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## The Effects of a Sensitivity-Encounter Group Experience upon Self-Concept and School Achievement in Adolescent Underachieving Girls

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THE EFFECTS OF A SENSITIVITY-ENCOUNTER GROUP EXPERIENCE  
UPON SELF-CONCEPT AND SCHOOL ACHIEVEMENT  
IN ADOLESCENT UNDERACHIEVING GIRLS

by

Naughne' La Vonne Thomas

A Dissertation Submitted to the Faculty of the Graduate School  
of Loyola University of Chicago in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Philosophy

February

1974



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## VITA

The author, Naughne' La Vonne Thomas, was born March 5, 1946 in Chicago, Illinois. She attended elementary and secondary school in the parochial school system in Chicago, Illinois. In May, 1963, as a consequence of "academic excellence" at Josephinum High School, she was awarded a scholarship by the Mayor Daley Youth Fund. This aided in her pursuance of an undergraduate degree at the university of her choice.

The author matriculated to Marquette University in Milwaukee, Wisconsin in September, 1963. She was awarded the maximum financial aid under the NDEA provisions throughout her years of undergraduate training. In January, 1967 she was graduated with a Bachelor of Arts degree in Psychology, and a double minor in Sociology and Spanish.

The author attended DePaul University in Chicago, Illinois on a Graduate Teaching Assistantship from 1967-1969, after enrolling in the Clinical Psychology program of the Department of Psychology. She conducted quiz sections for graduate and undergraduate students in statistics for her entire stay of six quarters in partial fulfillment of her Assistantship responsibilities. The author was accepted as a member of the DePaul University Chapter of Psi Chi, the National Honor Society in Psychology, during her second graduate year. She was a student Journal member of the American Psychological Association from January, 1967 until January, 1970 when she became an Associate Member upon completing the requirements for the Master of Arts degree.

She was employed as a staff psychologist at the Mercy Hospital and Medical Center Mental Health Clinic in Chicago from June, 1969 until November, 1970. For the last year of that employment she was Acting Chief Psychologist in the hospital and clinic.

During the summer and fall sessions of 1969 she was an Instructor of Psychology at DePaul University on a part-time basis. The thesis for the Master of Arts degree was formally approved in July, 1970 and the degree formally conferred in February, 1971.

In September, 1970 the author entered the doctoral program in Clinical Psychology at Loyola University, Chicago. She was a National Institute of Mental Health Fellow from September, 1970 through August, 1971. She entered the Clinical Psychology Internship-Training program at the Loyola Guidance Center and Day School in September, 1971, where she remained for two years.

She served as Psychological Consultant conducting diagnostic testing and individual and group therapy for several community facilities between September, 1970 and September, 1973. These facilities included Rosary College, Children's Memorial Hospital, and the George R. Lewis Foundation.

The doctoral dissertation was given final approval in December of 1973 and the Doctor of Philosophy degree in Clinical Psychology was formally conferred at the February, 1974 convocations at Loyola University in Chicago.

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## CHAPTER I

### THE PROBLEM AND ITS BACKGROUND

The purpose here has been to study the effects of an encounter group experience upon the self-concept and subsequent achievement scores of two groups of ninth grade girls who were academically underachieving. The problem area investigated in this study involved the relationship of low or poor self-concept and underachievement frequently found to exist together. Self-concept and achievement score changes of the two groups which participated in an encounter group experience have been compared with the self-concept and achievement score changes of two control groups which did not participate in an encounter group experience. Finally, the interpersonal process characterizing the encounter groups have been analyzed and related to changes in self-concept and/or subsequent academic achievement behavior by the two experimental groups.

The major hypothesis was that the treatment, an encounter group experience, was expected to enhance the self-concept and improve subsequent academic achievement of the participants.

Since the earliest years of even the crudest educational system, there have no doubt been individuals who did not perform to their expected or measured achievement potential. Remedial programs

dealing with underachievement by focusing upon specific academic learning skills have met with some success. However, over the past few decades, and especially since the 1950's, a great deal of educational, clinical, and research effort has been focused upon investigating the antecedents and correlates of underachievement. The eventual goal was to devise both remedial and preventative methods of dealing effectively with underachievement. From the viewpoint of prevention and remediation, it is important to understand underachievement in terms of the personal characteristics peculiar to the underachiever. Such may eventually lead to an increased understanding of the relationship among intellectual and motivational factors in achievement.

One of the intervening variables which has been found by many researchers to be intimately related to all levels of achievement is the individual's self-concept. Many studies (Bishten, 1955; Brookover, Thomas & Paterson, 1964; Bruck & Bodwin, 1962; Caplin, 1969; Fink, 1962; Gough, 1949; Hishiki, 1969; Lum, 1960; Miller, 1962; Quimby, 1967; Roth, 1959; Shaw & Alves, 1963; and Shaw, Edson & Bell, 1960) have concluded that there is a significant positive relationship between self-concept and academic achievement. In other words, underachievement has been found to be significantly correlated with a low or poor self-concept and vice versa. That this relationship exists was assumed for the purposes of this investigation.

A review of the background literature on self-concept and achievement and their relationship follows. Special emphasis will be given to low self-concept and underachievement. In addition, group methods of intervention cited in the literature as dealing with either or both of these two variables is presented. Finally, a brief review of the encounter group, often referred to as a sensitivity group, as a specific group intervention method dealing with self-concept and/or achievement will conclude this chapter.

One of the more difficult tasks for psychology is relating observable behaviors to the non-observable mental processes. One approach to the problem was to limit the study of behavior to the study of observable behavior only, while leaving to philosophy the chore of speculating about non-observable behavior. However, some theoreticians have attempted to clarify human behavior by positing the integrating concept of "ego" or "self", so that the coherence and unity seen in human behavior might be understood.

G. W. Allport (1943) claimed that the concept of ego was made necessary by certain shortcomings in associationism, and he listed eight different uses for the concept of the ego. During the 1940's the Psychological Review published many articles of a philosophical rather than psychological nature (Bertocci, 1945; Chein, 1944; Lundholm, 1940) which represented attempts to find the antecedents of human behavior by examining constructs and concepts, rather than just observable events.

The essence of "self" challenged definition. Nonetheless, an attempt to define and formulate a more useful concept of "self" was made during this same decade of the 1940's. While Rogers was working with the client-centered approach, one of his students (Raimy, 1943) conceptualized the "self" in a perceptual frame of reference. What he called the "self-concept" was both a learned perceptual system functioning as an object in the perceptual field, and a complex organizing principle which schematized on-going experience (Lowe, 1961). This concept of the self soon formed the theoretical underpinning for a new approach to the study of behavior. Raimy demonstrated that attitudes toward the self can be found by analyzing counseling protocols, and that these self-perceiving attitudes formed a reliable index for improvement in therapy. The self system can have perceptions about the environment and itself. One of its unique capacities is its ability to look at and evaluate itself. Raimy's concept of the self was further developed in the book Individual Behavior (Snygg & Combs, 1949).

Most essential in understanding the main theoretical conceptions of personality proposed by Rogers and his associates is a knowledge of what is called the phenomenological point of view. By this hypothesis, each person has a phenomenal field which is a definition of events or phenomena as they appear to him. His behavior, according to phenomenologists, is entirely determined by his field, and predictions of his behavior demand knowledge of that field. A person's

phenomenal field is limited. Only a small portion of his experience can be held in focus at a given time. The phenomenal field becomes constantly restructured according to the person's need.

These parts of the phenomenal field which the individual perceives as part or characteristic of himself are of particular importance in the determination of behavior, as understood by Rogers. These include the individual's physical self and his relationship with the cultural and physical worlds. Some of these things the individual considers relatively unimportant, and he leaves them rather vague and unattended. But those aspects of his phenomenal self which are highly differentiated and which he has defined as definite and relatively stable attributes of himself constitute the compelling aspects of his life and form his self-concept. Stated differently, the self-concept, or self-structure, is an organized configuration of perceptions of the self which are admissible to awareness.

(Harper, 1959, p. 84-5)

Rainy's concept of self was congruent with Rogers' theory of client-centered therapy, and Rogers' later developed theory of personality (1951). By 1950 the phenomenological theory of the self had become a new movement in psychology. The deluge of studies within the last two decades has not been contained within any one theoretical channel, so that studies involving the self-concept have spread over into many areas other than psychology.

## CHAPTER II

### SELF-CONCEPT AND ACHIEVEMENT

#### Self Concept

Before discussing the relationship between self-concept and achievement, each of these variables will be discussed separately.

Definitions. Self-concept has been variously defined. Bruck and Bodwin (1962) operationally defined self-concept as consisting of these elements: " (1) self confidence . . . , (2) freedom to express appropriate feelings . . . , (3) liking for one's self . . . , (4) satisfaction with one's attainments . . . , and (5) feeling of personal appreciation by others."

Caplin (1969) perceived the self-concept as "an organization within the individual's perceptual or phenomenal field" which is not open to direct observation and so its nature must be inferred from "observations of the behavior of the individual (p. 14)." It would seem that statements by the individual would be subsumed under "observations." Fink (1962) defines self-concept as a "central rather than a peripheral motivating force" which "is essentially moral rather than molecular (p. 57)."

Measurement of Self-Concept. Critics of the self-concept methodology (Crowne & Stephens, 1961; Wylie, 1961) invariably refer not only to the lack of equivalence of measures but also to the lack



of standardization and validation of the instruments. This was especially so in the early 1960's. Many researchers have addressed themselves to these issues (Piers & Harris, 1964; Lowe, 1961).

The most popular operational definition has assumed that the self-concept can be determined on the basis of attitudes toward the self reflected either by an individual's self-references in psychotherapy or by asking him to mark off certain self-regarding attitudes on a rating scale.

One early attempt at attitude measurement was by Sheerer (1949) who extracted statements made by clients in counseling that were relevant either as attitudes towards the self or towards other people. These statements formed the basis for a 101 item rating scale. Using this scale she reported an increased acceptance of and respect for one's self and other with successful therapy. Sheerer's rating scale also formed the basis for rating scales constructed by Phillips (1951) and by Berger (1952), according to Lowe (1961). By 1961 Lowe (1961) asserted that the only rating scale of attitudes toward self was the Bills Index of Adjustment and Values (Bissl, 1958). Bills stated that the intent of the Index was to measure the phenomenal self-view as described by Lecky (1945), Snygg & Combs (1949), and Rogers (1951). Q-sorts (Stephenson, 1953; Rogers & Dymond, 1954) and semantic differentials (Endler, 1961; Luria, 1959) have both been used to measure self-concept. Lowe

(1961) discusses the issues of measurement and validation of self-concept in detail and with a respectable degree of realistic criticism.

Three different types of self-concept measures were employed in the present investigation. They were: a semantic differential, a paper and pencil self-rating scale, and a four drawing set of projective human figure drawings subjected to a scoring procedure validated to measure self-concept traits.

The semantic differential (Appendix A-V) employed in this study originally consisted of 27 word item-pairs selected from Osgood, Suci, and Tannenbaum's (1964) list of 50 item pairs. They applied Thurstone's (1947, cited in Osgood et al., p. 36) Centroid Factor Method to a matrix of correlations. Four factors were extracted and rotated into simple structure, maintaining orthogonality. The semantic differential devised for the present study loaded on three factors which the authors labeled as evaluative, potency, and activity. Six of the original 27 pairs included and administered to the experimental subjects were discarded. There was too little agreement among subjects as to whether either item of the discarded six pairs was on the positive or negative end of the continuum to substantiate their inclusion in the final scoring.

The Tennessee Self Concept Scale (TSCS) was administered to all subjects at the pre-testing and the post-testing. The TSCS, already in use in mimeographed form since 1955 (Fitts, 1955), was revised and published ten years later (Fitts, 1965). The large number of

references on the TSCS (180 references by April, 1970 in addition to 30 references cited in the 1965 Manual) is indicative of its significant impact on self-concept research. It is described in the Manual as "simple for the subject, widely applicable, well standardized, and multidimensional in its description of the self-concept (p. 1)."

Consisting of 100 self-descriptive statements, this Likert-type instrument can be used with subjects aged 12 years and older, and having at least a sixth grade reading level. Most subjects can complete the scale in less than 20 minutes.

Two forms are available, a Counseling Form and a Clinical and Research Form. The only difference between the two forms is the scoring and profiling systems. In the present study the Clinical and Research Form was used.

According to the Manual, the standardization group was a "broad sample of 626 people. The sample included people from various parts of the country, and age ranges from 12 to 68 (years). There were approximately equal numbers of both sexes, both Negro and white subjects, representative of all social, economic, and intellectual levels and educational levels from sixth grade through the Ph.D. degree (p. 13)."

A table of reliability data based on test-retest with 60 college students over a two week period is provided by the manual and indicates a reliability of .92 for the Total Scale, reliabilities in the .80s and .90s for the major subscales and in the .60s and .70s for the minor subscales. In addition, the author claims to have demonstrated

through profile analysis that "the distinctive features of individual profiles are still present for most persons a year or more later (p. 15)." Bentler (Buros, 1972) concluded that it ranks among the better measures combining group discrimination with self-concept information.

Koppitz (1968) attempted to fill the gap of controlled research studies with children's HFDs and to provide a validated scoring system for developmental and projective signs on HFDs. She systematically investigated HFDs of children ages 5 through 12 years. She concluded with a system for scoring and analyzing HFDs objectively for developmental and emotional signs and symbols, and for interpreting them clinically for personality dynamics.

The normative study population used by Koppitz was composed of 1,856 public school boys and girls at each age level from age 5 years through 12 years. These children represented 86 entire classes, kindergarten through sixth grade, in 10 different elementary schools. Thirty-three per cent of the children came from two schools located in residential sections of a Midwestern metropolis; fifty-four per cent of the youngsters attended five schools situated in three small industrial towns in a Midwestern and an Eastern state; while the remaining thirteen per cent of the children were pupils from three schools in small villages or rural areas of the same states. One-third of the boys and girls came from low-income communities and included both Negro and white children, one-third came from

predominantly white, middle-income communities, and the last third lived in high-income areas. The subjects were assumed to represent the full range of intellectual potential normally found in a cross section of public schools. Koppitz reported that to the best of her knowledge very few, if any, mentally retarded children and no children suffering from gross physical handicaps were included among the subjects.

After her extensive research investigation correlating many variables, Koppitz (1965, 1966a, 1966b, 1966c, 1967) found two basic types of objective signs: Developmental Items and Emotional Indicators (EI). As such, each test protocol can be scored with a developmental score and an emotional indicator (EI) score. Each of the two kinds of scores is composed of 30 items. For the purpose of the present study only the EI score was used since it deals with signs relevant to self-concept (Koppitz, 1968, pp. 55-69). The scoring criteria used for each of these 30 signs is presented in Appendix AI. In addition, the age levels at which the signs become clinically valid for boys and girls will also be presented in the Appendix. The 30 items constituting the EI score were of an original 38 signs which statistically differentiated children with and without emotional problems; occurred on less than 15% of the HFDs of normal children; and were not related to age or maturation.

The kind of results an investigator obtains depends to a great extent on the theoretical orientation and the purpose of the investi-

gation. Koppitz (1968) wrote that she considered Harry Stack Sullivan's Interpersonal Relationship Theory as most useful for her work. She was primarily interested in exploring a child's developmental stage and his interpersonal attitudes. Her hypotheses for her study were "that HFDs reflect primarily a child's level of development and his interpersonal relationships, that is, his attitudes toward himself and toward the significant others in his life. It is further maintained that HFDs may reveal a child's attitudes towards life's stresses and strains and his way of meeting them; drawings may also reflect strong fears and anxieties which may concern the child, consciously or unconsciously, at that given moment (p. 8)." Koppitz stated that she does not generally accept the "body image" hypotheses for HFDs and does not necessarily consider them valid. She does not regard the HFD as a portrait of the child's basic and enduring personality traits nor as an image of the child's actual appearance. Instead she believes that HFDs reflect the child's current stage of mental development and his attitudes and concerns of the given moment, all of which will change in time due to maturation and experience. Because of this hypothesis that HFDs reflect current personality functioning rather than an enduring personality configuration, and because of the well validated scoring system, the Koppitz Scoring system was used to score the HFDs of this present investigation. It is necessary to have a system which can tap any changes in self-concept which may be results of the experimental

treatment of the encounter group experience. Koppitz (1968, pp. 55-69) discusses the interpretation of each EI which supports the present author's assumption that the EIs do relate to self-concept.

Stability and Change of the Self-Concept. Brownfain (1962) adapted the use of the rating scale in developing what he considered a measure of the degree of stability of the self-concept. Carlson (1965) dealt with self-concept stability and change in a longitudinal study of changes in the structure of the self-image. The study included 49 students studied in the sixth and again in the twelfth grade. Self and ideal descriptions obtained on parallel forms (pre-adolescent and adolescent) of a questionnaire designed to control for response sets, provided measures of self-esteem and social-personal orientation. Over the six-year period, as predicted, girls showed an increase in social orientation while boys increased in personal orientation, reflecting the different processes of personality development for boys and girls. From their findings they concluded that self-esteem was independent of sex role. Adolescents low in self-esteem more frequently characterized others in terms of personal reference and/or derogatory attitudes on the Role Construct Repertory Test. By administering parallel forms, these researchers avoided a drawback in a study by Piers and Harris (1964) who concluded that they demonstrated self-concept changes when increasing familiarity with the test items might have accounted for changes in an improved direction. More relevant is that Carlson (1965) used parallel but age

appropriate forms. Haas and Maehr (1965) conducted two experiments whose major hypothesis dealt with self-concept and the reactions of others. The first attempted to determine the durability of experimentally induced changes in self-ratings. The second sought to determine the effects of drug dosage in such changes in self-ratings. The conclusion from the first experiment was that experimentally induced changes in self-ratings are durable over time. The retesting was done six weeks after the experimental treatment. The second study's results showed that self-concept changes do show the effects of drug dosage. However, it should be noted that their study supports the stability of self-concept changes only for a six week period which is a relatively short period of time.

Self-Concept Development and Related Variables. Several researchers have studied the self-concept and related it to certain variables which their particular studies indicated were involved in its development. However, very few of the studies cited in the literature on self-concept used the experimental and control groups paradigm. The usual sampling procedure has been to study naturally occurring groups. Different measures from individuals described by some self-concept measure as having low or high self-concepts have been taken and correlated. Generally, all of the subjects in the sample population selected were tested on all of the test measures; the results were analyzed and certain correlations were found or concluded to exist.



One of the variables which has received notice has been the influence of significant others upon the development of the self-concept. Brookover et al. (1964) reported that "the general theory states that self-concept is developed through interaction with significant others which in turn influences (one's) behavior (p. 271)." They found support for this theory in their study using a sample of 1,050 seventh grade students (513 males and 537 females) in an urban school system. Black students were excluded on the assumption that their "self-concept-of-ability" and its relation to achievement would differ from those of the white population, which they found support for with subsequent analysis. Self-concept-of-ability is described as an individual's self-evaluation of his ability to achieve some goal, which in this case is in the academic arena. Parallel forms of a self-concept-of-ability scale were administered and average IQ scores for two (fourth and sixth grade) administrations of the California Test of Mental Maturity were calculated. They concluded that an individual's self-concept-of-ability is significantly correlated with the images that he perceives significant others to have of his ability. In addition, they found statistical significance for their hypothesis that self-concept-of-ability for specific academic subjects was a better indicator of achievement than a general self-concept measure. The authors' exclusion of Black subjects seems to inherently lack theoretical logic. Their assumption that the self-concept-of-ability

for Blacks would differ and be lower than that of the white subjects does not invalidate their basic assumption. In fact, the inclusion of Black subjects would seem to have strengthened their argument, rather than weakened it. That Blacks' self-concept-of-ability would be lower would possibly support their assumption that the environment and personal interaction with significant others has a significant influence upon one's self-concept-of-ability.

Davidson and Lang (1960) also found statistically significant support for the hypothesis that the student's perception of a significant other's feelings toward him is related to his self-concept or self-perception and to school achievement and behavior. The authors devised an adjective checklist which attained acceptable reliability coefficients. They stated that the instrument had "logical validity." They also obtained a measure of concurrent validity. This was done by correlating the child's own perception of his teacher's appraisal of him with his classmates's perceptions of the teacher's feelings toward him. For this purpose, a modified version of the de Great and Thompson Teacher Approval and Disapproval Scale (1949) was administered along with the Checklist of Trait Names, a scale devised by the authors, to 93 children distributed across three classes. The sample for the study under discussion was composed of 89 boys and 114 girls attending the fourth, fifth, and sixth grades of a New York public school. Since some of the test items had words too difficult for some children to read, only those children who were in the upper half of their grade level were chosen.

This may have resulted in a sample biased in favor of children achieving higher in reading. However, they did represent a wide range of socioeconomic levels. Social class levels were found to have a positive correlation with achievement, and with favorable perceptions and feelings of the teacher toward the child as attributed to the teacher by the child. The greatest weakness in the methodology of this study lies in the selection of the sample, of which the authors allege, it is "reasonable to assume that these subjects are representative of the population of New York City elementary school children at these grade levels (p. 116)." The restriction of their sample to only the better readers hinders the generalizability of their findings to all fourth through sixth grade elementary students. However, the authors did find subjects with various levels of self-concept which correlated positively with their levels of achievement.

Ringness (1970) also studied the influence of significant others upon the achievement values of children. Identification of 267 eighth grade girls with parents, peers, and teachers, and achievement values attributed to them by the subjects were assessed by the School Attitude Research Inventory. A card sort assessed achievement orientation, peer affiliation, nonconformity, and independence. Identification with each of the three groups of "significant others" mentioned above, and achievement values attributed to them were found to be related to the subject's own achievement values. These, in turn, were related to grade point average

(GPA) and the Iowa Test of Basic Skills (ITBS) percentile scores. Support for a social learning theory paradigm of motivation and achievement was concluded. Achievement was also predicted from the California Test of Mental Maturity IQs, and subjects' were grouped into over-, at, and under-prediction. Significant differences were associated with the subjects' identifications with their parents and teachers, with peer values, and with their own motivation on the GPA variable. However, significant differences were associated only with the subject's motivation for the ITBS scores. The research design reflects no serious methodological biases, and the sampling procedure was a random selection of 300 subjects drawn from the eighth grade population of all 13 public junior high schools in a large Midwestern city. Complete data was obtained on 267 subjects.

In addition to the influence upon self-concept by such significant others as parents, peers, and teachers which Brookover et al. (1964) label as the "composite other," another variable related to self-concept is the socioeconomic class of an individual. For example, Klausner (1953) found that low socioeconomic white males had lower self-concepts than white males in higher socioeconomic strata.

Piers and Harris (1964) conducted a study correlating age with self-concept. Their findings suggested a curvilinear developmental pattern in which "adequate" self-concepts were found for the

third and tenth grade subjects, while "inadequate" self-concepts were found for the sixth graders. Piers and Harris' (1964) major purpose was to make the first step in an effort to develop and standardize a general self-concept instrument which could be used over a wide age range. In addition, they sought to find the correlates of self-concept in children. They extracted six factors from an 80 item scale administered to 457 sixth grade children. The factors were: Behavior, General and Academic Status, Physical Appearance and Attributes, Anxiety, Popularity, and Happiness and Satisfaction. The 80 item scale was originally a 140 item scale which was administered to four classes each of third, sixth, and tenth graders in a large school system. The elementary classes were chosen from several different schools, representing a cross-section of socioeconomic levels of the community. In the high school classes, slow, average, and bright classes participated. The authors do not state why the high school class sample selection criterion was not comparable to the elementary school selection. The latter were selected on the basis of academic achievement, while the elementary school children were selected on the basis of socioeconomic level. This discrepancy in subject selection criteria may have influenced the curvilinear results. In addition, the four month post-test mean scores were consistently higher for all groups, suggesting that increased familiarity with response items might account for the change. This enhancement on retesting emphasizes the need for

control procedures before making claims regarding self-concept changes as a result of any particular manipulations. One might conclude from Piers and Harris' study that age seems to correlate with self-concept either positively or negatively using the same measure at different ages.

The effects of racial segregation on self-concept was investigated by Caplin (1969). He hypothesized that children, both Black and white, attending a de facto segregated school have less positive self-concepts than do children attending desegregated schools. Sixty children from the intermediate grades of each of the elementary schools in a small northern New Jersey city were matched on age, grade, sex, race, intelligence, and socioeconomic status. The entire sample consisted of 180 children, with 60 each from a de facto segregated school with over 66% Black enrollment; a school newly desegregated by the transferring of 150 Black children to a previously almost all white school; and a third school which had been desegregated for many years due to the housing pattern of the neighborhood. Analyses of variance were performed on the scores obtained from the self-report instrument administered, and correlations between these scores and achievement scores were obtained. The children attending the de facto segregated school had less positive self-concepts than the children at the other two schools. The methodology, statistical analyses, and use of naturally occurring groups matched on relevant variables lend strength to the results obtained.

Concerning sex differences and self-concept, Davidson and Lang (1960) found that girls generally perceived their teachers' feelings toward them to be more favorable than did the boys. Caplin (1969), who investigated the effects of racial segregation upon self-concept, found no significant sex differences. However, Carlson (1965) in his study of stability and change of the self-image found that girls increased in social orientation while boys increased in personal orientation. Although he found sex differences he concluded that self-esteem is independent of sex role.

A final variable frequently related to self-concept is anxiety. In the Piers and Harris (1964) study correlating age with self-concept sex differences were found in the Anxiety factor, with boys more often denying feeling nervous or worried. Swinn and Hunter (1964) administered tests of general anxiety and test anxiety along with a "self-acceptance (SA)- acceptance of others (AO)" questionnaire to 92 subjects. The investigators claim that the questionnaire can reflect an individual's acceptance of himself and his openness and acceptance of other people. Their study was conducted to test the predictive hypothesis that anxiety increased the usual positive SA-AO correlation. Results indicated that (1) anxiety is significantly associated with both lowered SA and lowered AO, (2) anxiety disrupts the SA-AO relationship by lowering SA at a greater rate than AO, and (3) in the presence of low anxiety, the usual SA-AO correlation exists. The investigators concluded that (A) the learning

theory from which the prediction was derived is inadequate in self-theory areas of personality, and (B) anxiety has a disruptive yet systematic influence on the SA-AO relationship.

The paucity of studies making use of statistical designs other than the correlational design causes one to wonder about the reasoning behind such widespread methodological singlemindedness. Perhaps the explanation lies in the likelihood that during the early stages of research on a variable it is more likely to find exploratory studies which involve no experimental treatment, or correlational studies which investigate hypothesized trends and relationships. Most of the studies cited in the Self-Concept section did not involve sophisticated experimental or statistical designs. The use of less powerful designs may be expected when one considers the point in the developing stages of research on the variable at which the particular studies were conducted. Now that self-concept research has become fairly productive of basic hypothetical postulations and the groundwork has been laid, more definitive research designs should be applied.

#### Achievement: Under- and Overachievement

Definitions. The phenomenon of achievement also presents problems in attempting to define it operationally. Concepts of under- and over-achievement suffer from this lack of consistency and imprecision. Almost every researcher operationally defines underachievement somewhat differently in his study. Kornrich (1965) confronted the



issue by listing several methods which various researchers have used to operationally define underachievement is consistently defined as a discrepancy of large or significant proportions between actual and predicted academic performance. The definitions differ in regard to the precision and the grade level of the students. In addition, some researchers deal only with bright (IQ above 110 or 135) underachievers, while others focus on the underachiever of average intellectual ability.

There have been critics of the terms over- and underachievement. Particular resistance is to the former term, since it is impossible for one to achieve more than he or she has the capacity to achieve. Coulson (1959) suggested the use of another term, "efficiency index", to substitute for under- and overachievement. The efficiency index is the difference between GPA and test measured ability level, both normalized within the college in which a student was enrolled. Coulson calculated chi squares, Pearson correlations, and analyses of variance on his data for simple effects. The instruments he used were MMPI, California Psychological Inventory, Guilford-Zimmerman Temperament Survey, and Kuder Preference Record-Vocational. He concluded that the concept of efficiency ratio was equally as useful as the older, though less uniform, concepts of over- and underachievement.

Some of the unclear findings on underachievement may be attributed to faulty conceptualizations. Rather than performance causing the discrepancy between actual and predicted achievement,

the discrepancy may result from faulty predictive methodology. Dyer (1960) and Schwitzgebel (1965) both discuss some critical issues concerning how the prediction of achievement potential may be invalid. One major fault may well lie with an invalid test to measure achievement potential in predicting how well an individual should be able to achieve academically.

Identification, Measurement, and Classification of Underachievement. Several studies have attempted to operationalize and assess achievement and underachievement. Ringness (1970), studying the influence significant others have upon the achievement values of children, used teachers' grades and standardized achievement test scores to identify underachievers. The California Test of Mental Maturity (CTMM) total IQ score was obtained from school records. A prediction of whether the student would be an under-, at, or over-achiever was based on this score which assessed intellectual ability. Underachievement was defined as any "significant" discrepancy in either GPA or the Total score on the Iowa Test of Basic Skills administered routinely, from the predicted level of achievement based on intellectual ability. Ringness' conclusions and findings were discussed in the Self-Concept section earlier.

Edgington (1964) developed a normative approach to the measurement of underachievement. The technique involved obtaining empirical probabilities for the magnitude of underachievement of any individual underachiever. He cited the statistical flaws in previous attempts

to measure underachievement and, as presented, his method seems to avoid these flaws. However, a major drawback in the use of this method is its tedious calculation.

Two kinds of achievement measures were employed in the present study. The Wide Range Achievement Test (WRAT), a standardized achievement test, and course progress reports by teachers were both considered in this investigation. The WRAT was first standardized in 1936 as a convenient tool for the study of the basic school subjects of reading (word recognition and pronunciation), written spelling, and arithmetic computation. It was designed as an "adjunct to tests of intelligence and behavior adjustment (Manual, 1965)." It was again revised in 1946 and the present edition was revised in 1965 (Jastak & Jastak, 1965). The 1965 edition retains the original three subtests: reading, spelling, and arithmetic. Each subtest is divided into two levels, Level I and Level II. Level I is designed for use with children between the ages of 5 years 0 month and 11 years 11 months. Level II is intended for persons from 12 years 0 month through adulthood. Level II was administered to all subjects in the present study. The three subtests take between 20 and 30 minutes to administer. The subtests may be given in any convenient order. The order of administration for the current investigation was: Spelling, Arithmetic, and Reading. Subtest instructions were given verbatim as presented in the WRAT Manual (1965). The WRAT can be administered individually or to a group. The Spelling and Arithmetic subtests

were administered to small groups of no more than seven girls each, and the reading subtest was given individually for this investigation. The experimenter scored the protocols according to the concrete scoring instructions provided in the Manual. Grade ratings, percentiles, and standard scores, or deviation quotients, based on the grade ratings are the three types of scores used in reporting WRAT results.

The 1965 revised edition of the WRAT was standardized on a population of school children and adults in a number of states: Delaware, Pennsylvania, New Jersey, Maryland, Florida, Washington, and California. No attempt was made to obtain a representative national sampling. The authors state, "Nor is such a sampling considered essential for proper standardization (Manual, 1965, p. 9)." The groups of children were selected from schools of known socioeconomic levels. The IQs of the children were also known from group tests such as the Lorge-Thorndike, the Kuhlmann-Anderson, and the California Mental Maturity Test administered at the schools. Many of the cases (over 1000) in the standardization group had been given individual tests such as the Stanford-Binet, Wechsler Intelligence Scale for Children, and "others." In each age bracket "probability samplings based on IQs were studied to develop WRAT norms that would correspond to the achievement of mentally average groups with representative dispersions of scores above and below the mean (Manual, 1965, p. 9)." The main drawback of the WRAT seems to be its lack of representativeness in the sample of the various ethnic groups to

which it may be administered. However, the normative population was impressively large with 5,868 males and females, ages 5 to adulthood, for Level I, and 5,933 males and females, ages 9 to 65 years including college students, for Level II.

In conclusion, the WRAT appears to be an effective diagnostic tool for evaluating achievement in reading, spelling, and arithmetic computation. It is easily administered and the results can be computed into any one or all three of the useful global scores. It can be administered individually or to groups, and appears to have adequate content and construct validity to support its use. Additional detailed description of its standardization, validation and reliability is presented in Appendix A-IX. Mervin and Thorndike seem to agree that the WRAT is of some value in a clinical or research setting as a quick estimate of general ability and educational background (Buros, 1972).

The course progress reports made by the teachers for all of the girls participating in the present investigation were scored on a five-point rating scale (Appendix A-II). The ratings had been devised by the school administrative staff and was adopted for use in this study. Letter grades were not used in the teacher evaluations. The four required courses which were analyzed were: Reading, English, Business Mathematics and Speech.

Pippert and Archer (1963) investigated which of two ways seemed most effective to use in classifying underachievers. The two methods were by GPA and by standardized achievement test scores. The Watson-

Glaser Test and standard achievement tests were administered to 126 ninth graders who scored above 110 on the Otis IQ test. Based upon their findings they concluded that using GPA in school situations is fairer and more effective. One of their criteria was that students identified as underachievers by a GPA below that predicted from their Otis IQ scores were similar to the achieving group on the Watson-Glaser and achievement test scores. The underachievers exceeded the achievers on the Otis but were significantly lower than the achievers on the GPA. Secondly, students identified as underachievers by their achievement test scores were lower than the achievers on all instruments except GPA. The authors suggested that for screening purposes or with experimental research studies the standard achievement tests seem appropriate. However, they commented that to classify an individual as an underachiever only on the basis of a standard achievement test score may be penalizing the student unjustly if the test content does not reflect the school's curricula. For research purposes, however, they asserted that a standard test seemed more valid since all subjects will have been exposed to the same content test.

Studies with Practical Implications for Prevention and Remediation. Another effort to objectify and develop methods of identification needed before prevention and remediation can occur was made by Swift and Spivack (1969). They developed a behavior rating scale of 45 items and 13 factors which proved useful in

detecting behaviors related to achievement success and failure. Methodology consisted of weekly meetings with 26 teachers of normal and emotionally disturbed junior and senior high school students. All classroom behaviors which, in their experience, interfered with or were related to achievement were discussed and recorded. Eighty teachers, using the original 102 items, took part in the actual student ratings over a four or five month period. A total of 1,554 ratings were made of 12 to 19 year olds, about equally distributed between the "normal" and "emotionally disturbed" groups. The data were analyzed into factors resulting in the 45 item, 13 factor scale. Further correlations included in the final scale were significant at the .05 level at least. The study appears to have substantial content validity. However, the authors are unclear as to the number of subjects used in the rating scale development. It is unclear whether the figure "1,554" refers to the number of subjects rated or to the number of rating items checked by the teachers.

In a second study seeking to contribute knowledge needed to develop preventive programs for underachievers, Shaw and McCuen (1960) investigated the onset of academic underachievement in bright children. One hundred sixty eight 11th and 12th grade students who were in the upper 25% of their school population with regard to ability were classified as achievers or underachievers on the basis of their cumulative GPAs in grades 9, 10, and 11 and their IQ scores. Any student receiving an IQ score of over 110 on the Pintner General

Ability Test: Verbal Series, but whose GPA was below the mean of his class was labelled as an underachiever. A student meeting the IQ score criteria but with a GPA above the average of his class was classified as an achiever. Those achieving at the class average of 2.4 on a four-point scale were not included in the study. The authors do not report how many subjects scored exactly at the class mean but it is doubtful that any sizable number did, if any. The subjects were divided into four groups: Male Achievers, Male Underachievers, Female Achievers, and Female Underachievers. Each subject's GPA for each grade from 1 through 11 was computed, as were the mean GPAs for each of the four groups.

Sex differences were found between the groups. Male achievers had significantly higher GPAs for each grade level from third through eleventh. In grades one and two there were differences for the achievers in the predicted direction, higher than underachievers, but these were not significant until the third grade. Results for females were more confusing. For grades one through five underachievers had marginally higher GPAs than achievers. However, from grades six through eight the achievers had higher GPAs, though, again, the difference was not significant. In the ninth and tenth grades the difference was significant in favor of the achievers. The authors suggested that females do not display their self-directing tendencies to the same extent as males until adolescence. They also suggested that the female underachievers showed a drop in GPA at the



time puberty was beginning. Other studies finding unclear results for females suggest that there is more ambivalence with regard to girls' feelings toward themselves (Shaw et al., 1960; Quimby, 1967).

Academic Variables Involved in Underachievement. Reading and arithmetic at the elementary school level, and English at the high school level are the curriculum areas in which most underachievement and failures occur, and which are most effected by what Cotter (1964), speaking from a medical model, calls "poor emotional health." Investigations in the field of arithmetic emphasize that children require even more freedom from inner anxiety for learning arithmetic than for learning to read, and that failure in the two areas may be caused by entirely different elements. Failure to learn how to read, however, has a more damaging effect upon the child. The poor reader sees himself as a failure, a non-reader, but the child who cannot comprehend arithmetic appears to feel that he has plenty of company. "Further, failure in arithmetic does not impede future school progress as does inability to read and thus does not pose as great a threat to the self-concept or ego (Cotter, 1964, p. 180)." Thus, reading below grade expectancy or at least below the current grade level placement is frequently the key criterion used in labelling a student as an underachiever. Although underachievers are not always children with a background of grade failures or demotions, those who fail and must repeat grades, especially when their IQ is at least average, are labelled as underachievers. Ten per cent of the nation's students

were not promoted in June, 1956. The same percentage was classified as failing in the 1963-1964 academic year for public school enrollment, which would involve over four million pupils (Cotter, 1964).

#### Personality Characteristics of the Female Underachiever.

Several researchers have described some of the relevant variables influencing personality and the typical personality of the underachiever. Since only female subjects were participants in the present study, a brief discussion of the female underachiever's personality based on research studies conducted seems relevant at this point. Lum (1960) discusses male and female achievers and underachievers. She describes the female underachiever as an individual who tends to become easily discouraged when confronted with long or difficult assignments and who admits that unless she likes a course, she exerts only the minimum effort required to get a passing grade. She also shows a marked tendency toward procrastination with regard to her assignments and tends to rely upon external pressures in order to complete her assignments. She is more susceptible to distracting influences and wastes too much time engaging in social activities, causing her studies to suffer. She is more critical of educational methodology and more often expresses doubt as to the value of a college education than an "overachiever."

The "non-achievement syndrome" (Roth & Meyersburg, 1963) involves the following characteristics: general self-depreciation, vulnerability to disparagement by others, no clear system of personal goals and

values, immature reactions to parents, frequent depressions, lack of insight about themselves and others, and free-floating anxiety.

Roth and Meyersburg add to these the "lack of self-esteem, personal sensitivity, inability to control introjected hostility, and 'acute anxiety' which build up into patterns much like the syndrome encountered in depressive disorders," and in some students becomes a true disorder (p. 538-539).

Gill and Spilka (1965) studied a population of Mexican-American high school students and concluded that underachievers were more hostile, less socially mature, exhibited less intellectual efficiency and conformity to rules than achievers. They also found that underachievers from low socioeconomic backgrounds seemed characteristically to lack independent initiative. However, Schutz (1960) concluded from his factor analysis of academic achievement and community characteristics that a "high level of educational achievement can be obtained in widely varying kinds of communities (p. 517)," and presumably by an individual from any socioeconomic class who puts forth the effort and has the ability.

It is commonly agreed that the larger number of failures and underachievers are boys. One theory offered to explain this (Cotter, 1964) is that a higher level of perfection is expected, though not demanded, of girls at home and at all levels of schooling. Another is that girls have more definite goals and reasons for achieving in school (Todd et al., 1962). However, Shaw and McCuen (1960) cite



McClelland et al. (1953) who suggested that parents of underachievers of either sex do not demand a high level of performance from their children.

Parental Influences Upon Underachievement. Ringness (1970) studied the relative impact of each parent upon the child's achievement. He found that the father's achievement values were more highly correlated with the child's than were the mother's. The identification with achievement values attributed to the father seemed to be more influential in actual achievement, as measured by GPA, than identification associated with the mother. This is an interesting finding since most people assume that the mother influences the child in more areas than the father.

It might be expected that especially in a family which places a high premium on academic achievement that an underachiever might be treated as a kind of deviant member. Donnelly (1960), although studying a population of psychotic children, did find that deviant children are treated noticeably differently than their siblings. More often than not, this "treatment" involves negative parental attitudes toward the "deviant" child which in turn threaten the child's positive sibling interrelationships. These influences obviously affect the personality of the underachieving child.

The Drasgow-Motto Controversy on Underachievers. Drasgow (1957) made three basic assumptions about underachievers: (1) that college underachievers tend to be enrolled in inappropriate curricula

and that this misplacement in curriculum was a significant determinant in their underachievement; (2) that a necessary requirement for helpful counseling was that the student-client accept the idea of failure "in his alien course;" and (3) that lack of insight was a determinant in underachievement.

Motto (1959) made a critical reply to Drasgow's assumptions. He admitted there was a need to clarify the definition of underachievement, but strongly disagreed with Drasgow's first two conclusions, while agreeing with the third with reservations. Motto stated that there was equal justification for considering factors such as "emotional immaturity, situational factors, defective study skills or subject matter, neurotic or quasi-psychotic adjustments, and disturbances in character functioning (p. 246)." He suggested that underachievement had no necessary relationship to curriculum choice, but may be a behavioral manifestation of personality inconsistencies and the consequent paralyzing effects of anxiety. In response to Drasgow's second assumption, Motto replied that in spite of warnings from teachers, deans, and counselors, the underachievers in his group failed to see their academic problems as failures on their part. Although they responded positively when the counseling services offered help, 28 of Motto's 31 underachievers did not accept failure, and 25 had not even requested counseling. He suggests that there are positive elements in allowing underachievers to be offered help without their having to admit they need it. Lastly, Drasgow asserted that the underachiever must be insightful of the

personality factors contributory to his problems in order to benefit from short term counseling. Motto agreed that insight was needed for improvement, but disagreed that such an understanding of complex personality dynamics could be handled by short term treatment.

Although the last cited controversy might at first glance seem to be more appropriately placed in the sections dealing with treatment methods for underachievers, it is placed here mainly because counseling was on an individual rather than a group basis. However, it should offer insight into the possible personality makeup of the underachiever at the college level.

Study Habits and Achievement Motivation. Lum (1960) investigated the study habits of achievers and underachievers. Three groups of twenty female college students were equated for scholastic aptitude as measured by the American Council on Education Psychological Examination. The subjects were enrolled in introductory psychology courses. The groups differed widely in achievement, as expressed in the cumulative grade point ratio. Lum found no difference in the reported study habits of achievers when compared with underachievers, but she did find a significant difference in their achievement motivation.

Several researchers have concluded that a major factor in achievement motivation is the individual's self-concept, (Bower, Beyer & Scheirer, 1970). Thus, Shaw, Edson, and Bell (1960) predicted that intensive study of the differences in self-concept between

achievers and underachievers would possibly lead to increased understanding of the problem of academic achievement motivation. Recent articles presenting research on achievement motivation have been published (Entwistle, 1972; Kukla, 1972; Tessler & Schwartz, 1972) thus showing its continued relevance to the phenomenon of underachievement, and achievement in general. The great bulk of work done in this area has included studies using varied projective techniques (Atkinson, 1958; McClelland, 1955). Studies which have used objective tests (Atkinson & Litwin, 1960; deCharms, Morrison, Reitman, and McClelland, 1955; Iard, 1962) generally have not been able to produce the same results. It seemed for a while that McClelland's (1958) argument, that need for achievement could only be measured with projective techniques, was irrefutable. Apparently, the projective test criteria relied upon were those score indicators on the TAT, Rorschach, and similar projective test devices which reflect such dynamics as self-esteem, need for achievement, need for approval, and feelings of adequacy or inadequacy.

Myers (1965) claimed that he had developed a highly satisfactory short objective test to measure achievement motivation. Ten items, aimed directly at academic achievement, were administered to 261 male and 263 female high juniors. The subjects were to answer "yes," "no," or "?" (can't say or doesn't apply) to the questions. Three items were discarded as a result of this initial test administration. Myers then used the remaining seven items in a six point rating scale

on which a subject had to indicate the degree to which an item was true for him. The author reported that correlations between his achievement motivation rating scale score and GPA compared favorably with previous studies which had used projective tests such as the TAT, and with studies using objective instruments. The scale is somewhat suspect, although previous findings were replicated, since the items are too susceptible to faking by the subjects. The importance of the self-concept factor in achievement motivation leads to the next section which considers the relationship between self-concept and underachievement.

#### Self Concept and Achievement

Which Is the Antecedent: Self-Concept or Achievement? Gowan (1960), Tuel and Wursten (1965), and the studies reviewed in the preceding sections cite research findings concluding that there is a significant positive relationship between self-concept and achievement. Several researchers have posed the question: which comes first, self-concept or achievement (Shaw & McCuen, 1960; Tuel & Wursten, 1965). Caplin (1969), who studied the effects of racial segregation on self-concept, concluded that the relationship between self-concept and achievement was probably reciprocal, as did Tuel and Wursten (1965). The latter researchers stated that an individual's negative self-concept in some cases appears to hinder academic performance, while in others a negative self-concept would seem to be



the product of poor academic performance. Biber (1961) stated that there is a circular relationship between healthy personality and effective learning. Thus, Tamkin (1960) suggested that emotional disturbance may be either the cause of or the product of educational disability. Lowe (1961) showed how a poor self-concept may result in underachievement or failure which can result in more failure. That psychological health data are more important than academic achievement data in understanding a pupil's dissatisfaction with school was suggested by Jackson and Getzels (1959).

Another study dealing directly with the issue of antecedent status of self-concept to achievement was conducted by Wattenberg and Clifford (1964). They studied poor self-concepts and reading disabilities using a sample of 128 kindergarten children. There were originally 185 subjects, but follow-up data was available for only 128 children. Measures of mental ability and self-concept were obtained during the subjects' first semester in kindergarten. Subjects were from two Detroit elementary schools. Two and one-half years later measures of their progress in reading were obtained and the self-concept measures repeated. The kindergarten self-concept measures proved significantly predictive of reading progress but were not significantly related to mental test scores. Two aspects of self-concept, (1) feelings of competence and (2) feelings of self-worth, were noted. The study was well conducted and appears valid, even though the sample may not have been representative of a larger

population. Half of the children transferred to Catholic schools after kindergarten, and thus were taught by different reading methods than the children who remained in the public school system. In addition, measures other than just the IQ and self-concept were used. Tape recordings of children's comments while making human figure drawings were made and the comments divided into positive and negative references to feelings of competence or self-worth. In addition to the quantified measures, the classroom teachers and a clinically trained interviewer were asked to rate the children as to their feelings of competence and self-worth. Additional ratings were secured on "ego strength," defined as the child's ability to adapt to the reality of his environment. The results indicated that self-concept measures and measures of ego-strength were predictive of reading achievement two-and-one-half years later. The authors concluded that even as early as kindergarten self-concept phenomena are antecedent to and predictive of reading accomplishment. Some of the problems causing a lack of support for their hypotheses was attributed to the fact that early reading achievement is linked to sex and socioeconomic class.

#### Relationships Found Between Self-Concept and Achievement.

Nearly all studies of the relationship between self-concept and achievement have concluded that there is a positive relationship between these two variables. However, Jervis (1959) concluded that there is no relationship between the two. He concluded that low

achievement does not always imply negative attitudes. His study revealed no significant relationship between self-concept related to attitudes toward others. Tuel and Wursten (1965) who cite Jervis' study make no attempt to discuss the calibre of Jervis' methodology or statistical analysis, which would shed light on how valid his findings should be considered.

Some investigators have used elementary school subjects, although studies of self-concept and achievement have more frequently used college or high school samples. Bodwin (1959) investigated the relationship between "immature self-concept" and reading and arithmetic disabilities. Immature self-concept seems to be a term the author used synonymously with poor, low, or inadequate self-concept. His study was based on the theory that self-concept was a developmental phenomenon whose final stages included "incorporation and identification," and that any interruption in the process limited and distorted the subsequent incorporation and identification, and therefore learning. Incorporation refers to a process which the investigator asserted was essential in developing an adequate self-concept. However, he failed to describe it in the Dissertation Abstracts version of his study. Identification is a subsequent and again essential stage in self-concept development which is not defined by the researcher. However, from contextual cues the two final stages appear to refer to a kind of assimilative and integrative process in which the individual must engage to develop an adequate self-concept,

as information enters his conscious awareness. Bodwin found no studies in the literature which were directly related to his problem. He used the Machover DAP test and devised a Self-Concept Scale for it which was later validated (Bodwin & Bruck, 1960). His sample consisted of 300 subjects (100 each with reading disabilities, arithmetic disabilities, and no educational disabilities) from the third to the sixth grades of three elementary schools in Flint, Michigan. The SCS-DAP and achievement test results were obtained and correlations were made between reading and arithmetic disabilities, and self-concept scores. Some of the differences were significant. He concluded that a very positive relationship existed between immature self-concept and reading disabilities ( $r = .72$  and  $.62$  for grades 3 and 6 respectively), and between immature self-concept and arithmetic disabilities ( $r = .78$  and  $.68$ ). These correlations were significant at the .01 level. He further concluded that the relationship between immature self-concept and these two educational disabilities was greater than the relationship between immature self-concept and any other school subject disability. In addition, he found an age difference since the relationships between immature self-concept and the reading and arithmetic disabilities were greater for the third than for the sixth graders. Methodology and statistical analysis appear to be sound. Although he administered no experimental treatment, Bodwin did use a control group with no educational disabilities, to support his findings.

Lumpkin (1959) also sampled an elementary school population in his study of reading achievement with over- and underachievers at the fifth grade level. He studied self-concept, teacher perception of the child, and peer status. Underachievers in reading made significantly lower scores on achievement measures and manifested predominantly negative self-concepts, a desire to be different from the self as seen, and expressed significantly more conflict.

Ten years later Hishiki (1969) studied the self-concepts of sixth grade Mexican-American girls living in California. He compared his findings to those of a study of a sample of fourth and sixth grade Caucasian girls in Georgia. Low socioeconomic level groups and minorities are thought to have lower self-concepts than their white middle class and upper class counterparts. Hishiki's findings supported these previously reported conclusions by others. Although the findings for each of the groups seem substantial and valid when considered independently, the conclusions based on their comparison are suspect. The two groups were not administered the same IQ and achievement tests. The Mexican-American scores indicated significantly lower self-concepts, ideal concepts, and IQ scores on Language and Non-Language forms. However, many of the goals and aspirations were the same for both groups. The author suggested that the schools have the task of making reality fit the aspirations of the Mexican-American and white students.

Ten years earlier, Roth (1959, cited above) had investigated the relationship between self-concept and achievement with a college sample of 54 freshmen, enrolled in a reading improvement course and

distributed across three classes. She investigated the differences among the three groups of their self-perceptions in terms of general defensiveness on Self as Self, Self in Relation to Authority, Self as Student, and Self as Reader concepts. The three groups were Attrition, Non-Improver, and Improver. They were hypothesized to appear in that order from most to least defensive. Scores on the Diagnostic Reading Test before and after the program were converted into equivalent scores which weighted speed and comprehension when considered together. Standard score changes from pre- to posttest were not significant. However, Improvers were defined as those subjects whose scores did increase. Non-Improvers' scores decreased. The Attrition group were those who discontinued the program before the seventh session which was a halfway point. A Q-sort and sentence completion test were used. Unfortunately, no one measure was taken by all subjects other than the sentence completion test. However, Roth concluded that those who achieve do so as a result of their own need systems and in line with their self-concepts, as do those who do not achieve. He found a direct relationship between self-concept as a reader and reading improvement. He finally concluded that in order to expect improvement in any achievement area one must deal with improving self-concept and reducing defensiveness. A methodological limitation of this study was that with the exception of the Sentence Completion Test (SCT) no one measure was taken by all subjects. Random selections of equal numbers of subjects were administered the other measures. As such, his conclusions which were based

on the measures other than the SCT may not be as powerful as those based on the SCT findings. In addition, perhaps a biased sample was being studied since all subjects had already enrolled in a reading improvement course. He does not state whether they were reading below level and needed remedial help or if some simply wanted to improve upon an already adequate reading level.

Many investigators, some reviewed above, have found that the influence of significant others, such as parents, teachers, and peers, has significant effects upon self-concept and achievement (Davidson & Lang, 1960; Ringness, 1970). Rosenberg (1965) concluded that praise or support, or deprecation and chastisement are both better in relationship to self-esteem and self-concept than total indifference by parents to a child's school performance (p. 141). Ringness (1970) found that not only identification with various figures, but also values of achievement attributed to them relate to differences in achievement commensurate with ability. Davidson and Lang (1960) wrote that, based on their findings, the more positive a child's perception of his teacher's feelings toward him, the better the achievement and classroom behavior.

A child or adolescent develops a perception of the expectations significant others have of him. This perception of what significant others view him as capable of achieving is apparently included in the positive relationships that have been found between an individual's self-concept and his perception of how he is esteemed by others. Elder (1965) demonstrated that assignment to a low status school or to a low

academic class within a school resulted in lowered self-esteem, academic performance, and vocational goals. This is perhaps especially true in those instances where an individual is placed in a lower status school or classroom after having been in a higher status school or classroom.

Although studying subjects from Australia rather than the North American population, Katz (1964) made one of the very few investigations relating socioeconomic class to achievement and personality characteristics. He found a positive relationship between socioeconomic class of Australian adolescents and their level of aspiration. Katz suggested that the positive relationship between opportunities for social mobility and socioeconomic class may explain this correlation. He suggested that perhaps not all people held the same definition of success, and that these may differ across socioeconomic classes and differing cultural value systems. He stated that how one defines success yields an index of a subject's aspirational level and frame of reference. Using a sample of 819 boys and girls, aged 14 to 16 years, he found that wealth and possessions were the most frequently named criteria of success. A secure job was frequently mentioned as another success criterion. Personal effort and worthiness were frequently mentioned as the reason for attainment of success. However, lower socioeconomic class adolescents more frequently mentioned factors over which they had no control, such as "luck" and "influence" or knowing someone influential. Middle and upper class



subjects more frequently named a relative as their model of success than lower class subjects who may find a dearth of success models in their frame of reference.

The "level of aspiration" as referred to by Katz has received much attention from others, especially as related to subjects with high and low self-concepts. Lefebvre (1971) cited several studies and concluded that low self-concept can result in unrealistically high aspirations for an individual. However, a high self-concept can result in more realistic aspirations in line with the subject's abilities.

Personality Variables Relevant to the Self-Concept--Achievement Relationship. Attitudes of girls and boys differ, often markedly, girls being characterized by feelings of personal inadequacy, boys by feeling critical of school authorities. It might be hypothesized that, while girls turn negative feelings inward, boys tend to project them to the environment.

Berger (1961) found that high scorers on "willingness to accept limitations" tended to get better grades. Underachievers, by contrast, were able to accept only the good in themselves and evidenced idealized self-images which did not correspond to reality. They established extremely high standards for themselves, denied wholeheartedness of effort, and expressed the belief that they should achieve at a high level with little effort. They were unwilling to risk being wrong, being disappointed, or doing poorly.

Payne and Farquhar (1962) after distinguishing between under- and overachievers with the use of a word rating list measuring self-concept, found that oft-observed surface confidence of underachievers may conceal deepseated feelings of inferiority.

Finally, Fink (1965) described male and female under-and over-achievers as follows:

The achieving girl accepts herself and feels secure in the certainty that others will accept her. While these feelings may be defenses against feelings of inadequacy and lack of personal worth, this group appears to be the best adjusted of the four. There is evidence that these girls value hard work and planning, and see themselves as capable and smart. This evident self-satisfaction would appear to reflect a lack of insight and the ability for self-criticism (p. 535).

The underachieving girl is poorly controlled and impulsive. Their major orientation appears to be toward pleasure. They feel themselves to be alienated socially and view themselves as the victims of circumstances, unhappy, and misunderstood. They do not appear to accept or even perceive the goals and values of others, and appear to regard themselves as basically evil (pp. 536-537).

Underachieving boys appear to be the most inadequate and immature of the four groups. They appear to be alienated from society and perhaps from family. They do not hold to the ideals, values, and goals of the dominant cultural groups. They tend to be pleasure oriented but so inadequate and passive that they never achieve their goals. Instead, they complain of their powerlessness in a world dominated by power, but are willing to concede that might makes right (p. 537).

Academically achieving boys accept themselves basically but apparently not with the same degree of assurance displayed by achieving girls. Here, too, there is an apparent lack of insight and critical ability, coupled with what appears to be a rather complete acceptance of the values and goals of the dominant culture; conformity to these norms appears not to be questioned even in the face of inconsistencies (p. 535).

Suggestions for Remediation of Underachievement and/or Low Self-Concept. Several of the articles and books discussed earlier have made suggestions concerning remediation of underachievement and/or low self-concept based on their research findings. Cotter stated that research indicating the necessity for close cooperation between the school and mental health specialists and agencies in the communities is increasing (p. 181). Bower et al. (1970) cited Engel who found that positive maternal self-concept was related to overachievement in girls, as was positive paternal attitude toward interpersonal relationships with female children. It seems reasonable, then, that working with the parents of underachievers might be beneficial for the underachieving child. Ringness (1970) suggested parent conference and/or counseling for the parents of underachieving children. She also suggested that the teacher, preferably males since the father was found to have a greater influence on achievement, become more of an identification figure for his students. He suggested that the teacher and school become more "pupil-person" oriented than subject oriented. Cotter (1964) also discussed possible teacher involvement through ungraded classes, specialized teachers, team teaching, and homogeneous teaching of students at the same levels in various subjects. She also suggested that the teacher provide a climate of emotional maturity and "psychological health" by promoting closer student-teacher relations.

Swift and Spivack (1969), in their factor analysis of classroom behaviors relevant for achievement, found that a child has an active desire for positive interaction with his peers and teachers, and that when such needs are gratified he is less likely to underachieve. Considering the complex psychodynamics of a chronic underachiever, Bower (in Cotter, 1964) argued against the teacher's ability to deal with the emotional problems in the classroom because of the "average teacher's lack of a consistent and understandable theory of personality dynamics for understanding the meaning of behavior (p. 181)."

Quimby (1967) argued that to deal with underachievement the individual underachiever's self-concept and concept of ideal self must first be changed. Some authors (Kolb, 1965; Ringness, 1970) have also considered working just with the underachiever, rather than discussing his peers, teachers, or parents. Kolb suggested that underachievers be taught the values characteristic of overachievers, while Ringness suggested that underachievers be placed in school situations in which they associate with achievers. Both of these suggestions seem to aim at the same goal, which is counter to isolating the two groups from each other, in order to promote a sharing in an achievement oriented value system.

Individual psychotherapy has also been offered as an effective method to deal with the underachiever. Essentially, the focus is upon a change in the underachiever's self-concept rather than dealing directly with academic improvement (Halpern, 1965; Piers & Harris, 1964).

### CHAPTER III

#### GROUP INTERVENTION METHODS

Group Intervention Methods with Elementary and High School Students. Morrow (in Costello, 1970) reviewed methods for modifying academic underachievement that are based explicitly or implicitly on reinforcement learning principles. "These methods appear promising, although experimental evidence regarding their effectiveness is as yet incomplete (p. 553)." In addition, he was quite critical of the effectiveness of psychodynamic insight counseling, "enrichment," work-study or programmed instruction formats used alone. He asserted that there is a lack of empirical support for these methods when used singly, and cited Eysenck (1961) and Levitt (1957), both of whom arrived at similar conclusions following an "extensive review of the literature." They had concluded that there is little empirical support for the hypothesis that psychodynamic psychotherapy (whether psychoanalytic, client-centered, or some other variant) administered individually or in a group, produces significant improvement in maladaptive behavior. They further asserted that there is little empirical support for the key premises of psychodynamic psychotherapy. For example, the assumption that self-insight is

either a necessary or a sufficient condition for the modification of behavior, maladaptive or otherwise was refuted (see, for example, Eysenck, 1960, esp. Part I; Rachman, 1963).

Nonetheless, the assumption has persisted that a "method of choice" for correcting underachievement is psychodynamically oriented counseling, individually or in small groups, aimed at increasing the underachiever's insight into emotional conflicts presumed to underlie his poor academic performance. Occasionally a similar type of counseling may be offered to parents, individually or in groups, on the assumption that disturbed family relations are a major source of the underachiever's emotional conflicts (Morrow, 1970). As should be evident from the studies discussed thus far, there have been relatively few experimental studies which were adequately designed to assess the effectiveness of this approach.

The previous chapter concluded with a brief overview of suggestions or attempts to deal either with the "significant others" or directly with the underachiever or person with a low self-concept. The remainder of this chapter will discuss efforts made to deal with underachievement or an inadequate self-concept, or both, on a group basis. Some of the studies on self-concept deal with group approaches with individuals in diagnostic categories other than underachievement. The intent of the chapter's review is to consider the various group approaches which have been applied with subjects characterized by

either of the two main target variables of the present investigation. As such, the particular diagnostic population need not be limited solely to underachievers.

As indicated above, the hypothesis is that underachievement can be dealt with either through a focus upon the remediation of academic learning skills or by attempting to affect a positive change in the self-concept. Both approaches have met with success, although there is a slight edge in favor of trying to affect a self-concept change as being more lasting.

Compensatory Educational Programs. Most approaches which have dealt with large numbers of underachievers in groups and focusing on the remediation of academic learning skills have taken the form of compensatory educational programs. The data from several studies demonstrate that self-concept can be manipulated. Many of these programs work with disadvantaged youths. Geisler (1968) tried to ascertain the effects of such a program (Upward Bound) on the self-concept and achievement of high school age low income adolescents. A positive correlation between self-concept and achievement was found. Upward Bound students had significantly more positive self-concepts and higher GPAs after the summer program than before participating in it.

The following studies attempted to raise self-concept, but did not deal with sociocultural influences. Frankel (1964) found that an advanced summer study program for academically talented high school students enhanced their self-concepts, although their levels of

aspiration, as measured by the Inventory of Student Attitudes, remained constant. Thomas (1966) found that an expert presenting material designed to enhance self-concept and achievement of a group of ninth graders had little success. Once parents were involved in this situation, however, some progress was noted. Although these three studies used different approaches, they did show that self-concept can be manipulated in a positive direction as a result of focusing upon poor learning skills.

Hershovitz (1969) set out to determine if the self-concepts of 58 disadvantaged Black high school youths who were potential dropouts could be changed by a compensatory program combining educational and vocational elements. The program produced negative, rather than positive, changes in self-concept, as measured by the Tennessee Self Concept Scale. The results were attributed to the shortness of the program and an overemphasis on work adjustment in the vocational part of the project. Jensen's major study (1969) discussed the effectiveness of compensatory educational programs, primarily in negative terms.

#### Group Approaches to Deal with Low Self-Concept Individuals.

Maynard, Warner, and Lazzaro (1969) studied the effects of group counseling with emotionally disturbed eighth graders. The main purpose of the study was to evaluate the effects of two methods of short-term group counseling on classroom behavior. There were no measures of self-concept either before or after the experiment. However, self-concept was discussed in conjunction with one of the



treatment methods. One method of group counseling, verbal reinforcement counseling, was designed to focus specifically on certain behavioral patterns that would cause disruptions in the classroom or could hinder a person's ability to adjust to the classroom learning situation. The other method was client-centered group counseling which allowed the groups to have as much freedom as possible in determining the content of group discussions. Subjects were 52 boys and girls placed in special classes for the emotionally disturbed within a regular school. Thirty seven of the subjects were counseled by one of the two counseling methods, while the other fifteen served as a non-counseled or control group. The groups were assigned randomly to one of the three conditions. The overall mean intelligence for these students fell in the fourth "sten" on the Intelligence Scale of the Cattell Junior High School Personality Questionnaire (Cattell, 1959), with scores ranging from the fourth to the eighth "sten."

Other psychometric data available also indicated that they were about average intelligence. Before and after the group counseling experiment the three groups were evaluated by their teachers on a modified version of the Student Description Form, which is designed to obtain from teachers a rating of the student's behavior along eight dimensions. All students were found to have no significant differences on these variables before the experiment began, as computed by an analysis of variance on the teachers' ratings. Tape recordings of the counseling sessions of both methods revealed that several of the

topics presented to the verbal reinforcement group, were also of concern to the client-centered, non-directive group subjects. Five 50 minute group sessions were held during the fall semester.

Results indicated that on five of the behavior variables the subjects in the two counseling groups received a higher mean rating, indicating better classroom behavior, than did the noncounseled subjects. On the sixth variable, Consideration for Others, the verbal reinforcement group received a higher mean rating than the noncounseled group, but the client-centered group had the lowest mean rating. In addition, on five of the six variables, the subjects in the reinforcement group received higher mean ratings than the client-centered group subjects. The data were submitted to a multivariate analysis of variance. Two of the univariate analyses of variance were significant at the .01 level. They were: Involvement in Classroom Activities, and Critical and Questioning Attitudes. There were no significant differences between the two counseling groups on these two variables. But post hoc comparisons did indicate that subjects in either one of the counseling treatments received significantly higher behavior ratings on these two variables than did the noncounseled subjects.

Becker, Gusrae, and MacNicol (1963) also found positive results in their study using a combination of individual and group therapy to deal with poor self-concepts and personality problems of adolescents. The setting was a general hospital, and the therapists were a psychiatrist and the social service department which worked closely

with him. They found the combined individual and group therapy sessions to be very helpful in overcoming resistances and blocks to progress. The study was non-specific as to the details of the therapy sessions. Both of the last two investigations reviewed indicate that self-concept can be manipulated and can change in a positive direction.

Truax, Wargo, and Silber (1966) administered measures of self-concept. They hypothesized that delinquent girls in a psychotherapy group characterized as high in therapist-offered conditions of accurate empathy and nonpossessive warmth would show more progress than girls in the same institution (Kentucky Village) who received only institutional care without group therapy. They randomly assigned 70 girls to therapy or control conditions. Forty girls were divided into four groups and seen by two therapists demonstrated in prior research to be high in these qualities of empathy and warmth. Each group had 24 sessions distributed over a three month period. The main criteria were release from the institution, and amount of time spent in the community. Analysis of co-variance was calculated for the two groups, with the initial measure being the percentage of time spent out of the institution in the 1,061 preceding days. The final measure was time spent out of the institution for the 344 days after group therapy was initiated.

Significant differences were found for the treated group. A similar analysis was computed for "delinquency proneness" as measured by the "C" scale of the Minnesota Counseling Inventory. Again the

treated groups were superior, although the girls were still more delinquency prone than normals in the test standardization. Changes in self- and ideal-concepts on a modified version of the Butler-Haigh Q-sort also generally favored the treatment group, as did attitudes towards parents on the MCI. Both groups improved on the MCI stability and social scales, but there were no changes on an Anxiety Reaction scale. Details of the group sessions are not available, nor were the significance levels reported. This final point places the study's results under suspicion especially since the self- and ideal-concept changes "generally favored" the treated group, rather than being significantly better.

Humes, Adamczyk, and Myce (1969) offered group counseling sessions to 21 educably retarded adolescent girls and boys. There was also a control group of 7 subjects, boys and girls. The ages ranged from 13-5 to 17-1. IQ range was from 53 to 77 as determined either by the Stanford Binet or Wechsler Intelligence Scale for Children. These subjects comprised the total of the only two special classes in a large junior high school. Subjects were two experienced male counselors, both beyond the master's level in preparation and neither worked in the school where the experiment was conducted. In addition, they were uninformed about the hypotheses or objectives of the experiment. A posttest control group design was used with equality of groups verified by a pretest analysis. A two-factor design permitted four separate treatment groups using two levels of experimenter variables and two conditions. Subjects

and experimenters were randomly assigned to one of the four treatment groups, with subjects' CA and MA differences and a range of measured IQ distributed randomly across groups. All subjects were seen individually by the appropriate experimenter for a 10 minute orientation interview, followed by group sessions meeting one hour per week for 12 weeks. The non-counseled groups received occupational and vocational information in a different classroom than their own, while the counseling groups met in small conference rooms. The counselors followed standardized procedures in which the first three sessions were unstructured and facilitative, and the remaining sessions, with the exception of the termination meeting, were structured and problem oriented. The problem oriented stage featured the introduction of a stimulus card per session from the TAT or Symonds Picture Story Test which was intended to focus group attention on a typical adolescent problem. The dependent variables were: a behavior rating scale, the California Test of Personality (Elementary), The Way I Feel About Myself (Piers & Harris, 1964), The Children's Self-Concept Scale, the SCS-DAP (Bodwin & Bruck, 1960), and a sociometric test. The raters and scorers were blind as to which treatment any individual had participated in. The results indicated the effectiveness of group counseling with EMM adolescents. The two hypotheses supported were:

- 1) that counseled, in contrast to non-counseled, group members exhibited significantly better adjustment as seen in teacher ratings on a behavior scale; and
- 2) that counseled, in contrast to non-counseled, group members scored significantly higher on a standardized personality

inventory. However, they obtained no statistically significant results for their several self-concept measures. To explain this, they suggested that significant self-concept changes may be possible only through a long term approach since self-concept represents a deeper personality characteristic; the construct itself is not well delineated and thus difficult to measure directly; and the self-concept measures seem to require more validity and reliability studies. The general design of this study was adequate. While there was no untreated control group, the placebo group controlled for the effects of extra attention received and program variety.

Counseling Groups for Underachievement Problems. Marie (1965) conducted a study using multiple counseling as the experimental treatment to male and female adolescent underachievers. She concluded that in positive programs using multiple counseling techniques the underachiever may be saved from the fate of being labelled a dropout or school failure.

Cubbedge and Hall (1964) proposed an approach to dealing with underachievers in the seventh grade. As a result of 14 weekly discussions with the underachievers, and weekly discussions with their parents, the experimental group made greater gains in achievement measured by standardized tests than the control group. However, t-tests indicated that the gains were not significant at the .05 level. Despite the lack of empirical support, the investigators still held a belief in their hypothesis based upon the questionnaires completed

by the parents and students. Further research is needed to attempt to find empirical and statistical support for their beliefs.

Gersten (1951) also investigated the effects of group therapy upon the academic achievement and self-concepts of delinquent juveniles. The subjects were all males and Gersten focused more on their achievement than self-concepts. The sample consisted of forty-four male juvenile delinquents institutionalized at the New York State Training School for Boys. The experimenter reported that all subjects had been reared and trained in antisocial behavior since infancy. The author does not make clear the bases for this statement. Subjects ranged in age from 13 to 16 and had a mean IQ of 85.6. Twenty-two pairs of boys were matched for age and IQ level. The experimental and control groups were matched as groups on education, socioeconomic status, race, and family background. The groups met for 20 weekly sessions. All subjects were tested before and after the experimental period with the Wechsler-Bellevue, Stanford Achievement Test, Maller's Personality Sketches, and the Rorschach. The Haggerty-Olson-Wickman Rating Schedule was filled out by the staff. The average IQ of the boys rose three points after group therapy, while the untreated controls remained the same ( $p = .05$ ). The group therapy subjects advanced eighteen months in school placement (SAT) while the controls only advanced three months during the six month period ( $p = .01$ ). The treated group was said to have made more progress in adjustment as reflected by the Rorschach, but no actual data were presented. The study became imprecise when dealing with personality

changes or changes in self-concept. However, the improvement in academic achievement was made distinct. No information was supplied as to whether the group therapy experience had any subsequent bearing in delinquency.

Shouksmith and Taylor (1964) studied male underachievers in high school. The three study groups were a counseled group, a "placebo" group, and a second control group. The subjects were 12 to 13 year old underachieving students of above average intelligence. From triads matched for IQ, age, and achievement test scores, one of each was assigned to each of the three groups. The counseled group received individual, nondirective, biweekly counseling sessions and some group discussions. The placebo group took the same psychological and achievement tests as the counseled group, while the control group had only initial screening and final tests. The counseled group had improved significantly after six months on four of six achievement tests. The other groups had also improved, but significantly less improvement was made than by the counseled group. Sixty-seven per cent of the counselees were no longer classified as underachievers, while 22 of the 24 non-treated boys remained in that category. Correlated improvement was shown in peer group acceptance and more favorable teachers' reports of cooperation and improved social adjustment only in the treated group. The benefits do not appear to be attributable to time passage or special attention, and appear to be results of the counseling procedures.



Three methods of assisting underachieving high school students were compared by Baymur and Patterson (1960). The goal was to reduce, rather than eliminate, underachievement. The authors hypothesized that since emotional factors seem to be involved in underachievement, then therapeutic counseling should be effective in reducing such underachievement. They investigated the relative effectiveness of two different counseling methods, and an attempt to increase motivation in what might be considered a common or traditional way. The methods used were individual counseling, group counseling, and what was designated "one-session motivational group counseling." They predicted that if the latter two methods were found to be at least as effective as individual counseling it would be an important finding since they would be less expensive, less time-consuming, and many more students could be reached by the limited number of counselors available. Juniors from a midwest high school whose percentile ranks based on grades were 25 or more points below their own percentile rank on the Verbal and Abstract Reasoning Tests of the Differential Aptitude Test taken at the beginning of the school year were designated as underachievers. Two students with 24 point differences on percentiles were included in order to obtain a sufficient number to comprise four matched groups of at least eight members each. Differences ranged from 24 to 67 percentile points. There were 9 girls and 23 boys, a sex difference frequently observed among underachievers. Subjects were matched and randomly assigned

to groups, to the extent possible, considering that counseling group subjects had to have the same period free for the sessions. They were assigned four at a time on the following variables: discrepancy between grade and DAT score, potential scholastic capacity (DAT score), academic achievement (grades), socioeconomic status, chronological age, and sex. Analysis of variance indicated no significant differences in underachievement, DAT scores, or age among groups.

The individual counseling group subjects were seen for 35 to 55 minutes in 10 to 12 weekly sessions, with the exception of one seriously disturbed subject who was seen 16 times (twice weekly during the latter part of the period). Client-centered techniques were used, interviews were recorded, and the counseling was supervised. Only nine weekly group counseling sessions were conducted due to holiday vacations. These sessions were also conducted in a client-centered manner. Groups receiving individual and group counseling were informed of the nature and purpose of the study to control for the information-motivational factor with the third group. However, in both situations subjects were restricted to discussing academic problems. The motivational counseled subjects met only once during the first week of the experiment. Members were informed that they were underachievers, were encouraged to work to reduce the gap between potential and achievement, and were told the importance of good grades for further education and employment. They

were told that some other students would receive special help, but that such help could not be given to all the underachievers in the class. Members of these three experimental groups were given copies of Study Your Way Through School (Gerken, 1953). The fourth group was a control group which had no contact with the counselor. The deans and other counselors were given a list of their names and asked to refrain from providing counseling for the duration of the experiment, which was done.

The Q-sort was used as a measure of personal adjustment. A criterion sorting of 45 items was available with which individual student sortings could be correlated. This criterion sorting had been agreed upon by 7 judges as to what they thought should be sorted by a well adjusted 17 year old adolescent. The Brown-Holtzman Survey of Study Attitudes was selected to measure the area of study habits and attitudes. GPA was used as the measure of academic achievement. In addition, a questionnaire was administered to the subjects at the conclusion of the experimental period to determine what information and attitudes they had about the study, etc. The hypotheses were tested by analyses of variance and t-tests. Prior to the analyses, the subjects were ranked and paired on the basis of precounseling scores. A two way analysis of variance yielded results showing that the overall analyses of variance were not significant. However, the comparisons of the counseled versus the noncounseled groups yielded positive results of positive change in self-concept, and increases in grade point averages, and were significant at the

.05 level. This occurred as a result of the pooling of consistent trends and increasing the numbers in the comparisons. There were no significant results on the study habits and attitudes measure.

The experimenters cited several explanations for their failure to find significant results between the counseled groups. Some explanations were: that the time was quite limited, that subjects had little in common other than being underachievers, and that the counselor felt that her lack of experience in group counseling caused her to lack assurance in the group and prevented her from developing a therapeutic rather than a teaching attitude. One last interesting finding was that the one-session motivational group declined on all three measures used in the study, falling below the control group on all post-test measures. This approach is the one commonly used by parents and teachers who attempt to raise the achievement of students. The experimenters suggested that it might be better to leave underachievers alone, rather than pointing out their failure to achieve adequately and exhorting them to do something about it. This study's findings were very similar to those reported by Maynard et al. (1969) in which no significant differences between types of counseling were found initially, although results supported the finding that counseling of any type is better than no counseling.

The study which most closely resembles the present investigation was that reported by Thoma (1964) who investigated the effects of group psychotherapy with underachieving public high school girls. The discussion topics were selected by the girls and the sessions as

Thoma described them closely resemble the sensitivity-encounter group method used in the present study. Thoma's sample of 43 girls ranged in age from 13 to 17 years. They were equally divided among four groups of approximate size. They had a history of underachievement together with an IQ of 115 or higher. More than half were regarded by their teachers as otherwise exhibiting no problems. Membership in the group was voluntary. Strict confidentiality was followed, and parents were only seen with the girl's permission and in her presence. Each subject was seen individually by the therapist for about a half hour before the first session. The groups met for 30 one-hour sessions, following the didactic initial introductory half hour session. The experimenter reported that the girls immediately verbalized "gripes" in the first session. These were directed toward one or more of their teachers, accompanied by testing the therapist, and competing with other group members. The topics brought in by the subjects showed that they fell into a chronological order, roughly, as follows: relationships with teachers, with parents, with peers, and with the opposite sex. The emphasis in the sessions was on free interaction and expression of feelings. Little attempt was made to elicit or to deal with past history, but rather the focus was on the here-and-now experiences of the group. The therapist rarely offered interpretations. The therapist reported that feelings of cohesiveness developed in the group, and even though hostile competitiveness was expressed within the safety of the group, most of the girls also experienced mutual support. The therapist

was empathic, and at times took roles suggested by the material brought in, such as: teacher, unpopular student or older sister. Thoma commented that her active participation as therapist enabled the girls to learn to deal with authority figures without fear. Gradually, defenses were no longer used to hide the true self.

The therapist had at least two conferences with each of 69 teachers. Results demonstrated improvements in three areas, based upon each girl's evaluation of the group experience and upon changes observed in her by both group members and teachers. Thoma did not report whether the teachers were aware of which girls were in the group psychotherapy sessions. However, her descriptions of the teacher-therapist conferences and teacher ratings of behavior changes leads one to suspect that the teachers were aware of which girls were group participants. This knowledge by teachers may well have established biased ratings in favor of the group members. It is not necessary that teachers be cognizant of the actual group methods employed for this knowledge to bias their developing a positive "halo" effect in their ratings of these particular students. This methodological weakness may have contributed to the significant results found. Ideally, teachers should have no way of knowing whether a particular girl is participating in the group. Even better, if at all possible, perhaps teachers should not even be aware that anyone is involved in a special project such as a psychotherapy group.

The girls' evaluations of the group and changes in each girl as observed by other group members and teachers were reported to the therapist whose clinical judgment concluded that the three improved areas were: feelings of strength and self-worth seemed to have replaced anger; awareness of the causes and effects of conflicts with authority was achieved, accompanied by increased tolerances of differences in values; and, understanding the analogy between sibling relationships and relations with other peers led to some realization that cooperation does not mean submission. Thoma offered no statistical analyses to support these findings. As for school achievement she reported that 37 of the 43 subjects (86%) showed improvement in their final grade averages over those of the previous year. The six showing no improvement had dropped out of the group by the sixth session. The grade improvement reported was from 79.8 to 87.4 which is significant at the .01 level. Although no simultaneous control group was used, the subjects served as their own control group on the achievement measure as their final grade of the previous year was used as the pre-group therapy achievement level. The idea and results are promising, but lack in experimental precision. It thus has much relevancy for the present study which has attempted to follow more precise methodology and has made use of a separate control group.

Group counseling and group therapy techniques with high school students is an occurrence which has become popular mainly since about 1960. As a result, most studies using these methods deal with college

students (Gilbreath, 1971; Shlien, Mosak & Dreikurs, 1962) and adults (Ends & Page, 1957; Ends & Page, 1959). Concerning counseling for underachievers, Ofman (1964) reported an increasing recognition among professional workers that work required for academic attainment at the college and graduate levels is qualitatively different from that required in prior academic settings. Due to the nature of the college population and differences one might expect between them and high school students, it does not seem necessary here to do more than cite references for the reader interested in studies dealing with populations above the high school age subject, of interest to this study. The counselor or therapist role may be relevant in some instances, but the results of studies using college students and adults appear to be irrelevant for the present purposes.

### Sensitivity Group Method

Sensitivity training or T-group methodology ("T" for training) is a type of human relations training which grew out of the National Training Laboratories at Bethel, Maine in 1947 (Bradford, Gibb, & Benne, 1964). Gibb (1970) described sensitivity-training groups as:

The classic method of human relations training . . . In the first decade after their invention by the National Training Laboratories in 1947, these groups followed a fairly clear and consistent model. The group leader was a process observer and reporter, a relatively inactive trainer who attempted to keep attention on process rather than content, and to keep interaction in the "here-and-now," continually dealing with perceptions and feelings that members generated about each other within the group setting. Since then the model has



become considerably broadened to encompass a wide variety of "intervention styles," theories of leadership, and behavior change. (pp. 851-852)

The training laboratory was designed to "try out new methods for re-educating human behavior and social relationships (Bradford, Gibb & Benne, 1964, p. vii)." Most of the research done on human relations training was performed on sensitivity-training groups. This is the classic method of in-depth human relations training in small groups known as the "T-group" or "sensitivity-training group (Gibb, 1970, p. 851)." Most of the studies in this area have focused upon college students (Culbert, Clark & Bobele, 1968; Grater, 1959; Lehmann, Zenger & Wechsler, 1959; Riley, 1971) and adults (Clark & Culbert, 1965; Rubin, 1967). Valiquet (1968) studied industrial management personnel and professionals. Several widely respected books have proven useful and informative in their discussions of the psychodynamics of group interactions and effective therapist variables (Back, 1972; Egan, 1970; Golembiewski & Blumberg, 1970; Lieberman, Yalem & Miles, 1973; Rogers, 1970; and Schutz, 1971). The research on the use of this method with high school students is extremely meager. This author found only two studies related to the present investigation. That by Thoma (1964) reviewed above did not use the terms "sensitivity" or "encounter" but, by description, evidenced that her group psychotherapy was run like the encounter group of this present study. Orsburn (1967) was the only study found by the author in the literature, using the terminology "sensitivity group" which dealt with high school students.

Orsburn's (1967) study was conducted to determine whether different group procedures were related to improved classroom behavior, as judged by the classroom teachers, and/or changed real-self: ideal-self congruence, as determined by change in the subject's distribution of 50 self-referent items on a Q-sort. Subjects were 84 high school sophomores judged by their teachers as being in the better one-third of their class on the dimension of classroom behavior. Subjects attended a high school in Kent, Ohio. They were randomly assigned to three separate groups, each subdivided into two subgroups of 14 subjects each. Group A participated in 8 weeks of sensitivity training and met in groups of 14 for 45 minutes three times weekly. The same trainer conducted all sensitivity sessions. Group B attended lecture sessions for 8 weeks, meeting in groups of 14 for 45 minutes once a week. School and community leaders conducted the lecture series. Group C was assigned as a control group. They met only three times in order to complete the Q-sort.

The instruments used were a locally devised Behavior Rating Scale, used to give a quantitative value to teacher perceived classroom behavior, and an adaptation of the Page and Pettinato Q-sort, used to determine correlation between real- and ideal-self at a given time. The data were gathered on three occasions: the day before the group procedures commenced, the day after the completion of the eight weeks of group procedures, and as a follow-up eight weeks later. Statistical procedures used were the sign test for within-group changes and the Mann-Whitney Test for between-group changes. A

two-tailed test and .05 level of significance were selected. The investigator reported that the results of the statistical tests of the hypotheses justified the following conclusions:

1. Sensitivity training was more effective than either lecture series or no treatment for improving classroom behavior.
2. Both sensitivity training and lecture sessions were more effective means of improving behavior than was no treatment.
3. Sensitivity training was more effective than either lecture series or no treatment for influencing improved real-self, ideal-self congruence.
4. Lectures had the temporary effect of improving behavior and decreasing real-self, ideal-self congruence.
5. Lecture sessions resulted in greater immediate change in behavior, but the sensitivity training group continued to improve after the action phase of the study while the lecture group regressed, resulting in significant long range change for the sensitivity training group, and no significant long range change for the lecture group.
6. Improved real-self, ideal-self congruence did not necessarily precede or accompany improved behavior. (p. 504)

The large differences in the numbers of sessions provided for the three kinds of groups places this study's findings under suspicion. In effect, the sensitivity group had 24 sessions within an eight week period; the lecture series group met only eight times; while the no-treatment group was seen only three times for the purpose of completing the Q-sort. It would seem that the number of times and frequency of contact alone might account for the results, or some of them, which the author claims are statistically valid and methodologically sound. A second serious limitation to the credibility of Orsburn's findings lies in what knowledge the teachers

had of subject participation in the study and the kind of interventions being applied to the three group types. Their knowledge of the group treatment and membership could obviously have biased their evaluations of the students' classroom behaviors. Since the author makes no mention of precautionary measures taken to avoid such biases by the teachers, it may be assumed that such precautions were not taken.

Two well-done reviews of the research in this area (Campbell & Dunnette, 1968; Gibb, in Bergin & Garfield, 1970) are definite contributions to the sensitivity training literature. Gibb completed a particularly admirable and objective review analyzing 106 studies, including seven earlier reviews of such research. He had also examined 123 additional studies which did not measure up to his criteria for inclusion, as well as 24 then recent doctoral dissertations from thirteen universities. Drawing his conclusions from the findings of many studies, he stated, "Changes do occur in sensitivity, ability to manage feelings, directionality of motivation, attitudes toward self, attitudes toward others, and interdependence (p. 855)." Attitudes toward self includes self-acceptance, self-esteem, congruence of perceived and ideal-self, and self-confidence.

Authenticity groups, sometimes called encounter groups or growth groups, as well as sensitivity training groups, were described by Gibb in his review. They are very similar with only minimal differences in leader-trainer functions and focus. His description of sensitivity training groups was given above. That of authenticity

groups follows. Both describe the kind of approach attempted in the present study.

Authenticity Groups. Stemming from a growing accent in religion, therapy, management, and philosophy, upon authenticity, openness, transparency, encounter, and confrontation, the last decade has seen a rapid growth, particularly in California and other parts of the west, of quasi-therapeutic training groups that focus primarily on openness of communication of the person with himself and with others . . . (T)hese experiences are an extension of methods found to be effective in dyadic therapy, and are, in a sense, "therapy for normals." Leaders, often coming to training groups from experience or training in individual or group therapy, rely upon time-tested methods of feeling-expressions, personal feedback, mirroring, role-playing, confrontation, and fantasy analysis. There is little available published research on training in these groups. (p. 851)

In contrast to the meager research done on authenticity groups, "from the beginning, the practitioners of sensitivity training groups have been strongly research oriented (pp. 851-852)."

The six most frequently recurring objectives in the training literature are: sensitivity to self and the feelings of others; managing feelings; managing motivations; functional attitudes toward self; functional attitudes toward others; and interdependent behavior, according to Gibb. He listed specific central aims for authenticity groups and sensitivity groups, respectively, as:

Openness and authentic encounter (Authenticity Groups); Personal competence, group effectiveness, and organizational effectiveness (Sensitivity Groups) (p. 840)

#### Definitions, Rationale for Treatment Method, and Hypotheses for the Present Study

Definition: Self-Concept. The definition of the self-concept as described above by Rogers and his associates, and defined from a

phenomenological viewpoint is congruent with this author's definition. Briefly stated, self-concept is an organized configuration of self-perceptions. It is a person's view of himself; the fullest description of himself that a person is capable of entertaining at any particular time. The self-concept develops as a result of perceptions of itself, and as a result of social learning within the context of relationships with significant others who give one feedback. Thus, self-concept is learned. Certain aspects of a person are seen as characteristic and relatively stable of himself throughout his life. However, there are certain other aspects of oneself, more peripheral aspects, which must undergo constant remodification. This must occur in reaction to the aging process, if nothing else. Thus, self-concept is a changing characteristic and cannot be static throughout an individual's life span, if one is to remain psychologically and emotionally intact. Both the nuclear, more stable characteristics and the peripheral, changing ones constitute one's self-concept. So, depending upon the stimulus, the aspect of the self-concept involved, and the reality of the situation, the phenomena of change or modification, as well as stability of aspects of the self-concept may be either healthy or debilitating. It is noteworthy to recognize that one's self-concept may be an accurate or inaccurate self-assessment but, nonetheless, it is "reality" for the self-perceiving individual. Those experiences and perceptions which are congruent with one's self-concept are admitted into conscious awareness. Those which are at variance with one's self-concept are

refused conscious recognition. As such, if an individual has a negative self-concept, he will usually refuse to accept positive perceptions as true of himself without some additional experiences which challenge his need to maintain a negative self-concept. Likewise, an individual with a positive self-concept may typically defend himself against accurately perceiving experiences or perceptions which challenge that basic positive self-concept. However, it seems from research and everyday life experiences that the self-concept can be modified.

Often in an atmosphere of trust the individual will feel safe enough to lower his defenses. In such situations, he can evaluate more realistically whether his self-concept is congruent with the reality of the external environment. For example, an individual who felt others did not like him might be convinced that he is lovable if people he trusts tell him that they like him and what they like about him in fairly concrete terms. Almost the opposite situation can also result in self-concept changes. Often a person may find himself in a situation in which the emotional and intellectual impact of an experience is so overwhelming and so challenges existing self-perceptions that he has to admit them to awareness and subsequently modify his self-concept to integrate this new information. This is the definition and view of self-concept of the author of the present study. These aspects of the sensitivity-encounter group method which are considered capable of effecting a modification in self-concept will be presented shortly.

Academic Achievement. Academic achievement is generally defined as the grade level at which an individual is performing based upon his score on a standardized achievement test, or according to teacher ratings or school grades. Although several operational definitions of underachievement have been used, as reflected by studies reviewed earlier, the key criteria used to identify underachievers for the present study were: (1) any student scoring below her current grade-level placement (8.6) in one or more of the major subject areas of reading, mathematics, or language on the Scholastic High School Placement Test: Closed Series I, a standardized achievement test, administered to all incoming freshmen at the school which participated in this study; (2) and/or whose IQ score on the same test was below 100, even though achievement levels in the aforementioned subject areas were at or above her current grade level placement.

Certain personal experiences and mechanisms or phenomena which occur in encounter group situations have been found to eventuate in learning and behavior change. Many maintain that changes in behavior are frequently associated with, and consequents of, personality changes. One of the major personality changes which is often followed by noticeable behavioral changes is a change in the self-concept of an individual. It follows that if the behavioral change is in a positive direction, the self-concept change which it may have followed was also in a positive direction.

Two recent major literary efforts have attended to the various aspects of "change" (Meltzoff & Kornreich, 1970; Lieberman, Yalem, &



Miles, 1973). Meltzoff and Kornreich focused on many of the methodological hurdles involved in measuring "change" as a result of psychotherapeutic interventions. Lieberman et al. conducted a study of specific factors which have previously been postulated as promoting learning and change in encounter groups. The major mechanisms investigated were: expressivity (the expression of intense personal feelings), self-disclosure, feedback (receiving information about one's behavior that can be accepted), experiencing strong emotions, and cognitive learning (the discovery or reinterpretation of something about oneself, self-insight, or receiving cognitive information that can be adapted for oneself). Some, if not all of these personal learning mechanisms can be found to occur in individual or dyadic therapy settings. Other mechanisms, which are unique to a group experience, which were also investigated were: the experience of communion (a feeling of oneness with the group), altruism, spectatorism (spectator therapy), the discovery of similarity, and active vs. passive involvement. They investigated a number of other processes which have been considered by others to play a role in change: advice-getting, modeling, experimenting with new forms of behavior, inculcating hope, and perceiving the group as a symbolic family.

Three major groups: learners and positive changers, unchanged, and negative changers, resulted when the study was finished. There were also some casualties or individuals who dropped out of the encounter group sessions prematurely. The mechanisms were studied through the eyes of the participants, using primarily data called for at the end of each meeting.

The findings based on these data are somewhat surprising, insofar as a number of the "favorite processes" implicated as crucial to change in encounter group theory and in the literature of related fields failed to show associations with learning and change in a positive direction, especially. The number of events that differed between the learners and those who were unchanged was small and primarily involved cognitive learning. The expression of anger, of rage, the experience of profound emotions, the receipt of feedback, self-disclosures in and of themselves, appeared not to differentiate markedly those who learned and those who remained unchanged. It was only when cognitive events modified these experiences that statistically significant differences obtained among the learners and those who remained unchanged were found. In their explanation of why the "favorite processes" failed to show significance independent of cognitive learning, the authors suggested that, "It may be that many of the mechanisms which are associated with encounter groups and thought to be critical to learning are not simply related to learning, itself, but rather to the building of an environment upon which people can draw for learning." (p. 376)

Some of the variables on the Carkhuff-Egan behavior rating scale (Appendix A-III) used in the present study bear a resemblance to some of the mechanisms which Lieberman et al. (1973) studied. In the author's view the following item sets appear to tap similar

aspects of the personal experience and encounter group processes:

Lieberman, Yalem, and Miles	Carkhuff-Egan Scale
expressivity	warmth, expression of feelings
self-disclosure	self-disclosure
feedback	confrontation
experiencing strong emotions	expression of feelings
cognitive learning	response to confrontation
communion	warmth
altruism	warmth
spectatorism	accurate empathy
active vs. passive involvement	initiative
advice-getting	response to confrontation

The ratings for the experimental subjects on the Carkhuff-Egan Scale and the semantic differential will be used to study the development of the group life and to relate the group experience to changes on the self-concept and achievement measures.

The final analysis of the results and their interpretation will not be able to demonstrate that either self-concept change or achievement change caused the other since the self-concept and achievement measures were taken at the same time. At best, they can be shown to relate to each other. Only one measure, the third semester school grades for the experimental I group, might show some temporal relationship between the two major target variables of self-concept and achievement. These grades were obtained by the girls after their group sessions

had ended and after their post-test measures on both major variables had been taken. However, this would only yield data on one of the four groups as to whether anything about causality can be substantiated.

Most of the studies reviewed in the literature support the basic assumption of the present study that a positive correlation exists between self-concept and achievement. Those finding negative or no correlation between these two concepts were few and generally methodologically weak, as reflected in the studies reviewed in Chapter I. Hypotheses for the present study are:

1. That the school achievement of underachieving ninth grade girls will improve significantly as a result of a sensitivity-encounter group experience as compared with subjects from the same population who did not have such an experience.
2. That the self-concept of underachieving ninth grade girls will improve significantly as a result of a sensitivity-encounter group experience as compared with subjects from the same population who did not have such an experience.
3. That the initial status of experimental subjects on measures of intellectual functioning and emotional pathology are related to the amount of measured change in self-concept and subsequent school achievement scores.
4. That the interactional group process measures based on the group interactions are directly related to self-concept and school achievement score changes by all subjects.

## CHAPTER IV

### METHODOLOGY

#### Study Procedure Summary

The major assumption underlying this study is that there is a positive correlation between self-concept and achievement. This study will examine if when self-concept is manipulated and improved, achievement will also improve, and that one method of affecting a positive change in self-concept is the sensitivity-encounter group method. This study, in effect, is dealing with whether this particular group intervention method can remedy a defective self-concept which is assumed to characterize underachievers.

Hypotheses generated from these assumptions are:

1. That the school achievement of underachieving ninth grade girls will improve significantly as a result of a sensitivity-encounter group experience as compared with subjects from the same population who did not have such an experience.
2. That the self-concept of underachieving ninth grade girls will improve significantly as a result of a sensitivity-encounter group experience as compared with subjects from

- the same population who did not have such an experience.
3. That the initial status of experimental subjects on measures of intellectual functioning and emotional pathology are related to the amount of measured change in self-concept and subsequent school achievement scores.
  4. That the interactional group process measures based on the group interactions are directly related to self-concept and school achievement score changes by all subjects.

Briefly, the study procedures were as follows. The experimenter was a black female doctoral candidate in clinical psychology with training and work experience in diagnostic testing and in therapy. Subjects were 56 freshmen girls enrolled in a special educational program in an all girls Catholic high school. Without knowledge of the girls' identities, the experimenter assigned each subject to one of four groups: two experimental groups of 12 and 15 subjects, respectively, and two control groups of 15 and 14 subjects, respectively.

The groups did not differ significantly on the variables of age, socioeconomic status, IQ and achievement scores on their high school entrance exam, nor on initial level of emotional pathology. Each of the two experimental groups participated in sensitivity-encounter groups which met for 16 one-hour weekly sessions distributed across  $5\frac{1}{2}$  months.

All subjects were administered three tests before and after the 16 sensitivity-encounter group phase of the study. These test measures

were: The Tennessee Self Concept Scale (TSCS), the Wide Range Achievement Test (WRAT), and the Draw-A-Person (DAP) (four drawings). The semantic differential (SD) was administered at the pre-testing (to experimental group II ( $E_{II}$ ) only) and the post-testing to the experimental subjects, and at the beginning of the 6th, 10th, and 14th sessions. The Carkhuff-Egan Scale (C-E Scale) (Appendix A-III, IV) was used to analyze the group interactional process for the second through the sixteenth session. School grades (SG) for the first, second, and third semesters were obtained for all subjects.

Analysis of the data was made on the pre-post test difference scores using t-tests, 3-way analysis of variance, 2-way analysis of variance, and a correlational matrix. More specifically, analyses will include: t-tests to test the differences between means for uncorrelated data; a 3-way analysis of variance for all subjects grouped according to three dichotomous variables of treatment group (experimental or control group), level of intellectual functioning (above or below the group mean IQ of 94.5), and level of initial emotional pathology (above or below a criterion point score of 2.0 on Emotional Indicators for the mean DAP pre-testing score); a 2-way analysis of variance for experimental subjects grouped according to two dichotomous variables of level of intellectual functioning and initial emotional pathology; and a correlational matrix for all subjects on all measures obtained (TSCS, WRAT, DAP, SG, C-E Scale, and SD). The t-tests relate to hypothesis 1; the F-tests, analyses of variance,

relate to hypothesis 2; and the t- and F-tests on the C-E Scales and SDs relate to hypothesis 3. The correlation matrices will be used to support all data obtained.

### Experimenter

The experimenter was a black female doctoral candidate in clinical psychology with training and work experience in diagnostic testing and in therapy. She has participated as therapist in several psychotherapy groups and as participant-member in encounter groups, and had an understanding of group interactional dynamics. She functioned as both investigator and facilitator in this study. The experimenter did not know the group membership, identities of the girls, in her role as investigator when she was selecting the subjects and assigning them to one of the four groups.

### Subjects

The subjects were 56 freshmen girls enrolled in a special educational program in an all-girls Catholic high school. Subjects were assigned to four groups: two experimental groups of 12 and 15 subjects, respectively, and two control groups of 15 and 14 subjects, respectively.

With the exception of two girls, aged 16 and 18 years, all subjects ranged in age from 13 to 15 years. Ethnic identifications for the groups were: Experimentals - 1 black (4%); 7 Spanish or Italian speaking as primary family language (26%); and 19 whites (70%);



Controls - 1 black (3%); 9 Spanish or Italian speaking as primary family language (31%); and 19 whites (65%). Total group ethnicity was: 3% black, 29% Spanish or Italian speaking as primary family language, and 68% whites.

Sibship distribution was: Experimentals - 1 (4%) only child; 6 (22%) oldest children; 6 (22%) middle children; and 14 (52%) youngest children; Controls - 2 (7%) only children; 6 (21%) oldest children; 9 (31%) middle children; and 12 (41%) youngest children; total group sibship distribution was: 3 (5%) only children; 12 (21%) oldest children; 15 (26%) middle children; and 26 (48%) youngest children.

The parents' marital status distributed as follows: Experimentals - 1 (4%) divorced; 18 (67%) married; 5 (18%) with one parent (father) or both (1 girl's) parents dead; and 3 (11%) girls living in an orphanage, with parents dead or divorced; Controls - 2 (7%) divorced; 24 (83%) married; and 3 (10%) with one parent (father) deceased. Total group parental marital status: 3 (5%) divorced; 42 (75%) married; 3 (5%) father dead (with one girl having both parents dead); and 3 (5%) living in an orphanage.

Each subject's socioeconomic status was evaluated according to the Coleman Index (1959). The father's occupation was evaluated except in those instances in which the mother was the sole parent in the home, or when a girl lived in an orphanage. Experimental and Control groups were found to be statistically comparable on the variable of socioeconomic status (Table 1).

TABLE 1  
SOCIOECONOMIC CLASS DISTRIBUTION OF SUBJECTS

Socioeconomic Class		Upper	Upper Middle	Indeterminate Middle	Lower Middle	Upper Lower	Indeterminate Lower	Lower Lower	Tot	M	SD	t
Groups		7	6	5	4	3	2	1				
	<u>N</u>	0	1	0	5	1	5	0	12	—	—	
E <sub>I</sub>	<u>Rating Sum</u>	0	6	0	20	3	10	0	39	3.25	1.24	.31
	<u>N</u>	0	0	0	4	9	2	0	15	—	—	
C <sub>I</sub>	<u>Rating Sum</u>	0	0	0	16	27	4	0	47	3.13	.63	
	<u>N</u>	0	0	0	7	7	0	1	15	—	—	
E <sub>II</sub>	<u>Rating Sum</u>	0	0	0	28	21	0	1	50	3.33	.79	.09
	<u>N</u>	0	0	2	3	7	2	0	14	—	—	
C <sub>II</sub>	<u>Rating Sum</u>	0	0	10	12	21	4	0	47	3.36	.88	
	<u>N</u>	0	1	0	5	1	5	0	12	—	—	
E <sub>I</sub>	<u>Rating Sum</u>	0	6	0	20	3	10	0	39	3.25	1.24	.09
	<u>N</u>	0	0	0	7	7	0	1	15	—	—	
E <sub>II</sub>	<u>Rating Sum</u>	0	0	0	28	21	0	1	50	3.33	.79	

TABLE 1 (Continued)

## SOCIOECONOMIC CLASS DISTRIBUTION OF SUBJECTS

Socioeconomic Class		Upper	Upper Middle	Indeterminate Middle	Lower Middle	Upper Lower	Indeterminate Lower	Lower Lower	Tot	M	SD	t
		7	6	5	4	3	2	1				
Groups												
	<u>N</u>	0	0	0	4	9	2	0	15	----	----	
C <sub>I</sub>	<u>Rating Sum</u>	0	0	0	16	27	4	0	47	3.13	.63	.29
	<u>N</u>	0	0	2	3	7	2	0	14	----	----	
C <sub>II</sub>	<u>Rating Sum</u>	0	0	10	12	21	4	0	47	3.36	.88	
	<u>N</u>	0	1	0	12	8	5	1	27	----	----	
E <sub>I,II</sub>	<u>Rating Sum</u>	0	6	0	48	24	10	1	89	3.30	1.01	.25
	<u>N</u>	0	0	2	7	16	4	0	29	----	----	
C <sub>I,II</sub>	<u>Rating Sum</u>	0	0	10	28	48	8	0	94	3.24	.77	

The criteria used for defining subjects as underachievers were: (1) any student scoring anywhere below her current grade level placement (8.6) in one or more of the major subject areas of reading, mathematics, or language on the Scholastic High School Placement Test: Closed Series I, a standardized achievement test, administered to all incoming freshmen at the school which participated in this study; (2) and/or whose IQ score on the same test was below 100, even though achievement levels in the aforementioned subject areas were at or above her current grade level placement. The study was conducted during the first year after the institution of the school's special educational program.

The scores shown on Table 2 are from the Scholastic High School Placement Test: Closed Series I taken by the subjects in March of their eighth grade year. The scores include the IQ scores and the achievement scores presented in grade level units for reading, mathematics and language.

Table 3 presents the t-test analyses of the mean IQ scores for the groups and indicates that the group means were not statistically different on this variable.

Table 4 presents the t-test analyses of the achievement score means for the groups on reading, mathematics and language. t-test scores indicate that E<sub>II</sub> scored significantly higher as a group on the mathematics achievement test than C<sub>II</sub>. This significant difference also reflected itself in the significant difference found when the

TABLE 2

## INTELLIGENCE AND ACHIEVEMENT SCORES FROM THE SCHOLASTIC

## HIGH SCHOOL PLACEMENT TEST: CLOSED SERIES I

Experimental Group I

<u>S</u>	<u>IQ</u>	<u>Reading</u>	<u>Mathematics</u>	<u>Language</u>
1	96	8.4	8.5	9.7
2	102	8.3	8.5	8.8
3	96	8.9	8.2	9.2
4	98	7.9	7.1	9.5
5	100	8.4	8.5	8.6
6	96	9.2	8.4	8.6
7	95	8.3	9.0	9.8
8	75	5.7	6.5	5.7
9	87	8.4	7.8	9.0
10	99	8.2	9.0	9.7
11	103	8.0	8.0	7.6
12	96	8.2	9.2	8.8

Control Group I

1	100	8.7	7.8	8.4
2	97	8.1	7.1	7.0
3	98	8.1	8.5	7.3
4	89	8.4	8.4	7.6

TABLE 2 (Continued)

Control Group I (Continued)

<u>S</u>	<u>IQ</u>	<u>Reading</u>	<u>Mathematics</u>	<u>Language</u>
5	107	7.5	8.4	9.4
6	97	7.9	8.2	7.9
7	75	5.7	6.0	7.9
8	103	7.1	8.4	7.6
9	93	8.2	8.8	8.8
10	91	8.2	6.3	9.0
11	105	6.0	8.9	7.9
12	87	6.8	6.3	8.4
13	96	7.7	8.8	8.6
14	100	8.5	6.3	8.8
15	79	8.1	9.1	8.4

Experimental Group II

1	96	8.3	8.0	7.9
2	79	6.5	8.0	6.6
3	95	8.7	9.3	9.5
4	98	8.6	9.0	8.6
5	101	8.4	8.8	7.0
6	91	8.2	9.1	9.4
7	104	6.8	9.0	8.6

TABLE 2 (Continued)

## Experimental Group II (Continued)

<u>S</u>	<u>IQ</u>	<u>Reading</u>	<u>Mathematics</u>	<u>Language</u>
8	91	9.6	7.8	7.6
9	97	7.1	9.0	7.6
10	93	8.0	8.8	9.2
11	97	7.9	8.3	8.6
12	100	8.7	7.8	8.6
13	88	7.7	8.4	7.9
14	98	8.2	8.7	6.6
15	94	6.2	7.1	7.6

Control Group II

1	90	8.2	8.7	7.6
2	94	7.9	6.5	8.8
3	93	8.2	6.8	9.4
4	81	7.5	7.8	7.6
5	98	8.0	7.5	9.8
6	106	7.9	9.2	10.0
7	99	8.2	8.0	7.9
8	106	7.5	8.2	8.4
9	82	5.7	8.7	6.3
10	79	7.5	7.5	9.4
11	102	8.4	6.8	7.3
12	90	6.0	8.4	9.0
13	101	8.0	8.7	7.3
14	83	7.1	7.8	7.0

TABLE 3  
ANALYSIS OF IQ SCORES OF SUBJECTS

	<u>N</u>	<u>Range</u>	<u>M</u>	<u>SD</u>	<u>t</u>
E <sub>I</sub>	12	75-103	95.2	7.25	.21
C <sub>I</sub>	15	75-107	94.5	8.75	
E <sub>II</sub>	15	79-104	94.8	5.83	.44
C <sub>II</sub>	14	79-106	93.5	9.05	
E <sub>I</sub>	12	75-103	95.2	7.25	.15
E <sub>II</sub>	15	79-104	94.5	5.83	
C <sub>I</sub>	15	75-107	94.5	8.75	1.52
C <sub>II</sub>	14	79-106	93.5	9.05	
E <sub>I, II</sub>	27	75-104	95.0	7.02	.41
C <sub>I, II</sub>	29	75-107	94.0	10.67	



experimentals were compared with controls on that subtest. Thus, if any results on the test measures administered later yield significant results on mathematics measures in favor of the experimental subjects it can not be concluded that the significant difference is due to the experimental treatment.

Table 5 presents the t-test analyses of group total raw scores on the total Emotional Indicator (EI) score for subjects on the pre-testing with the Draw-A-Person test. The mean score for the four DAP drawings was used as an indication of the initial level of emotional pathology. t-scores indicate that the groups did not differ significantly on this variable. All of these findings will be referred to in the Results and Discussion chapters since they lay the foundation for assuming that the subjects began with no significant differences on IQ, self-concept, or achievement measures, and thus are assumed to be samples from the same population.

Subjects were assigned to one of four groups based only upon their class schedules allowing them to attend either of the two possible times when the group sessions could be scheduled. Any student who would have had to wait for more than two class periods between her last class of the day and the time of the group session, or who had classes during the time periods when the group sessions took place, was assigned to one of the two control groups. The group sessions were introduced as a regular part of the school's guidance program. Only the core teaching staff of six persons and the

TABLE 4  
ANALYSIS OF READING ACHIEVEMENT SCORES: HIGH  
SCHOOL PLACEMENT TEST - CLOSED SERIES I

	<u>N</u>	<u>Range</u>	<u>M</u>	<u>SD</u>	<u>t</u>
Groups					
E <sub>I</sub>	12	5.7-9.2 <sup>a</sup>	8.2 <sup>a</sup>	.82 <sup>a</sup>	1.44
C <sub>I</sub>	15	5.7-8.7	7.7	.87	
E <sub>II</sub>	15	6.2-9.6	7.9	.90	1.06
C <sub>II</sub>	14	5.7-8.4	7.6	.79	
E <sub>I</sub>	12	5.7-9.2	8.2	.82	.86
E <sub>II</sub>	15	6.2-9.6	7.9	.90	
C <sub>I</sub>	15	5.7-8.7	7.7	.87	.31
C <sub>II</sub>	14	5.7-8.4	7.6	.79	
E <sub>I, II</sub>	27	5.7-9.6	8.1	.87	1.73
C <sub>I, II</sub>	29	5.7-8.7	7.7	.83	

<sup>a</sup>Grade Level Score Units.

TABLE 4 (Continued)

ANALYSIS OF MATHEMATICS ACHIEVEMENT SCORES: HIGH  
SCHOOL PLACEMENT TEST - CLOSED SERIES I

	<u>N</u>	<u>Range</u>	<u>M</u>	<u>SD</u>	<u>t</u>
Groups					
E <sub>I</sub>	12	6.5-9.2	8.2	.76	1.08
C <sub>I</sub>	15	6.0-9.1	7.8	1.07	
E <sub>II</sub>	15	7.1-9.3	8.5	.61	2.26*
C <sub>II</sub>	14	6.5-9.2	7.9	.79	
E <sub>I</sub>	12	6.5-9.2	8.2	.76	1.10
E <sub>II</sub>	15	7.1-9.3	8.5	.61	
C <sub>I</sub>	15	6.0-9.1	7.8	1.07	.36
C <sub>II</sub>	14	6.5-9.2	7.9	.79	
E <sub>I, II</sub>	27	6.5-9.3	8.35	.69	2.207*
C <sub>I, II</sub>	29	6.0-9.2	7.85	.94	

\*  $p < .05$ .

TABLE 4 (Continued)

## ANALYSIS OF LANGUAGE ACHIEVEMENT SCORES: HIGH

## SCHOOL PLACEMENT TEST - CLOSED SERIES I

	<u>N</u>	<u>Range</u>	<u>M</u>	<u>SD</u>	<u>t</u>
Groups					
E <sub>I</sub>	12	5.7-9.8	8.7	1.1	1.44
C <sub>I</sub>	15	7.0-9.4	8.2	.65	
E <sub>II</sub>	15	6.6-9.5	8.1	.91	.46
C <sub>II</sub>	14	6.3-10.0	8.3	1.1	
E <sub>I</sub>	12	5.7-9.8	8.7	1.1	1.49
E <sub>II</sub>	15	6.6-9.5	8.1	.91	
C <sub>I</sub>	15	7.0-9.4	8.2	.65	.84
C <sub>II</sub>	14	6.3-10.0	8.3	1.1	
E <sub>I, II</sub>	27	5.7-9.8	8.4	1.05	.85
C <sub>I, II</sub>	29	6.3-10.0	8.25	.90	

TABLE 5  
t-TEST ANALYSIS ON DAP-HFD PRE-TEST TOTAL  
EMOTIONAL INDICATORS SCORES FOR ALL GROUPS

	<u>N</u>	<u>M</u>	<u>SD</u>	<u>t</u>
E <sub>I</sub>	12	5.58	5.56	.41
C <sub>I</sub>	15	4.86	3.92	
E <sub>II</sub>	15	7.27	3.57	.37
C <sub>II</sub>	14	6.78	3.34	
E <sub>I</sub>	12	5.58	5.56	.92
E <sub>II</sub>	15	7.27	3.57	
C <sub>I</sub>	15	4.86	3.92	1.36
C <sub>II</sub>	14	6.78	3.34	
E <sub>I, II</sub>	27	6.51	4.64	.63
C <sub>I, II</sub>	29	5.79	3.77	

non-teaching administrative staff were aware that the students were participating in a research study. However, even these teachers did not know which girls were in the experimental or the control groups. Since the sessions were held during the otherwise free period of a student, group members did not have to make conspicuous exits from their classes at those times when the groups met. It is assumed that the teachers knew which girls were attending the sessions only if they questioned the girls about it. Participation in the study was not voluntary, rather, all freshmen participated as either experimentals or controls.

Measures: Detailed Description of Their Administration in the Present Study

Draw-A-Person Human Figure Drawings (Koppitz Scoring). The Koppitz scoring procedure (1968) was used to score the four drawings requested of all subjects. Koppitz requests only one HFD from her subjects. However, a battery of four drawings was requested in the present study: Draw-A-Person, Draw-A-Person of the opposite sex to #1, Draw-A-Family, and Draw-A-Girl in the rain. The latter two modifications of the Draw-A-Man test are cited by Hammer (1958).

The subject was given a pile of blank paper size  $8\frac{1}{2}$ " x 11", and a set of at least two sharpened No. 2 pencils with erasers. Instructions were:

I would like you to draw a whole person for me. It can be any kind of a person you want to draw, just make sure it is a whole person and not a stick figure or a cartoon figure.

The second HFD instruction was:

Now will you please draw a man (or "draw a woman" if the first figure was of a male).

The last two drawing instructions were:

Now will you draw a family?

and

Please draw a girl in the rain.

The HFDs were scored according to the Koppitz scoring procedure for Emotional Indicators (EIs). EI raw scores for each of the four drawings and a mean EI score for the set of four drawings were computed. The scoring was executed manually by an undergraduate technician who was unaware of the group membership of any of the subjects.

The latter two drawings were included to obtain information about the girls' self-concepts and feelings of self-esteem in relation to their families and in response to environmental stresses, respectively.

An interscorer reliability coefficient based on the Pearson Product Moment R was computed to insure that the technician and experimenter would score the protocols in the same fashion. This coefficient ( $r = .95$  which accounts for 90% of the variance) was made on a sample constituting 30% of the total sample of HFDs.

Koppitz suggests that the diagnostic significance of the 30 EIs appears to be greatly enhanced when the total number of such signs on a given HFD is considered instead of each item separately. The presence of one EI on an HFD was considered inconclusive and not necessarily a

sign of emotional disturbance. However, Koppitz considers two or more EIs as highly suggestive of emotional problems and unsatisfactory interpersonal relations. Koppitz (1966c) made a study which yielded findings in which 7 EIs correlated highly with the school achievement of first and second graders. Those items are asterisked (\*) on the Scoring Criteria Manual (Appendix A-I). Total and mean scores for the school achievement items were computed for the subjects in the present study (SA-T and SA-M).

Tennessee Self Concept Scale. The TSCS was administered to the subjects as a group. Subjects were given pencils if they could not supply their own. The instructions on the inside front cover were read aloud by the experimenter and questions were answered before the testing proper began. Girls were allowed to raise their hands for help from the experimenter on particular test items. They were requested to take the test without consulting one another, and, in general, acquiesced to this request. They were only allowed to freely discuss the test once they had completed the test, returned the materials to the experimenter and left the testing room. No unusual problems were encountered nor did any girls take an abnormally long amount of time to complete the scale. The test was administered on a day when none of the other measures were given. The test was scheduled to precede or follow by one day, the other pre-test and post-test measures but during the same test week.

Wide Range Achievement Test. The spelling and arithmetic subtests of the WRAT were administered to small groups of girls with 3 to



9 girls in a group. The reading subtest, because of its very nature, had to be administered individually. The subjects were supplied with sharpened pencils with erasers if they did not have their own. The order of the subtest administration was spelling, arithmetic, and reading for all subjects. Both experimental and control subjects were in each group. Instructions were given verbatim as indicated in the WRAT Manual.

School Grades. The academic evaluations made by the teachers which were reported at the mid-point of the group sessions for  $E_I$  and  $C_I$  (although only  $E_I$  was participating in the sessions) and the evaluations for the second school semester, which were the first evaluations given after the termination of  $E_I$ 's group sessions, were averaged and analyzed statistically. The subject areas included: English, Reading, Business Mathematics, and Speech, all required courses for freshmen.

The grades in these same four subjects earned by the  $E_{II}$  and  $C_{II}$  subjects for the second and third semesters were similarly analyzed. In addition, all three sets of semester grades were analyzed for all subjects. The grades were derived after placing the evaluations on a five-point rating scale (Appendix A-II). First semester grades served as the first high school level grades achieved by all E and C subjects, and were considered their pre-session phase grades. Second semester grades served as the post-session grades for  $E_I$  and  $C_I$  subjects. Third semester grades served as the post-session grades for  $E_{II}$  and  $C_{II}$  subjects. An interscorer reliability coefficient

( $r = .75$ ) was obtained for a sample of 40 ratings made by the experimenter and an experienced psychologist. However, they only differed on 5 ratings by one point each.

Interactional Group Process Analysis: Carkhuff-Egan Scale. A scale combining the Carkhuff rating scale (1969) and the Behavior Rating Scale by Egan (1970) was used in this study to analyze the interactional process of the sensitivity-encounter group sessions (Appendix A-III, IV). The scale is a 5-point rating scale comprised of 11 variables. Each subject was rated on each variable for each session attended.

The group sessions were analyzed by two raters. The experimenter rated 30 of the total 32 sessions. The first session in each group was didactic in that the experimenter read and discussed the encounter group contract suggested by Egan (1970). This session was not included in the scoring since the experimenter simply read the Encounter group contract as suggested by Egan (1970). The girls only asked clarifying questions and no group interaction occurred.

The second rater analyzed a sample comprising 10% of the total sessions. An interrater stability coefficient (.70) was computed and indicated that the two raters agreement on session ratings were adequate.

Semantic Differential. Experimental subjects rated themselves on a 6-point rating scale on two concepts: "Myself As I Usually Am" and "Myself When I Feel Great and On Top of the World." The semantic differentials were administered to  $E_I$  subjects at the beginning of the 6th, 10th, and 14th sessions.  $E_{II}$  was administered the semantic

differential at the beginning of the same sessions, as well as at the pre-testing. Both experimental groups were given the self-rating scale at the post-testing. The  $E_I$  group was not pre-tested on this measure because the forms were not then completed. As a result, the pre-test scores for group  $E_{II}$  on this measure were not included in the statistical analysis of the results.

At the post-testing each experimental subject was asked to circle one word of each of the item pairs which represented her "ideal" person. This was done after she had rated herself according to the two concepts cited above. At least 90% of the girls agreed upon 21 of the 27 item pairs as representing the same positive and negative ends of the continuum. The six pairs on which there was less than 90% agreement were discarded. Thus, all semantic differentials were scored in the direction which the vast majority of subjects had indicated as representing their "ideal" person. For each session the actual- and ideal self-concept group mean differences were analyzed statistically, and changes across sessions were also compared and analyzed. The raw scores on each of the three factors for both "Usual" and "Great" self-concepts were analyzed and compared for experimental group subjects. Subjects were given identifying code numbers to use on the forms to maintain anonymity among the group members. Each girl was given the reverse order (Usually and "On Top of the World--Great") on alternate administrations of the semantic differentials.

## Procedures

Pre-Test Procedures. All subjects were administered the WRAT, TSCS, and DAP-HFD as pre-test measures of self-concept and achievement. The experimental and control group subjects were tested during a one week period. One experimental and one control group were tested during the first week of October; the other experimental and control group ( $E_{II}$  and  $C_{II}$ ) were pre-tested during the third week in December. Half of the subjects in each of the four treatment groups were given the WRAT first followed by the DAP-HFDs. The other half received the reverse test order. Each subject was tested in the reverse order at her post-testing, to avoid test order bias. The TSCS was given to all girls as a group on the day preceding or immediately following the WRAT and DAP-HFD test administrations.

Post-Test Procedure. All girls were retested on the same three measures as in the pre-testing 22 weeks after the pre-testing. As discussed above, if a particular girl was given the WRAT first at her pre-testing, she was given the DAP-HFD first at her post-testing. The TSCS was administered again to the girls as a group.

The test protocols were collected from the subjects after each of the testing periods by the experimenter. However, before scoring them or having them scored, the experimenter presented them to an experienced professional psychologist who, along with an undergraduate technician, coded them. Thus, the experimenter scored the WRATs, and

a trained undergraduate technician scored the DAP-HFDs without knowledge of group membership. The TSCSs were computer-scored by the test publisher. Scoring bias was thus avoided since the code was not broken until all group sessions were analyzed and all tests were scored.

Treatment Procedure: Sensitivity-Encounter Group Sessions.

Each of the two experimental groups participated in sensitivity-encounter groups. Each group met for 16 one-hour weekly sessions distributed across  $5\frac{1}{2}$  months. Experimental group I ( $E_I$ ) met from October through March. Experimental group II ( $E_{II}$ ) met from January until mid-May. As a result, the group sessions overlapped for nine weeks, although groups  $E_I$  and  $E_{II}$  met separately.

The group sessions provided the opportunity for the development of the traditional sensitivity-encounter group process including self-disclosure, expression of feelings, and open interpersonal communication. The experimenter functioned as a facilitator who helped the groups to focus on interpersonal communications, leading toward matters pertaining to interpersonal growth, self-awareness, and self-concept.

Each of the 32 group sessions were tape recorded. These tapes were used to assist the experimenter in following the group process in each successive session. The tapes were transcribed into verbatim type-script and were used by the two interactional process raters on the Carkhuff-Egan behavior rating scale (Appendix A-III, IV).

## CHAPTER V

### RESULTS

The study findings will be presented in the following sequence: the impact of treatment upon school achievement; the impact of treatment upon self-concept; the effects of interaction between treatment, initial level of intellectual functioning, and initial level of emotional pathology upon changes in self-concept and school achievement; experimental group comparisons on the process measures, and the interaction effects of initial level of intellectual functioning and the initial level of emotional pathology on the process measures; and the correlation matrix findings (Appendix A-XI) for the pre- and post-test scores on all self-concept, school achievement, and process measures for all groups.

Table 6 presents a list of abbreviations and definitions for each variable on all test measures administered in this investigation. The abbreviations will be used on all tables and figures presented.

#### Impact of Treatment on School Achievement and Self-Concept

Table 7 gives the group means and standard deviations for the two self-concept (Draw-A-Person: Human Figure Drawings and Tennessee Self Concept Scale) and two achievement (Wide Range Achievement Test and School Grades -2 and -3) measures for all experimental and control groups for the pre-testing and post-testing. The reader is reminded

TABLE 6  
LIST OF TEST VARIABLE ABBREVIATIONS  
USED ON TABLES

DAP-HFDs	Draw-A-Person Human Figure Drawings using the Koppitz scoring method. Each set is composed of four drawings by each subject.
I	The first drawing in response to the instruction, "Draw a person."
II	The second drawing in response to the instruction, "Draw a person of the opposite sex (to your first drawing)."
III	The third drawing in response to the instruction, "Draw a family."
IV	The fourth drawing in response to the instruction, "Draw a girl in the rain."
Tot	The total number of Emotional Indicators (EIs) for all four drawings, or the total EI score.
M	The average number of Emotional Indicators, or the mean EI score.
SA-Tot	The total EI score on the school achievement items as indicated by asterisks (*) on the Koppitz score sheet.
SA-M	The average or mean EI score on the school achievement items.
WRAT-Rdg GL	Wide Range Achievement Test Reading subtest grade level score.
WRAT-Splg GL	Wide Range Achievement Test Spelling subtest grade level score.
WRAT-Ar GL	Wide Range Achievement Test Arithmetic subtest grade level score.

TABLE 6 (Continued)

WRAT- Rdg SS	Wide Range Achievement Reading subtest standard score.
WRAT- Splg SS	Wide Range Achievement Test Spelling subtest standard score.
WRAT- Ar SS	Wide Range Achievement Test Arithmetic subtest standard score.
WRAT- Tot	Wide Range Achievement Test Total achievement score average difference across all three subtests in standard score units. The pre-test average total score is subtracted from the post-test average total score, thus yielding a difference score.
SG-2	The average difference scores of school grades for four major subject courses; obtained by subtracting the first trimester grade average from the second trimester grade average.
SG-3	The average difference scores of school grades for four major subject courses; obtained by subtracting the first trimester grade average from the third trimester grade average.
TSCS	Tennessee Self Concept Scale
SC	TSCS Self Criticism score
T/F	TSCS True-False score
Net C	TSCS Net Conflict score
Tot C	TSCS Total Conflict score
Tot P	TSCS Total Positive score
R 1	TSCS Row 1 score
R 2	TSCS Row 2 score
R 3	TSCS Row 3 score
Col A	TSCS Column A score
Col B	TSCS Column B score
Col C	TSCS Column C score



TABLE 6 (Continued)

Col D	TSCS Column D score
Col E	TSCS Column E score
V Tot	TSCS Total Variability score
V Cols	TSCS Variability score across all columns
V Rows	TSCS Variability score across all rows
D	TSCS Total Distribution score
D5	TSCS Distribution score on use of scale rating "5"
D4	TSCS Distribution score on use of scale rating "4"
D3	TSCS Distribution score on use of scale rating "3"
D2	TSCS Distribution score on use of scale rating "2"
D1	TSCS Distribution score on use of scale rating "1"
DP	TSCS Defensive Positive scale score
GM	TSCS General Maladjustment scale score, an inverse scale.
Psy	TSCS Psychosis scale score
PD	TSCS Personality Disorder scale score, an inverse scale.
N	TSCS Neurosis scale score, an inverse scale.
PI	TSCS Personality Integration scale score
NDS	TSCS Number of Deviant Signs scale score
SD	Semantic Differential administered to experimental subjects
Tot-DS	Semantic Differential total difference score for all administrations
M-DS	Semantic differential mean difference scores for all administrations

TABLE 6 (Continued)

Tot	Semantic differential total raw score for a specific session on either the "Usual" or "Great" self concept description.
U	Raw score on the SD description of "How I See Myself Usually"
G	Raw score on the SD description of "How I See Myself When I Feel on Top of the World (i. e. 'Great')"
D	Difference score obtained by subtracting U raw score from G raw score.
Numbers	Numbers associated with the SDs refer to the session at the start of which the SD was administered (e.g. Session 14 U refers to the score on Usual self filled out at the commencement of Session 14).
I	The raw score of the items circled to indicate the ideal self at the post-testing.
I-U	The Usual self raw score obtained at the post-testing subtracted from the Ideal self score.
I-G	The Great self raw score obtained at the post-testing subtracted from the Ideal self score.
SD-Fct	The Semantic Differential scores broken down into its three component factors for each of the U and G scores.
I	Factor I: evaluative
II	Factor II: potency
III	Factor III: activity
C-E	The Carkhuff-Egan Behavior Rating Scale score for each session.
Numbers	Refer to the session scored, from 2 through 16.
Tot	Total C-E score
M	Mean or average C-E score

TABLE 7

## DESCRIPTIVE STATISTICS FOR TEST MEASURES FOR ALL GROUPS

Variables	E <sub>I</sub>		C <sub>I</sub>		E <sub>II</sub>		C <sub>II</sub>		E <sub>I, II</sub>		C <sub>I, II</sub>	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
DAP-HFDs												
I	1.17	.91	1.13	.60	1.53	1.53	1.28	1.78	1.37	1.26	1.20	1.19
	1.40	1.32	.88	.49	1.36	.96	.89	1.42	1.39	1.17	1.20	1.21
II	1.17	1.33	.53	.93	1.47	1.20	1.36	1.36	1.33	1.26	.94	1.14
	1.46	1.03	.72	.77	.96	1.17	1.11	1.29	1.22	1.11	1.01	1.07
III	2.00	2.17	2.06	2.53	2.8	3.2	2.78	3.43	2.40	2.68	2.42	2.98
	2.08	1.28	2.03	2.22	1.51	2.54	1.47	2.13	1.82	2.14	1.82	1.22
IV	1.25	1.41	1.13	.86	1.47	1.46	1.36	1.78	1.37	1.43	1.24	1.32
	1.48	1.19	1.31	1.20	1.02	1.36	1.29	1.61	1.25	1.28	1.30	1.49
Tot	5.58	5.83	4.86	4.93	7.27	7.40	6.78	8.35	6.40	6.60	5.82	6.64
	5.56	3.72	3.91	5.57	3.57	4.11	3.34	5.14	4.64	4.02	3.77	4.51
M	1.39	1.46	1.22	1.23	1.82	1.85	1.70	2.09	1.60	1.65	1.46	1.66
	1.39	.93	.98	.74	.89	1.03	.84	1.28	1.55	1.00	.94	1.12

Note.—The top entry represents the mean and the bottom entry represents the standard deviation for each cell.

TABLE 7 (Continued)

Variables	$E_I$		$C_I$		$E_{II}$		$C_{II}$		$E_{I, II}$		$C_{I, II}$	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
SA-Tot	.50	.75	.33	.66	.40	.80	.79	.86	.45	.78	.56	.76
	.87	1.01	.50	.79	.61	1.17	1.26	.99	.74	1.10	.50	.90
SA-M	.125	.187	.083	.166	.10	.2	.20	.214	.11	.193	.141	.190
	.22	.25	.11	.20	.26	.29	.32	.25	.18	.28	.24	.22
WRAT- Rdg GL	8-3	9-1	7-2	8-3	7-9	8-4	7-1	7-10	8-0	8-7	7-2	8-0
	1.99	2.0	1.17	1.62	1.27	1.56	1.18	1.54	1.58	1.73	1.13	1.54
WRAT- Splg GL	7-9	8-2	6-8	7-2	7-5	7-9	6-11	7-5	7-7	7-11	6-10	7-4
	2.38	1.96	1.31	1.07	1.23	1.23	1.46	1.83	1.77	1.55	1.34	1.44
WRAT- Ar GL	6-1	6-9	5-9	6-4	6-3	6-3	6-1	6-4	6-2	6-6	5-11	6-0
	.99	.98	1.01	1.13	1.29	.67	.57	.69	1.13	.82	.83	.91
WRAT- Rdg SS	96	98.7	90.2	95.3	92.6	94.8	88.3	92.3	94.3	96.7	89.2	93.8
	11.75	11.02	7.76	10.18	7.54	8.66	6.48	8.34	9.41	12.79	6.99	9.13

Note.—The top entry represents the mean and the bottom entry represents the standard deviation for each cell.

TABLE 7 (Continued)

Variables	E <sub>I</sub>		C <sub>I</sub>		E <sub>II</sub>		C <sub>II</sub>		E <sub>I, II</sub>		C <sub>I, II</sub>	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
WRAT- Splg SS	93.4	94.3	87.2	88.9	90.7	91.4	87.5	90.4	92.0	92.8	87.3	89.6
	13.98	11.16	8.10	6.47	7.23	7.23	8.26	9.74	10.42	8.94	5.27	7.96
WRAT- Ar SS	83.3	86.25	81.9	84.5	84.4	83.3	83.3	83.8	83.8	84.8	82.6	84.1
	6.01	5.67	6.67	6.83	7.16	3.83	3.17	3.96	6.45	4.78	5.15	5.45
WRAT- Tot	6.58		9.4		1.5		7.5		3.74		8.48	
	8.66		12.81		8.04		11.77		8.32		12.32	
SG-2	.60		.45		.80		.64		.71		.54	
	.54		.47		.61		.78		.58		.64	
SG-3	.65		.50		1.00		.66		.84		.58	
	.53		.43		.61		.30		.59		.38	
TSCS- SC	47.9	48.9	43.5	46.3	50.0	51.5	43.3	45.4	49.1	50.4	43.4	45.9
	7.73	7.54	8.37	9.71	7.98	8.11	8.38	9.51	7.79	7.82	8.37	9.45
T/P	53.1	56.3	54.3	54.4	63.2	58.0	52.7	49.3	58.7	57.3	53.5	52.0
	15.28	16.42	10.12	14.98	16.05	14.07	14.1	13.74	16.23	14.88	12.14	14.37

Note.—The top entry represents the mean and the bottom entry represents the standard deviation for each cell.

TABLE 7 (Continued)

Variables	$E_I$		$C_I$		$E_{II}$		$C_{II}$		$E_{I, II}$		$C_{I, II}$	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Net C	51.7	55.6	55.6	54.6	59.0	57.7	52.1	52.9	55.7	56.7	54.0	53.8
	16.64	9.94	9.48	11.34	11.12	10.12	10.3	9.44	14.1	9.91	10.0	10.59
Tot C	61.8	53.8	47.0	50.2	54.7	49.2	56.8	53.0	57.9	51.3	51.7	51.6
	11.99	13.82	14.22	8.54	12.79	9.67	14.6	11.44	12.72	11.69	15.2	9.96
Tot P	42	39.5	49.2	45.1	44.3	39.8	43.4	44.5	43.3	39.7	46.4	44.8
	6.89	8.06	14.46	13.60	11.76	9.81	8.35	12.97	7.99	8.91	12.37	13.06
R 1	44	39.4	46.4	43.8	45.9	39.2	43.4	44.1	45.0	39.3	44.9	43.9
	9.56	8.78	13.30	14.65	11.76	12.18	11.11	12.51	10.68	10.61	12.42	13.42
R 2	43.5	44.3	54	48.2	48.7	45.4	49.2	50.2	46.4	44.9	51.7	49.2
	5.82	8.38	11.77	11.63	7.54	9.37	9.20	13.38	7.20	8.79	10.93	12.32
R 3	41.4	36.4	45.6	43.9	38.9	36.6	38.1	39.2	40.0	36.5	42.0	41.7
	8.90	8.39	17.61	16.18	8.84	9.49	7.24	10.91	8.79	8.85	14.32	13.85
Col A	43.9	41.1	48.9	44.3	47.8	41.4	45.1	44.5	46.1	41.3	47.0	44.4
	8.07	9.39	15.74	10.20	8.49	9.42	9.53	12.21	8.38	9.23	13.36	11.01

Note.—The top entry represents the mean and the bottom entry represents the standard deviation for each cell.

TABLE 7 (Continued)

Variables	E <sub>I</sub>		C <sub>I</sub>		E <sub>II</sub>		C <sub>II</sub>		E <sub>I, II</sub>		C <sub>I, II</sub>	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Col B	41.1	39.6	47.3	42.2	40.2	37.9	40.0	40.8	40.6	38.6	43.8	41.6
	7.56	6.02	13.76	11.80	9.58	11.03	10.39	12.36	8.59	9.03	12.86	11.87
Col C	45.6	44.3	49.1	49.8	48.3	41.7	47.0	46.6	47.1	42.85	48.1	48.2
	8.94	11.44	13.70	15.02	9.92	10.56	8.39	12.90	9.42	10.83	11.49	13.88
Col D	43.2	40.9	51.7	47.1	43.3	41.7	45.6	48.1	43.26	41.3	48.8	47.6
	7.77	6.52	15.06	17.69	11.27	13.75	10.93	11.46	9.69	10.95	13.66	14.75
Col E	43.4	40.1	49.6	47.3	46.7	44.3	44.0	44.8	45.26	42.4	46.9	46.1
	8.64	11.93	13.41	11.68	10.81	11.52	6.56	11.52	9.87	11.67	11.16	11.46
V Tot	52	49.9	51.8	50.3	52	49.1	47.9	47.5	52.0	49.48	49.9	48.9
	6.97	7.88	12.01	10.31	7.49	9.80	9.60	10.70	7.13	8.84	11.13	10.41
V Cols	53.6	48.4	48.5	49.2	50.7	47.1	47.4	46.3	51.96	47.7	47.9	47.8
	9.11	7.32	13.17	11.22	7.87	10.47	10.34	10.99	8.41	9.06	11.96	11.01
V Rows	47.8	49.7	54.4	50.8	51.7	50.9	48.0	48.1	50.0	50.4	51.3	49.5
	9.21	7.66	10.86	11.23	10.28	11.16	8.95	10.20	9.83	9.61	10.54	10.65

Note.—The top entry represents the mean and the bottom entry represents the standard deviation for each cell.

TABLE 7 (Continued)

Variables	$E_I$		$C_I$		$E_{II}$		$C_{II}$		$E_{I, II}$		$C_{I, II}$	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
D	46.0	39.7	48.8	43.6	45.1	41.3	42.1	41.5	45.5	40.6	45.6	42.6
	8.44	9.70	15.77	16.39	6.55	8.58	13.58	17.43	7.31	8.95	15.18	16.63
D 5	48.2	43.7	50.1	46.0	49.3	45.5	43.3	45.1	48.8	44.7	46.8	45.6
	12.58	11.86	13.76	13.52	8.95	10.75	14.99	17.56	10.79	11.07	14.76	15.32
D 4	47.5	52.1	46.1	46.5	52.7	53.8	47.0	42.9	50.4	53.0	46.5	44.8
	11.05	11.06	13.02	13.88	10.42	10.58	12.43	11.82	11.04	10.62	12.76	12.83
D 3	55.1	60.0	52.9	58.5	56.7	58.7	60.1	62.5	56.3	59.3	56.4	60.5
	9.76	9.92	13.92	13.91	9.61	9.24	13.62	15.25	9.69	9.38	14.25	14.45
D 2	48.1	49.5	46.0	48.5	43.6	49.1	46.1	44.9	45.9	49.3	46.0	46.8
	8.65	11.22	10.41	12.62	9.21	7.31	6.91	10.12	9.34	9.06	8.95	11.42
D 1	46.3	39.7	48.9	42.9	44.7	39.9	44.7	43.1	45.4	39.8	46.9	43.0
	7.92	8.41	14.18	17.07	5.31	7.91	12.21	17.06	6.69	7.98	13.47	16.76
DP	46.4	45.7	55.6	50.5	51.5	46.7	51.6	50.9	49.2	46.3	53.7	50.7
	6.40	6.85	12.96	11.64	7.92	8.59	7.87	12.29	7.69	7.74	11.10	11.75

Note.— The top entry represents the mean and the bottom entry represents the standard deviation for each cell.



TABLE 7 (Continued)

Variables	E <sub>I</sub>		C <sub>I</sub>		E <sub>II</sub>		C <sub>II</sub>		E <sub>I, II</sub>		C <sub>I, II</sub>	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
GM	58.7	62.1	57.0	55.9	59.5	63.7	58.5	59.1	59.2	63.0	57.7	57.4
	7.40	7.10	13.29	13.23	9.64	10.28	9.47	13.20	8.68	8.88	11.70	13.08
Psy	58.1	60.7	56.9	57.9	57.3	58.7	61.1	60.8	57.7	59.6	59.0	59.3
	9.13	7.72	10.68	10.67	11.25	7.83	10.22	10.71	10.33	7.71	10.68	10.59
PD	58.4	60.2	51.5	55.5	59.5	60.3	56.8	56.8	59.0	60.2	54.1	56.1
	7.33	7.61	12.07	12.34	8.27	10.78	8.73	10.40	7.87	9.33	10.99	11.06
N	54.6	56.6	47.6	52.9	50.6	58.2	53.2	52.5	52.4	57.5	50.3	52.7
	8.98	8.83	13.55	11.37	10.53	10.69	7.57	9.68	10.05	9.76	11.54	10.40
PI	43.4	43.9	44.4	45.5	46.1	46.27	44.8	41.9	44.9	45.2	44.6	43.8
	10.48	6.32	8.30	9.78	8.85	9.25	7.90	13.18	9.73	8.02	8.12	11.48
NDS	63.2	62.2	63.9	62.3	61.1	61.6	61.8	64.3	62.0	61.9	62.9	63.3
	11.22	12.42	8.31	9.70	11.41	12.99	10.16	9.28	11.38	12.50	9.27	9.38

Note.— The top entry represents the mean and the bottom entry represents the standard deviation for each cell.

that the Wide Range is a standardized achievement test, and the school grades are based on the teacher evaluations made at the first, mid-year (SG-2), and end-of-the-year (SG-3) semesters. These descriptive statistics on Table 7 reflect certain characteristics about the various groups. The school grade difference scores for the mid-year and end-of-the-year semesters show that the experimental subjects improved more than the controls on both occasions.

For the Draw-A-Person test only drawing II, of "a family," had a group mean Emotional Indicator score of or beyond the critical value (2.0) reflecting disturbance by all subjects in their relations with their families. On the Tennessee pre-test measure all groups, experimentals and controls, were within normal limits for 28 of the 29 subscales. However, all groups were above the normal limits on one subscale, Number of Deviant Signs. At the post-testing the experimentals had a fewer Number of Deviant Signs while the controls had a higher Number of Deviant Signs than at the pre-testing. The t-tests and three-way analysis of variance performed on the self-concept and achievement measures are based on the difference scores derived from the pre- and post-test means and standard deviations presented on Table 7.

$E_I$  vs.  $C_I$  comparisons were initially analyzed separate from the  $E_{II}$  vs.  $C_{II}$  comparisons. These groups were analyzed separately to avoid the possibility that the  $E_{II}$  and  $C_{II}$  subjects, after having had a half-school year's experience in their high school curriculum, may have obtained post-test scores which would differ significantly from

those of the  $E_I$  and  $C_I$  girls due to entering the study with more high school academic experience behind them rather than being due to the study's treatment conditions. Had the only dependent variable of interest been self-concept this would not have been necessary. However, school achievement being a dependent variable of interest this precaution was taken. Thus, four treatment group combinations have been analyzed for the self-concept and achievement measures:  $E_I$  vs.  $C_I$ ;  $E_{II}$  vs.  $C_{II}$ ;  $E_{I, II}$  vs.  $C_{I, II}$ ; and  $E_I$  vs.  $E_{II}$ . The latter comparison was the only possible contrast for the process measures: Semantic Differential and Carkhuff-Egan Interaction Behavior Rating Scale. The most relevant findings are those which refer to the pooled experimentals and controls ( $E_{I, II}$  and  $C_{I, II}$ ). These will be reported in the appropriate sections. However, the significant differences found for the other, separate, group combinations will also be presented for a more detailed understanding of what occurred in this study. The terms "controls" and "experimentals" will refer to comparisons between the pooled treatment groups. When the separate contrasts are being discussed they will be designated with the appropriate Roman numerals.

Table 8 presents the results of the t-test analysis of the differences between means for uncorrelated data for the school achievement and self-concept measures.

School Achievement Measures. Results supported the first hypothesis, that school achievement would significantly improve ( $p < .05$ ) after a sensitivity-encounter group for the experimentals as compared

TABLE 8

## t-TESTS AND STANDARD ERRORS FOR PRE-POST TEST

## COMPARISONS FOR ALL GROUPS

Groups	$E_I$ vs $C_I$ $N_{EI}=12; N_{CI}=15$	$E_{II}$ vs $C_{II}$ $N_{EII}=15; N_{CII}=14$	$E_{I, II}$ vs $C_{I, II}$ $E=27; C=29$	$E_I$ vs $E_{II}$ $N_{EI}=12; N_{EII}=15$
Variables				
DAP-HFDs				
I	.56 .50	.86 .58	.20 .39	.44 .57
II	.58 .40	.56 .48	.89 .31	1.01 .43
III	.30 1.00	.29 .85	.40 .64	.31 .76
IV	.67 .65	.84 .51	.01 .41	.29 .57
Tot	.11 1.65	1.00 1.43	.57 1.07	.09 1.24

Note.—Top entry in each cell is the t-score and bottom entry is the standard error of the difference between means.

\*  
 $p < .10.$

\*\*  
 $p < .05.$

\*\*\*  
 $p < .01.$

TABLE 8 (Continued)

Groups	$E_I$ vs $C_I$	$E_{II}$ vs $C_{II}$	$E_{I, II}$ vs $C_{I, II}$	$E_I$ vs $E_{II}$
	$N_{EI}=12; N_{CI}=15$	$N_{EII}=15; N_{CII}=14$	$E=27; C=29$	$N_{EI}=12; N_{EII}=15$
Variables				
M	.11 .41	1.00 .36	.57 .27	.09 .31
SA-Tot	.21 .39	.67 .49	.41 .31	.35 .42
SA-M	.21 .10	.67 .12	.41 .08	.35 .11
WRAT-	.93	1.84 $*(C \nearrow > E)^a$	2.12 $**(C \nearrow > E)$	1.82 $*(EI \nearrow > EII)$
Tot	3.01	3.27	2.25	2.81
WRAT-	.98	.92	1.45	1.01
Rdg GL	3.34	2.99	2.23	3.05

Note.--Top entry in each cell is the t-score and bottom entry is the standard error of the difference between means.

\*  
p < .10.

\*\*  
p < .05.

<sup>a</sup> C (or E)  $\nearrow$  > E (or C) means controls (or experimentals) increased more than experimentals (or controls). C (or E)  $\searrow$  > E (or C) means controls (or experimentals) decreased more than experimentals (or controls). C (or E)  $\nearrow$  > E (or C)  $\searrow$  means controls (or experimentals) increased more than experimentals (or controls). C (or E)  $\searrow$  > E (or C)  $\nearrow$  means controls (or experimentals) decreased more than experimentals (or controls).

TABLE 8 (Continued)

Groups	$E_I$ vs $C_I$	$E_{II}$ vs $C_{II}$	$E_{I, II}$ vs $C_{I, II}$	$E_I$ vs $E_{II}$
	$N_{EI}=12; N_{CI}=15$	$N_{EII}=15; N_{CII}=14$	$E=27; C=29$	$N_{EI}=12; N_{EII}=15$
Variables				
WRAT-	.50	1.38	1.34	.39
Splg GL	2.96	2.64	1.94	2.71
WRAT-	.12	.73	.62	2.08
Ar GL	3.73	3.87	2.79	4.02
			**( $C \nearrow > E$ )	
WRAT-	1.64	1.32	2.18	.43
Rdg SS	1.41	1.36	.97	1.29
WRAT-	.48	1.66	1.46	.14
Splg SS	1.55	1.33	1.00	1.31
WRAT-	.14	.88	.72	2.08
Ar SS	1.75	1.87	1.33	1.91
				**( $EI \nearrow > EII \searrow$ )
SG-2	.79	.60	1.04	.87
	.19	.26	.16	.23
SG-3	.79	1.89	2.02	1.60
	.18	.18	.13	.22
			**( $E \nearrow > C$ )	

Note.—Top entry in each cell is the t-score and bottom entry is the standard error of the difference between means.

\*  $p < .10$ .

\*\*  $p < .05$ .

TABLE 8 (Continued)

Groups	$E_I$ vs $C_I$	$E_{II}$ vs $C_{II}$	$E_{I, II}$ vs $C_{I, II}$	$E_I$ vs $E_{II}$
	$N_{EI}=12; N_{CI}=15$	$N_{EII}=15; N_{CII}=14$	$E=27; C=29$	$N_{EI}=12; N_{EII}=15$
Variables				
TSCS	.61	.16	.52	.14
SC	2.97	3.34	2.20	3.94
TSCS	.38	.36	.02	1.04
T/P	8.04	5.11	4.66	8.05
Net C	.84 5.93	.52 3.92	.35 3.47	.84 6.17
Tot C	1.93 <sup>*(E &gt; C)</sup> 5.80	.37 4.78	1.73 <sup>*(E &gt; C)</sup> 3.72	.42 5.85
Tot P	.46 2.64	2.25 <sup>**(E &gt; C)</sup> 2.49	1.20 1.85	.71 2.76
R 1	.53 3.75	3.37 <sup>*** (E &gt; C)</sup> 2.17	2.23 <sup>**(E &gt; C)</sup> 2.11	.57 3.67

Note.—Top entry in each cell is the t-score and bottom entry is the standard error of the difference between means.

\*  
 $p < .10.$

\*\*  
 $p < .05.$

\*\*\*  
 $p < .01.$

TABLE 8 (Continued)

Groups	$E_I$ vs $C_I$	$E_{II}$ vs $C_{II}$	$E_{I, II}$ vs $C_{I, II}$	$E_I$ vs $E_{II}$
	$N_{EI}=12; N_{CI}=15$	$N_{EII}=15; N_{CII}=14$	$E=27; C=29$	$N_{EI}=12; N_{EII}=15$
Variables				
	**(C $\nabla$ > E $\nearrow$ )			
R 2	2.55 2.60	1.41 3.02	.51 2.11	1.42 2.88
R 3	.69 4.74	1.13 3.02	1.15 2.73	.70 3.89
Col A	.43 3.97	1.69 3.37	.82 2.58	.80 4.27
Col B	1.22 2.99	.95 3.35	.12 2.29	.28 2.93
Col C	.52 3.65	1.51 2.77	1.45 2.25	.94 3.55
Col D	.62 3.41	.84 3.36	.08 2.41	.22 3.29
Col E	.20 4.74	1.11 3.00	.74 2.72	.18 4.91
V Tot	.15 4.17	.38 3.03	.37 2.50	.21 3.72

Note.—Top entry in each cell is the t-score and bottom entry is the standard error of the difference between means.

\*\*  
p < .05.



TABLE 8 (Continued)

Groups	$E_I$ vs $C_I$	$E_{II}$ vs $C_{II}$	$E_{I, II}$ vs $C_{I, II}$	$E_I$ vs $E_{II}$
	$N_{EI}=12; N_{CI}=15$	$N_{EII}=15; N_{CII}=14$	$E=27; C=29$	$N_{EI}=12; N_{EII}=15$
Variables				
V Cols	1.18 4.95	.79 3.12	1.45 2.83	.38 4.31
V Rows	1.08 4.16	.27 3.28	.66 2.59	.62 4.22
D	.26 4.42	1.09 2.88	.74 2.59	.59 4.28
D 5	.21 5.37	1.79 3.08	1.05 3.01	.16 5.36
		*( $E \searrow > C \nearrow$ )		
D 4	.70 5.67	1.55 3.32	1.34 3.20	.64 5.24
D 3	.34 4.28	.13 3.27	.42 2.63	.51 4.08
D 2	1.03 4.33	2.001 3.34	.53 2.77	1.64 4.59
		*( $E \nearrow > C \searrow$ )		
D 1	.21 3.53	1.06 2.99	.77 2.30	.51 3.67

Note.—Top entry in each cell is the t-score and bottom entry is the standard error of the difference between means.

\*  
p < .10.

TABLE 8 (Continued)

Groups	$E_I$ vs $C_I$	$E_{II}$ vs $C_{II}$	$E_{I, II}$ vs $C_{I, II}$	$E_I$ vs $E_{II}$
	$N_{EI}=12; N_{CI}=15$	$N_{EII}=15; N_{CII}=14$	$E=27; C=29$	$N_{EI}=12; N_{EII}=15$
Variables				
DP	1.50 2.93	1.32 3.11	.001 2.17	1.17 3.40
GM <sup>b</sup>	1.35 3.30	1.39 2.93	2.03 2.17	.49 3.12
Psy	.39 4.16	.40 4.05	.53 2.84	.32 4.13
PD <sup>b</sup>	.52 2.91	.32 2.75	.22 1.99	.33 2.90
N <sup>b</sup>	.83 4.02	3.38 2.46	1.12 2.40	1.37 4.10
PI	.16 3.47	.86 3.93	.52 2.61	.01 3.77
NDS	.09 5.00	.56 3.38	.19 2.94	.32 4.98

Note.—Top entry in each cell is the t-score and bottom entry is the standard error of the difference between means.

\*\*  
 $p < .05$ .

\*\*\*  
 $p < .01$ .

<sup>b</sup> An inverse scale.

with the controls only for the end-of-the-year school grades derived from the teacher evaluations (SG-3). Findings were in the opposite direction than predicted for the Wide Range Reading subtest (WRAT-Rdg SS) and the Wide Range Total score (WRAT-Tot) on which the controls improved significantly ( $p < .05$ ) more than the experimentals. Several of the separate group contrasts showed differences ( $p < .10$ ) at a low level of confidence, and although not highly significant are indicated on Table 8.

Self-Concept Measures. Results indicated no significant differences on the Draw-A-Person test measure. Significant differences emerged for two of the Tennessee subscales, but did not support the second hypothesis since they were in the direction opposite from that predicted. On Row 1: Identity, how an individual sees himself, both experimentals and controls described themselves less positively but the experimentals scored significantly lower ( $p < .05$ ) than controls. On the measure of general maladjustment (GM) the experimentals had significantly higher ( $p < .05$ ) scores than the controls. Although not a powerful level of significance, it should be noted that the experimentals expressed less ( $p < .10$ ) total conflict, the amount of conflicting responses to positive and negative items within the same area of self-perception (Tot C), at the post-testing than at the pre-testing than the control subjects.

Results of the separate group contrasts revealed a significant difference ( $p < .05$ ) on the Tennessee subscale measuring the overall level of self-esteem (Tot P) in favor of the C<sub>II</sub> girls who increased

on this measure while the  $E_{II}$  subjects had a much lower overall level of self-esteem. The significance was due to the regression by the  $E_{II}$  girls rather than a significant increase in overall level of self-esteem by the  $C_{II}$  groups. The  $E_I$  subjects showed a trend toward a reduction ( $p < .10$ ) in the amount of conflicting responses to positive and negative items within the same area of self-perception (Tot C) as compared with the  $C_I$  group. On Row 1: Identity the  $E_{II}$  subjects regressed significantly ( $p < .01$ ) while the  $C_{II}$  group slightly improved. On Row 2: Self Satisfaction (R 2), how an individual feels about the self she perceives or her level of self-acceptance, the  $C_I$  group regressed significantly ( $p < .05$ ) while the  $E_I$  subjects showed a slight improvement. The D variable is a summary score of the way an individual distributes her answers across the five available choices in responding to the Scale items. It is also interpreted as an aspect of self-perception: certainty about the way one sees himself. The Tennessee Manual states that reliance upon either of the two extremes of the response continuum, D 5 or D 1, is "undesirable" and "most often obtained from disturbed people (p. 3)." On D 5, reflecting a reliance upon the "Completely True" response, the  $E_{II}$  group showed a trend ( $p < .10$ ) in using this response less often than at their pre-testing, while the  $C_{II}$  subjects used it somewhat more frequently than at their pre-testing. Although D 1, "Completely False," yielded no significant results, the  $E_{II}$  girls followed the same trend as on D 5 by relying less on D 1 responses than at their pre-testing. The  $C_{II}$  girls also used it less

often, but more frequently than the  $E_{II}$  group at the post-testing. On D 2, "Mostly False," a trend ( $p < .10$ ) emerged in which the  $E_{II}$  group used this response more than at their pre-testing, while the  $C_{II}$  girls used it less than at their pre-testing and less than the  $E_{II}$  group. The D 2 response is considered healthy and reflects greater flexibility in self-perception than the rigid D 1 and D 5 responses indicate. Finally, the  $E_{II}$  group reported significantly ( $p < .01$ ) more neurotic signs than  $C_{II}$  girls at the post-testing.

The Effects of Interaction Between Treatment, Initial Level of Intellectual Functioning, and Initial Level of Emotional Pathology Upon Change in Self-Concept and School Achievement

Table 9 presents the results of the three-way analysis of variance for the Wide Range, school grades, and Tennessee test measures. To maintain independence of the analysis which used the pre-test Draw-A-Person mean Emotional Indicator scores to separate subjects according to their initial level of emotional pathology, the analysis of variance was not performed on the Draw-A-Person mean Emotional Indicator difference scores. The results reported on this Table relate to the third hypothesis of this study.

Subjects were divided into eight groups according to the three dichotomous, independent variables of treatment group, initial level of intellectual functioning, and initial level of emotional pathology. The reader is reminded that the dichotomies for these three variables were: experimental or control treatment condition; above or below the

TABLE 9

THREE-WAY ANALYSIS OF VARIANCE FOR  
PRE-POST TEST COMPARISONS FOR ALL GROUPS

Source of Variation	Treatment Group	IQ	Pathology	Treatment Group x IQ	Treatment Group x Pathology	IQ x Pathology	Treatment x IQ x Pathology	Within Cells
Variables								
WRAT-Rdg GL	147.14 2.14	144.17 2.09	61.25 .89	82.55 1.20	1.83 .03	16.68 .24	160.55 2.33	68.84 (48)
WRAT-Splg GL	95.19 1.79	32.41 .61	72.53 1.36	14.35 .27	24.11 .45	60.71 1.14	109.62 2.06	53.27 (48)
WRAT-Ar GL	42.62 .39	47.14 .43	507.55* <sup>a</sup> (IP) 4.66	48.95 .45	87.89 .81	.13 .001	19.55 .18	108.88 (48)
WRAT-Rdg SS	62.09* (C) 4.66	8.00 .60	7.01 .53	13.81 1.04	3.87 .29	11.12 .83	28.45 2.14	13.32 (48)
WRAT-Splg SS	29.85 2.08	27.50 1.92	9.70 .68	7.69 .54	3.81 .27	18.70 1.30	17.53 1.22	14.34 (48)

Note.—Top entry is Mean Squares (MS) and bottom entry is F-score for first 7 columns. In the last column top entry is MS and bottom entry is df within. df for first 7 columns is 1 (one).

\*  
p < .05.

<sup>a</sup> Abbreviations indicate the group which improved most when a significant difference was found; E = experimental; C = control; H or L = high or low; I = IQ; and P = pathology. When all groups regressed the group regressing the least will be indicated with (✓).

TABLE 9 (Continued)

Source of Variation	Treatment Group	IQ	Pathology	Treatment Group x IQ	Treatment Group x Pathology	IQ x Pathology	Treatment x IQ x Pathology	Within Cells
Variables								
WRAT-Ar SS	12.66 .51	2.86 .12	117.76* (LP) 4.77	2.61 .11	24.32 .99	1.11 .05	3.05 .12	24.68 (48)
WRAT-Tot	314.41* (C) 4.55	1.81 .03	317.80* (LP) 4.61	13.13 .19	1.93 .03	29.46 .43	131.47 1.90	69.06 (48)
SG-2	.40 1.01	.001 .003	.107 .27	.16 .39	.21 .54	.09 .24	.42 1.05	.40 (48)
SG-3	.98 3.80	.04 .14	.19 .74	.11 .44	.10 .40	.02 .07	.20 .79	.26 (48)
TSCS SC	13.56 .30	46.67 .76	11.80 .19	365.02* (CLI) 5.95	150.68 2.46	8.57 .14	134.82 2.20	61.36 (48)
T/F	.07 .00	14.67 .05	399.85 1.42	41.29 .15	1734.77* <sup>b</sup> 6.16	1038.18 3.68	322.49 1.14	281.74 (48)
Net C	20.45 .13	0.03 .00	66.30 .41	116.56 .72	880.49* (CHI) 5.41	297.19 1.83	105.83 .65	162.80 (48)

Note.—Top entry is Mean Squares (MS) and bottom entry is F-score for first 7 columns. In the last column top entry is MS and bottom entry is df within. Df for first 7 columns is 1 (one).

\*  
 $p < .05$ .

<sup>b</sup>Scale score interpretation is too complex to use the abbreviation method to indicate improvement. Reader must see discussion section dealing with the variable.

TABLE 9 (Continued)

Source of Variation	Treatment Group	IQ	Pathology	Treatment Group x IQ	Treatment Group x Pathology	IQ x Pathology	Treatment x IQ x Pathology	Within Cells
Variables								
Tot C	582.99 3.11	64.08 .34	81.92 .44	45.70 .24	281.70 1.50	612.08 3.26	483.71 2.58	187.47 (48)
Tot P	68.81 1.32	4.72 .09	29.86 .57	11.84 .23	16.77 .32	1.62 .03	1.91 .04	52.22 (48)
R 1	309.69*(CV) 4.74	28.60 .44	24.87 .38	61.43 .94	63.09 .96	7.51 .11	38.04 .58	65.39 (48)
R 2	16.09 .24	4.88 .07	.76 .01	28.94 .42	12.40 .18	7.26 .11	14.44 .21	68.44 (48)
R 3	137.56 1.22	12.88 .11	29.13 .26	1.93 .02	142.46 1.27	4.24 .04	62.37 .56	112.31 (48)
Col A	62.84 .64	80.48 .82	52.49 .54	14.93 .15	67.15 .68	88.25 .90	22.56 .23	98.09 (48)
Col B	1.08 .01	162.98 2.16	43.99 .58	8.80 .12	130.63 1.73	16.01 .21	39.86 .53	75.45 (48)
Col C	147.60 1.96	4.88 .06	2.76 .04	45.50 .60	56.20 .75	2.86 .04	77.59 1.03	75.38 (48)

Note.--Top entry is Mean Squares (MS) and bottom entry is F-score for first 7 columns. In the last column top entry is MS and bottom entry is df within. Df for first 7 columns is 1 (one).

\*  
p < .05.



TABLE 9 (Continued)

Source of Variation	Treatment Group	IQ	Pathology	Treatment Group x IQ	Treatment Group x Pathology	IQ x Pathology	Treatment x IQ x Pathology	Within Cells
Variables								
Col D	.57 .01	62.98 .75	41.01 .49	43.58 .52	111.73 1.34	149.08 1.79	24.18 .29	83.45 (48)
Col E	57.29 .57	1.81 .02	126.24 1.25	83.88 .83	442.75*(BHP) 4.40	33.55 1.33	25.66 .25	100.65 (48)
V Tot	12.15 .14	354.90 4.02	4.89 .06	33.18 .38	5.37 .06	24.24 .27	44.42 .50	88.27 (48)
V Col	233.53 2.02	206.02 1.78	28.68 .25	129.14 1.12	29.55 .26	39.89 .35	50.58 .44	115.53 (48)
V Rows	41.13 .41	199.14 2.00	53.62 .54	11.95 .12	17.75 .18	15.45 .16	60.85 .61	99.52 (48)
D	51.86 .53	26.08 .26	0.66 .01	16.23 .16	139.69 1.42	40.59 .41	121.50 1.23	98.44 (48)
D 5	141.40 1.03	5.83 .04	16.81 .12	5.52 .04	110.00 .80	63.85 .46	68.16 .50	137.53 (48)
D 4	256.09 1.82	4.725 .03	585.14*(HP) 4.16	119.43 .85	0.44 .003	132.90 .94	138.01 .98	140.79 (48)

Note.—Top entry is Mean Squares (MS) and bottom entry is F-score for first 7 columns. In the last column top entry is MS and bottom entry is df within. Df for first 7 columns is 1 (one).

\*  
p < .05.

TABLE 9 (Continued)

Source of Variation	Treatment	IQ	Pathology	Treatment	Treatment Group	IQ x Pathology	Treatment x IQ	Within Cells
Variables	Group			Group x IQ	x Pathology		x Pathology	
D 3	17.02 .17	4.88 .05	15.89 .15	31.80 .31	103.97 1.01	47.72 .46	99.83 .97	102.64 (48)
D 2	29.85 .26	1.22 .01	62.88 .55	68.42 .60	78.65 .69	8.69 .08	73.53 .64	114.34 (48)
D 1	43.69 .55	19.50 .24	27.80 .35	42.96 .54	11.96 .15	5.17 .06	46.72 .58	80.00 (48)
DP	0.0 0.0	52.50 .74	12.97 .18	32.06 .45	34.34 .49	17.71 .25	27.29 .39	70.69 (48)
GM <sup>c</sup>	269.72 3.80	0.10 .001	1.05 .01	66.50 .94	10.99 .15	39.50 .56	16.64 .23	70.96 (48)
Psy	31.97 .30	292.88 2.73	6.00 .06	59.18 .55	146.47 1.36	129.02 1.20	316.61 2.95	107.43 (48)
PD <sup>c</sup>	2.62 .05	45.27 .82	42.42 .77	127.19 2.31	84.09 1.53	73.52 1.34	29.54 .54	54.96 (48)
N <sup>c</sup>	101.73 1.16	12.88 .15	41.41 .47	8.18 .09	22.17 .25	37.53 .43	36.44 .42	87.44 (48)

Note.—Top entry is Mean Squares (MS) and bottom entry is F-score for first 7 columns. In the last column top entry is MS and bottom entry is df within. Df for first 7 columns is 1 (one).

<sup>c</sup>An inverse scale.

TABLE 9 (Continued)

Source of Variation	Treatment Group	IQ	Pathology	Treatment Group x IQ	Treatment Group x Pathology	IQ x Pathology	Treatment x IQ x Pathology	Within Cells
Variables								
PI	25.34 .26	7.24 .08	1.33 .01	400.40*(ELI) 4.17	46.38 .48	29.98 .31	44.88 .47	96.01 (48)
NDS	4.46 .04	58.67 .49	0.12 .001	43.54 .37	492.64*(CHP) 4.15	285.18 2.40	48.45 0.41	118.69 (48)

Note.—Top entry is Mean Squares (MS) and bottom entry is F-score for first 7 columns. In the last column top entry is MS and bottom entry is df within. Df for first 7 columns is 1 (one).

\* $p < .05$ .

group mean IQ of 94.5; above or below the group mean pre-test Draw-A-Person Emotional Indicator critical value of 2.0. The eight resulting categories were:

1. experimental, hi IQ, hi pathology (N = 7)
2. experimental, hi IQ, lo pathology (N = 12)
3. experimental, lo IQ, hi pathology (N = 3)
4. experimental, lo IQ, lo pathology (N = 5)
5. control, hi IQ, hi pathology (N = 2)
6. control, hi IQ, lo pathology (N = 14)
7. control, lo IQ, hi pathology (N = 5)
8. control, lo IQ, lo pathology (N = 8)

School Achievement Measures. Results supported the third hypothesis that the initial status on measures of intellectual functioning and emotional pathology, and treatment condition are related to the measured change in school achievement and self-concept scores. Results of the F-tests indicate that there was a significant main effect ( $p < .05$ ) on the Wide Range Arithmetic subtest reported in grade level and standard scores (WRAT-Ar GL and WRAT-Ar SS) with the lo pathology subjects (N = 39) having made significantly more improvement than the hi pathology group, regardless of treatment group condition or initial level of intellectual functioning. The controls (N = 29) showed significantly more ( $p < .05$ ) improvement than the experimentals on the Wide Range Reading subtest reported in standard scores (WRAT-Rdg SS) at the post-testing regardless of the initial level of intellectual functioning or of emotional pathology. Significant main effects ( $p < .05$ ) were also found on the Wide Range Total score (WRAT-Tot) with controls improving significantly more than the experimentals, and the lo pathology subjects improving more than the hi pathology subjects regardless of treatment condition or initial

level of intellectual functioning. These findings support the significant t-test findings in favor of controls for the Wide Range Total and Reading subtest scores (Table 8). The school grades yielded no significant interaction or main effects.

Self-Concept Measures. Results revealed several significant findings on the Tennessees which supported the third hypothesis which partly referred to the self-concept measures. The treatment group-IQ interaction yielded a significant ( $p < .05$ ) finding on the Self Criticism (SC) subscale. The rankings of which of the IQ-treatment group combinations became more self-critical were, from most to least: controls, lo IQ; experimentals, high IQ; controls hi IQ; and experimentals, lo IQ. The last combination was the only one which became less self-critical than at the pre-testing, whereas the other three combinations showed an increase in self-criticism. On the Personality Integration (PI) subscale a significant ( $p < .05$ ) interaction effect was found for treatment group and IQ, regardless of level of pathology. Scores for the experimental lo IQ and control, hi IQ combinations reflect a higher level of personality integration, with the former far surpassing the latter. Experimental, hi IQ subjects and control, lo IQ subjects displayed a lower level of personality integration in their scores, with the control, lo IQ subjects regressing more than any of the four combinations. The Self Criticism and Personality Integration subscales were the only two subscales on which there were significant treatment-IQ interaction effects. Considering the findings for the relevant groups, integrated findings indicated

that: the experimental, lo IQ girls ( $N = 8$ ) were the only girls who became less self-critical by the post-testing. However, they attained the highest level of adjustment and degree of personality integration in contrast to the other three groupings. Control, hi IQ subjects ( $N = 16$ ) ranked third in their approach towards a more normal and healthy openness and capacity for self-criticism, and ranked second best on improved level of adjustment and degree of personality integration. The experimental, hi IQ group ( $N = 19$ ) ranked second best in their approach toward more normal and healthy openness and capacity for self-criticism, but reflected a lower level of adjustment and degree of personality integration at the post-testing. The control, lo IQ ( $N = 13$ ) girls improved most in their approach towards a more normal and healthy openness and capacity for self-criticism, but achieved the lowest level of adjustment and degree of personality integration of the four categories. It should be noted that the Self Criticism and Personality Integration subscales have an inverse relationship as reflected in the fact that the group scoring highest on Self Criticism, scored lowest on Personality integration; whereas the group scoring highest on the latter scored lowest on Self Criticism, and so on.

Significant treatment group-pathology interaction effects were found on four Tennessee subscales: True-False ratio (T/F), Net Conflict (Net C), Column E: Social Self (Col E), and Number of Deviant Signs (NDS). Significant ( $p < .05$ ) interaction effects were found for the T/F subscale which measures the individual's achieving self-definition or self-description by focusing on what she is while being

relatively unable to accomplish the same thing by eliminating or rejecting what she is not. Fitts (Manual, 1965) suggests two other approaches to interpreting this subscale (p. 3) which are also presented in Appendix A-VII. The self-definition approach will be used for interpreting the data for this study. Subject combinations ranked from greatest to least reliance upon this way of achieving self-definition, as follows: experimentals, hi pathology; controls, lo pathology; controls, hi pathology; and experimentals, lo pathology. On Net C there was a significant interaction effect ( $p < .05$ ) for treatment and pathology. The experimental, hi pathology and control, lo pathology subjects exhibited more conflict at their post-testings than at their pre-testings, with the former exhibiting more. However, the experimental, lo pathology and control, hi pathology subjects showed less conflict at the post-testing, with the latter group showing the greater decrease in conflict to items related to the same area of self-perception. The analysis of Col E: Social Self yielded significant ( $p < .05$ ) treatment and pathology interaction effects. Rankings from most improvement to regression in this area were: experimental, hi pathology; control, lo pathology; control, hi pathology; and experimental, lo pathology. Only the experimental, hi pathology subjects saw themselves as more socially adequate and of greater self-worth, while the other groups described themselves as less adequate than at their pre-testings. A significant ( $p < .05$ ) treatment and pathology interaction effect was found for the NDS subscale. Findings indicated that the control, hi

pathology group decreased the most on this subscale. The experimental, lo pathology group also had fewer deviant signs (IDS).

However, the control, lo pathology subjects and the experimental, hi pathology girls both had more deviant signs, with the latter group increasing the most.

Integrating the findings on all four of these subscales, the groups' scores reflected the following indications: the experimental, hi pathology group increased the most in becoming more likely to achieve self-definition or self-description by focusing on what they were and were relatively unable to accomplish the same task by eliminating or rejecting what they were not; reported the most conflict within the same area of self-perception; improved the most in their sense of adequacy and worth in their social interactions with other people in general; and increased the most on number of deviant signs. At the post-testing the control, lo pathology group ranked second on an increase in becoming more likely to achieve self-definition or self-description by focusing on what they were and became relatively unable to accomplish this task by eliminating or rejecting what they were not; ranked second on an increase in conflict within the same area of self-perception; had a lower sense of adequacy and worth in their social interactions with other people in general; and had more deviant signs than at their pre-testing, but not as much of an increase as the experimental, hi pathology subjects. The control, hi pathology girls ranked third and scored lower at the pre-testing on the measure reflecting self-definition



being achieved by a more balanced employment of the two tendencies--affirming what is self and eliminating or rejecting what is not self; they decreased the most in conflict within the same area of self-perception; ranked third on feelings of adequacy and worth in their social interactions with people in general which were lower than at their pre-testing; but showed the greatest reduction in the number of deviant signs. The experimental, lo pathology subjects decreased the most on the T/F measure reflecting the greatest shift toward achieving self definition by a more balanced employment of the two tendencies--affirming what is self and rejecting what is not self; reported less conflict within the same area of self-perception; regressed the most in their sense of adequacy in social interactions with other people in general; but showed fewer deviant signs at their post-testing.

Main effects were found for two of the Tennessee subscales, and were significant at the  $p < .05$  level. On Row 1: Identity the experimentals perceived themselves significantly more negatively than the controls at the post-testing, although both groups' scores indicated a lower self-perception on the Identity measure than they had at the pre-testing. The second main effect was for pathology on the D 4 variable, indicating that at the post-testing the hi pathology girls used more "Mostly True" responses than the lo pathology girls, thus reflecting a healthier distribution of self-descriptive responses. In addition, the lo pathology girls used fewer "Mostly True" responses at the post-testing than they had at their pre-testing.

### Experimental Group Differences on the Process Measures

Table 10 presents the group means and standard deviations for the Semantic Differential, a self-report self-concept and process measure, and the Carkhuff-Egan Interaction Behavior Rating Scale, (C-E), a group process measure. These tests scores were obtained on the experimental subjects only. All t-tests and two-way analyses of variance on the process measures were performed on the data presented on Table 10. The factor scores and Ideal (I) self-concept variables are raw scores, as are the C-E scores. The other scores are difference scores.

Figure 1 graphically presents the group mean difference scores for "Great minus Usual" self-concept scores for the four test administrations of the Semantic Differential given to both experimental groups. The graph demonstrates that at the  $E_{II}$  subjects' second Semantic Differential testing their difference scores were larger than those of the  $E_I$  girls. The reader is reminded that the  $E_I$  group was not given this test at their pre-testing, as was done with the  $E_{II}$  girls, since the test forms were not yet completed. Statistical comparisons were made only for those testings in which both experimental groups participated. At the posttesting, which "session 17" represents, both groups had larger difference scores than when they had begun, with the  $E_I$  group closely approximating the  $E_{II}$  group difference scores after the encounter group experience was completed. A statistical analysis of this process is reflected in the data presented on Table 11.

TABLE 10

## DESCRIPTIVE STATISTICS FOR TEST MEASURES

## ADMINISTERED TO EXPERIMENTAL GROUPS

	E <sub>I</sub>	E <sub>II</sub>	E <sub>I, II</sub>
SD			
Tot-DS	42.33 35.97	65.53 57.26	55.22 49.52
M-DS	10.58 8.99	14.04 12.71	12.51 11.15
SD-Tot			
Session 1U	— —	96.07 11.61	— —
G	— —	109.79 7.70	— —
D	— —	13.71 11.93	— —
Session 6U	95.08 11.20	97.36 8.34	96.31 9.63
G	100.67 12.74	108.79 12.07	105.04 12.82
D	5.58 9.32	11.43 14.69	8.73 12.62

Note.—Top entry refers to the Mean and bottom entry refers to the Standard Deviation.

TABLE 10 (Continued)

	E <sub>I</sub>	E <sub>II</sub>	E <sub>I, II</sub>
Session 10U	91.67 9.86	96.36 13.80	94.20 12.14
G	99.75 12.87	107.86 14.13	104.12 13.92
D	8.08 8.71	11.50 14.98	9.92 12.37
Session 14U	88.83 10.78	92.07 11.23	90.63 10.94
G	102.58 13.03	108.07 12.03	105.63 12.55
D	13.75 14.26	16.0 16.41	15.0 15.24
Session 17 Post U	89.42 13.84	91.47 13.43	90.56 13.39
G	104.33 14.02	106.80 17.26	105.70 15.65
D	14.92 14.00	15.33 22.87	15.15 19.09
(I)	120.0 6.69	121.33 6.11	120.81 6.28

Note.—Top entry refers to the Mean and bottom entry refers to the Standard Deviation.

TABLE 10 (Continued)

	$E_I$	$E_{II}$	$E_{I, II}$
I-U	30.75 11.95	29.20 14.77	29.89 13.36
I-G	15.00 14.94	14.53 15.84	14.74 15.15
SD-Fct			
Session 1			
U			
I	----- -----	65.93 7.45	----- -----
II	----- -----	12.93 2.50	----- -----
III	----- -----	17.21 3.66	----- -----
G			
I	----- -----	75.64 5.51	----- -----
II	----- -----	14.29 2.09	----- -----
III	----- -----	19.64 1.98	----- -----

Note.—Top entry refers to the Mean and bottom entry refers to the Standard Deviation.

TABLE 10 (Continued)

	$E_I$	$E_{II}$	$E_{I, II}$
Session 6			
U			
I	61.67 8.94	66.0 6.67	64.0 7.94
II	14.67 1.37	13.29 1.82	13.92 1.74
III	19.00 3.54	18.07 2.13	18.50 2.85
G			
I	67.58 9.86	73.86 7.54	70.96 9.08
II	13.75 1.96	14.93 2.81	14.38 2.48
III	19.33 3.05	20.0 3.14	19.69 3.06
Session 10			
U			
I	61.08 7.04	65.71 9.77	63.58 8.77

Note.—Top entry refers to the Mean and bottom entry refers to the Standard Deviation.

TABLE 10 (Continued)

	$E_I$	$E_{II}$	$E_{I, II}$
II	12.08 1.73	13.29 1.68	12.73 1.78
III	18.50 3.00	17.36 3.59	17.88 3.31
G			
I	67.50 9.38	72.36 10.70	70.12 10.21
II	12.92 1.83	15.07 1.82	14.08 2.10
III	18.83 3.43	20.43 2.62	19.69 3.07
Session 14			
U			
I	59.83 7.70	62.4 8.53	61.26 8.12
II	11.92 2.19	12.60 2.23	12.30 2.20
III	17.08 2.68	17.07 3.06	17.07 2.84

Note.—Top entry refers to the Mean and bottom entry refers to the Standard Deviation.

TABLE 10 (Continued)

	$E_I$	$E_{II}$	$E_{I, II}$
G			
I	68.67 9.26	72.67 8.29	70.89 8.79
II	13.92 2.23	16.07 2.43	15.11 2.55
III	20.0 3.02	19.33 2.85	19.63 2.88
Session 17			
U			
I	60.0 9.65	62.0 9.34	61.11 9.35
II	12.17 2.12	12.33 2.44	12.26 2.26
III	17.25 3.28	17.13 3.31	17.19 3.23
G			
I	70.92 9.45	72.07 11.74	71.56 10.60
II	13.58 2.54	15.07 2.66	14.41 2.66
III	19.83 3.21	19.67 4.10	19.74 3.66

Note.—Top entry refers to the Mean and bottom entry refers to the Standard Deviation.



TABLE 10 (Continued)

C-E	E <sub>I</sub>	E <sub>II</sub>	E <sub>I, II</sub>
Session 2	17.3 7.90	23.4 7.47	20.9 8.09
3	20.6 8.58	23.3 8.04	22.1 8.21
4	24.7 9.60	25.8 5.01	25.2 7.71
5	21.4 6.35	17.5 5.50	19.0 6.03
6	23.6 7.91	19.9 7.77	22.0 7.88
7-8	21.4 8.59	18.6 3.26	19.9 6.32
9	18.7 5.79	22.6 8.75	20.65 7.49
10	19.0 7.12	23.3 5.97	21.7 6.58
11	24.1 4.36	21.9 8.58	22.8 7.21

Note.—Top entry refers to the Mean and bottom entry refers to the Standard Deviation.

TABLE 10 (Continued)

	$E_I$	$E_{II}$	$E_{I, II}$
Session 12	28.4 10.38	22.7 6.07	25.0 8.40
13	39.75 4.80	27.7 11.0	33.4 10.5
14	20.9 8.44	31.2 12.16	26.0 11.49
15	27.75 14.59	23.5 7.85	25.4 11.18
16	26.7 7.47	19.9 6.04	22.5 7.30
Tot	265.6 85.66	263.7 106.71	264.5 96.10
M	23.45 4.40	22.0 6.29	22.66 5.48

Note.—Top entry refers to the Mean and bottom entry refers to the Standard Deviation.

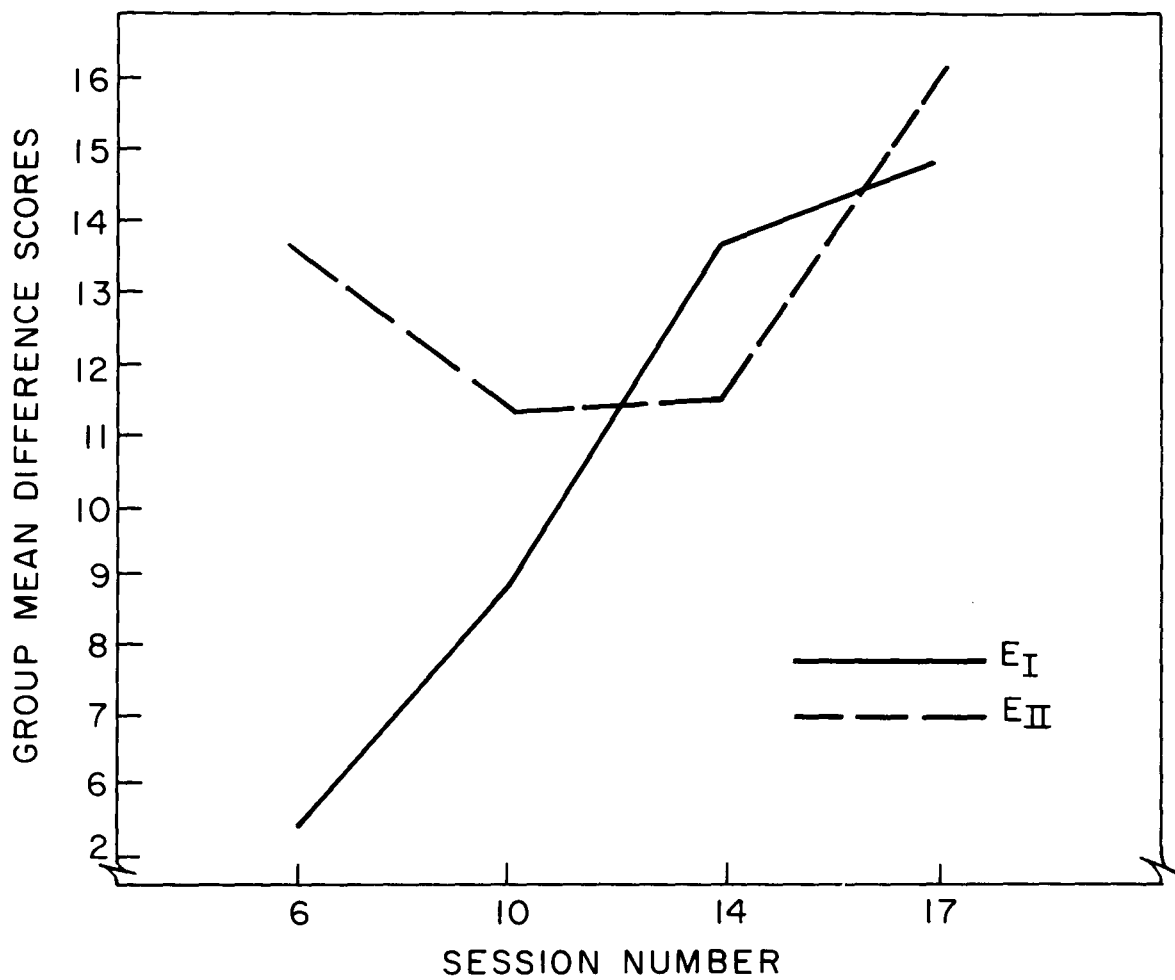


FIG. 1. GROUP MEAN DIFFERENCE SCORES ON THE SEMANTIC DIFFERENTIAL

TABLE 11

t-TEST ANALYSIS FOR COMPARISONS  
ON PROCESS MEASURES FOR EXPERIMENTAL GROUPS

Source	<u>M</u>	<u>SD</u>	<u>df</u>	<u>SD<sub>x</sub></u>	<u>t</u>
Variables					
SD	10.58 <sup>a</sup>	8.99 <sup>a</sup>			
M-DS	14.07	12.66	25	4.34	.80
Sessions					
D-6	5.58 11.43	9.32 14.69	24	4.92	1.19
D-10	8.08 11.50	8.71 14.98	24	4.92	.69
D-14	13.75 16.00	14.26 16.41	25	6.00	.37
D-17	14.92 15.33	14.00 22.87	25	7.54	.06
I	120.17 121.33	6.69 6.11	25	2.47	.47

<sup>a</sup>Top entry is of E<sub>I</sub> and bottom entry is of E<sub>II</sub> for all M's and SD's.

\*  
 $p < .10.$

\*\*  
 $p < .05.$

\*\*\*  
 $p < .01.$

TABLE 11 (Continued)

Source Variables	<u>M</u>	<u>SD</u>	<u>df</u>	<u>SD</u> <u>X</u>	<u>t</u>
I-U	30.75 29.20	11.95 14.77	25	5.27	.29
I-G	15.00 14.53	14.94 15.84	25	5.98	.08
6U Fct I	61.67 66.00	8.94 6.67	24	3.06	1.41
6U Fct II	14.67 13.29	1.37 1.82	24	.64	2.16**
Fct III	19.00 18.07	3.54 2.13	24	1.13	.82
6G Fct I	67.58 73.86	9.86 7.54	24	3.42	1.84*
Fct II	13.75 14.93	1.96 2.81	24	.97	1.22
Fct III	19.33 20.00	3.06 3.14	24	1.22	.55

\*  
p < .10.

\*\*  
p < .05.

TABLE 11 (Continued)

Source	<u>M</u>	<u>SD</u>	<u>df</u>	<u>SD-</u> <u>x</u>	<u>t</u>
Variables					
10U	61.08	7.04			
Fct I	65.71	9.77	24	3.39	1.36
Fct II	12.08	1.73			
	13.29	1.68	24	.67	1.79*
Fct III	18.50	3.00			
	17.36	3.59	24	1.31	.87
10G	67.50	9.38			
Fct I	72.36	10.70	24	3.98	1.22
Fct II	12.92	1.83			
	15.07	1.82	24	.72	3.00***
Fct III	18.83	3.43			
	20.43	2.63	24	1.19	1.34
14U	59.83	7.70			
Fct I	62.40	8.53	25	3.17	.81
Fct II	11.92	2.19			
	12.60	2.23	25	.86	.80

\*  
p < .10.

\*\*\*  
p < .01.

TABLE 11 (Continued)

Sources	<u>M</u>	<u>SD</u>	<u>df</u>	<u>SD</u> <sub>x</sub>	<u>t</u>
Variables					
Fct III	17.08 17.07	2.68 3.06	25	1.12	.01
14G Fct I	68.67 72.67	9.26 8.29	25	3.38	1.18
Fct II	13.92 16.07	2.23 2.43	25	.91	2.36**
Fct III	20.00 19.33	3.02 2.85	25	1.13	.59
17U Fct I	60.00 62.00	9.65 9.34	25	3.67	.55
Fct II	12.17 12.33	2.12 2.44	25	.89	.19
Fct III	17.25 17.13	3.28 3.31	25	1.28	.09
17G Fct I	70.92 72.07	9.45 11.74	25	4.18	.28
17G Fct II	13.58 15.07	2.54 2.66	25	1.01	1.47

\*\*  
p < .05.

TABLE 11 (Continued)

Sources	<u>M</u>	<u>SD</u>	<u>df</u>	<u><math>\frac{SD}{\sqrt{x}}</math></u>	<u>t</u>
Variables					
Fct III	19.83 19.67	3.21 4.10	25	1.45	.12
C-E					
2	17.30 23.43	7.90 7.47	22	3.17	1.93*
3	20.60 23.33	8.58 8.04	20	3.55	.77
4	24.67 25.80	9.60 5.01	20	3.37	.34
5	21.44 17.50	6.35 5.50	21	2.49	1.58
6	23.58 19.89	7.91 7.77	19	3.46	1.07
7-8	21.42 17.96	8.59 3.35	24	2.48	1.39
9	18.70 22.60	5.79 8.75	18	3.32	1.18
10	19.00 23.33	7.12 5.97	17	3.04	1.42

\*  $p < .10.$



TABLE 11 (Continued)

Sources	<u>M</u>	<u>SD</u>	<u>df</u>	<u>SD</u> <u>x</u>	<u>t</u>
Variables					
C-E					
11	24.125 21.92	4.36 8.58	19	3.29	.67
12	28.44 22.69	10.38 6.07	20	3.50	1.64
13	39.75 27.67	4.80 11.00	15	4.22	2.87**
14	20.91 31.18	8.44 12.16	20	4.46	2.30**
15	27.75 23.50	14.59 7.85	16	5.36	.79
16	26.67 19.86	7.47 6.04	21	2.83	2.41**
M	23.45 22.03	4.40 6.29	25	2.14	.66

\*\*  
p < .05.

Figure 2 graphically presents the contrasting C-E group mean raw scores achieved by the two experimental groups for each session rated. The C-E scores might be understood as an indication of the level of experiencing or level of functioning as reflected by observable interaction behaviors by the group members with each other. The higher the scores, the more the group members were contributing and interacting. Contrasting the first and last rated sessions' group mean scores, one notes that the  $E_I$  girls began at a lower level of interacting than the  $E_{II}$  group. However, the  $E_I$  group was interacting at a higher level at the end of the encounter group experience than the  $E_{II}$  girls. The statistical analysis of these data are also presented on Table 11.

Semantic Differential Measure. Results supported the fourth hypothesis that the group interactional process measures are directly related to the self-concept and school achievement score changes. On the Semantic Differential self-report process measure the potency factor (II) was the only factor yielding significant results. At the beginning of their respective sixth sessions, the  $E_I$  subjects felt significantly ( $p < .05$ ) more powerful in their "Usual" or real self-concept than the  $E_{II}$  girls. By the tenth session,  $E_{II}$  subjects tended to feel more ( $p < .10$ ) powerful in their "Usual" or real self-concept as contrasted with the  $E_I$  subjects, but the difference was not significant. Also, at the tenth session, on the "Great" or ideal self-concept the  $E_{II}$  subjects felt significantly ( $p < .01$ ) more powerful than the  $E_I$  girls. On this factor II, potency, at the fourteenth

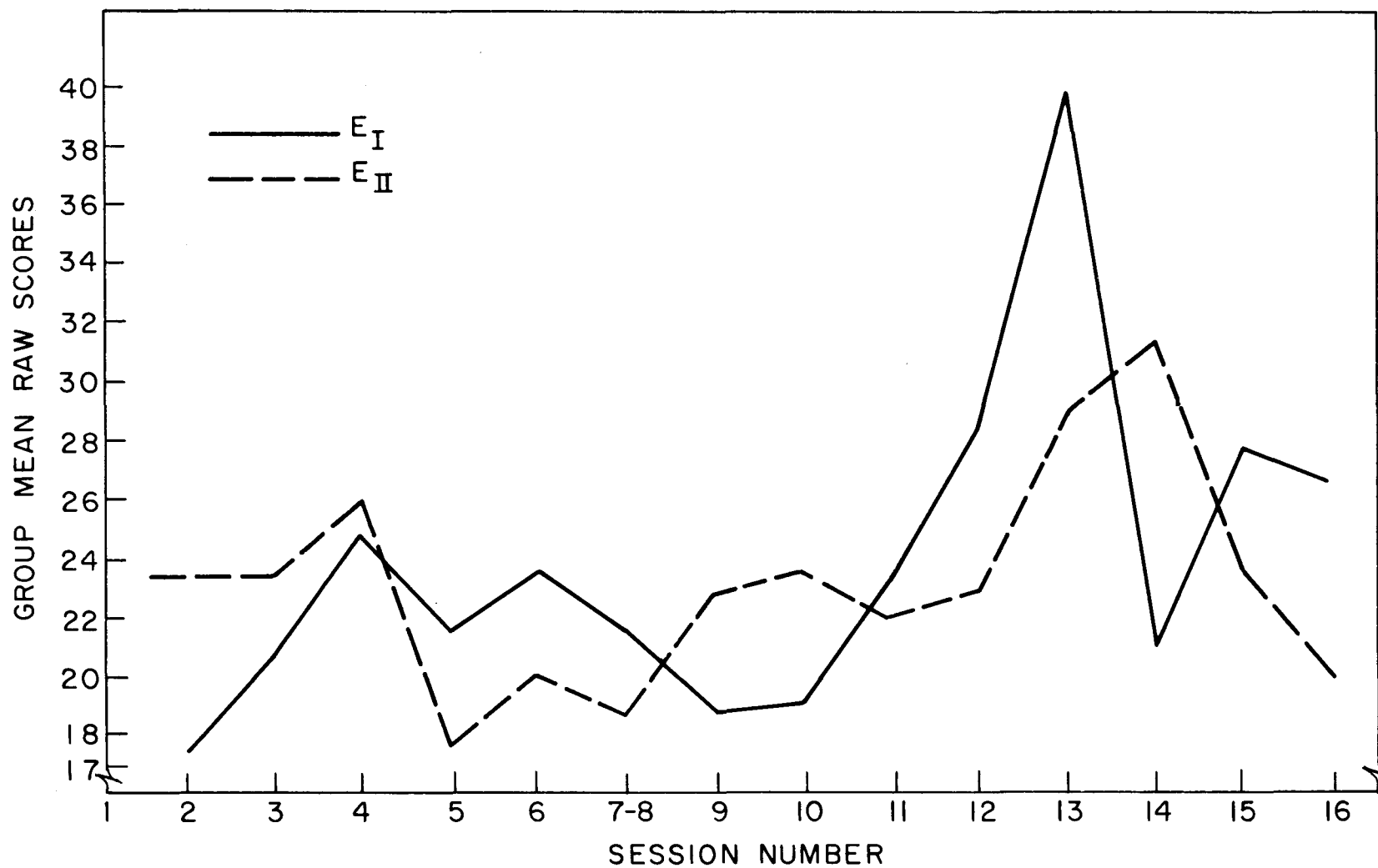


FIG. 2. GROUP MEAN CARKHUFF-EGAN RAW SCORES FOR EACH SESSION

session the  $E_{II}$  subjects felt significantly ( $p < .05$ ) more powerful than the  $E_I$  group on their "Great" self-concept. At the sixth session, the  $E_{II}$  subjects made higher ( $p < .10$ ) self-evaluations (Fct I, evaluative) than  $E_I$  subjects on their "Great" self-concept.

Carkhuff-Egan Interaction Behavior Rating Scale Measure. T-test data presented in Table 11 reflects the relative level of group interaction of the two experimental groups for each session as reflected in their Rating Scale scores. At the second session the  $E_{II}$  group tended to interact at a higher level ( $p < .10$ ) than  $E_I$  subjects as reflected in their higher C-E scores. At the thirteenth session the  $E_I$  group was interacting at a significantly higher ( $p < .05$ ) level than  $E_{II}$  subjects. This was also true at the last session. However, at the fourteenth session the  $E_{II}$  group temporarily interacted at a significantly higher ( $p < .05$ ) level than the  $E_I$  group.

Effects of the Interaction Between Initial Level of Intellectual Functioning and Initial Level of Emotional Pathology on the Process Measures

The graph presented as Figure 3 demonstrates the relative rankings of the four groups resulting from categorizing all experimental subjects according to initial levels of intellectual functioning and emotional pathology on the Semantic Differential measure. The lo IQ, hi pathology group had much larger difference scores than the other three categories except at session 10. All groups had larger differences between the "Great" and "Usual" self-concepts at the

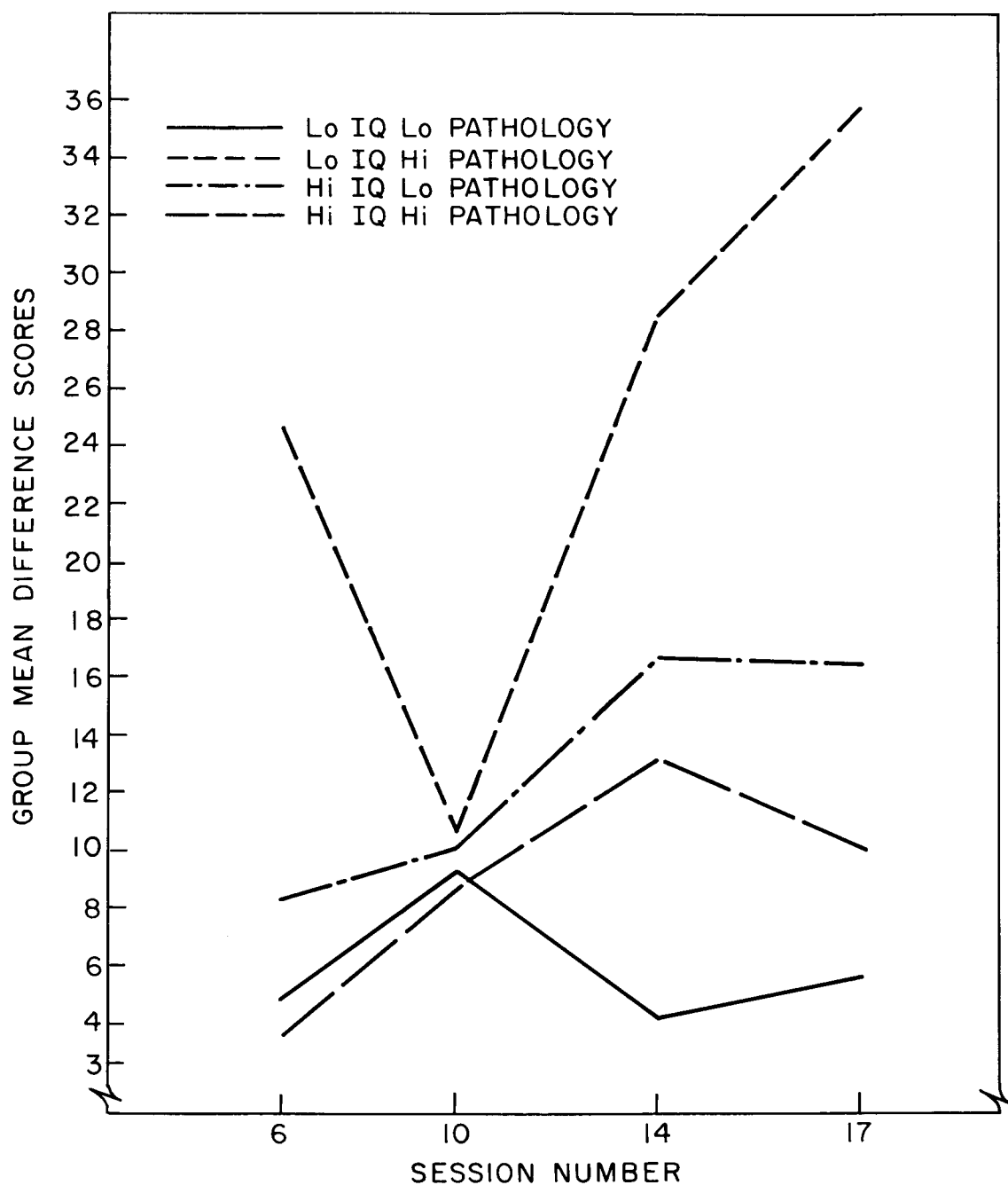


FIG. 3. SEMANTIC DIFFERENTIAL ANALYSIS OF VARIANCE  
CELL MEANS FOR DIFFERENCE SCORES

post-testings than at their initial Semantic Differential testing at the beginning of session 6. Table 12 presents the two-way analysis of variance related to Figure 3.

Figure 4 graphically presents how the four categories of subjects ranked at each session on the C-E measure. The lo IQ, lo pathology individuals ( $N = 5$ ) seem to have made the most progress, contrasting sessions scores of session 2 against session 16. Hi IQ, lo pathology ( $N = 12$ ) girls also improved, although not as much as the former group. The lo IQ, hi pathology ( $N = 3$ ) and hi IQ, hi pathology ( $N = 7$ ) categories both ended their encounter group experience at a lower level of interacting than when they began. However, the latter group regressed only slightly. The lo pathology groups were the two categories which improved, and they improved more than the two hi pathology groups regressed. It should be noted that the break in the graph line for the lo IQ, hi pathology category, which shows no score for session 6, is a result of the absence of the three girls in this category at that sixth session. Statistical analysis presented in Table 12 shows which of the differences were significant.

Table 12 presents the two-way analysis of variance results for the experimental subjects when compared after being assigned to groups according to initial levels of intellectual functioning and emotional pathology.

Semantic Differential Measure. Significant ( $p < .05$ ) IQ main effects were found for session 10 "Usual" self-concept for the

TABLE 12

TWO-WAY ANALYSIS OF VARIANCE FOR COMPARISONS ON  
PROCESS MEASURES FOR EXPERIMENTAL GROUPS

Source of Variation	Pathology	IQ	Pathology x IQ	Mean Square Within And df Within Cells
Variables				
SD	93.52	47.50	692.73* <sup>a</sup> (LL)	103.53
M-DS	.90	.46	6.69	(23)
Sessions				
D-6	64.11	164.17	779.34* (HH)	135.16
	.47	1.21	5.77	(22)
D-10	.90	.06	6.01	173.59
	.01	.00	.03	(22)
D-14	142.94	25.58	1014.98* (LL)	211.07
	.68	.12	4.81	(23)

Note.—Top entry is Mean Square (MS); bottom entry is F-score for first 3 columns. For 4th column, the top entry is MS and the bottom entry is df within cells.

\*  
p < .05.

<sup>a</sup>Abbreviations indicate the group which performed highest on the variable. For SD - the smallest group difference score and C-E, the highest group mean score represent the best performance; L = Low; H = High. The first letter refers to the IQ level and the second letter refers to the pathology level.

TABLE 12 (Continued)

Source of Variation	Pathology	IQ	Pathology x IQ	Mean Square Within And df Within Cells
Variables				
D-17	120.27 .37	50.22 .15	1755.39* (LL) 5.35	328.41 (23)
I	22.31 .52	7.50 .18	15.94 .37	42.54 (23)
I-U	13.18 .08	128.43 .81	856.42* <sup>a</sup> (HH) 5.41	158.29 (23)
I-G	11.23 .04	0.0 0.0	143.52 .57	252.72 (23)
6U	0.0	4.50	47.75	69.35
Fct I	0.0	.06	.69	(22)
Fct II	6.76 2.20	.35 .11	1.12 .36	3.07 (22)

Note.—Top entry is Mean Square (MS); bottom entry is F-score for first 3 columns. For 4th column, the top entry is MS and the bottom entry is df within cells.

\*  
p < .05.

<sup>a</sup>Abbreviations indicate the group which performed highest on the variable. For SD - the smallest group difference score and C-E, the highest group mean score represent the best performance; L = Low; H = High. The first letter refers to the IQ level and the second letter refers to the pathology level.



TABLE 12 (Continued)

Source of Variation	Pathology	IQ	Pathology x IQ	Mean Square Within And df Within Cells
Variables				
Fct III	2.08 .23	4.51 .51	0.02 .003	8.90 (22)
6G Fct I	4.81 .06	212.50 2.73	130.19 1.67	77.98 (22)
Fct II	15.46 3.04	0.0 0.0	26.66* <sup>a</sup> (IH) 5.24	5.09 (22)
Fct III	1.30 .13	5.38 .55	12.73 1.31	9.73 (22)
10U Fct I	6.44 .09	327.94* (IH) 4.56	8.50 .12	71.89 (22)
Fct II	9.36 3.08	1.625 .54	1.33 .44	3.04 (22)

Note.—Top entry is Mean Square (MS); bottom entry is F-score for first 3 columns. For 4th column, the top entry is MS and the bottom entry is df within cells.

\*  
 $p < .05$ .

<sup>a</sup>Abbreviations indicate the group which performed highest on the variable. For SD - the smallest group difference score and C-E, the highest group mean score represent the best performance; L = Low; H = High. The first letter refers to the IQ level and the second letter refers to the pathology level.

TABLE 12 (Continued)

Source of Variation	Pathology	IQ	Pathology x IQ	Mean Square Within And df Within Cells
Variables				
Fct III	2.67	15.16	10.49	11.20
	.24	1.35	.94	(22)
10G	11.00	348.00	49.25	99.93
Fct I	.11	3.48	.49	(22)
Fct II	4.79	3.89	10.12	4.14
	1.16	.94	2.45	(22)
Fct III	0.01	12.99	0.66	10.09
	.001	1.29	0.07	(22)
14U	3.31	45.00	179.19	64.68
Fct I	.05	.70	2.77	(23)
Fct II	5.79	24.02 <sup>a</sup> (IH)	0.15	4.17
	1.39	5.76	0.04	(23)

Note.—Top entry is Mean Square (MS); bottom entry is F-score for first 3 columns. For 4th column, the top entry is MS and the bottom entry is df within cells.

\*  
p < .05.

<sup>a</sup>Abbreviations indicate the group which performed highest on the variable. For Sd - the smallest group difference score and C-E, the highest group mean score represent the best performance; L = Low; H = High. The first letter refers to the IQ level and the second letter refers to the pathology level.

TABLE 12 (Continued)

Source of Variation	Pathology	IQ	Pathology x IQ	Mean Square Within And df Within Cells
Variables				
Fct III	15.07	0.03	0.18	8.46
	1.78	0.00	0.02	(23)
14G Fct I	64.19	29.50	182.81	75.40
	.85	.39	2.42	(23)
Fct II	12.55	11.69	6.66	5.99
	2.09	1.95	1.11	(23)
Fct III	8.45	4.50	3.48	8.69
	.97	.52	.40	(23)
17U Fct I	16.25	3.00	242.19	87.36
	.19	.03	2.77	(23)
Fct II	0.31	18.03	9.01	4.60
	.07	3.92	1.96	(23)

Note.—Top entry is Mean Square (MS); bottom entry is F-score for first 3 columns. For 4th column, the top entry is MS and the bottom entry is df within cells.

TABLE 12 (Continued)

Source of Variation	Pathology	IQ	Pathology x IQ	Mean Square Within And df Within Cells
Variables				
Fct III	4.21	23.41	25.73	9.51
	.44	2.46	2.71	(23)
17G	20.75	0.06	122.875	120.83
Fct I	.17	0.00	1.02	(23)
Fct II	3.85	.54	5.36	7.60
	.51	.07	.71	(23)
Fct III	9.16	1.52	23.93	13.68
	.67	.11	1.75	(23)
C-E				
2	378.22	3.00	5.00	56.02
	6.75 <sup>a</sup> (IH)	.05	.09	(20)
3	1.90	3.25	299.20 <sup>*</sup> (IH)	61.64
	.03	.05	4.85	(18)

Note.—Top entry is Mean Square (MS); bottom entry is F-score for first 3 columns. For 4th column, the top entry is MS and the bottom entry is df within cells.

\*  
p < .05.

<sup>a</sup>Abbreviations indicate the group which performed highest on the variable. For SD - the smallest group difference score and C-E, the highest group mean score represent the best performance; L = Low; H = High. The first letter refers to the IQ level and the second letter refers to the pathology level.

TABLE 12 (Continued)

Source of Variation	Pathology	IQ	Pathology x IQ	Mean Square Within And df Within Cells
Variables				
4	58.625 1.08	45.50 .84	166.74 3.07	54.245 (18)
5	139.14* <sub>a</sub> (LH) 4.38	14.16 .44	42.22 1.33	31.87 (19)
6	84.23 1.27	75.86 1.15	41.73 .63	66.10 (17)
7-8	.69 .02	11.45 .25	11.41 .25	45.94 (22)
9	47.34 .78	33.71 .55	10.21 .17	60.96 (16)
10	22.35 .44	.03 .001	.49 .01	50.45 (15)
11	44.86 1.04	38.08 2.04	172.07 3.98	43.22 (17)

Note.—Top entry is Mean Square (MS); bottom entry is F-score for first 3 columns. For 4th column, the top entry is MS and the bottom entry is df within cells.

\*  
p < .05.

<sup>a</sup>Abbreviations indicate the group which performed highest on the variable. For SD - the smallest group difference score and C-E, the highest group mean score represent the best performance; L = Low; H = High. The first letter refers to the IQ level and the second letter refers to the pathology level.

TABLE 12 (Continued)

Source of Variation	Pathology	IQ	Pathology x IQ	Mean Square Within And df Within Cells
Variables				
12	33.70 .44	45.16 .58	11.19 .14	77.27 (18)
13	242.16 2.19	7.76 .07	62.08 .56	110.45 (13)
14	503.65 4.12	.37 .00	65.83 .54	122.28 (18)
15	521.36* <sup>a</sup> (HH) 4.75	9.79 .09	55.46 .50	109.83 (14)
16	54.27 .93	3.34 .06	4.96 .08	58.48 (19)
M	70.96 2.43	2.58 .09	35.99 1.23	29.16 (23)

Note.—Top entry is Mean Square (MS); bottom entry is F-score for first 3 columns. For 4th column, the top entry is MS and the bottom entry is df within cells.

\*  
p < .05.

<sup>a</sup> Abbreviations indicate the group which performed highest on the variable. For SD - the smallest group difference score and C-E, the highest group mean score represent the best performance; L = Low; H = High. The first letter refers to the IQ level and the second letter refers to the pathology level.

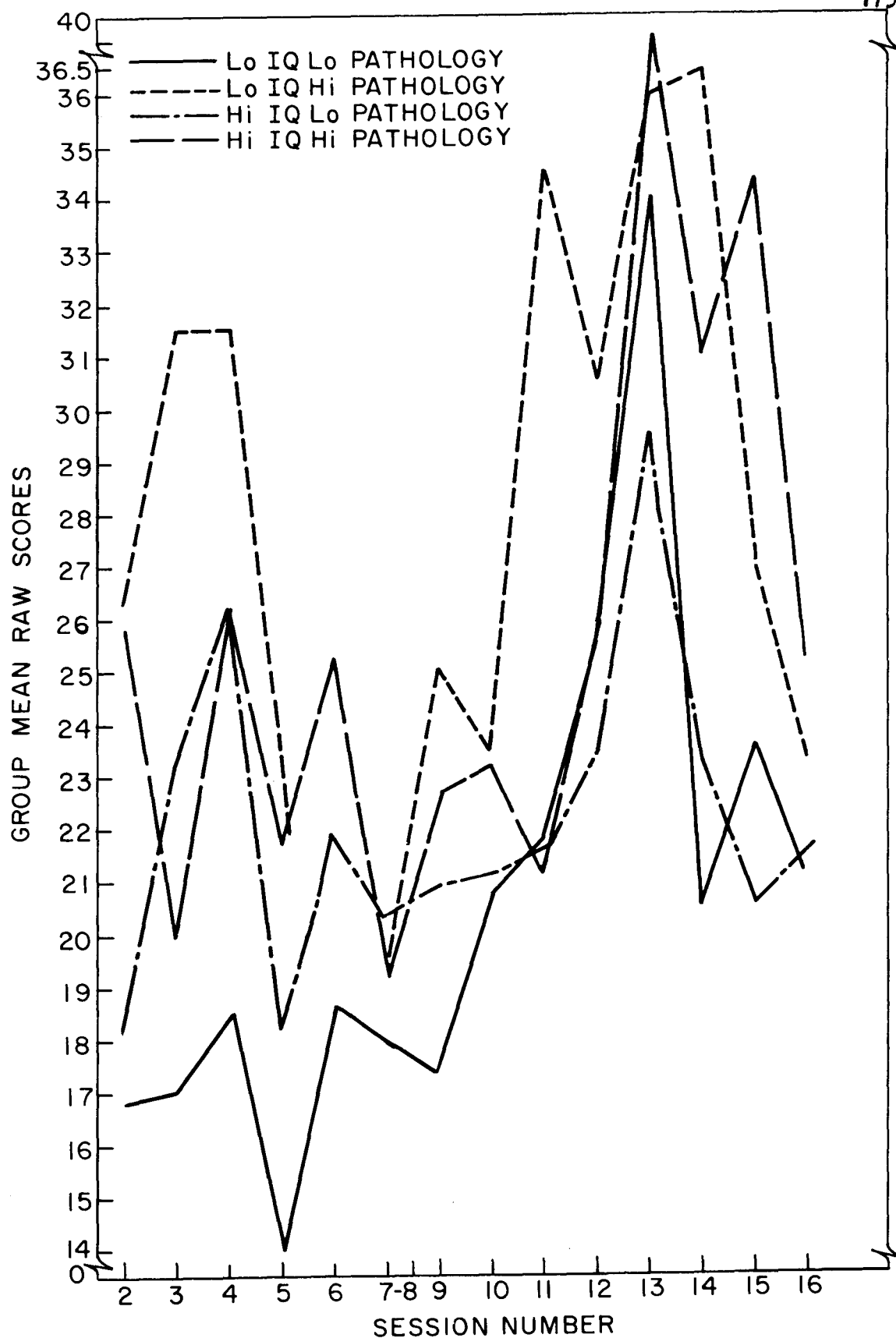


FIG. 4. CARKHUFF-EGAN SCALE ANALYSIS OF VARIANCE  
CELL RAW SCORE GROUP MEANS

evaluative factor (Fct II). Group rankings from highest to lowest scores were: lo IQ, hi pathology; lo IQ, lo pathology; hi IQ, lo pathology; and hi IQ, hi pathology. IQ was also a significant ( $p < .05$ ) main effect on the potency factor at the 14th session for the "Usual" self-concept. Rankings of the categories feeling powerful from most to least were: lo IQ, hi pathology; lo IQ, lo pathology; hi IQ, hi pathology; and hi IQ, lo pathology.

Significant interaction effects were also noted. All subjects scored higher on all of the measures to be reported in this section at the post-testing. A significant interaction effect ( $p < .05$ ) for IQ and pathology was found for the Semantic Differential Mean Difference Score (SD-MDS). The groups ranked from greatest to least difference across sessions as follows: lo IQ, hi pathology; hi IQ, lo pathology; hi IQ, hi pathology; and lo IQ, lo pathology. Significant ( $p < .05$ ) IQ and pathology interactions effects occurred on the difference between real and ideal self-concept scores (Great minus Usual self-concept score) between the two experimental groups for the 6th, 14th, and 17th (post-test) session administrations (D 6, D 14, and D 17). Rankings from greatest to least difference between Usual and Great self-concepts for the sixth session were: lo IQ, hi pathology; hi IQ, lo pathology; lo IQ, lo pathology; and hi IQ, hi pathology. The same rankings were true for the 10th session, but no significant differences between experimental groups were found. Rankings for the 14th and post-test administrations were, from greatest to least difference: lo IQ, hi pathology; hi IQ, lo



pathology; hi IQ, hi pathology; and lo IQ, lo pathology. On the Ideal image minus Usual self (I-U) measure significant interaction effects ( $p < .05$ ) emerged, with group rankings from largest to smallest differences being: lo IQ, hi pathology; hi IQ, lo pathology; lo IQ, lo pathology; and hi IQ, hi pathology. On the potency factor for the "Great" self-concept at the sixth session, a significant ( $p < .05$ ) interaction effect was found with group rankings for feeling most and least powerful as: lo IQ, hi pathology and lo IQ, lo pathology. The other two groups, hi IQ, hi pathology and hi IQ, lo pathology, were between the former two with the hi IQ, hi pathology girls feeling slightly more powerful.

Integrating these interaction effects found for the four groups, a descriptive explanation is in order to bring some greater comprehensiveness to the findings. The lo IQ, hi pathology individuals had the largest average overall difference scores (SD-MDS); the largest difference scores for each of the Semantic Differential administrations taken separately (D 6, D 10, D 14, and D 17); the largest I-U difference score; felt the most powerful in their "Great" self-concept at session 6; evaluated themselves highest in their "Usual" self-concept at session 10; and felt most powerful in their "Usual" self-concept at session 14.

The hi IQ, lo pathology girls ranked second highest on mean difference scores across all Semantic Differential testings; ranked second on difference scores for each of the four Semantic Differential testings; and second on the I-U measure. This group ranked third

highest on feeling powerful in their "Great" self-concept at session 6, on self-evaluation in their "Usual" self-concept for session 10, but felt least powerful of the four groups in their "Usual" self-concept at the 14th session.

The hi IQ, hi pathology group had the second to the smallest mean difference score; the smallest difference score for sessions 6 and 10; the smallest I-U difference score; ranked third for the size of the difference score at sessions 14 and 17 (post-test); felt second most powerful in their "Great" self-concept at session 6; had the lowest self-evaluations in their "Usual" self-concept at session 10; and ranked second to the last on feeling powerful at session 14 in their "Usual" self-concept.

The lo IQ, lo pathology individuals had the smallest mean difference score; almost the smallest difference scores for sessions 6 and 10, and the I-U measure; the smallest difference scores for sessions 14 and 17; felt least powerful in their "Great" self-concept at session 6; but ranked second highest on self-evaluation in their "Usual" self-concept at session 10 and on feeling powerful for session 14.

Carkhuff-Egan Interaction Behavior Rating Scale Measure. C-E Scale results supported the fourth hypothesis that the interactional group process measures based on the group interactions are directly related to changes in the school achievement and self-concept measure scores. There was a significant ( $p < .05$ ) main effect of pathology involved in the level of group functioning. Group rankings from high

to low levels of group interactions were: lo IQ, hi pathology; hi IQ, hi pathology; hi IQ, lo pathology; and lo IQ, lo pathology. A significant interaction effect ( $p < .05$ ) was found for the C-E scores for the third session. Group rankings on level of interaction from high to low were: lo IQ, hi pathology; hi IQ, lo pathology; hi IQ, hi pathology; and lo IQ, lo pathology. There was a significant ( $p < .05$ ) pathology main effect at the fifth session. Groups ranked from high to low levels of interaction as follows: lo IQ, hi pathology; hi IQ, hi pathology; hi IQ, lo pathology; and lo IQ, lo pathology. Although trends existed no significant differences emerged from the fifth until the fifteenth session. At the fifteenth session rankings for level of interaction from high to low showed a significant ( $p < .05$ ) pathology main effect and were: hi IQ, hi pathology; lo IQ, hi pathology; lo IQ, lo pathology; and hi IQ, lo pathology.

In summary, the two hi pathology categories functioned at the highest levels of interaction in the group sessions for all of the sessions yielding significant findings, and for most of the other sessions. It was the lo IQ, hi pathology girls who functioned on the highest interaction level until the fifteenth session when the hi IQ, hi pathology category exchanged places with them. Results suggest that at least for the initial stages it is the hi level of pathology which is the crucial factor in promoting a higher level of group interaction, as well as the level of intellectual functioning. These interesting findings will be discussed in greater depth in the Discussion chapter.

Correlation Matrix for Pre-Post Test Scores on All  
Self-Concept, School Achievement, and Process  
Measures for All Groups

The results of the intercorrelations among all variables are reported in relation to the six test measures employed (Appendix A-XI). Ninety-four variables were intercorrelated and the significant correlations are reported in this section. Correlations were computed for two basic reasons. First, was to support the study findings of this investigation. Secondly, correlations were made to determine how well these particular six tests functioned together to obtain information on the issue of using an encounter group to derive information on the relationship between the various aspects of the self-concept, school achievement, and self-report and group interactional process measures. The reader is cautioned to remain aware that both the size and the level of significance are important in considering how powerful a specific correlation coefficient is. In this study the significant correlations reported all indicate a dependable and meaningful relationship between any two variables. However, a correlation of only .4293 is required for an  $r$  significant at the .001 probability level for this study. Because of the possibility that the significant correlations reported may seem to suggest a more positive view than the previous  $t$ -test and  $F$ -test findings have presented, when in doubt the reader is referred to check the actual correlation size as presented in the matrix (Appendix A-XI). The correlation findings presented in this section closely follow the sequence as presented in the matrix.

Draw-A-Person: Human Figure Drawings With All Other Tests.

The Draw-A-Person projective drawings battery findings are presented as the first eight variables on the matrix. The four drawings did not intercorrelate significantly. However, each drawing intercorrelated significantly ( $p < .001$ ) with the total and mean DAP scores. In addition, the DAP school achievement total and mean variables (SA-T and SA-M; See Appendix A-I) intercorrelated perfectly with each other, but not significantly with any of the other DAP measures. The significant intercorrelations of the four drawings with the total indicate they are independent and valid measures.

Intercorrelations among the DAP and Tennessee variables yielded some significant findings. The DAP drawing II, of the "opposite sex" intercorrelated negatively ( $p < .05$ ) with: the overall level of self-esteem, Total Positive (Tot P); Row 3, Behavior; and Column D, Family Self (See Appendix A-VII for the "Nature and Meaning" of the Tennessee scores). Drawing II intercorrelated positively ( $p < .05$ ) with Variability Total (V Tot). Drawing IV, "a girl in the rain", intercorrelated positively ( $p < .05$ ) with Column E, Social Self (Col E). There was a significant positive ( $p < .05$ ) correlation between the DAP School Achievement items and D 1, "Completely False" self-descriptive responses.

School Grades With Wide Range, Tennessee, and Process Measures.

The school grade difference scores for the mid-year and end-of-the-year (SG-3) semesters intercorrelated significantly ( $p < .001$ ) and in a positive direction. There was a significant ( $p < .05$ ) positive

correlation between the end-of-the-year school grades and Column B, Moral-Ethical Self (Col B). A significant negative intercorrelation ( $p < .05$ ) emerged between the mid-year school grades and Variability Total (V Tot). Many significant positive intercorrelations ( $p < .05$ ) were found between end-of-the-year school grades and the Ideal Image (I), Ideal Image minus Usual self scores, Ideal Image minus Great self-concept scores, and the factors (Fcts. I, II, III) on most sessions of the Semantic Differential administrations. The mid-year school grades (SG-2) intercorrelated positively ( $p < .05$ ) only with the Ideal Image minus Great self-concept scores on the Semantic Differential (I-G). On the C-E Scale, the mid-year school grades intercorrelated positively ( $p < .05$ ) with the group mean scores for sessions 5 and 9, and ( $p < .01$ ) session 10. The end-of-the-year school grades intercorrelated positively ( $p < .05$ ) with C-E group mean scores for sessions 11, 12, and 16, and with the mean over all sessions (C-E M). The end-of-the-year school grades intercorrelated positively ( $p < .01$ ) with the C-E group mean scores for sessions 5, 13, 15, and ( $p < .001$ ) for sessions 9, 10, and 14.

Wide Range With Some Tennessee Subscales and All Process Measures.

The Wide Range Total score (WRAT-Tot) intercorrelated significantly and positively ( $p < .001$ ) with all three Wide Range subtests. The Wide Range Total score also intercorrelated positively ( $p < .05$ ) with Row 1, Identity and ( $p < .01$ ) with Column B, Moral-Ethical Self (Col B), both Tennessee subscales. The Wide Range Total intercorrelated negatively ( $p < .05$ ) with General Maladjustment (GM) and positively ( $p < .05$ ) with Psychosis (Psy), both Tennessee subscales.

Each Wide Range subtest intercorrelated significantly ( $p < .001$ ) with its own subject area given in grade level and standard score units. For example, the Reading subtest grade level intercorrelated ( $p < .001$ ) with the Reading standard score, etc. The Wide Range Reading subtest in grade level scores (WRAT-Rdg GL) intercorrelated positively ( $p < .05$ ) with the overall level of self-esteem (Tot P); Row 3, Behavior (R 3); and D 2, "Mostly False" self-descriptive responses, with "D" meaning Distribution. The Wide Range Reading subtest in grade levels intercorrelated negatively ( $p < .05$ ) with Neurosis (N). The Wide Range Arithmetic subtest in grade levels and Reading subtest in standard scores intercorrelated positively ( $p < .05$ ). The Arithmetic subtest in grade levels intercorrelated negatively ( $p < .05$ ) with General Maladjustment (GM). In addition to positive intercorrelations with the overall level of self-esteem (Tot P) and Row 3, Behavior (R 3), as in the case of the Reading subtest in grade levels, the Reading subtest in standard scores also intercorrelated positively ( $p < .05$ ) with Column E, Social Self (Col E). Significant negative intercorrelations ( $p < .05$ ) emerged for the Reading subtest in standard scores with the "Mostly False" response (D 2), General Maladjustment (GM), and Neurosis (N). The Arithmetic subtest in standard scores (WRAT-Ar SS) intercorrelated positively ( $p < .05$ ) with Column B, Moral-Ethical Self (Col B).

The Wide Range Total and Reading subtest in standard scores intercorrelated negatively ( $p < .05$ ) with Ideal Image (I) on the Semantic Differential measure. These same two Wide Range scores intercorrelated negatively ( $p < .05$ ) with all three of the Semantic

Differential factors (Evaluative, Potency, and Activity) for the "Usual" and "Great" self-concepts for many of the sessions. The Wide Range Total also intercorrelated negatively ( $p < .05$ ) with the Semantic Differential group mean difference score for the sixth session (D 6). The Arithmetic subtest in standard scores (WRAT-AR SS) intercorrelated negatively ( $p < .01$ ) with the Semantic Differential group mean difference score for session 6 (D 6).

There were some significant intercorrelations between the Wide Range and the Carkhuff-Egan scores (C-E). The Wide Range Total score intercorrelated negatively ( $p < .05$ ) with the C-E raw score group means for sessions 2, 5, 14, and 16, and with the C-E mean over all sessions (C-E M). The Wide Range Spelling subtest in grade levels intercorrelated negatively ( $p < .05$ ) with the C-E raw score group means for the 4th, 11th, and 13th sessions. The Wide Range Reading subtest in standard scores intercorrelated negatively ( $p < .05$ ) with the C-E session 16 group mean and with the C-E mean score across all sessions (C-E M). The Wide Range Spelling subtest in standard scores intercorrelated negatively ( $p < .05$ ) with the C-E group means for sessions 4 and 5.

Tennessee With the Semantic Differential and Carkhuff-Egan Measures. The lack of significant intercorrelations among the 29 Tennessee subscales demonstrate that except for those which are subscale components of their respective major scales, which intercorrelated significantly, most of the subscales are independent measures of different aspects of the self-concept. Significant intercorrelations



among the Tennessee subscales also emerged. The Self Criticism (SC) scores intercorrelated negatively ( $p < .05$ ) with Column B, Moral-Ethical Self (Col B); Column C, Personal Self (Col C); and negatively ( $p < .001$ ) with Defensive Positive (DP) and Psychosis (Psy). Self Criticism intercorrelated positively ( $p < .01$ ) with Variability Total (V Tot); Variability for Columns (V Col); and Distribution 5, "Completely True" (D 5) self-descriptive responses. Self Criticism intercorrelated positively ( $p < .05$ ) with Distribution Total score (D); and positively ( $p < .001$ ) with Personality Disorder (PD). True-False Ratio (T/F), can be approached in three ways (See Appendix A-VII). The third approach, the self theory framework, will be adopted in this study. From this approach the T/F score indicates whether an individual achieves self-definition by relying on a tendency to focus on what she is while being relatively unable to achieve the same thing by eliminating or rejecting what she is not (high T/F score), or the opposite (low scores), or a more balanced use of both tendencies (middle range scores). The T/F subscale intercorrelated positively ( $p < .05$ ) with Total Conflict (Tot C); D 4, "Mostly True" self-descriptive responses; and positively ( $p < .01$ ) with D 5, "Completely True" responses; Defensive Positive (DP); and Number of Deviant Signs (NDS); and positively ( $p < .001$ ) with Net Conflict (Net C) and negatively ( $p < .001$ ) with D 2, "Mostly False" responses. Net Conflict, the extent to which an individual's responses to positive items conflicts with negative items in the same area of self-perception, intercorrelated positively ( $p < .05$ ) with Total

Conflict, the total amount of conflicting responses to positive and negative items regardless of the directional amount of conflict, which is the Net Conflict. Net Conflict also intercorrelated positively ( $p < .05$ ) with Column E, Social Self; Distribution (D); and negatively ( $p < .05$ ) with Personality Integration (PD). Net Conflict intercorrelated positively ( $p < .01$ ) with Defensive Positive (DP) and positively ( $p < .001$ ) with "Completely True" (D 5) responses and Number of Deviant Signs (NDS). Net Conflict intercorrelated negatively ( $p < .001$ ) with "Mostly False" (D 2) responses. Total Conflict intercorrelated positively ( $p < .001$ ) with "Completely True" (D 5) responses; and positively ( $p < .01$ ) with Distribution (D) and Number of Deviant Signs (NDS). Total Conflict intercorrelated negatively ( $p < .05$ ) with Row 2, Self Satisfaction (R 2) and Column C, Personal Self (Col C); and positively ( $p < .05$ ) with Personality Disorder (PD). Total Positive (Tot P), the overall level of self-esteem, intercorrelated positively ( $p < .001$ ) with all of its subscales. In addition, Total Positive intercorrelated positively ( $p < .001$ ) with "Completely False" (D 1) and Defensive Positive; and negatively ( $p < .001$ ) with General Maladjustment, Neurosis, Personality Defensive, and Number of Deviant Signs. Total Positive intercorrelated positively ( $p < .01$ ) with Distribution (D) and ( $p < .05$ ) with "Partly True and Partly False", (D 3), a healthy self-descriptive response. Row 1, Identity, how one perceives her basic identity, in addition to intercorrelating positively with Total Positive and its other seven subscales at varying levels of significant probabilities,

intercorrelated positively ( $p < .001$ ) with Defensive Positive, and negatively ( $p < .001$ ) with General Maladjustment and Neurosis. Row 1, Identity also intercorrelated positively ( $p < .01$ ) with Distribution (D) and "Completely False" (D 1) responses. Row 1, Identity also intercorrelated positively ( $p < .05$ ) with "Completely True" (D 5) responses, and negatively ( $p < .05$ ) with "Partly True and Partly False" (D 3) responses and Personality Disorder (PD). Row 2, Self-Satisfaction intercorrelated positively with Total Positive and its other component subscales at varying probability levels. Row 2, Self-Satisfaction intercorrelated positively ( $p < .001$ ) with Defensive Positive (DP) and negatively ( $p < .001$ ) with Variability for Columns (V Col); Personality Disorder; and Neurosis. Row 2 also intercorrelated positively ( $p < .05$ ) with "Completely False" (D 1) responses, and negatively ( $p < .05$ ) with Variability Total (V Tot) and General Maladjustment. Row 3, Behavior, how an individual perceives what he does, intercorrelated positively at varying levels of probability with Total Positive and its other subscales. Row 3 also intercorrelated positively ( $p < .001$ ) with Defensive Positive and negatively ( $p < .001$ ) with Personality Disorder, General Maladjustment, and Neurosis. Row 3 intercorrelated positively ( $p < .01$ ) with Distribution (D) and "Completely False" (D 1) responses; and negatively ( $p < .05$ ) with "Partly True and Partly False" (D 3) responses. Column A, Physical Self (Col A) in addition to significant intercorrelations at various probability levels with Total Positive and its other component subscales, except Column C, Personal Self (Col C), intercorrelated

positively ( $p < .001$ ) with Defensive Positive. Column A, Physical Self intercorrelated negatively ( $p < .001$ ) with Personality Disorder and Neurosis; and negatively ( $p < .01$ ) with "Partly True and Partly False" (D 3) responses and General Maladjustment. Physical Self intercorrelated positively ( $p < .05$ ) with Distribution Total (D) and "Completely False" (D 1) responses; and negatively ( $p < .05$ ) with Variability for Columns (V Col). Column B, Moral-Ethical Self (Col B) intercorrelated positively with Total Positive and its subscales, except Column C, Personal Self and Column E, Social Self, at various significant probability levels. Column B also intercorrelated positively ( $p < .001$ ) with Defensive Positive; and negatively ( $p < .001$ ) with Personality Disorder. Column B intercorrelated positively ( $p < .01$ ) with "Completely False" (D 1) responses and negatively ( $p < .01$ ) with Neurosis, General Maladjustment, and Variability for Columns. Column B intercorrelated positively ( $p < .05$ ) with Psychosis (Psy). Column C, Personal Self (Col C) intercorrelated positively with Total Positive and its other subscales except Columns A (Physical Self), B (Moral-Ethical Self), and E (Social Self), at various probability levels. Column C, Personal Self intercorrelated positively ( $p < .001$ ) with Defensive Positive; negatively ( $p < .001$ ) with General Maladjustment and Neurosis; with ( $p < .01$ ) Variability Total (V Tot); and negatively ( $P < .05$ ) with Variability Columns (V Col), Variability Rows (V Rows), and Number of Deviant Signs (NDS). Column D, Family Self (Col D) intercorrelated positively with Total Positive and its subscales except Col E, Social Self. Family Self

also intercorrelated positively ( $p < .001$ ) with Defensive Positive and negatively ( $p < .001$ ) with General Maladjustment, Personality Disorder, and Neurosis. Family Self intercorrelated negatively ( $p < .01$ ) with Number of Deviant Signs, and negatively ( $p < .05$ ) with Variability for Columns (V Col). Family Self intercorrelated positively ( $p < .05$ ) with "Completely False" (D 1) responses. Column E, Social Self (Col E) intercorrelated positively with Total Positive and its other subscales except Moral-Ethical Self, Personal Self, and Family Self, at various significant probability levels. Social Self intercorrelated positively ( $p < .001$ ) with Distribution Total (D) and negatively ( $p < .001$ ) with General Maladjustment. Positive intercorrelations ( $p < .01$ ) emerged between Social Self and "Completely True" responses and "Completely False" responses, D 5 and D 1, respectively; and Defensive Positive. Negative intercorrelations ( $p < .01$ ) were found for Psychosis and Neurosis. Variability Total intercorrelated positively ( $p < .001$ ) with its two subscales and "Completely True" (D 5) responses. Variability Total intercorrelated positively ( $p < .01$ ) with Distribution Total (D) and Neurosis (N); and negatively ( $p < .05$ ) with Defensive Positive. Variability for Columns (V Col) intercorrelated positively ( $p < .001$ ) with Variability Total and positively ( $p < .01$ ) with "Completely True" (D 5) responses, Personality Disorder, and Neurosis; negatively ( $p < .01$ ) with Defensive Positive; and positively ( $p < .05$ ) with Distribution Total score (D). In addition to the significant correlations mentioned above, Variability for Rows (V Rows) also intercorrelated positively ( $p < .05$ ) with "Completely True" responses and

negatively with "Mostly False", a less rigid response category (D 2). Distribution Total (D) intercorrelated positively ( $p < .001$ ) with "Completely True" and "Completely False" response (D 5 and D 1); negatively ( $p < .001$ ) with "Partly True and Partly False" (D 3) responses, the healthiest response category. Distribution Total (D) also intercorrelated negatively ( $p < .01$ ) with "Mostly True" (D 4) responses and positively ( $p < .05$ ) with Number of Deviant Signs. D 5, "Completely True", intercorrelated positively ( $p < .001$ ) with D 1, "Completely False", responses and with Number of Deviant Signs; and negatively ( $p < .001$ ) with the response categories of "Mostly True," "Partly True and Partly False," and "Mostly False" and Personality Integration. The "Mostly True" category intercorrelated positively ( $p < .05$ ) with "Mostly False" category and with Personality Integration; and negatively ( $p < .05$ ) with "Completely False" response. The "Partly True and Partly False" category intercorrelated negatively ( $p < .001$ ) with "Completely False" responses. The "Mostly False" responses intercorrelated positively ( $p < .001$ ) with Personality Integration; and negatively ( $p < .001$ ) with Number of Deviant Signs; and negatively ( $p < .05$ ) with "Completely False" responses. The "Completely False" category intercorrelated negatively ( $p < .01$ ) with General Maladjustment and Personality Disorder in addition to the significant correlations reported above, with D 1, "Completely False." Defensive Positive intercorrelated negatively ( $p < .001$ ) with General Maladjustment, Personality Disorder, and Neurosis; and positively ( $p < .05$ ) with

Psychosis (Psy). General Maladjustment intercorrelated positively ( $p < .01$ ) with Personality Disorder and Neurosis, and positively ( $p < .05$ ) with Number of Deviant Signs. Personality Disorder intercorrelated positively ( $p < .001$ ) with Neurosis and Number of Deviant Signs. Neurosis intercorrelated positively ( $p < .05$ ) with Number of Deviant Signs, in addition to the significant correlations already reported. Personality Integration intercorrelated negatively ( $p < .01$ ) with Number of Deviant Signs, in addition to the other significant correlations with Personality Integration reported above.

Tennessee subscales intercorrelated significantly with many of the Semantic Differential variables. Total Conflict intercorrelated negatively ( $p < .05$ ) with Factor I, (evaluative), for the "Usual" self-concept for sessions 10, 14, and 17 (post-testing); with Factor II, potency, for the "Usual" self-concept for sessions 10 and 17; for Factor III, activity, for the "Usual" self-concept for sessions 6, 10, 14, and 17; and for the "Great" self-concept, Factor I for session 10. The Tennessee Row 1, Identity subscale intercorrelated negatively ( $p < .05$ ) with the Ideal Image score (I), Ideal Image minus Great self-concept (I-G), and the factor scores for most of the sessions for both the "Usual" and "Great" self-concepts. Column C, Personal Self intercorrelated negatively ( $p < .05$ ) with the Semantic Differential Mean Difference Score for all sessions (SD-MDS), Ideal Image minus Usual self-concept (I-U), and the group means for sessions 14 and 17 (D 14 and D 17). The Variability for Rows (V Rows) intercorrelated positively ( $p < .05$ ) with the Semantic

Differential group mean for the post-testing (D 17). Distribution Total (D) intercorrelated negatively ( $p < .05$ ) with Ideal Image minus Great self-concept score (I-G). General Maladjustment intercorrelated positively ( $p < .05$ ) with Ideal Image (I), Ideal Image score minus Usual self-concept score (I-U), the evaluative factor for Usual self-concept at session 6 (6U Fct. I), the potency factor for Usual self-concept at the sixth session (6U Fct. II), the evaluative factor for the Great self-concept for the sixth session and the post-testing, the evaluative factor for Usual self-concept at the 14th session, the potency and activity factors for Great self-concept at session 6, and the potency factor for Usual self-concept at the 14th session.

Tennessee subscale intercorrelations with the Carkhuff-Egan process measures yielded some significant findings. Total Conflict intercorrelated negatively ( $p < .05$ ) with the C-E raw group mean scores for session 3. Overall level of self-esteem (Total Positive) intercorrelated negatively ( $p < .05$ ) with the group mean C-E score for session 7-8 a double length session. Row 1, Identity intercorrelated negatively ( $p < .01$ ) with C-E session 7-8 scores, and negatively ( $p < .05$ ) with the scores for sessions 9, 10, and the group mean across all sessions (C-E M). Behavior (Row 3) and Physical Self (Column A) intercorrelated negatively ( $p < .05$ ) with the scores for session 7-8. D 3, "Partly True and Partly False" intercorrelated negatively ( $p < .05$ ) with C-E session 15 scores. General Maladjustment and Neurosis intercorrelated positively ( $p < .05$ ) with



C-E session 7-8. The only Tennessee variable which intercorrelated significantly ( $p < .05$ ) with IQ was Variability Total (V Tot), which was a positive correlation.

The Semantic Differential and Carkhuff-Egan Process Measures.

The 47 variables comprising the two process measures intercorrelated positively at varying levels of probability. Most were significant at the .001 level and had correlation coefficients in the high .70's, 80's, and .90's. Many were significant at the .01 level. Only 22, less than 2%, of the 1200 process measure intercorrelations were significant at only the .05 probability level. Intercorrelations of the process measures with the self-concept and school achievement measures have been reported above and need not be repeated.

The interpretation and integrated discussion of the findings presented in this chapter will be given in the following chapter.

## CHAPTER VI

### DISCUSSION

#### Conclusions Related to the Test Measures

The findings of this study suggested certain characteristics about the six test measures employed in this investigation. The lack of significant intercorrelations among the four projective drawings, in addition to their significant ( $p < .001$ ) intercorrelations with the total and mean DAP scores suggests that this particular battery is a reliable one. In addition, the findings suggest that the four drawings are independent measures tapping different aspects of the personality. That the DAP intercorrelated significantly only with the Tennessee Self Concept Scale further supports the conclusion that it does measure self-concept characteristics.

The lack of significant intercorrelations among the Tennessee Self Concept Scale's subscales suggests that except for those subscales which are components of their respective major scales, the subscales are independent measures of various aspects of the self-concept. The positive, and significant, intercorrelations between some of the Wide Range Achievement Test's subtests and some of the Tennessee subscales lends support for the assumption that there is a positive relationship between school achievement and self-concept.

The lack of significant intercorrelations between the Wide Range subtests and total score with the school grades suggests, perhaps, that these two measures are not measuring the same aspects of achievement. It seems likely that in addition to reflecting classroom achievement, school grades may also reflect the teachers' positive responses to other personality characteristics displayed by the students, such as greater classroom participation and cooperation. In the case of this investigation precautions were taken to avoid knowledge by the teachers as to which students were in group sessions, which knowledge may have resulted in a halo effect influencing their grading. Thus, it is a safe assumption that for this study the significant improvement in school grades was most likely a reflection of (1) improved social adjustment skills gained from the encounter group experience being transferred to classroom behavior and (2) school achievement.

The significant and large intercorrelations between the Semantic Differential and the Carkhuff-Egan Rating Scale measures suggest that only one of these two measures may be necessary to measure similar processes, if the participants have the reading ability to comprehend the Semantic Differential items. Since the Semantic Differential is much simpler to administer and score, it would be the process measure of choice. The Carkhuff-Egan measure requires taped sessions, verbatim typescripts, and ratings on each subject for every session on each of 11 variables for each session rated. However, it does provide scores on a wider variety of interaction variables and dimensions than

the Semantic Differential self-report measure. Of critical importance for this study is that what the subjects were experiencing, as reflected in the Semantic Differential, was borne out by what they were displaying in their interaction behavior in the group, as reflected in the Carkhuff-Egan ratings. The intercorrelations between these two process measures strongly suggest that they are valid measures of very similar, if not identical processes. Most importantly the findings suggest that it is possible for an observer's rating of the interaction behavior of another, and the subject's own self-report of her inner experiences and perceptions to intercorrelate significantly and with correlation coefficients of large sizes, such as above the .80's.

Significant and positive correlations between the school grades and the process measures suggest that there are more personality variables operating in classroom achievement than on the Wide Range, a standardized achievement test. The significant and positive intercorrelations between the reading and arithmetic subtests of the Wide Range, and between the Wide Range and the Tennessee suggest that there may be a verbal fluency factor involved in these tests. This is quite understandable since the tests and directions had to be read and comprehended by the subject as a preliminary to responding to the items.

The negative intercorrelations between the Wide Range and the C-E process measure suggest that increased group interaction behavior did not occur simultaneously with improved achievement on the Wide

Range Achievement test. However, these findings could be misinterpreted if one considered increased group interaction to be synonymous with improved self-concept. The study findings suggest that the period covered by this investigation was actually a time of personality reorganization for the group members. They were confronting themselves and gaining new insights into themselves. This seems to have been a period preliminary to a reintegration. Aspects of their personality were in flux rather than stable. The negative intercorrelations between the Wide Range and the Semantic Differential lend further support to this conclusion. Negative correlations between these two measures actually means that achievement on the Wide Range improved as the differences between the real and ideal self-concepts decreased. However, the discussion in the following section of this chapter will demonstrate that during the period of this study the real and ideal self-concepts were still in a preliminary stage where they were getting larger. Thus, the negative intercorrelations between the Wide Range and process measures indicates that performance on the Wide Range, a standardized achievement test, would increase once the real-ideal self-concepts began to decrease. It is suggested that perhaps had the encounter groups continued longer the real-ideal self-concepts would get closer and achievement scores on the Wide Range would also improve. The correlation data is the only finding generated by this investigation which points toward this particular outcome since the investigation ended before this later stage of real-ideal self-concept difference decrease

occurred. However, it points toward possible future research to test out these possible outcomes. For this study, however, the negative correlations between the Wide Range and the two process measures do indicate, again, that there is a positive relationship between self-concept and achievement.

Finally, the positive correlations between the process measures and some of the Tennessee subscales suggests that as group interaction behavior increases, and as the real and ideal self-concepts get closer, (as reflected by smaller real-ideal self-concept differences) there is also an improvement on many of the scores on the Tennessee which reflect improvement in self-concept areas.

In general, findings suggest that the six measures employed in this study were more than adequate to obtain information needed to shed some light on the self-concept and school achievement issues as reflected in the hypotheses for this study. The only change, if for example the Experimenter had a time limitation, would be the possible elimination of the Carkhuff-Egan Rating Scale without a great loss in the basic information sought.

#### Conclusions Related to the Experimental and Control Groups

Significant t-test findings for the separate experimental and control group contrasts were presented in the Results Chapter. However, they will not be discussed in this chapter since two conditions were met which demonstrate that only the significant findings for the pooled experimentals ( $E_{I, II}$ ) and controls ( $C_{I, II}$ ) are relevant for

this study. The two conditions were (1) that the experimentals and controls were initially comparable on all relevant variables (See Tables 1 through 5), and (2) that all experimentals were exposed to the same treatment and that the controls had no such treatment.

The study findings supported the first hypothesis only when involving the end-of-the-year school grades. Study findings also supported the third and the fourth hypotheses. The first hypothesis was not supported by the Wide Range achievement test, nor was the second hypothesis supported.

School Achievement Conclusions. The t-test analyses of the means and the F-test analyses of variance both indicated that the controls improved significantly on the Wide Range Total and Reading subtest scores. The reader is reminded that there were no significant differences between the controls and experimentals on their entrance exam reading achievement scores. The controls did not receive any reading skills nor attend more reading classes than the experimentals during the course of this study. One possible explanation is that the controls were not involved in the group sessions, which the findings suggest were generating anxiety in some, if not all of its participants. The controls, without the possibly interfering influence of anxiety on personality issues, were better able to concentrate on their achievement in reading. The controls were not focusing on personal and interpersonal issues in any systematic way, as were the experimentals in the encounter groups. Thus, perhaps, all of the energies of the control subjects were aimed toward better

school achievement as reflected in their Wide Range Total and Reading subtest post-test scores. The F-tests also indicated that the lo pathology experimentals and controls improved significantly more on the Wide Range Arithmetic subtest at the post-testing than did the hi pathology girls. This finding for the Arithmetic Wide Range subtest is consistent with the comment by Cotter (1964) that success in the subject area of arithmetic requires even fewer emotional problems which might distract one's concentration than the level and intensity of emotional problems one can be experiencing and still succeed in reading skills. It is assumed that the lo pathology girls ( $N = 39$ ), whose DAP pre-test Emotional Indicator mean scores suggested that there was no emotional disturbance, were not experiencing anxiety beyond the normal limits. The hi pathology ( $N = 17$ ) girls' Emotional Indicator scores suggested emotional disturbance. It was thus assumed that they probably were experiencing more anxiety than the lo pathology girls. As such, the lower level of anxiety seems to best explain the finding that lo pathology subjects performed significantly better on the Wide Range Arithmetic subtest and Total score.

The explanation for the significant school grades in favor of the experimentals seems to be more complex than the explanation of the Wide Range findings. In addition, the school grade findings seem to be more closely related to the self-concept and process measure findings. Results suggest that the experimentals were learning various social skills in the encounter groups and transferring these into their classroom behavior. For example, they may



have become more comfortable in speaking before a group. It was suggested above that the school grades based on the teacher evaluations probably reflect achievement performance as well as other social and personal aspects such as the teacher's perception and evaluation of the student's participation, cooperativeness and initiative in the classroom. These personality traits would not necessarily be used as yardsticks by the teachers in a conscious or deliberate way, but one can certainly understand how they can influence a teacher's judgement and perception of a student in addition to the actual course work performance.

The Encounter Group Experience. Because the findings for the self-concept and process measures are so closely related to the encounter group experience it seems appropriate to discuss the experimental treatment before launching into a discussion of the rest of the findings and conclusions. Certain learning experiences seemed to be gained by the experimentals from the encounter group experience. In general, the content of the group sessions followed a sequence similar to that reported by Thoma (1964). The topics brought in by the girls fell into a chronological order, roughly, as follows: gripes about being forced to participate in the group; gripes about teachers and school peers, which also seemed to have the goal of testing the facilitator's limits and her promise of openness and confidentiality; feelings of being different and intellectually inferior to students in the regular school program, mainly in response to invectives like being called "dummies" and feeling socially ostracized by students in the regular school program; problems with boys

whom they felt were immature by comparison to themselves at dances and on dates; family conflicts and the need for autonomy from their parents; feelings about and preparations for becoming adults; sharing deeply personal feelings about past losses of love objects; and resistance to group termination along with requests to continue the group until the end of the school year or to resume the following school year.

One of the most pervasive learning experiences that group members seemed to gain, was a general recognition that their problems were not petty, silly, nor frightening to the other group members. They reported that often their parents, relatives or other adults perceived certain issues as silly and summarily dismissed discussion of them. They came to recognize that perhaps that behavior reflected that the listener felt threatened and uncomfortable to respond, rather than feeling they were being silly. The group discussions and mutual acceptance which developed in the group served to reassure them that they could share frightening reactions to past events, fears, and disturbing but yet unresolved losses of love objects with the group openly and without embarrassment or fear. In addition, they came to realize that other group members or the facilitator had encountered similar problems, or were still struggling with similar experiences or feelings. Through the experience of crying in the presence of the group, many of the girls came to realize that to share feelings and weaknesses often involves more risk and courage, and less energy than to withhold and hide feelings. Out of

these kinds of experiences in the group of spontaneously expressing feelings, especially those which make one feel more vulnerable, many of the girls concluded that strength was involved in being oneself and developing congruence among one's thoughts, feelings, and behavior.

Self-Concept and Process Measure Conclusions. The DAP post-test and pre-test scores suggested significant emotional disturbance within the context of family interactions for all experimental and control subjects throughout the span of this investigation. In addition, all subjects scored beyond the normal limits on the Tennessee Number of Deviant Signs (NDS) for the pre-testing and post-testing. These indications of emotional upset and anxiety from two independent measures may reflect the subjects' reactions to certain situations. First, complaints of feeling socially ostracized and taunted by regular school program students increased as the encounter group sessions progressed into the school year. The DAP and NDS scores may have been reflecting the anxiety and upset generated by the negative social effects of feeling "different" and rejected by students who perceived them as intellectually inferior. The experimentals complained in the group sessions about the negative social effects of their placement in the special remedial school program. However, they continued to perceive the teachers and educational aspects of the program as positive and beneficial.

Another possible explanation for the DAP and NDS findings may be that they are reflecting the typical adolescent turmoil involved

with etching out an identity and seeking autonomy from family ties, and acceptance by the adult world as a blossoming adult. The controls increased in their average number of deviant signs (NDS) by the post-testing, whereas the experimentals had fewer deviant signs at the post-testing than they had at their pre-testing. This seems to indicate that although not powerful enough to totally eliminate the negative social effects of placement in the special remedial program nor the adolescent "growing pains," the group sessions may have helped the experimentals to better cope with negative and disarming influences of these two situations which they were encountering.

The Semantic Differential findings indicated that the  $E_I$  girls felt significantly more powerful in their "Usual" or real self-concept at the sixth session, as compared with the  $E_{II}$  group. They were surpassed by the  $E_{II}$  girls on this factor for the two middle Semantic Differential administrations. However, by the post-testing both groups were functioning at approximately the same level for their real and ideal self-concepts. It should be noted that both groups scored a fraction lower on the potency factor for "Great" or ideal self-concept at the post-testing, in comparison with their scores for the third, or previous, Semantic Differential testing. But both groups scored higher than at session 14, the third testing, for the potency factor on "Usual" or real self-concept. This suggests that the real self-concept was improving, while the ideal self-concept was lowering by the end of the study. This decrease in the

difference between real and ideal self-concept has been traditionally regarded as a positive indication of personal growth and improved self-concept since the individual perceives herself as moving closer to her concept of the "ideal" person.

The Carkhuff-Egan (C-E) interaction group process measure findings indicated that the experimental groups were both interacting at higher levels at the end of the encounter group experience than when they began.

The  $E_{II}$  girls were interacting at a higher level than the  $E_I$  girls at the beginning of the encounter group sessions as reflected by the session 2 C-E scores. One reasonable explanation for this is that by the time the  $E_{II}$  girls had their second session they had been in high school with each other for four months, whereas the  $E_I$  girls had only known each other for less than three weeks when they had their second session. However, as the encounter group experience approached the final sessions the  $E_I$  girls were interacting at a significantly higher level than  $E_{II}$  girls. They concluded the group experience at a significantly higher level than the  $E_{II}$  girls. The mean C-E score across all sessions indicated that the  $E_I$  group had functioned on a higher level throughout the encounter group experience, on the average. At the fourteenth session the  $E_{II}$  girls temporarily interacted on a higher level than the  $E_I$  group. The main explanation for the temporary reduction in interaction level by the  $E_I$  girls at session 14 seems to be that the two previous sessions (See Appendix A-X for session typescripts) had been heavily emotionally laden.

The  $E_I$  girls had been very self-disclosing, especially concerning family relations and conflicts, the strength rather than the weakness it takes to cry in public, and the death of or rejection by love objects. They also expressed some of their feelings about not wanting to terminate the group sessions. The majority of the members were crying and were intensely emotionally involved as the thirteenth session ended. At the beginning of session 14 they specifically verbalized not wanting to discuss anything "serious." Instead, they spent most of the session discussing vocational and educational issues, and criteria for college or vocational school entrance.

$E_{II}$  girls were more active and talkative at their group sessions than  $E_I$  girls even at later  $E_I$  group sessions. However, they did not tend to deal as seriously nor with as much personal involvement with critical issues as the  $E_I$  girls did. In other words, a core of the  $E_{II}$  girls became personally involved at deeper levels but there was not as pervasive an involvement by all members as with the  $E_I$  group. The explanation as to why there were, therefore, not more sessions indicating significant differences in favor of the  $E_I$  group is a kind of artifact of the variables upon which the girls were rated. The  $E_I$  girls' achieved their rating scores on such variables as self-disclosure and expressing feelings more so than the  $E_{II}$  group which achieved many of its session scores for variables such as initiative and concreteness (See Appendix A-III and IV).

The analysis of variance findings indicated that it was the lo IQ hi pathology experimentals ( $N = 3$ ; IQ score range from 88 to 93) which had the highest C-E scores (reflecting highest level of group interaction behavior), the largest Semantic Differential difference scores (indicating the largest real-ideal self-concept differences) and the highest scores on the potency factor of the Semantic Differential (indicating that they felt most powerful throughout the study until the last session and post-testing). Large real-ideal self-concept differences during the period of this investigation is considered a positive sign since group interaction behavior was consistently improving as the real-ideal self-concept differences increased. It was not until the end of the study that the hi pathology-hi IQ group ( $N = 7$ ; IQ range from 95 to 104) surpassed the lo IQ-hi pathology girls by having the highest C-E scores for session 15.

In general, it seems that the lo IQ-hi pathology and the hi IQ-hi pathology groups were both "turned on" to the sessions as reflected in their rankings on the C-E measures for the sessions where significant differences emerged. The former group ranked 1st, 1st, 1st, and 2nd, while the latter group ranked 2nd, 2nd, 3rd, and 1st for sessions 2, 3, 5, and 15, respectively. However, the hi IQ of the latter group may have been a kind of obstacle in that these individuals were perhaps better able to develop defenses against threatening stimuli. The hi IQ-lo pathology and lo IQ-lo pathology groups seemed to have been less "turned on" by the group sessions

as reflected in their rankings for the four sessions under consideration, as: 3rd, 2nd, 3rd, 4th for the former group, and 4th, 4th, 4th, and 3rd for the latter group. The lo IQ-lo pathology group may be characterized as people who tend to adhere to what they have. They are, perhaps, simpler, less complex individuals with no serious disturbances nor intensely felt conflicts. They may be the types who do not delve deeply into themselves or others. As such, they may not experience any deep depressions or "soul-searchings." But neither do they experience the exhilarating heights of an integrated identity etched out of pain, struggling and eventual reintegration. As such they may have little use for nor get much value out of the kinds of experiences an encounter group offers.

In spite of the fact that the lo IQ-lo pathology group interacted at the lowest group interaction levels, as indicated by their usually having the lowest C-E scores, their Semantic Differential real-ideal self-concept differences were usually the smallest. This suggests that they perceived themselves as close to their ideal self-concept. These findings, contrasted with the findings concerning the lo IQ-hi pathology group, suggest that perhaps there are at least two kinds of positive self-concepts. One kind may be based upon less depth in terms of one's self-knowledge. In a sense, such individuals may not "know" themselves as well or in as great a depth as others, but the self they are aware of is liked and accepted. A second kind of positive self-concept may be the result of painfully confronting



oneself at deeper levels, resulting in greater self-knowledge followed by a reintegration of the self which more closely approximates the individual's ideal self-concept. These individuals may have positive self-concepts based on greater self-awareness of their strengths and weaknesses than the people in the first "positive self-concept" group. Considering the findings of this study, one might speculate that the lo IQ-lo pathology group resembles the first kind of positive self-concept, whereas the hi pathology girls of lo or hi IQ might resemble the second possible kind of positive self-concept.

The groups which performed better on the process measures also performed better on most of the Tennessee self-concept subscales which were significant. IQ was the critical variable for significant improvement on the Personality Integration and Self Criticism subscales in favor of the lo IQ girls, regardless of pathology levels. This may be explained by the possibility that being self critical and establishing or finding positive personality changes, which is implied in Personality Integration, may require more conscious and deliberate effort relying more heavily on thinking things through, and thus being less influenced by pathology, although the level of pathology would be of importance. However, pathology was the crucial variable for the other four subscales yielding significant findings. It seems that on the three subscales which seem to be more from an internal frame of reference, the True-False ratio (self-definition through being capable of affirming what is self and rejecting what is not self), the Number of Deviant Signs, and Net Conflict

(in response to positive and negative items in the same area of self-perception), the experimental, lo pathology and control, hi pathology groups improved the most. For the Social Self (Col E) subscale, which seems to have an external frame of reference in the sense that it is a self-perception about how one functions with others, the experimental, hi pathology group improved most. Here again, then, it was the lo IQ and hi pathology girls who performed best on the self-concept measures.

The process measure findings suggest that the encounter group experience seemed to have generated anxiety which interfered with school achievement performance on the Wide Range standardized achievement test measure. This generated anxiety seemed to have had some positive effects in that the experimentals were functioning at increasingly higher interaction levels in the groups as the sessions progressed. However, the state of flux and temporary personality confusion and preliminary stage to reintegration was also seen to have taken a toll on the self-concept measures in which the controls were functioning significantly better than the experimentals. Perhaps this anxiety and state of personality reorganization explains the findings in which the experimentals had significantly lower scores on the Tennessee Identity subscale and significantly higher General Maladjustment scores. Although not significant, there was a trend indicating that experimentals were nonetheless reporting less total conflict reflected in lower scores on the Total Conflict Tennessee subscale.

An additional explanation of the analysis of variance findings suggests that the hi pathology level functioned as a motivational factor causing the hi pathology subjects to have a felt need to deal with their emotional problems. This was especially true for those hi pathology subjects who were provided with an encounter group experience. The lo IQ combined with the hi pathology was apparently the best combination in that the lo IQ subjects may have been less well equipped to erect defenses to ward off threatening group interactions, or reactions to threatening group feedback. In addition, the hi pathology girls may be said to have had a longer way to go in terms of dealing with their problems. The hi IQ-hi pathology girls may have had an internal motivation to deal with their problems, but they were better able to erect defenses to perceived threat. However, during the later sessions, the hi IQ-hi pathology group began to interact at the highest group interaction levels, and they improved on some of the self-concept measures. It would seem, then, that for short term encounter groups of six months duration or less, the hi IQ or brighter individuals may erect defenses and thus get less from the encounter group experience than lo IQ-hi pathology individuals. Considering the loosening of defenses which seemed to occur for the hi IQ-hi pathology group near the termination of the group sessions, a long term encounter group experience of perhaps nine months' to a year's duration might also yield significant growth for the brighter and disturbed group members. The lo IQ-lo pathology girls were fairly consistently functioning at the lowest group interaction levels, in

comparison to the other three categories. Findings suggest that this group may reflect a kind of pollyannaish attitude about their current functioning as compared with their potential, and made little substantial progress on the self-concept measures. Since their scores reflected no serious emotional disturbance, it may be that they were not motivated to deal with deeper personality issues. Perhaps in the final analysis they were content to maintain a status quo in self-concept areas. However, they were progressing in achievement areas as the significant improvement on the standardized achievement Wide Range Arithmetic subtest in favor of the experimental-lo pathology group over the experimental-hi pathology girls indicates.

General Conclusions. The study findings lead to the conclusion that the issue of self-concept and its relationship to school achievement, and the influence of an encounter group experience on both of these phenomena are complicated and involved. Positive changes in the self-concepts of underachieving ninth grade girls appear to be the products of an intricate interaction among such variables as the initial level of intellectual functioning, the initial level of emotional pathology, and whether an encounter group will be run for a long enough period of time for the participants to no longer feel the need for defenses which might obstruct progress in their group interactional and growing process. In addition to the interrelationships among these variables, they also seem to take on different relative weights or importance as the group moves from the early to the later stages. For short term groups of six months or

less the lo IQ-hi pathology individuals made the greatest personal gains. However, the group interactional process measure shift upward by the hi IQ-hi pathology girls near the end of the encounter group experience suggests that a longer termed encounter group of perhaps nine months to a year's duration for underachieving ninth grade girls might result in the greatest long range gains for the hi IQ-hi pathology girls. This may be due to the fact that once their defenses have been lowered due to feeling more comfortable in the group and less threatened by the topics, their higher intellectual abilities and resources may help them to achieve insights more readily than the lo IQ-hi pathology girls. In addition, their hi pathology level may function as a motivating force to deal with problem areas, assimilate group feedback, and express this assimilation in their behavior. Many therapists feel that a year is generally the minimum time for therapeutic changes in an individual's life to be expected. Perhaps nine months to a year in an encounter group or the more traditional therapy setting provides the opportunity for the individual and the therapist, or in this case the other group members, to live through various life experiences together rather than to artificially attempt to resolve conflicts and problems by talking "about" personal problems from the past.

Another general conclusion based on the reportedly (by the experimental subjects) negative social effects of participation in the special remedial school program suggests that perhaps placement in specific school course in need of remediation might be preferable

to placement in a total remedial program in which all classes are conducted with the attitude of remediation for the students. For girls who were not underachieving in certain subjects, some negative impact on their self-esteem was felt, which was reflected in their comments in the group sessions. They were looked down upon by students in the regular school program. Part of the reason for the ostracizing behaviors and verbal invectives by the regular school program students, as reported by the experimentals, suggested that negative attitudes toward the students in the remedial school program were rooted in the misunderstanding that these girls were "dumb" rather than of average intelligence, usually, but "lazy", as one group member phrased it. Placement in remedial school courses only for those courses in which underachievement is indicated might avoid many of the feelings of social ostracism and rejection which the group members reported. An additional alternative might be that the administration and teachers present the program to the regular school enrollment with emphasis on the fact that the special remedial program's participants have the intellectual ability to perform at least average work, but for one or another reason are not working up to their potential. This may not help to avoid condescending actions totally, no matter how clearly and forcefully presented, human nature tending to be what it is, especially in our society in which intelligence and academic success and achievement are so prized.

What seems to be the most crucial and important finding of this study relates to the real-ideal self-concept differences as reflected on the process measures. The difference between the "Usual" or real

self-concept and the "Great" or ideal self-concept scores did not immediately become smaller for the experimentals who were given the encounter group experience. The approximation of the real and ideal self-concepts as reflected in increasingly smaller difference scores between these two kinds of self-concepts has been the assumption in many studies employing the semantic differential method of assessing real and ideal self-concept changes. In this study the differences became consistently larger as the experimentals' group interactional process measure scores increased, indicating improvement in their group interactions. What occurred in this study may be similar to the processes which have emerged in other research studies in which clients of nonprofessional therapists whose main function was to be friendly and supportive, made greater initial strides than clients of professional therapists. However, the clients of the latter demonstrated greater long term gains, and surpassed the clients of the nonprofessionals. In this study, it seems that as the experimental subjects began to confront themselves and began to deal with less superficial aspects of their personalities, the gap between the "Usual" or real and "Great" or ideal self-concepts increased. At the same time they were consistently improving in their group interaction levels. It appears that the process of therapy within the encounter group resulted in the girls' becoming more keenly aware of their greater sense of potential. At the same time, it seemed that the girls were re-evaluating themselves and perceiving themselves as farther away from their ultimate potential than they had before. It

appears that once a sense of "what I can be" becomes clearer for the individual, and personal resources to achieve that greater growth and adjustment have been sharpened, such as through an encounter group experience, the gap between the real self and the potential or ideal self then begins to decrease. Thus, the process of reintegration seems to involve an initial stage in which the real-ideal self-concept discrepancy increases, and later decreases, theoretically, until the two merge. This study's findings suggest that while an individual is in the initial phase of becoming self-actualized, she does not focus as much nor perform as well on school achievement areas as measured by the Wide Range. The personal growth does seem to transfer into the classroom situation, however. The study suggests, therefore, that there is a preliminary stage in which the real-ideal self-concepts increase and only later when the individual begins to reintegrate new insights and behaviors reflecting growth do the real-ideal self-concepts decrease.

#### Future Research Possibilities

One research possibility is to run a third treatment condition in which underachieving girls would be taught specific educational skills while still remaining students in the special remedial school program. However, they would not receive the encounter group experience. Results on school achievement and self concept measures for this second kind of experimental group might shed some light on some



of the questions raised in this study, for example: why the controls performed significantly better on the standardized achievement test, the Wide Range.

A second, and closely related research possibility would be to conduct an encounter group for an entire school year. In addition, experimentals and controls would be tested three or four times on the school achievement and self-concept measures. Experimentals would again be measured on the two process measures employed in the present study. Three or four self-concept and school achievement testings might clarify which of the two changes first, self-concept or achievement, or whether the one changing last, if that be the case instead of simultaneous improvement, ever catches up with or surpasses improvements found for the controls.

## SUMMARY

Previous research suggests a positive relationship between self-concept and school achievement, and that underachievers have poor self-concepts. An assumption underlying this study is that self-concept can be improved by an encounter group experience. Four hypotheses tested are that following an encounter group experience: (a) the school achievement of underachieving ninth grade girls will improve significantly and (b) the self-concepts of underachieving ninth grade girls will improve significantly; (c) that baseline measures of intellectual functioning and emotional pathology are related to the measured change in school achievement and self-concept scores, and (d) that interactional group process measures are directly related to the self-concept and school achievement score changes.

Subjects were 56 freshmen girls enrolled in a remedial program in an all-girls Catholic high school. They were assigned to one of four groups: two experimental groups of 12 and 15 subjects, respectively, and two control groups of 15 and 14 subjects, respectively. No significant differences emerged between experimentals and controls for age, socioeconomic status, IQ, entrance exam achievement scores, or initial level of emotional pathology. Each experimental group met for 16 one-hour weekly sessions distributed across 5½ months, beginning in October and January, respectively. The Wide Range Achievement Test (WRAT), Tennessee Self Concept Scale (TSCS), and four human figure drawings (using the Koppitz "Emotional Indicators" scoring method)

were administered before and after the encounter group experience. The Semantic Differential (SD) was administered to experimentals approximately every fourth session, and each group session was rated with the Carkhuff-Egan Interaction Behavior Rating Scale devised for this study. Subjects' school grades, based on teacher evaluations, were obtained for the three grading periods covering the time of this study.

T-tests, three- and two-way analyses of variance, and a correlation matrix were applied to the data. The analysis of variance was based on subjects grouped according to initial levels of emotional pathology and intellectual functioning. Results supported  $H_1$  for school grades only, while negating it for the WRAT in favor of the controls. Results did not support  $H_2$ . Instead, post-test findings indicated that experimentals were more generally maladjusted. Experimentals had lower Basic Identity scores than controls, who also had lower post-test scores. A trend in favor of the experimentals reflected less post-test Total Conflict, while controls had more.  $H_3$  was supported, with controls and low pathology experimentals showing greatest progress on the WRAT. IQ was the main effect for improvement on the TSCS Personality Integration and Self Criticism subscales. Treatment condition and pathology level were significant interaction effects for the True/False Ratio, Social Self, Number of Deviant Signs, and Net Conflict TSCS subscales. Results supported  $H_4$  with low IQ and hi pathology experimentals functioning on the highest group interaction levels, and making the most progress in

personal growth on the SD. Results generally suggest that while an underachiever is becoming more aware of her potential through group therapeutic intervention, she perceives herself as farther away from her ultimate potential or ideal self than she had previously. Previous research suggested that the real-ideal self-concept difference decreases with therapy. These findings suggest a preliminary stage of increased real-ideal self-concept difference. Anxiety generated by the encounter group apparently interfered with WRAT performance. Findings suggest that perhaps remedial class placement should apply only for specific courses indicating underachievement, and that encounter groups may be most effective when involving the entire school year.

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## APPENDIX A

I.

(Koppitz, 1968, pp. 331-333)

## APPENDIX A

## SCORING CRITERIA MANUAL FOR 30 EMOTIONAL INDICATORS

## ON HUMAN FIGURE DRAWINGS

## DRAW-A-PERSON

(All Emotional Indicators are considered valid for boys and girls age 5 to 12 unless otherwise indicated.)

## Quality Signs

1. Poor integration of parts (Boys 7, Girls 6): One or more parts not joined to rest of figure, part only connected by a single line, or barely touching. \*
2. Shading of face: Deliberate shading of whole face or part of it, including "freckles," "measles", etc.; an even, light shading of face and hands to represent skin color is not scored.
3. Shading of body and/or limbs (Boys 9, Girls 8): Shading of body and/or limbs.
4. Shading of hands and/or neck (Boys 8, Girls 7): Shading of hands and/or neck.
5. Gross assymetry of limbs: One arm or leg differs markedly in shape from the other arm or leg. This item is not scored if arms or legs are similar in shape but just a bit uneven in size.
6. Slanting figures: Vertical axis of figure tilted by 15° or more from the perpendicular. \*

NOTE.--(starred items) Emotional Indicator related to poor school achievement in the primary grades.

7. Tiny figure: Figure two inches or less in height.
8. Big figure: (Boys and Girls 8) Figure nine inches or more in height.
9. Transparencies: Transparencies involving major portions of body or limbs; single line or line of arms crossing body not scored.

#### Special Features

10. Tiny head: Height of head less than one-tenth of total figure.
11. Crossed eyes: Both eyes turned out or turned in; sideways glance not scored.
12. Teeth: Any representation of one or more teeth.
13. Short arms: Short stubs for arms, arms not long enough to reach waistline.
14. Long arms: Arms excessively long, arms long enough to reach below knee or where knee should be.
15. Arms clinging to body: No space between body and arms.
16. Big hands: Hands as big as or bigger than face of figure.
17. Hands cut off: Arms with neither hands nor fingers; hands hidden behind back of figure or in pocket not scored.
18. Legs pressed together: Both legs touch with no space in between, in profile drawings only one leg is shown.
19. Genitals: Realistic or unmistakably symbolic representation of genitals.
20. Monster or grotesque figure: Figure representing nonhuman, degraded or ridiculous person; the grotesqueness of figure must

be deliberate on part of the child and not the result of his immaturity or lack of drawing skill.\*

21. Three or more figures spontaneously drawn: Several figures shown who are not interrelated or engaged in meaningful activity; repeated drawing of figures when only "a" figure was requested; drawing of a boy and a girl or the child's family is not scored.\*
22. Clouds: Any presentation of clouds, rain, snow or flying birds.

#### Omissions

23. No eyes: Complete absence of eyes; closed eyes or vacant circles for eyes are not scored.
24. No nose: (Boys 6, Girls 5).
25. No mouth. \*
26. No body. \*
27. No arms: (Boys 6, Girls 5). \*
28. No legs.
29. No feet: (Boys 9, Girls 7).
30. No neck: (Boys 10, Girls 9).

NOTE.--(starred items) Emotional Indicator related to poor school achievement in the primary grades.

II.

## COURSE PROGRESS SHEET

Quarter: 2 4 5 (circle)

Course: \_\_\_\_\_

(circle)

Experimental I or II

or

Control I or II

Student's Number:

Performs required work suc- cessfully and does additional work	Performs required work suc- cessfully	Performs required work poorly	Performs less than the re- quired work	Performs little or no work
(5)	(4)	(3)	(2)	(1)

## III.

## INTERACTION RATING SCALE: CARKHUFF-EGAN (COMBINED)

/ 1 / 2 / 3 / 4 / 5 /  
 Very Weak Moderately Weak Adequate Moderately Strong Very Strong

Note: A rating of 3.0 means that in that particular category, the member is a resource person, a giver, in that category rather than just a receiver (even if only minimally so).

Accurate empathy: The member sees the world through the other's eyes, gets inside the other, and is able to communicate this to others. The member communicates an accurate understanding of the feelings and behavior (content) of the other's experience. The member understands because she is listening to all the cues the other emits and responds to the other.

Warmth (respect): The member expresses in a variety of ways that she is "for" others, that she has respect for their person. She is accepting (without confusing acceptance with approval). She is an actively supportive person.

Genuineness: The member is herself, not phony. She does not hide behind roles or facades. She does not play games nor try to overwhelm the other with herself.

Concreteness: She deals in specifics, rather than generalities and is not vague. She deals with concrete, relevant behavior rather than storytelling or theory. She deals with specifics details and instances, is direct, and does not "beat around the bush."

Immediacy: She deals with her relationships with others directly. She knows where she stands with others, and others know where she stands with respect to them. She is in the here-and-now even when she talks about what has happened or is happening outside the group. She understands and deals with the other's subverbal and nonverbal messages.

Self-disclosure: She lets others know the "person inside", and the there-and-then behavior that helps her achieve the goal of establishing and developing relationships. She is open to what is going on inside during the group itself. Her openness is proportioned to the goals of the group.

Confrontation: She challenges others responsibly and with care. She does this by pulling together the behavior of the other and letting her see it clearly for herself. She challenges the strengths rather than the weaknesses of the other. She points out the discrepancies in the other's life (e.g. between what she wants to do and what she does). She uses confrontation as a way of getting involved with others.

Directionality: She directs the other's attention to "choice points" in her life. She proposes concrete courses of constructive action. She points out alternate courses of action. She displays problem-solving skills and tries to help others apply these to the concrete problems in their lives.

Response to Confrontation: She uses confrontation as an opportunity for self-exploration. She responds as nondefensively as possible. She checks things out with the group. If she thinks she should, she changes her style of behavior in the group, without being a conformist.

Initiative: She acts rather than just reacts. She goes out to contact others without waiting to be contacted. She adds to the spontaneity of the group. She initiates along a variety of dimensions. She "owns" the interactions that take place between other members and gets involved in them.

Feelings: She is not afraid to deal directly with emotion, her own or others. She allows herself to feel in the group and gives expression to what she feels, although she does not inflict her emotions on the group.



IV

(Carkhuff, 1969)  
(Egan, 1972, Unpublished)Carkhuff-Egan Interaction Rating Scales ---Scoring Sheet

Rating categories: 1.0 / 2.0 / 3.0 / 4.0 / 5.0  
 Very Weak Moderately Weak Adequate Moderately Strong Very Strong

InteractionVariables:

Accurate Empathy- / / / /  
 Warmth(respect)- / / / /  
 Genuineness- / / / /  
 Concreteness- / / / /  
 Immediacy- / / / /  
 Self-disclosure / / / /  
 Confrontation- / / / /  
 Directionality- / / / /  
 Response to Confrontation- / / / /  
 Initiative- / / / /  
 Feelings- / / / /

Identification Code: \_\_\_\_\_

Session # \_\_\_\_\_

Group(Experimental I or II  
(circle))

Rater's initials: \_\_\_\_\_

Number: \_\_\_\_\_

Date: \_\_\_\_\_

I would like to have a general picture of YOU AS YOU USUALLY ARE.

For example, if you are given the choice:

quiet	Very	moderately	slightly	slightly	moderately	Very	talkative
-------	------	------------	----------	----------	------------	------	-----------

1. First ask yourself if you are basically a quiet or basically a talkative person.

2. If you are basically a quiet person, you will use half of the line which is closer to the word "quiet".

Then ask yourself : Am I very quiet, moderately quiet, or slightly quiet, and place a check mark under the word which tells how quiet you usually are.

For example, if you are slightly quiet, it will be like this:

quiet	Very	moderately	slightly	slightly	moderately	Very	talkative
-------	------	------------	----------	----------	------------	------	-----------

3. If you are basically a talkative person, put a check mark on the talkative half of the line and show if you are slightly talkative, moderately talkative, or very talkative.

For example, if you are very talkative, the line will look like this:

quiet	very	moderately	slightly	slightly	moderately	very	talkative
-------	------	------------	----------	----------	------------	------	-----------

Number: \_\_\_\_\_  
 Date: \_\_\_\_\_

Please describe yourself AS YOU USUALLY ARE. Make only ONE check on each line.

/very / moderately / slightly / slightly / moderately / very/

good /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/bad  
 large /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/small II  
 beautiful/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/ugly  
 soft /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/hard II  
 strong/ /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/weak  
 clean /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/dirty  
 agitated/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/calm  
 valuable/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/worthless  
 cruel /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/kind  
 loud /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/soft II  
 deep /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/shallow II  
 unpleasant/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/pleasant  
 happy /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/sad  
 sharp /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/dull  
 ferocious/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/peaceful  
 light /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/heavy  
 tense /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/relaxed  
 cowardly/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/brave  
 hot /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/cold III  
 nice /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/awful  
 bright /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/dark  
 angular/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/rounded III  
 dishonest/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/honest  
 active /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/passive

NOTE.-- The numbers refer to the semantic differential factor of the item pair next to it. The 6 pairs with numbers are those which were discarded for E<sub>1</sub> subjects in the final scoring. I, evaluative; II, potency; III, activity

/very /moderately/slightly /slightly /moderately /very/

slow /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/fast

unfair /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/fair

rugged /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/delicate

I would like to have a picture of you when YOU FEEL ON TOP OF THE WORLD.

For example, if you are given the choice:

VERY	MODERATELY	SLIGHTLY	SLIGHTLY	MODERATELY	VERY
quiet					talkative

1. First ask yourself if you are basically a quiet or basically a talkative person when you feel on top of the world.

2. If at those times you are a quiet person, you will use the half of the line which is closer to the word "quiet".

Then ask yourself: Am I very quiet, moderately quiet, or slightly quiet at those times.

For example, if at those times you are slightly quiet, it will be like this:

VERY	MODERATELY	SLIGHTLY	SLIGHTLY	MODERATELY	VERY
quiet		✓			talkative

3. If you are a talkative person when you feel on top of the world, put a check mark on the talkative half of the line and show if you are slightly talkative, moderately talkative, or very talkative.

For example, if you are very talkative when you feel on top of the world, the line will look like this:

VERY	MODERATELY	SLIGHTLY	SLIGHTLY	MODERATELY	VERY
quiet					✓
					talkative.

Number: \_\_\_\_\_  
Date: \_\_\_\_\_

Please describe yourself when YOU FEEL ON TOP OF THE WORLD. Make only ONE check on each line.

very / moderately / slightly / slightly / moderately / very /

good / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / bad  
large / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / small **II**  
beautiful / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / ugly  
soft / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / hard  
strong / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / weak  
clean / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / dirty  
agitated / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / calm  
valuable / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / worthless  
cruel / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / kind **II**  
loud / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / soft **II**  
deep / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / shallow  
unpleasant / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / pleasant  
happy / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / sad  
sharp / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / dull  
ferocious / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / peaceful **III**  
light / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / heavy  
tense / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / relaxed  
cowardly / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / brave  
hot / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / cold  
nice / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / awful  
bright / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / dark  
angular / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / rounded **III**  
dishonest / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / honest  
active / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / passive

NOTE.-- The numbers refer to the semantic differential factor of the item pair next to it. The 6 pairs with numbers are those which were discarded for **E<sub>II</sub>** subjects in the final scoring. **II**, potency; **III**, activity

/very /moderately/slightly /slightly /moderately /very/

slow /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/fast

unfair /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/ fair

rugged /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/delicate II

## TENNESSEE SELF CONCEPT SCALE:

## CONSTRUCTION AND VALIDATION

The original pool of items was derived from several other self-concept inventories and also from written self-descriptions of patients and non-patients. Of the 100 items used in the Scale, 90 are those which were agreed upon unanimously by the seven clinical psychologists used as judges. The remaining 10 items, those comprising the Self Criticism scale, were borrowed from the L-scale of the MMPI. It may thus be assumed that the TSCS has a reasonable degree of content validity. With regard to its construct validity, two investigators (Vacchiano and Strauss, 1968) submitted the Scale to factor analysis and reached a favorable conclusion.

A comparison between 369 psychiatric patients and 626 non-patients of the standardization group revealed highly significant (mostly at the .0001 level) differences between the two groups for almost every subscale. This finding was supported by other studies cited in the Manual. Numerous correlations between various TSCS subscales and other personality measures, such as the Edwards Personal Preference Schedule (EPPS) and the MMPI, are also provided in the Manual, and appear to support the validity of the TSCS (Lefebvre, 1971).



One of the major features of the TSCS is its multidimensionality. In addition to providing a Total Positive Score, reflecting the overall level of self-esteem, the TSCS includes an evaluation of Physical Self, Moral-Ethical Self, Personal Self, Family Self, and Social Self. It also provides measures of Identity ("what I am"), Self-Satisfaction ("how I feel about myself"), Behavior ("what I do"), Self Criticism (obvious defensiveness), Conflict (inconsistency within the same area), Variability (inconsistency from one area to another), Distribution (to detect response sets on the five available choices), True-False Ratio, and six empirical scales: Defensive Positive (subtle defensiveness), General Maladjustment, Psychosis, Personality Disorder, Neurosis, and Personality Integration. The Number of Deviant Signs Score (NDS) is a purely empirical measure, and is simply a count of the number of deviant features on all other scores. The Manual reports that the NDS score is the Scale's best index of psychological disturbance. It asserts that this score alone identifies deviant individuals with about 80% accuracy.

The scoring of the TSCS can be done manually with the appropriate instructions and score keys. The method is fairly straightforward although scoring time is somewhat lengthy. The NDS score is extremely difficult to compute and the directions for its computation are not as clear as the other score methods. Because of the length of time necessary to score even one protocol and the difficulty of computing the NDS, this investigator did make use of the computer-scoring available from the publisher of TSCS. In addition to being more economical, it should decrease the probability of scoring errors.

## TENNESSEE SELF CONCEPT SCALE:

### NATURE AND MEANING OF SCORES

Individuals who expect to use only the Counseling Form may wish to read only the first part of the following section. However, those who want to use the Clinical and Research Form should read the entire section because all scores in the Counseling Form appear also in the Clinical and Research Form.

#### I. Counseling Form

A. The Self Criticism Score (SC). This scale is composed of 10 items<sup>1</sup>. These are all mildly derogatory statements that most people admit as being true for them. Individuals who deny most of these statements most often are being defensive and making a deliberate effort to present a favorable picture of themselves. High scores generally indicate a normal, healthy openness and capacity for self-criticism. Extremely high scores (above the 99th percentile) indicate that the individual may be lacking in defenses and may in fact be pathologically undefended. Low scores indicate defensiveness, and suggest that the Positive Scores are probably artificially elevated by this defensiveness.

B. The Positive Scores (P). These scores derive directly from the phenomenological classification scheme already mentioned. In the original analysis of the item pool the statements seemed to be conveying three primary messages: (1) This is what I am, (2) This is how I feel about myself, and (3) This is what I do. On the basis of these three types of statements the three horizontal categories were formed. They appear on the Score Sheet as Row 1, Row 2, and Row 3 and are hereafter referred to by those labels. The Row Scores thus comprise three sub-scores which, when added, constitute the Total Positive or Total P Score. These scores represent an internal frame of reference within which the individual is describing himself.

Further study of the original items indicated that they also varied considerably in terms of a more external frame of reference. Even within the same row category the statements might vary widely in content. For example, with Row 1 (the What I am category) the statements refer to what I am physically, morally, socially, etc. Therefore, the pool of items was sorted again according to these new vertical categories, which are the five Column Scores of the Score Sheet. Thus the whole set of items is divided two ways, vertically into columns (external frame of reference) and horizontally into rows (internal frame of reference) with each item and each cell contributing to two different scores.

1. Total P Score. This is the most important single score on the Counseling Form. It reflects the overall level of self esteem. Persons with high scores tend to like themselves, feel that they are persons of value and worth, have confidence in themselves, and act accordingly. People with low scores are doubtful about their own worth; see themselves as undesirable; often feel anxious, depressed, and unhappy; and have little faith or confidence in themselves.

If the Self Criticism (SC) Score is low, high P Scores become suspect and are probably the result of defensive distortion. Extremely high scores (generally above the 99th percentile) are deviant and are usually found only in such disturbed people as paranoid schizophrenics who as a group show many extreme scores, both high and low.

On the Counseling Form the Positive Scores are simply designated as P Scores, while on the Score Sheet of the C and R Form they are referred to as P + N Scores in order to clarify the computations involved.

2. Row 1 P Score - Identity. These are the "what I am" items. Here the individual is describing his basic identity - what he is as he sees himself.

3. Row 2 P Score - Self Satisfaction. This score comes from those items where the individual describes how he feels about the self he perceives. In general this score reflects the level of self satisfaction or self acceptance. An individual may have very high scores on Row 1 and Row 3 yet still score low on Row 2 because of very high standards and expectations for himself. Or vice versa, he may have a low opinion of himself as indicated by the Row 1 and Row 3 Scores yet still have a high Self Satisfaction Score on Row 2. The sub-scores are

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1. These items have been taken from the L-Scale of the Minnesota Multiphasic Personality Inventory (1951), Copyright 1943, the University of Minnesota. Published by the Psychological Corporation. Reproduced by special arrangements.

therefore best interpreted in comparison with each other and with the Total P Score.

4. Row 3 P Score - Behavior. This score comes from those items that say "this is what I do, or this is the way I act." Thus this score measures the individual's perception of his own behavior or the way he functions.
  5. Column A - Physical Self. Here the individual is presenting his view of his body, his state of health, his physical appearance, skills, and sexuality.
  6. Column B - Moral-Ethical Self. This score describes the self from a moral-ethical frame of reference--moral worth, relationship to God, feelings of being a "good" or "bad" person, and satisfaction with one's religion or lack of it.
  7. Column C - Personal Self. This score reflects the individual's sense of personal worth, his feeling of adequacy as a person and his evaluation of his personality apart from his body or his relationships to others.
  8. Column D - Family Self. This score reflects one's feelings of adequacy, worth, and value as a family member. It refers to the individual's perception of self in reference to his closest and most immediate circle of associates.
  9. Column E - Social Self. This is another "self as perceived in relation to others" category but pertains to "others" in a more general way. It reflects the person's sense of adequacy and worth in his social interaction with other people in general.
- C. The Variability Scores (V). The V scores provide a simple measure of the amount of variability, or inconsistency, from one area of self perception to another. High scores mean that the subject is quite variable in this respect while low scores indicate low variability which may even approach rigidity if extremely low (below the first percentile).
1. Total V. This represents the total amount of variability for the entire record. High scores mean that the person's self concept is so variable from one area to another as to reflect little unity or integration. High scoring persons tend to compartmentalize certain areas of self and view these areas quite apart from the remainder of self. Well integrated people generally score below the mean on these scores but above the first percentile.
  2. Column Total V. This score measures and summarizes the variations within the columns.
  3. Row Total V. This score is the sum of the variations across the rows.

- D. The Distribution Score (D). This score is a summary score of the way one distributes his answers across the five available choices in responding to the items of the Scale. It is also interpreted as a measure of still another aspect of self perception: certainty about the way one sees himself. High scores indicate that the subject is very definite and certain in what he says about himself while low scores mean just the opposite. Low scores are found also at times with people who are being defensive and guarded. They hedge and avoid really committing themselves by employing "3" responses on the Answer Sheet.

Extreme scores on this variable are undesirable in either direction and are most often obtained from disturbed people. For example, schizophrenic patients often use "5" and "1" answers almost exclusively, thus creating very high D Scores. Other disturbed patients are extremely uncertain and noncommittal in their self descriptions with a predominance of "2", "3" and "4" responses and very low D Scores.

- E. The Time Score. This score is simply a measure of the time, to the nearest minute, that the subject requires to complete the Scale. The author has only recently made any study of this variable, and at this point little is known as to its meaning or significance. It correlates significantly with only one of the many other scores of the Scale (Net Conflict sub-score for Column C where  $r = .32$ , significant at the .05 level). Therefore, any validity it may prove to have with other criteria should add to the total validity of the Scale.

The data do indicate that, provided the individual has sufficient education, intelligence, and reading ability to handle this task, the majority of subjects complete the Scale in less than 20 minutes. These qualifications are quite important; if they are not met, the Time Score obviously has little meaning. It has been found that psychiatric patients in general take longer than non-patients. This is particularly true of those who are overly compulsive, paranoid or depressed.

## II. The Clinical and Research Form.

The following additional scores of the C and R Form are presented in the order in which they appear on the Profile Sheet. Readers interested only in the Counseling Form may omit this section.

- A. The True-False Ratio (T/F). This is a measure of response set or response bias, an indication of whether the subject's approach to the task involves any strong tendency to agree or disagree regardless of item content (Fitts, 1961).

The actual meaning of T/F can be approached in three ways.

(1) It can be considered solely as a measure of response set and interpreted in terms of the findings about the meaning of deviant response sets. (2) It can be treated purely as a task approach or behavioral measure which has meaning only in terms of empirical validity. In this sense the T/F Ratio differentiates patients from non-patients and correlates significantly with other tests. (3) It can also be considered from the framework of self theory. From this approach, high T/F Scores indicate the individual is achieving self definition or self description by focusing on what he is and is relatively unable to accomplish the same thing by eliminating or rejecting what he is not. Low T/F Scores would mean the exact opposite, and scores in the middle ranges would indicate that the subject achieves self definition by a more balanced employment of both tendencies--affirming what is self and eliminating what is not self.

- B. Net Conflict Scores. These scores are highly correlated with the T/F Score. More directly, however, they measure the extent to which an individual's responses to positive items differ from, or conflict with, his responses to negative items in the same area of self perception. Thus this is a limited and purely operational definition and application of the term "conflict". On the C and R Score Sheet separate scores are computed within each cell for the positive and negative items. The difference between these scores, the P - N Score, is an operational measure of conflict. Since the responses on the negative items are reversed on the Score Sheet, the P Scores and the N Scores have equivalent meanings. Thus any difference between P and N reflects contradiction or conflict.

There are two different kinds of conflict, as follows:

1. Acquiescence Conflict. This phenomenon occurs when the P Scores are greater than the N Scores (P - N yields a positive score or number). This means that the subject is over-affirming his positive attributes.
  2. Denial Conflict. This is the opposite of acquiescence conflict. Here the N Scores for the cells are higher than the P Scores (P - N yields minus scores). This means that the subject is over-denying his negative attributes in relation to the way he affirms his positive characteristics. He concentrates on "eliminating the negative".
- C. Total Conflict Scores. The foregoing Net Conflict Scores were concerned only with directional trends in our P - N measure of conflict. However, some individuals have high P - N differences which cancel each other out because they are so variable in direction. It is of equal interest to determine the total amount of P - N conflict in a subject's self concept as well as the net or directional amount of conflict. The Total Conflict score does this by summing P - N discrepancies regardless of sign. High scores indicate confusion, contradiction, and general conflict in self perception. Low scores have the opposite interpretation, but extremely low scores (below the red line on the Profile Sheet) have a different meaning. The person with such low scores is presenting such an extremely tight and rigid self description that it becomes suspect as an artificial, defensive stereotype rather than his true self image. Disturbed people generally score high on this variable, but some also have deviantly low scores depending on the nature and degree of their disorder.

The conflict scores are reflections of conflicting responses to positive and negative items within the same area of self perception. These scores are not to be confused with the variability scores, which reflect fluctuations from one area of self perception to another.

- D. The Empirical Scales. These six scales were all derived by item analysis, with a resulting selection of those items which differentiated one group of subjects from all other groups. The scores on these scales are purely empirical, and cut across the basic classification scheme of the Scale.

These scales were derived from an analysis of item responses with the following groups:

Group	Size of Group
Norm Group	626
Psychotic Group (Psy)	100
Neurotic Group (N)	100
Personality Disorder Group (PD)	100
Defensive Positive Group (DP)	100
Personality Integration Group (PI)	75

The comparative item responses for these groups were studied and analyzed by Chi Square tests. Those items which differentiated one group from all other groups were then used to compose a specific scale for that group. There is some overlapping of items, since a number of items are used on more than one scale.

The six empirical scales derived by this method, in order of their appearance on the Profile Sheet, are as follows:

1. The Defensive Positive Scale (DP). This is a more subtle measure of defensiveness than the SC Score. One might think of SC as an obvious defensiveness score and DP as a subtle defensiveness score. The DP Score stems from a basic hypothesis of self theory: that individuals with established psychiatric difficulties do have negative self concepts at some level of awareness, regardless of how positively they describe themselves on an instrument of this type.

With this basic assumption, the author collected data on 100 psychiatric patients whose Total P Scores were above the mean for the Norm Group. The item analysis then identified 29 items which differentiated this DP Group from the other groups.

The DP Score has significance at both extremes. A high DP Score indicates a positive self description stemming from defensive distortion. A significantly low DP Score means that the person is lacking in the usual defenses for maintaining even minimal self esteem.

2. The General Maladjustment Scale (GM). This scale is composed of 24 items which differentiate psychiatric patients from non-patients but do not differentiate one patient group from another. Thus it serves as a general index of adjustment-maladjustment but provides no clues as to the nature of the pathology. Note that this is an inverse Scale on the Profile Sheet. Low raw scores result in high T-Scores, and vice versa.
3. The Psychosis Scale (Psy). The Psy Scale is based on 23 items which best differentiate psychotic patients from other groups.
4. The Personality Disorder Scale (PD). The 27 items of this scale are those that differentiate this broad diagnostic category from the other groups. This category pertains to people with basic personality defects and weaknesses in contrast to psychotic states or the various neurotic reactions. The PD Scale is again an inverse one.
5. The Neurosis Scale (N). This is an inverse scale composed of 27 items. As with the other inverse scales, high T-Scores on the Profile Sheet still mean high similarity to the group from which the scale was derived--in this case neurotic patients.
6. The Personality Integration Scale (PI). The scale consists of the 25 items that differentiate the PI Group from other groups. The scoring is slightly different for this scale and is explained on the special template for scoring this scale. This group was composed of 75 people who, by a variety of criteria, were judged as average or better in terms of level of adjustment or degree of personality integration.
- E. The Number of Deviant Signs Score (NDS). The NDS Score is a purely empirical measure, and is simply a count of the number of deviant features on all other scores. This score is based upon the theoretical position of Berg (1957) as stated in his "deviation hypothesis". This hypothesis states that individuals who deviate sharply from the norm in minor behaviors are likely to be deviant in more major aspects of behavior. The findings with the NDS Score substantiate this hypothesis. Disturbed persons often obtain extreme scores on either end of the continuum. Consequently, a system which sets appropriate cut-off points for each score on the Scale will identify disturbed persons with considerable accuracy.

The NDS Score is the Scale's best index of psychological disturbance. This score alone identifies deviant individuals with about 80% accuracy.

## DRAW-A-PERSON HUMAN FIGURE DRAWINGS (KOPPITZ SCORING):

## CONSTRUCTION AND VALIDATION

Human figure drawings (HFDs) have become one of the most widely used techniques of psychologists working with children. But the purposes to which the drawings are put vary greatly. Two main approaches to the interpretation of HFDs exist today. The first of these is employed mostly by clinicians who regard HFDs as a projective technique and who analyze the drawings for signs of unconscious needs, conflicts, and personality traits. Representatives of the second school of thought approach HFDs as a developmental test of mental maturity.

At least until the late 1960's most psychologists seemed to adhere rather exclusively to one or the other method of interpreting HFDs. Koppitz (1968) appears to have been the first writer in the field who was unwilling to accept either method to the exclusion of the other. Years of clinical experience and experimentation convinced her that the HFD test was one of the most valuable techniques for evaluating children just because she felt it could be used both as a developmental test and a projective method.

The foremost representative of the developmental approach to HFDs is Goodenough (1926) whose well standardized and validated

Draw-A-Man Test has become widely accepted and used, especially in schools and for research purposes. Some 35 years later, Harris (1963) went to great lengths to revise and extend the Draw-A-Man Test to include a Woman Scale and a Self Scale. The Self Scale was developed as a projective test of personality. However, this scale met with unfavorable statistical findings. Harris found that Goodenough's work had been so carefully designed and executed that relatively little could be done to improve it. Harris reported numerous studies which show a fairly high correlation between the Draw-A-Man Test and IQ scores from intelligence tests. Harris made a special point in stating that the Draw-A-Man Test measured mental maturity and was not a test of traits or personality dynamics. There is no doubt that those who are primarily interested in obtaining a mental age or IQ score from HFDs can use the Goodenough-Harris scoring method with a reasonable degree of confidence (Koppitz, 1968).

A different picture presents itself to clinicians interested in using HFDs as projective instruments. The foremost exponents of the projective approach towards HFDs are Machover (1949, 1953, 1960), Levy (1958), Hammer (1958), and Jolles (1952). These clinicians have studied HFDs of adults and teenagers extensively, but have worked only to a limited degree with drawings of elementary school age children. Machover's book (Personality Projection in the Drawing of the Human Figure, 1949) has become the most widely quoted book in the field and equals Goodenough's book in significance and influence. Although Machover's book is largely based on her clinical experience

with male adolescent and adult patients, she has also extended her findings to children (1953, 1960). Koppitz (1968) commented that Machover offers numerous hypotheses based on psychoanalytic theory regarding signs on HFDs, but she offers no scoring system and no controlled research data to support her claims.

Koppitz (1966a) made a validation study of the EI signs. There were originally 38 possible items. She had 76 pairs of public school children matched for age and sex. There were 32 boys and 44 girls in each of two groups. They ranged in age from 5 through 12 years. Group A was composed of 76 child guidance clinic patients. They had WISC or Stanford-Binet IQ scores ranging from 90-148 with a mean of 110. Group B was composed of children from the same elementary school from kindergarten through sixth grade. They were all selected by their teachers as outstanding "all around" students with good social, emotional and academic adjustment. There were no IQ scores available but the investigator assumed high average to superior intelligence. Chi squares were computed comparing the number of subjects in the two groups who showed each given EI on their HFDs. In addition, a comparison was made of the total number of EIs shown on the HFDs of Group A and Group B. The results demonstrated that 12 EIs were found significantly more often on HFDs of the clinic patients (Group A) than on the drawings of the well adjusted pupils (Group B). Statistical computations revealed that the chi square values were significant at the .01 level for four items, at the .05 level for four items and at the .10 level for four items. Sixteen of the items were present exclusively on the HFDs of the clinic patients.



Two items (crossed eyes and omission of legs) were so exceedingly rare as not to be shown on the drawings of either group. However, Koppitz retained them in the scoring criteria since, based on her experience, she asserted that they do reflect emotional problems when they occur.

Reliability coefficients for the EIs are not cited by Koppitz (1968). This may reflect her hypothesis that the HFDs reflect current personality concerns, and as such, perhaps, she would expect no scorable stability for subjects tested on the HFDs over time. However, she does cite scoring stability for the inter-rater reliability (1968, p. 10). The stability for scoring HFDs for Developmental Items and for Emotional Indicators was determined with the aid of another qualified psychologist. The two of them scored independently the HFDs of ten randomly selected second grade pupils and fifteen children referred to the school psychologist because of learning and behavior problems. The 25 protocols were checked for the presence of the 30 Developmental Items and the 30 Emotional Indicators. The two examiners checked a total of 467 different items for all drawings. Of these, 444, or 95% of the items scored were checked by both psychologists, whereas 23 items, or 5%, were scored by only one or the other of the investigators. The average number of items scored for each drawing was nineteen. On ten of the HFDs there was a perfect agreement as to the scoring, while on 15 of the HFDs the two examiners differed by only one or two points.

## IX

WIDE RANGE ACHIEVEMENT TEST:  
CONSTRUCTION AND VALIDATION

The three subtests at both levels are:

1. Reading: recognizing and naming letters and pronouncing words.
2. Spelling: copy marks resembling letters, writing the name, and writing single words to dictation.
3. Arithmetic: counting, reading number symbols, solving oral problems, and performing written computations.

The test contents of both levels are printed on the same test blank. The first page of the test blank is reserved for the spelling test. There are 46 spaces, numbered vertically, in three columns, for the words to be dictated in order of difficulty. The second and third pages are devoted to the arithmetic tests of Level I and Level II respectively. There are 10 possible points for the oral part of Level II and 46 additional possible points for the written computations. The fourth page contains the words of both levels of the reading test, Level II at top half and Level I at the bottom half of the page. The Level II reading test has a possible 15 points for giving two letters of the person's name and reading 13 letters. In addition, there are a possible 74 additional points for reading 74 words presented in an increasing order of difficulty.

Three types of scores are used in reporting the WRAT results: (1) grade ratings, (2) percentiles, and (3) standard scores or deviation quotients based on the grade ratings. The grade norms for the Level II Spelling subtest range from the second month in kindergarten (Kg 2) to grade 18.0 (which is equivalent with the second year of graduate school); for Level II Arithmetic from the ninth month of nursery school (N 9) through grade 20.0 (equivalent with the fourth year of graduate school; and for Level II Reading from the fifth month of prekindergarten (Pk 5) through grade 19.5.

Whereas the grade score is comparable to the Mental Age, the standard score is comparable to the IQ score of standard tests. The WRAT standard score has a mean of 100 and a standard deviation of 15. The authors (Jastak and Jastak, 1965) report that "the WRAT standard score is statistically comparable to IQ's obtained from Wechsler Scales (WAIS and WISC) and partly also to IQ's from the New Stanford-Binet (Form L-M) which has a standard deviation of 16." They further assert that "the results from the WRAT test can thus be directly compared with the major individual intelligence scales." Standard scores on the WRAT range from 41 to 160.

Percentile ranks are also provided for the raw scores. They are convenient because they make ranks (not scores) from different standard scales comparable. However, the authors caution that they "should not be used in research or in reporting comparisons between scores or changes following remedial effort" (p. 12). As a consequence of the nature of percentiles, the present investigation used only grade ratings and standard scores for statistical comparisons.

The authors report that the WRAT "satisfies the statistical conditions of reliability most adequately," (p. 13). Numerous population groups of different degrees of homogeneity were studied by the authors from 1945 until 1965. The correlation coefficients (even in such homogeneous groups as policemen and nurses) ranged from .92 to .98 for the reading and spelling tests, and from .85 to .92 for the arithmetic test. The authors cite split-half correlation coefficients for the WRAT, 1965 edition. They were determined on samples of 200 individuals selected in such a way as to represent probability distributions of achievement based on normative data. The split-half measures used were odd-even scores after the test items of each subject had been arranged in their exact order of difficulty. The order of difficulty of each subtest was determined by an item analysis of 1400 records for Level I and 1300 records for Level II. The spelling and reading items in the 1965 edition are in the order established by this item analysis. The arithmetic items deviate in minor ways from that order.

The standard errors of measurements for the three Level II subtests range from 1.13 to 1.70. The reliability measures reported for all three subtests are impressive and the standard errors are seemingly small. However, it should be noted that split-half reliability coefficients give one the upper bounds of a coefficient. In other words, the correlations can be no higher than the coefficient computed but can be lower. Nonetheless, the WRAT is widely used and

considered to have substantial clinical and statistical reliability. The authors felt that an alternate test form would be superfluous considering the degree of reliability found on the WRAT.

Several methods of estimating the validity of the WRAT are reported in the Manual. The reading subtest has been correlated with teachers' ratings and mid-term grades of 29 fifth graders (Wagner and McCloy, 1962). Correlation coefficients were  $+ .78$  and  $+ .88$ , respectively. These were significant beyond the  $.01$  level of confidence. The Manual cites other studies correlating the WRAT with external criteria with significant results. Several validity studies correlating the WRAT with chronological age; with other achievement tests; with intelligence and educational level; and with intelligence tests are cited in the Manual with positive results. A factor analysis made on the WRAT is described in detail in the Manual.

## Appendix A-X

Group Session #3 - November 8, 1972

EI

Present - 10Absent - 2

M.A.G. C. S.  
 C.C. M.J.  
 C.B. P. G.  
 K.G. G.G.  
 M.D. M.R.L.  
~~M.D.~~ F. = Facilitator

R. B.  
~~M.R.L.~~  
 N.H.

(The first day we sat on the floor in a circle)

Kathy G. (to girls entering the room): We're having a sit-in.

M.D.: We're having a camp fire.

K.G.: I'll let you be the fire.

M.D.: No, we're gonna make the fire right here. ~~M.D.~~ goes right in the middle (a girl outside the group).

F: Is somebody not coming?

M.D.: ~~M.R.L.~~ is not coming.

M.G.: ~~M.R.L.~~ ~~is not coming!~~

F: I talked to ~~M.R.L.~~. She's going to go in the second group.

C.S.: ~~M.R.L.~~ is here. She'll be here.

M.D.: ~~Very far~~ down in the valley.

K.G.: (Laughing) Down in the valley.

C.B.: What time is the second group?

F: It's not until Mod 4. It's something like 10: or 11:00 o'clock.

M.D.: She never smiles.

K.G.: She goes "don't look at me" (mocking)

M.D.: ~~Very far~~ down in the valley (laughing).

F: She said that?

K.G.: Long time ago. Last week she said (mocking); "Don't look at me".

C. B. (laughing) Who'd want to look at her!

F: Has anybody ever talked to her?

C.S. Me.

M.D. Um - um

F: What's she ... like?

C.S. Well in speech, she has a lot she .. I tell ya she has everything a girl could have. Everything. She's got a phone, everything in her room. Ohh!

M.D.: And she's got her own diamond ring.

C.S. Yeah!

M.A.G. It sounds like she's spoiled!

K.G.: It sounds that way to me too.  
 (short silence)

F: She must have some problems that nobody else knows about.

M.J.: What! When she told us about how huge her closet is?

C. S.: Ohh! She told us her that it's about from about that wall to here - this wide. (indicating about 20' x 12')

F: What is?

C.S. Her closet (sounds angry).

CS(cont'd from page 1) I'll tell you, my bed fits between the wall perfect. That's how wide it is.

M.D.: My house is as big as this room. (General talking about the sizes of their bedrooms and houses being small).

F: In terms of that...

M.D.: ~~V. D. V. D.~~ problem...

F: No. (general laughing)

M.D.: (leading and others joining in) From the valley of the jolly ho! ho! ho! green giant. (laughing)

(Everyone talking together. Many words lost) (They are discussing why M.D. can't find a comfortable way to sit on the floor.)

F: Are we agreed that only one person will talk at a time, so I can hear what you're saying?

Many voices: - Yeah! Okay.

F: You don't necessarily have to raise your hands or anything, but just wait until you can get others attention.

(~~G. G.~~ enters late)

M.D.: ~~G. G.~~!

K.G.: Long time no see.

M.D.: Yeah, since Math (last class).

G.G.: Oh, that was a long time ago.

M.D.: Yeah, the way she teaches.

C.B.: Ughh!

(general giggling)

K.G.: Now we can all start talking about her (the teacher).

C.B.: She was a little upset about

M.D.: I like Miss P. She's upset at \_\_\_\_\_ because she didn't go to her tutoring.

G.G.: She said we don't have to go if we don't want to.

K.G.: Did you agree to it? That you want to be tutored?

G.G.: Yeah!

K.G.: No wonder.

M.D.: My mom's smart, she can tutor me.

(general talking)

C.B.: My dog's got more brains than her (referring to a teacher)

(short silence)

F: In terms of the contract we read, does anybody not understand ~~something~~ something?

(C. gave a confused facial expression)

F: Yeah, none of it, right? Basically what, as briefly as I can put it (laughing ignored), what it says in terms of what's expected of all of us is that you can talk about whatever you want to and as deep as you want to, but whatever you say should be honest. Okay?

M.D.: It is. I was right.

F.: I was what?

- M.D.: I was right.  
 K.G.: Okay, Okay - alright.  
 F.: Okay, for those who just came in, we just said that we agree that one person will talk at a time. It doesn't matter - You don't have to raise your hand. You can use any kind of way you want to, to get the floor.  
 C.C.: I'm going to ~~set~~ sit here. (up at the table)  
 F.: But if we all talk at the same time, I can't understand you on the tape and we can't understand one another. Okay?  
 Many voices: Okay.  
 F.: Don't you want to be a part of the group?  
 C.C.: I'll be a part of the group, but I don't want to sit on the floor.  
 K.G.: Did you understand the last one?  
 F.: Some of it.  
 C.B.: Let's talk about teachers.  
 M.D.: Nooo!  
 G.G.: Did you tape us from last week? Are you going to play it, or did you already?  
 F.: It's on the other side.  
 M.D.: C.'s a cool head.  
 K.G.: She is.  
 F.: And then next week, I'll erase it by recording next week's session.  
 M.D.: She has a cold.

(short silence)

- M.D.: What are we going to say?  
 C.S.: You wouldn't understand it (laughing).  
 M.D.: Just like in Spanish.  
 K.G.: (laughs)  
 M.D.: I love how she laughs. Tee hee hee! (mocking K.G.)  
 F.: What are some of your ideas about what you expect from this group?  
 C.B.: Ummm!  
 G.G.: To help each other out on problems.  
 M.D.: To understand what's wrong with each other.

(general laughter)

- M.D.: Something like that.  
 G.G.: It sounds like we have a mental problem.  
 M.D.: Do we want any sophomores in this room? (said for the benefit of embarrassing a sophomore who walked into the room - sophomore hollered something back)

(general laughter)

- F.: Okay, we really don't have a whole lot of time. I like to see you enjoy it, but...  
 K.G.: We do, we do.

(general laughter)

- M.D.: Especially when I'm in the group.



- C.B. Oh boy! We have more fun without her. Oh, I don't really care.
- F.: Hope we have more fun with what?
- K.G.: Without her (pointing to M.D.).
- F.: You really like each other, don't you?
- C.B. Yeah, we're good friends.
- K.G.: Yeah, but for how long?
- M.D.: Since the beginning of school.
- F.: Did you know each other before you came here?
- C.B. No.
- M.D.: No, of course not. There are two .. two other girls from my school who came here.  
(general murmurings about the two girls who are with the regular program)
- F.: Do you have some of the same feelings we were talking about last week? About feeling like a dummy?
- M.D.: About dummy?
- M.G.: No, when someone asks what subjects I'm taking, I feel so funny telling them I take Business Math (nervous laugh).
- K.G.: So! Business Math is a lot easier than math. My mother even said so last night.
- F.: Is Business Math something that you take before you take Algebra?
- K.G.: No, you don't have to take Algebra.
- G.G. Like everything that you need in life, like Algebra and all that like ....
- K.G.: You don't need Algebra in life.
- C.B. That's stupid.
- G.G. Like writing out checks and stuff like that.
- M.D.: I did my mom's bank balance .. got it all right too.
- M.G. I won't do mine.
- C.S. We don't .... (laughing)
- F.: (laughing) You don't have a bank balance.
- C.S. No, we don't have a checking thing. I don't know why. Maybe we're old fashioned (C.B. and C.S. laughing)

(some aborted laughing - then silence)

M.D.: Come on ~~Mary Rose~~ - ~~Nancy~~ and ~~Mary Ann~~ say something.

M.D.: M.R. Do you know ~~Vincent~~ ~~Vallance~~?

M.R.L. Yeah and I don't like her.

M.D.: Do you like her?

C.B. Do you like her, ~~Mary~~?

M.R.L. No, not at all.

M.D.: You should have been here last week we had a bad conversation.  
Ba-a-a-ad.

(long silence and nervous giggles - someone tapping on floor)

C.B. Oh, boy! This is thrilling today. (some giggling) Sit around the campfire.

K.G.: Yeah, jump in.

M.D.: You want to go in with her?

K.G.: No

(general soft giggling - long silence)

M.D.: Everyone's looking at everyone else and nobody's saying nothing, C? I said something already.

(long silence)

C.S. Let's have a seance!

C.B. Oh, no.

M.A.G. Let's go to school.

C.S. Uh, uh, I'm not that crazy.

C.S. Okay come on, let's go.

M.D.: Let's go home. We got ... 20 minutes to go - we got 10 minutes.

M.D. Let's see. We get out at 3:29.

C.B. Alright let's start.

M.G.: And then we go to a basketball game 'til 4:30.

C.C. Don't remind me.

K.G.: What do you want to talk about?

M.D.: She wants to talk about boys.

C.B. Yeah, why not? Hmmm.

M.D.: What about 'em? (laughing) What don't we know?

K.G.: What don't you know? Ha! Ha!

M.D.: Ahh! (laughs)

- C. B Do you know what we know?  
 ( Ha! Ha! Ha!.. ) (Someone said something about "virgin")
- C. S What do you know? (laughs)
- M.G.: They're kind of square. Blockheads.
- C. B Do you know something?
- C. C No, I don't know. I never even heard of a boy.
- C. S How do they look?
- K.G.: Hee, Hee, Hee
- G. G Alright, let's stop you guys.  
 (K.G. still giggling)  
 (long silence - some whispering)  
 (C. loudly clears her throat)
- M.G.: This is great! Someone else has to think of something to say.  
 K.G. thought of the last thing.
- M. R. L What did she say?
- M.D.: ~~Virginia Valley~~.
- K.G.: That's not much to think about.
- M.D.: M.A., you're always quiet. And so are you, ~~Patty~~.
- P. G (mumbles something and shrugs shoulders) Nothing to say.
- C. B I'm always quiet.
- M.D.: (and others) Yeah, sure!
- K.G.: I can tell when you're in the lunchroom.
- C. B My mother's always complaining about my mouth.
- M.D. (general murmur and giggling) I like it!
- G. G In psychology today they were talking about why people don't make friends that good because most people judge 'em by their looks and not by their personality.
- F.: Um humm.  
 (M.D., K.G., C. giggle and Hmm Hmnn! )
- G. G It's serious, it's true.  
 (giggle)
- G. G Like look, N. D., who ....  
 (All laugh)
- C. S But she's got so many friends, like that whole lunchroom knows her.  
 (several in unison): Yeah! (laughing)

(C.A. says something)

M.D.: Yeh! C.C. in 301B.

C. E 301B? We weren't laughin at her.

M.D. The other day you and, uh, ~~Debbie~~ and ~~Joan~~ were laughing.

C. S Listen, you can't help it. you sit there and you die.  
You can't help laughin'.

M. J You can't help it!

G. G You have to laugh.

F.: What did she do? No, no, no

K.G.: She stinks.

(laughing)

G. G She's uncoordinated, you know, like in gym. She can't  
do much. (someone giggles) But you feel sorry for her,  
you know.

K.G.: Since the beginning of the year, Miss B. has been giving  
her tests. Since then we've taken all kinds of 'em.

F.: Gym tests you, mean?  
(general uh, huh'.)

G. G And she talks funny.

C. B No, she doesn't.

G. G She does in a way.

M.D.: Yeah!

C. C She talks like she's a big lady.

K.G.: Uh, huh!

M.D.: Old fashioned.

(general talking)

M.D.: I couldn't believe it. you know like the first three

weeks of school, when we didn't have to wear our uniforms and we could wear anything we wanted. Her mother wouldn't let her wear pants.

C.S What did she wear?

G.G Well that's the way she was brought up.

K.G.: Um - Hmmm.

M.D.: Well, yeah, but her dresses were down to her ankles and they weren't maxis'.

G.G Yeah, but she's brought up different.

C.S Yeah, she's nice. She's the only kid.

M.D.: Well, my mom's old fashioned, but she let's me wear what I want.

C.C So's mine (old fashioned)

G.G Well, I can't wear everything.

(Ohh! short silence)

F.: Do you see ... Have you seen anytimes when that's true? What you read in Psychology today? Where people sometimes are disliked ... maybe sometimes liked just because of what they look like?

G.G Um - Hm

K.G.: Ummmm Hmmmmmm

G.G Like you see someone and you don't want to make friends with them like cuz she's ugly or something, you don't want to be seen walking with her cuz .... you feel a little bit dumb. (nervous laugh)

F.: Dumb because you're walking with her because she's ugly.

G.G Yeah! (general giggling)

C.B. Everyone's looking at me.

(general giggling)

F.: Have any of you ever been disliked for what you feel is an unfair reason? Because somebody didn't take the time to get to know you?

K.G.: Not that I know of. (nervous laugh)  
(short silence)

M.R.L. I uh ... when I moved in my house, I got to know a pretty lot of the people around there because I had a boyfriend right away, you know cause I started liking him so he started liking me and you know all the girls sorta like ... he introduced me to all the other guys. And then I had all the other guys talking to me and everything and all the other girls, you know were really ..

G.G. They were just jealous.

M.R.L. We're saying "She just got here", you know and she knows all the guys".

G.G. We had a new girl in our eighth-grade class. She was real cute, I don't know. All the guys paid attention to her and all of us just sat there trying to get them jealous, waiting for a new boy to walk in. So one came in and she was really ... a winner, but we went on with it any way and tried making the boys jealous and ... but it didn't work.

C.B. Ugh.

F.: Why not?

G.G. I don't know ... cuz he was ugly.

F.: Ohh. That's what I thought you meant.

(Silence - then giggling)

F.: Something's going on.

M.D.: It's a rubber band stuck in my tooth.

(silence and giggling)

C.B. Hmmm!

(more silence and giggling) - (murmurings - one girl squeezing up a plastic cup - all join in who have plastic cups and giggling - more silence)

M.D.: Oh, I know what we can talk about.

C.C. Tell me about it.

(giggling)

M.D.: I don't know if this is very interesting, but ....

C.B. Talk!

M.D. Well, I don't know if I can tell it.

C.B. Will you talk?

M.D. Well, in basketball, you know, Miss B., divided us up. So I'm on one team and this one girl was on her team and that girl hogged the ball all the time and didn't give anyone else a chance and I thought ... I was going to tell Miss B., (nervous laugh) to let, ..... to tell her to let someone else ..... I gave everyone else a chance at the ball and everything. See I have experience with running with the ball real fast, and everything you know. See, I can handle the ball good.

F.: Umm-hmm.

M.D.: And so I'd pass it to someone see 'cause like when I was in grade school, they had basketball and I'd pass it to someone

and they would dribble it but then they would lose it to the other team. I felt kinda bad 'cuz I could have made a basket, I think. But this other girl starts from like that end over there and she comes running like this all the way down without passing it to one of her other teammates and I think that she should give someone else a chance (nervous - embarrassed giggle)

F.: Would you have enough nerve to tell her that?

M.D.: Ummm. Yeah, I would. I will, I will, I will tell her.  
(laughing)

F.: Especially, if she's on the opposing team, why was that important to you?

M.D.: Well, since we're one team, the other girls should have practice too, instead of letting her hog the ball.

K.G.: So?

M.D.: She does it all the time. Whenever she gets the ball, she won't let ..... she'll run to the other basket.

G.O. Is that the other team?

M.D.: No, she's on my team, but we're like divided up.

F.: You play like a practice game?

M.D.: Yeah.

C.B. Strange.

C.C. Who is she?

M.D.: I don't know.

C.C. She wears glasses?

M.D.: And kind of heavy.

F.: Is she good? Does she lose the ball by doing that?

M.D.: No, not ..... she doesn't lose the ball much.

C.C. Oh, I know, she has a weak.



M.D.: No, but ... I wouldn't hog the ball though.

C.C. Oh, I know she has black hair. Yeah! I know who she is.

M.D.: And here she could be passing to Claudia.

F.: C., you were on that side of the team. Did you notice that  
--- what's she's talking about?

C.C. No, ... no, we don't do that. Some people think we just ....  
Like when I have the ball I just keep giving it to her, you  
know everybody else is guarded, but the other people think you  
can get out of it real fast. But in one minute you can't watch  
... she's free for a second, so is she and you got to throw it  
to the first one who you see is free, so, I'd always throw it to  
her.

F.: Ummm-hmmmmmm. You mean that's what people say to you?

C.C. Yeah, they always say that .... but they either say the girls  
usually throws it to the other one ...

(short silence)

C.C. Boy, this .... this is thrilling today.

M.D.: Well, this time I'm not going to hog it. I said I would hog  
it, but I won't. (she meant hogging the session)

C.S. I'm gonna cry.

(silence - someone crumpling paper & murmuring)

K.G.: (laughing)

M.D.: Let's ask her a question and see if she'll talk. Okay, Patty,  
remember that one time when you ruined that T.V.?

P.C. When what? (laughing and surprised)

M.D.: When the T.V. room burnt down.

K.G.: You better shut up, she might beat us up or something.

(silence)

F.: She might do what? ... Oh, beat you up.

(giggling)

F.: She might do what? ... Oh, beat you up.

M.D.: Shut your mouth ... (laughing) shut your lips. (P.'s mouth was open in confusion )

C.B. This is really thrilling today.

K.G.: (giggling)

M.D.: Okay, ~~CP~~ do you have anything else to say?

C.B. No M.D., do you have anything else to say?

M.D.: I said mine already.

K.G.: I know.

M.D.: Why don't you say something (to F.)? You probably can think of a lot of things.

F.: Like what? <sup>girls</sup> (giggling) If I think of something, I'll say it.

M.D. I don't know ... I don't know...

G.C. Let's talk about why people are scared to talk.  
(short giggling)

F.: That's a good idea.  
<sup>girls</sup> (giggling) Along the line of what G. said, Yeah, I have something to say. One, why people are scared to talk and second, how different people handle the silence ... like when we aren't talking, how they behave. I think K. had an idea when she was trying to tell you (M.D.) like - you said yours.

K.G.: Yeah!

F.: I think you talk a lot....(giggling and agreement) and you try to get other people to talk so there won't be any quiet.

M.D.: Yeah, well my mother says that to me a lot.

- K.G.: Yeah, ... what do you think I was trying to tell you.  
(a sophomore came into room to get garbage)
- F.: Is this a passway or something?
- K.G.: Ummm-hmmm.
- M.D.: Hey, we got some garbage here ( holding up her empty pop cup)
- K.G.: A nickel a cup, you gotta pay to pick up.
- M.D.: Hey, that rhymes.
- K.G.: I'm a poet and didn't know it.
- F.: G., what ideas do you have as why people might be scared to talk.
- G.O. I don't know ..... maybe, they don't know us as well as the rest of us know each other and they don't know what to say.
- M.R.L. Or maybe they feel a little bit stupid.
- G.G. Yeah, that they feel they are afraid to speak out 'cause they'd be wrong.
- K.G.: Uh Huh!
- G.G. I'm usually like that when a teacher asks a question and I'm too scared to answer 'cuz I think the answer will be wrong and everybody will laugh at me.
- C.B. I feel like that too.
- F.: I used to feel like that too.
- M.D.: I still do.
- G.G. My mother says, you should speak up though, 'cuz that's the only way you learn. If it's wrong, she'll correct you.
- F.: Just about that point....., have any of you ever had the answer in your head and you didn't say it and then somebody else said it and you were right?

Almost all in unison: Yeah!

C.S In Spanish Class.

K.G.: I told my mother I know the answer sometimes and she waits for everybody to have the answer and I'll have the answer, but I don't say 'em and I says .... and she told us she's gonna start grading us on how we respond in class and everything.

M.D.: But the one's in the back ...

(general laughing)

F.: What about the one's in the back? Oh, separate the one's in the back?

C.S Oh, don't do that! That's what she told me and she goes, separate yourself like that. I .....

F.: Who said that? Your teacher?

C.S Yeah. Tomás I knew ... I got really mad 'cuz last week ahh .... you know, the advanced Spanish Class told us that we were going to go to Spain. She asked Miss T., last week.

C.C Tomás

C.S Tomás, I don't care and she goes .... you know like were we going? Miss T., says "Yeah, you'll go. Whoever is interested I'll take you, you know.

F.: Really, to Spain?

C.S Yeah!

C.: To Madrid.

C.C Yeah, 'cuz some other people were going, you know so we were really thrilled. And today one girl asks her and she goes, "No, 'cuz you're not native speakers and you're not ....

C.S You're not mature enough.

C.C Yeah, you're not mature enough.

M.D.

M.D.: Who did she tell this to?

C.S. Our class, but you know what isn't fair tho' is like ....  
at the beginning of the year, we learned how to say "What's  
your name?" And like she could teach us like, "Where do I  
live?" What do I do?" She could teach us those kinds of  
words. And I don't even think they'll get lost anyway, you  
know.

M.D.: She don't even know how to say casserole.

M.J. We were .... were kind of wondering, because she wasn't telling  
us no details about it, you know. Like I don't know, just  
little stuff. So that's when this one girl and she goes no,  
no, you can't go. So we were real mad 'cuz after all this  
time we were asking our parents.

C.S. I asked already. My Ma and she said, yeah, I could.

M.J.: And she says "No".

M.D.: Ohh! I told my Dad that I said I didn't want to go.

C.C. Mrs. Del C. ... she let ... she's our teacher 'cuz I'm in the  
advanced Spanish ....

C.S. You're Spanish?

C.C. Yeah!

C.S. Really?

(laughing)

C.C. You know, first of all she said "They can't go". Then after  
a while she says, you can go if you have somebody there to  
translate for you, you know.

C.S, M.J.

& M.D.: Uh huh !

C.C. She said, "You gotta have permission from your parents, the  
principals

principal and ...

M.D.: But you go during school vacation. I'd rather stay here  
in the states.

F.: How expensive is this trip?

C.C. \$319.00.

M.J. \$319.00, I think.

C.C. But she changed it down, I think.

C.S. How much is it?

C.C. \$290.00, I think.

C.S. Ohh!

M.J. Wheel!

M.D.: She's gonna get the cheapest plane that she can get.

(all laugh and make fun)

C.S. and C., it will be highjacked to Cuba. You know she'll give us  
Cl.: that one.

C.C. She was talking about planes getting highjacked to Cuba.

M.D.: Now she's not going to let you go.

(laughing)

C.C. No, she's not taking us on the cheapest plane. There's one  
for \$115.00 and we're going on the one for \$290.00.

M.D.: Are you going on a 747?

C.C. It takes 10 hours to get there.

C.B. Oh, my God!

K.G.: Forget it. Ha, ha, ha!

C.C. If you take the cheap plane it takes 20 hours.

M.D.: Ugh! Tell her to keep the \$290.00.

G.G. That takes up a whole day.

- F.: What .... what seems to be the ... First of all, what group was the trip originally for?
- G.G. All the Spanish speaking ...
- C.S They started it .... the advanced class and like I don't know. We heard about it and then we asked her and she said, "Yes," and then next she said, "no".
- M.D.: And that really made a lot of people mad.
- M.J Yeah, and we thought.....
- F.: So it's not just for juniors or seniors or sophomores, or freshmen.
- C.S No, just anyone.
- F.: Anybody in advanced Spanish Class.
- C.S She goes, anyone that's interested. That's exactly what she said. And, Oh, I was so mad all day. I really wanted to go, too!
- F.: Well, is it necessarily, out.
- C.S No.
- F.: Is there something you can still do .... I don't really understand what's really going on. Like what's her reason?
- C.S I don't know what her reason is.
- C.C They're just going on. 'cuz she said one in a great while..... this is really a great offer 'cuz for \$290.00 to go to Spain all the way around.
- F.: But like what's the reason for saying that your class can't go?
- C.C She said that they'll get lost 'cuz they don't know the language

and all that. And they'll be ... it won't be she said-it won't be that interesting for them 'cuz they won't understand a word of Spanish.

C.S: You can know English and live in America and not get lost. That's what we should tell her.

M.D.: I can get lost right here in Chicago.

F.: Because you don't know the Spanish language?

C.S: Like if you do (get lost) you have to say "where can I go?" And all that. You could learn that.

F.: When is the trip?

C.S: April.

C.C: March.

C.S: March?

F.: For how long?

C.S: 9 days.

F.: Hmmm, 9 days?

C.C: But the thing is, it's not fair, because the sophomores, they took Spanish last year. They won't know that much Spanish this year. And they'll get to go ....

K.G.: Uh huh!

C.C: All the sophomores, juniors.

F.: Who are not taking Spanish now?

K.G.: Uh huh, right.

C.C: Oh! No, the sophomores are taking Spanish now, they took it last year, but they don't know that much now.

F.: Oh, I see.

K.G.: There's this one girl in our Spanish class and she fell



asleep in class and the teacher was talking about her in Spanish and she goes (mimicking a snoring girl) ...

(general laughing)

C.S: You know what I don't like? I don't like it when our Spanish teacher gets up there and talks Spanish and I don't know what she's saying.

K.G.: She does, she does. We don't understand a word she's saying.

C.S: We sit there "uh huh, yeah, no, I mean ....

K.G.: We do.

C.S: And we get it by one word, but ...

K.G.: Yeah.

C.S: But like the first day we ever came in, she was talking to us in English and then all of a sudden here came this Spanish

K.G.: Brrrrr!

C.S: We didn't even know what hit us and ...

(loud chatter and shrill giggling by K.G., M.D. and a few others  
- words lost)

C.C: In our Spanish class we're not to talk, we're not allowed to talk one bit of English.

M.D.: Ohhh!

C.C: The only one that's allowed to talk English is .....

Ch.S: ~~Margie~~?

Cl.C: ~~Rosie~~ 'cuz she don't know that much. Oh and ~~Margie~~ is okay. She'll misunderstand some things, but she knows a lot of the Spanish words.

K.G.: That's because Josie teaches her.

Cl. C She gets mad at us. "Don't talk English" on this or that.  
'Cuz half of the words you know, we don't know how to pronounce. She says a word and we know what the definition is but we're not sure about changing the word endings and she gets mad.

Ch. S Ughh!

M.R. L Mrs. T., I got somethin' I wanta ask ya', but it might sound kinda dumb. But like ummm.... if you, if a girl gets caught smokin' in the bathroom she gets immediately kicked out of school, but like I walk into offices, like teachers offices and stuff like that, or with you, and like you can smoke there. And like in the office there's wood and everything like that and in the bathroom it's all cement.

F.: Um hm.

M.R. L And like I realize that you're older and you're a teacher and everything, but like the seniors they're what? They're about 18 and so they should be allowed to have a smoking lounge or something like that.

M.D.: Or a smoking area.

K.G.: Yeah.

F.: The only thing I can say is when I was in high school we did have, I mean we put through the Student Council a smoking room or smoking area. But for three of the years that I was there you know like up until the junior we couldn't smoke any place. One reason, just the fact that although you could tell by uniforms, but once there were times when you didn't have to wear

the uniform, you couldn't just go up and ask a girl who's smoking are you a freshman, sophomore, or a senior and prove it. So it was just a matter of being able to recognize the grade you were in. And secondly, most Catholic schools, if not all, just say a flat out "no". Mainly, because you've got 3 groups of people; freshmen, sophomores and juniors - they're pretty much against smoking. And only one grade for it. So it's almost like the majority is the one that outweighs the boat. Uh .... it may be something like the wood and stuff, but I doubt if it's really the safety as much as the actual person who's smoking.

M.R.1 Yeah, but like, Miss Z., and everybody everytime like in the beginning of the year they always said smoking .... don't smoke and stuff like this and they spread it, you know, a real lot and they uh ... made the rules on it real heavy and everything like that. But in the bathroom it's just all cement like and in the rooms there's a lot of wood. And like they always said "Well the reason we don't want you smoking is because you might start a fire and if you start a fire, how could we get all the girls out?" And to me that sounded like the main reason, like that they didn't want anybody to smoke.

F.: Well, like I said, that's my .... I don't know why they make their rules. I would think it would be for another reason . Anybody else ever heard of another reason?

Cl.C No, but at dances they always let you smoke upstairs on the 4th floor.

Ch.S        Yeah!

Cl.C        That's why I don't understand. (several girls talking simultaneously - words lost) They don't know if you're a sophomore, seniors, or what you know.

G.C        The boys .....

F.:        They allow the seniors to smoke when there's dances?

G.C        No, anybody can smoke up there no matter what grade you're in. I don't know why they don't let 'em do it now.

M.D.:      A third grader can go up there and smoke if they want to.  
(some laughing)

M.R.L      I mean like my old , like some of my girlfriends still go up there and everything and like in between your classes and everything you can just walk right out in front of them and have a cigarette and it's a Catholic school too. But it's a boy and girl school, but it's Catholic.

F.:        Um humm.

M.R.L      And they get to ... and they can go out in between classes anytime they want, like and just have a cigarette right in front of the school, I guess, if they want to. And like you can go in the bathroom and they don't have ashtrays in the bathroom and I don't know how much trouble you'd get in, but I don't think you'd get kicked out if you did. And it's still a very strict school. I mean you gotta wear uniforms and stuff like that.

F.:        Um hm

M.R.L      And I mean they don't have any trouble over it or anything like

that.

F.: Um hm.

G.G. I don't think this school would have any trouble if they'd let 'em. That wouldn't keep them from doing it 'cuz there are so many kids that get caught smoking in the john anyway.

K.G.: Ummm hmmm.

G.G. If they'd let 'em do it they wouldn't stay into so much trouble.

K.G.: Yeah a lot of freshies. They never catch the seniors tho' every-time you go in there the bathroom stinks like anything.

G.: Oh, yeah.

M.R.L. Yeah, I know even though I don't smoke in there, after I go in-when I came out, you know, I smell like smoke already. And like if the teachers would let us go out like between classes and stuff, then the girls could smoke and have their cigarettes then and then there wouldn't be so much smoking in the bathtrooms.

F.: Um hmm.

M.R.L. Because like some of the bathtrooms you walk in and they're all cloudy and stuff. There's just one big thing of smoke.

K.G.: Yeah.

M.R.L. And I don't think it would be that bad if ah .... they'd let ... if we could go out.

F.: Uh huh.

Ch.S. You know what they should do? When they build the new McDonald's they should let us go to it for lunch.

M.D.: Yeah.

G.G. They should let us go out.

M.D.: It would be jam packed tho'.

Ch.S. I really think so, you know because they're losing money anyway on that cafeteria. I never buy nothing in that cafeteria any-

way, except for the machines, I never buy nothing, tho'.

C.B.: From the counter.

M.D.: Man, you get ripped off. Even potato chips-you get this much for a dime.

Ch.S A tiny portion for a dime.

G.E Sandwiches, 45¢.

Ch.S 45¢ for a sandwich

M.: (laughing)

M.J You can rip that place off. I saw seniors go up and steal *off that thing.*

Ch.S You can steal from that place like anything. Yesterday, the first time I stood in line, what was <sup>I</sup> gettin', the taco. Me and her (M.) were gonna share it, and they tasted bad anyway, but we were just standing there and girls were just coming (demonstrates girl stealing from counter and holding item behind back) and their partners run away and right away I turns to her and I says, I'm paying for this and they're gettin' away?

K.G.: Uh huh!

Ch.S I couldn't believe ... it made me laugh 'cuz you sit there and ... how many of 'em were doing that? (to M.)

M.J Five.

Ch.S Even I'll tell ya' more. I'll tell ya' one more good one. Ah huh.

K.G.: Yeah, they're over there ripping off everything ..

M.D.: Because this girl was standing there right in front of me and she goes la-dee-do-dee-dum (humming while mimicking the girl stealing a slice of cake) and she, you know, the piece is like on a little tray thing.

Ch.S: Yeah!

M.D.: And in a piece of plastic paper. And she goes, oh (hums) then she walks away and I said "Gee".

C.B: I wouldn't mind getting somethin' (? free).

M.D.: I was gonna do it one day.

K.G.: I don't mind payin' for the stuff, but it's so high priced.

Cl.B: 45¢ for a sandwich!

K.G.: For a tuna fish sandwich, 45¢!

G.B: I know and then you're supposed to put it in that little oven thing and it doesn't work. You put it in, it's warm when you get it out and you get back to the table and it's cold.

K.G.: We even put it in there twice.

Ch.S: Last year, when I went ... I didn't go last, but the year before, there was this one school by our school, Drummond, it was a public school. We used to go there to eat public school. We used to go there to eat and 30¢ for mashed potatoes, meat, peas....

M.R.L: Yeah.

M.D.: Yeah, I know.

Ch.S: And chocolate milk.

Cl.B: And here it's 30¢ for one, you know, whatever it is.

K.G.: 15 to 20 cents for a pint of milk. Go to the store and rip it

off from the store for nothin' (laughing)

M.R. l At the school I live near it's the same thing. They give vegetables, potatoes, meat and a carton of milk for about 20¢ and they had .....

Cl. B 20 cents?

M.D. & K.G.: (talking at the same time so words lost)

M.R. l You know, spaghetti and hamburgers and stuff like that in case you didn't like one of them you could have the other one.

F.: Was that a Catholic school?

M.R. l Yeah. This was. Then they had about 5 kinds of dessert. They ought to have that here.

M.D.: That's like at a hospital. All I have is vegetables. Yeah.

K.G.: And chicken sandwiches (laughing) (some general talking)  
I'm not saying this school .... something's wrong with it, but God, the prices are ....

M.D.: It's bad enough. The tuition's \$390.00.... plus all the other stuff you have to pay for.

Cl. h Like uniforms.

G. G Luther North, now it's like almost a thousand.

M.D.: Our Lady of Grace had a lot of people in there.

K.G.: Just 'cuz you went there. I think the same of mine.

G. G Sometimes it's much better to go to a public school.

M.D.: This one girl got transferred from Sheraton to here.

K.G.: Well, goodie, goodie.

M.D.: And you know her?

K.G.: Who is she?

M.D.: K. (a girl's name)



K.G.: Oh, yeah. She went to my grammar school before she got kicked out (laughing) She did!

M.D.: Yeah, she was smoking right by the mailbox in front of school and the stupid principal kicked her out. (looked at clock)  
Ohh! Class is over.

K.G.: We could stay.

F.: Before you .... can I just .... Did you have any personal contact with this smoking business? (to M.R.) or why was it bothering you?

M.R.L You wouldn't want to ....

F.: Did somebody you know, or were you smoking, or like to smoke, or something?  
(laugh)

M.R.L I smoke and I know a lot of people smoke in the bathrooms and like they'll go outside and the first thing they do is light up a cigarette because they want one so bad.

Ci.B They need it.

M.R.L 'Cuz like they have to go through the whole day without smoking and when you get outside you want one so bad, you know. And I think it's not really, you know. I can see their point, I really can, but then in another way, I think it's stupid because in a lot of schools that I know of, you can't smoke in the bathrooms, but they either have smoking lounges or you can go outside.

F.: Umm hum.

M.R.L To have a cigarette and it's not as bad then because then like the students they don't smoke in the bathrooms. They don't

have that kind of problem or anything. And the students they don't try to get away with trying to see how many times they can go ( to smoke) in the bathrooms and everything for a cigarette.... they just walk outside and it's not as bad.

G.G. They should let you out.

K.G.: They're afraid you're gonna cut out.

G.G. They should let you out 'cuz if you have 4 mods you have to stay in the cafeteria or the library ...

C. B.: I know.

G.G. For all that time. I don't know why they don't just let us go out.

K. G.: How many people cut classes inside of school? Just as many people would cut classes if they let 'em out.

M.R.L. And I got one day where I've got from 9 o'clock 'til 5 to 12 (o'clock) free. And in that time I could go home, lay down take a rest and come back again!

Ch.S. I could too.

F.: You can't leave during that time?

K.G.: Nooo!

M.A.G. No. You can't leave school until after your last class.

M.R.L. It's like, if you get caught doing it, you'll get in a real lot of trouble... you know because ...

F.: You mean even if you don't have any classes for that span of time, you've got to stay around here.

K.G.: Yeees! That's stupid! They're afraid we're not gonna come back.

M.D.: It's terrible.

F.: Well you know the first thing that I think about is depending

upon how strong your student council is or how active they are, get together and decide on some of the thing. Ya' know I don't really have too much sympathy for people who talk about such and such a thing is wrong and if you haven't at least tried to get it through...

M.R.L. Yeah!

F.: You may have a lot more people that feel the same way. Then if they say "No", then you can bitch and then I can sympathize with you. I can sympathize at this point, but not unless you at least try and see what, you know, they might be receptive to it.

M.D.: I doubt it.

M.R.L. And there's just a lot of other schools that they let people go out, you know, and they come back in and everything like that, and they don't have a lot of trouble there.

F.: Yeah, well whether you're talking about that or whether you're talking about some kind of a smoking lounge ....

K.G.: I betcha they make these rules up without, you know, any reasons why. (some laughing)

F.: Yeah. But there really isn't much reason for them to change unless somebody attacks them.

G.G. We'll attack 'em.

(many voices): Yeah!

F.: Well, it doesn't have to be an angry attack.

Some: No, we know.

G.G. Maybe you don't know what attacking means.

M.R.L. Yeah, just talk to 'em.

(some students leaving) Bye! See you next week.

A.R.:

But you know, you don't want to say nothing 'cuz then they'll know your name and start watching you and figure that you smoke in school too.

F.: Yeah, that's true. I guess you have to be careful about what you say and how.

Many: Bye!

F.: Okay. Bye! See you next week!

SESSION 122/23/73  
EI

## Present:

C.C.  
M.A.G.  
N.H.  
C.S.  
C.B.  
G.G.  
P.G.  
M.J.  
M.D.

F. = Facilitator

## Absent:

R.B. (eye doctor)  
K.G. (veterinarian)  
M.R.L.

(Before session formally begins)

F. C., you look sad. Are you upset about something?

C.S. Yeah. One of my dogs ran away this morning. They both got out of the yard but the big one came back home.

F. The German Shepherd?

C.S. Yeah. See, this group of dogs comes by our yard every morning. So he got out to follow them. I don't know where he is. As soon as I get home, I'm going to take my other dog and go looking for him. I don't know where to look for him though.

F. What does he do? Jump the fence?

C.S. No! My dad left the garage door open. And he got out. He's real little and doesn't know his way home. The bigger dog came home. My dad just looked at him and he came running back. I guess he said, "Okay!" (kind of laughing)

(Girls are still entering the session room. Various greetings of "Hi" are being exchanged.)

F. Well, with us, the little one jumped the fence so we just bought some chain like about 10 or 12 feet and tied it to a post so she has room to run around and play but she can't jump the fence. Maybe you can think about doing that.

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N.H. They don't know if sexually anything is wrong yet.

F. They don't know yet?

N.H. Uh uh.

M.D. That's terrible!

C.C. Little seven year old girl. That's really sick.

M.D. (Words lost -- laughter)

C.C. People like that are mentally ill.

M.D. They should put them in Dunning somewhere.

F. That's true. Some of them should.

C.C. All these people talking about peace and all. They should begin with them.

M.D. It should begin in the United States. (Short silence)

F. What do you do to protect yourself, if anything should happen to any of you? ..

C.C. I would fight.

M.D. I'd be pulling on his leg. (Tape is unclear)  
(All talking at same time.)

C.C. The actions I do scare people more than anything. It looks like I know Karate.

M.D. And you make these Karate sounds. That scares N.H. One girl jumped in front of her face and went "Boo!"

F. You didn't strike me, until today when we started talking about it, as a person who would be too scarey.

M.D. What?

F. You didn't strike me before as a person that would be too scarey.

M.D. What do you mean?

F. Like you're scared of the dark and scared of . . .

M.D. Oh, yeah.

C.C. The only thing I'm scared of is (? death).

M.A.G. I'm scared of the dark. Like at night if I'm thirsty and I want a glass of water I'm too afraid that something will be in the hall and come past me.

G.G. And are you scared to hang your feet out of the bed because you think someone is under the bed.

M.D. I know!

C.C. And you think a man is going to grab your legs.

M.D. When I was a little girl, this boy next door was babysitting me and my brother. And we were on my mom's big bed. And we were laying down. And he told us that this kid was in bed and an alligator came up and grabbed him. That had me scared for so long!

N.H. How old was the guy?!

M.D. I was about 6 or 7.

N.H. But how old was he?

M.D. He was about my sister's age.

N.H. A boy babysitter! That doesn't sound right to me.

M.D. Yes, there's nothing wrong.

F. No, there are some . . .

M.J. There's this one story. It's kind of stupid! It's about this dog under the bed.

General: Oh, yeah!

M.J. This girl had her dog under the bed. And before she went to sleep she'd always have him lick her hand. And then she could feel

confident, you know. And so, one night she put her hand down by the bed and she, you know, got a lick. So . . . she didn't feel confident. But she went to sleep. And she got real scared. So she got up and looked under the bed and there was a man.

General: Ohh, no.

F. How did he know to lick her hand? Is that true?

M.J. I don't know.

C.C. Maybe the dog.

M.J. But in the next room her parents were dead!

M.D. Oh, God! (Sounds indicating fright. Several people talking.)

C.C. M., did you ever read that story about that one guy. He killed so many nurses? That was really scary.

F. Yeah. Speck.

C.C. And one nurse he forgot. She was under the bed alive.

M.D. I never knew she was under there!

F. Yeah. She was the only one that got away.

M.D. I knew she was the only one that got away. I knew it when someone told me that.

F. You mean you had forgotten.

M.D. No. No one ever told me that she was under the bed.

F. Yeah, one got away.

C.C. I think that they should just kill them guys instantly.

M.D. I don't think they should have a right to live. If they can kill other people, they should die themselves. (Loud and angry)

N.H. I don't see how she could stand it under that bed. I would have died.

F. Yeah. I think I would have jumped out of that window.

C.B. (Laughed)



F. No, really. The most you can do is break an arm or something.

M.D. Or a leg.

F. But, God! I couldn't have stayed under that bed.

M.A.G. You break a leg and start hemorrhaging.

C.C. When they called her back for the trial, she said she was still scared at the thought of it.

F. Yeah!

M.D. You know where the safest place for me is living in a jail. I think it's the only place you can't get killed. (Some laughter)

C.C. How did it happen then?

F. He apparently was dating one or two of the nurses. And he knew that eight girls lived there. And I don't know if they'd broken up or one girl wasn't going to date him or something. And he came and as each nurse was coming in from work he just kept them in the house and was tying their arms in the back and just killed them one by one.

M.D. With a gun or a knife?

F. It so happened. I think with a knife . . .

General: Ughh!

F. And raped them. And so there was one girl who was spending the night. And so that made it nine girls. And he knew only eight lived there. So he only looked for eight. That's why that one girl got away. Because he knew he had killed eight but he didn't realize one was only a visitor.

N.H. Did the visitor get away?

F. No. The visitor was one of the one's that got killed. One of the girls that lived there was the one who got away. But see,

he didn't know them by face; he just knew the number that lived there.

M.D. You know I can't stand to hear about that stuff because one time in California my sister almost got killed. (Voice lower)

F. Really? How? I mean directly or like a car accident?

M.D. Well . . . see . . . it's . . . like . . . Oh . . . Wait (Eyes filling with tears)

C.C. I feel so sorry.

N.H. She can't ever think.

M.D. No, I can think about it but I'm too afraid to say it. (Silence)

F. What, is it hard to talk about it?

M.D. Wait.

F. <sup>How</sup> When long ago did it happen? (Silence)

M.D. June.

F. What happened? (Silence)

M.D. Wait. (Blank stare into ceiling, eyes tearing up more -- silence)

M.D. (Hands over face, face down on knees crying.)

F. Aw . . . she got away. It's alright now. (F. holds M.D. and rubs hair and neck) (Other people shuffling feet, nervous, looking at clock. Silence) It's okay. (Silence)

M.D. (Crying and head still in hands. Voice muffled) He almost killed her.

F. With what?

M.D. He could have pushed her over the cliff. (Silence)

F. Was he trying to?

M.D. I don't know. But the fire engine made a wrong turn and he saved her. (Silence)

F. She's okay now?

M.D. Yes. But she started pulling her hair and started beating her up.

F. Did they catch him?

M.D. No! She was supposed to go to testify at his trial but she was too frightened.

F. She was supposed to go to a trial?

M.D. Yes.

F. Is she still scared about it? Or is she over it?

M.D. No. But she has dreams at night.

C.C. Bye. (About two girls leave)

M.D. (Raises up, wipes eyes)

F. Are you okay?

M.D. Yes. (Silence)

F. Is it somebody who knows where they could find her now?

M.D. We have a picture of him.

F. Does he know how to find her? Where she lives?

M.D. He was doing bad things to her.

F. Trying to rape her?

M.D. (Shakes head "yes")

F. Did it mess her up emotionally at all?

M.D. (Shakes head "no")

F. That's good. (Silence) You must be close to her.

M.D. Huh?

F. Are you close to her?

M.D. Her? Yeah. And I never hit my sister again.

F. Which one is this? Your older sister?

M.D. No. She's real pretty.

F. How old is she?

M.D. She's 21 now. I only have one other sister and brother.

F. Well, she's lucky she's okay and it's good she doesn't have any emotional scars now.

(A few more girls leave, leaving just P.G., M.A.G. and N.H.)

M.J. et al.: Bye

F. Bye-bye. Was she dating him or something?

M.D. Yeah. He took her out to the forest. And he started doing mean things to her.

F. Like trying to rape her or something like pull her clothes off?

M.D. No. He told her to do that.

F. Oh.

M.D. Then he started pulling her hair. Then the fire truck came.

F. She was awfully lucky.

M.D. (P.G. gives her a kleenex) Thanks, P.

F. Thanks, P. Was she visiting someone?

M.D. She was living with her girlfriend. And she was the unlucky one that had to go.

F. That had to go where?

M.D. Out with him!

F. Oh!

M.D. Then she came home on the day of my cousin's wedding. We had to leave early.

F. You mean after you found out about it?

M.D. My mother called. And she told us what happened. And when I went . . . I like to go there and kill him.

F. That's a natural feeling to have. It's too bad she couldn't have gone to court so he could be put away.

M.D. He'd probably . . .

F. He'll probably try it on somebody else and someone else will take him to court.

M.D. (Putting on coat to leave.)

F. But you needn't feel embarrassed about crying today, M. Are you feeling any better now?

M.D. Yes.

F. Okay. See you all next week.

SESSION 132/28/73  
EI

## Present:

K.G.  
M.A.G.  
C.B.  
M.J.  
C.S.  
N.H.  
M.D.  
P.G.  
F = Facilitator

## Absent:

G.G. (Orthodontist)  
R.B. (Veterinarian)  
M.R.L.  
C.C.

(C.B., M.A.G., F., K.G. and M.D. discussing fights with their brothers and the dangers of being molested on the streets. This conversation occurs before the session formally begins and as the other members are coming into the room. Session begins as girls sit around the tape recorder.)

- F. Your brother is older?
- K.G. Yeah. He's a punk too! (Laughter)
- K.G. They found out how old he was at his job. They wouldn't fire him but he had to quit.
- F. Why? What do you mean "how old he is"?
- K.G. Because he's only 16. And they can't hire you until you're 17.
- F. Oh, I thought it was 16.
- K.G. No. 'Cause you gotta be in school.
- F. Is this the brother who was in the Audy Home or something?
- K.G. Yeah!
- F. What was he in there for?
- K.G. Huh?
- F. What was he in there for?
- K.G. He ran away three times.

F. For how long?

K.G. One time was for a week, next time was . . . First time was over-night. Next time was for a week. One time . . . he went and got caught for trying to take my father's car. And he called the police.

M.D. What on earth for?! (Snidely said)

K.G. Because he hates my father. But we all hate my father. So that's.

M.D. I don't. My father's nice.

F. You hate him too? What does he do?

K.G. Because he's stupid and mean. He calls us liars and everything.

M.D. Because you're probably rotten to him!

K.G. We are. (Laughing)

M.D. See!

K.G. One time I told him to "shut up" and keep his hands off me because I hated him. And he started hitting me back.

C.B. (Laughs "Heh! Heh!")

F. Your father?

K.G. Yeah.

F. Is he your real father?

K.G. Yeah. My only father. But I'd trade him in for a new car! (Laughs)  
And my grandmother hates him too. Because he beats up my mother all the time. He beat on her one time and her eye was all like this.

F. Ohhh!

K.G. He called the police on himself and my mother says, "Oh, no. He didn't do nothing. It was a little family argument."

Several: Ohhh!

K.G. And she goes like this, "Oh, don't call your grandmother! Don't call your grandmother!" I didn't. She goes, "Tell her that I was so drunk after the wedding that I fell in the tub."

M.D. (Laughing)

F. Is she afraid of him?

K.G. No. She stands up to him.

M.J. That's the same thing with my grandfather . . . He does that.

K.G. I'd like to go live with my grandmother. She's got a nice house. I like it over there.

M.D. Oh, C. went home. G. had to go to the orthodontist.

K.G. To get her braces removed.

N.H. I get mine tonight.

C.B. G. has a sister too.

K.G. A dumb sister and a punk brother.

F. You have two other . . . ?

K.G. Yeah. A dumb sister and a stupid brother! Now my brother is stupid too. (Laughing)

F. Are you the oldest?

K.G. No, my brother is. He's 16.

F. So you're in the middle?

K.G. Yeah. I wish my mother would have had that other boy. Oh, that'd be fun.

F. Why?

K.G. Because! She lost a baby and then the two of us would always fight. Two against two. Now my brother brings his boyfriend over and . . .

C.B. Then you got to fight them! (Laughs)



K.G. No! We don't. It was funny. Cause he almost broke my sister's foot. He poured salt all over and threw ice cream at my sister! It was a free for all.

M.D. If my brother did that, my father would send him to the moon!

M.A.G. My father wouldn't even let us do that.

C.S. Neither would my father.

F. Your father won't let you fight?

M.A.G. He won't if he sees my brother throwing something.

C.B. I got mad at my brother and threw him against the wall.

K.G. My mother pushed my brother through a window!

F. Are there a lot of fights at your house or something?

K.G. Yeah! Constantly.

M.A.G. In grade school someone was always fighting.

C.B. It's fun!

M.D. No, it isn't! Cause . . . It's fun, but . . . I went to the store and I beat this one guy up. My mother said, "M., come back out now!" I knocked. I used to run up to my brother and hit him and scare him. He won't stand there and let me scare him, he'll run.

F. He's got good sense! (Laughter)

M.D. My father is like a teacher. If we're nice to him, he'll be nice to you. That's how you have to be to some teachers. But if you're not nice to him. He won't be nice to you. But see we always have to be nice to my father, cause sometimes we need him to do things. But sometimes we don't.

K.G. I never go to my father for anything.

M.D. But, see, that's because you're not nice.

K.G. I know.

M.D. You don't respect him.

K.G. I respect my mother but not my dad.

C.B. My ma got mad at my sister's boyfriend and threw a knife at him.

(Laughing)

K.G. A knife?

C.B. She had a whole bunch of knives, ya know. She got mad at him and threw one at him.

K.G. She sounds like she's crazy!

F. Your mother got mad and threw a knife at your sister's boyfriend?

C.B. Yeah. (Laughing)

K.G. What's the matter with your mother?!

C.B. No. My mother got mad at him.

M.A.G. My ma doesn't throw knives at anybody.

K.G. She may throw coat hangers and junk like that but never a knife.

M.D. When my father gets mad at my sister's boyfriend he just sits in the kitchen! (Laughter)

M.D. He never goes in the living room or sits there watching them. He sits in the kitchen. When my father gets mad at my sister's boyfriend he won't come in and say "Hi".

M.A.G. My dad does that.

M.D. But he should! That's what my father does. (Short silence)

F. Would you really like to move away from your house?

K.G. Yeah. I want to move to my grandmother's house. It's so quiet there.

M.D. G. would have fun at our house, man.

K.G. No thanks!

M.D. Our house is fun! Well . . .

K.G. Our house sounds a blast! These two girls come in Sunday night when our brother was beatin' us up. And this one goes, "Man, F. [brother] you're mean!" And my sister goes over there and she almost missed to kiss her and almost pushed her out the window. And this big kid is almost 18 years old. And, oh. God.

M.D. Hi, P. (to a girl opening door by mistake.)

K.G. And . . . he's mean. In a way he's nice, but . . . Cause he likes to see us fight.

F. Who's that?

K.G. This kid, M. He's got a sister who is a sophomore here. He likes to see us fight. He says "Round 2 tomorrow night!" (Laughs) I said, "I'm gonna get out of here." Last night he went out on our front porch and he rang these deaf people's bell you know. And like the bell and light goes on in their house you know. And so they came down in the hall and they go like this. And he rang the bell of the people on the second floor, but his wife and the baby are in New York. So he came out in the hallway by himself. And he unscrewed the light, you know. And these deaf people are up<sup>7</sup> setting on the stairs. And they came down and they're looking around. And he goes like this, panting, to the bell and everything. And I just . . . I told them ours rang too. But ours don't work! And he went out and rang it twice again. Ohhh!

F. Now this is your brother or his friend?

K.G. This . . . my brother's friend. He's mean. I don't like him . . . (Pause) And then he comes by Saturday. I wasn't doing nothing. I was just outside and he threw a bug ~~off~~ at me.

M.D. Ugh!

K.G. And then he's always going I'll buy you a pizza and stuff like that if you don't tell your father and I go, "No, I'm gonna tell my father. You can keep your pizza and junk. But I'm going to tell my father." And then my sister goes, "Well, if you tell daddy and I take the stuff, they're not going to do it anymore." I said, "I don't want him to do it."

F. Do what?

K.G. Throw stuff at us and beat us up and everything. Cause they don't suffer! . . . My brother's friends aren't about to . . . Like Saturday they offered us pop.

F. His friends?

K.G. Yeah. And my brother. And this kid always ends up paying for what my brother does. Ohh! Me and my sister go M., [brother's friend] you better watch F [K.G.'s brother] because he's adding up a big bill with you. And you're gonna have to keep paying for all our accidents.

M.D. (Loud screaming laugh after popping a bag)

N.H. D.!

K.G. And he goes, "Alright, let's stop fighting." And everytime he comes over I say, "You cause trouble and you're gonna go right out." And one time my mother was right in the house, and my brother was making trouble. And my mother just looked at him real hard. And my father comes home. And my mother gets real nervous and my father just starts screaming, "What are you doing?! What are you doing to your mother? Look at how nervous she is!" Ha! Ha!

M.D. Let's hear it. (Bag pops on the recorder.)

F. We'll listen to it at the end.

M.A.G. Like I don't know. My brother used to beat up on . . .

F. Your father?

M.A.G. No, my brother.

K.G. He used to beat up on who?

M.A.G. This one kid. And so . . . he'd beat up on him. He's real wierd. And so now he's real friendly, you know. We ran into him over the summer and he's real friendly.

F. Did you ever help your brother fight or?

C.B. My brother helps me.

M.D. One time this one boy was pounding my brother's head on the ground. So I jumped on him and said, "You leave him alone!" I started swearing at him. And I punched him in the head.

C.B. You should <sup>now</sup> what I went through. I had five kids on top of me. My brother and his friends, One's around 175 pounds and 6'2".

K.G. Boy, that's how much I weigh! (K.G. is heavy but not 175 pounds.)  
Several: (Laughing)

C.B. And so this kid threw my glasses up on the roof and my brother flipped the kid right through to the garage. Honest to God! My brother got mad and he really threw him. And he went sailing over to the garage. The kid went, "What did you do that for?" My brother said, "Well, why did you throw my sister's glasses up on the roof!"

K.G. My sis. . . My brother will fight for me. I don't know. It must have been about three weeks ago. These three guys jumped my brother. They beat him up against a wall, smashed his head against the wall. I found him. They pushed my brother through our basement

window. And my father says, "Did you beat 'em up?" And then my brother's laying there in the gangway. And then they came home. They take the three guys to the police station. My father comes home. My brother comes home. Well . . . they go to the hospital at 1 o'clock in the morning. They come home and I go, "Well, what's the matter?" He says, "Nothing." But he can't sleep more than 5 or 6 hours. Because he has a concussion, he'll wake up and he'll start seeing double and triple. I said, "That'll be funny!" So then my father goes ahead and drops the charges against all three of those kids.

F. Why?

K.G. Because they threatened to . . . that if my father didn't, they were going to beat him up again.

M.D. What would he . . . If they um?

K.G. If you're standing out in front of your own house, and somebody comes and jumps you, what's your father gonna do?

M.D. Go out there and beat the hell out of those jerks!

K.G. But we just moved there! We don't like movin'!!! (angry)

C.S. But if your life is in danger. God!

K.G. What do you want us to do? Get killed?! (angry)

F. What do you think about your father's decision to drop the charges?

K.G. I didn't think it was right! In a way. Because these kids. One of these kids is 17 years old who hit my brother. He has the same parole officer as my brother does. And the parole officer told me that any of those three kids or any other kids that beat my brother are just going . . . to jail. And the parole officer told me that.

M.D. Well, there is a lot of parole officers by G.'s house.

K.G. There's only one! You don't live by my house!

M.D. Yeah, I know but . . . You're talking about it like it's the slums!

C.S. God!

K.G. Thanks a lot, D. It's only six blocks from your house.

C.B. No, we got little Italy. Little ~~Dago~~ town at our house.

C.S. Oh, that's all slums.

M.D. Not by my house.

K.G. I can say the same about you that you say about me!

C.S. Over by [street names].

M.D. That's the junky place.

K.G. What about [street name]? You live a block away from there.

And it's slums.

C.S. No, it's not. It's good. (She lives there too.)

K.G. We get these stupid phone calls every night. The people stay on the line. Last night . . . not last night . . . night before, I went to bed, turned off all the lights, covered myself up and the phone rings. People won't get off and my mother goes, "Get off this goddamn phone!" And the next time they call, she goes like this, "Good evening. Western Union. May I help you?" Boy, they hang up that phone awfully fast!

C.B. (Laughs)

K.G. I tell my mother to change the phone number. And she goes, "Right! And they'll charge me \$17." Well, wouldn't you rather pay \$17 than be threatened? I would.

F. You mean these are people who know where you live?

K.G. Yeah. It's these people over on [street] that my brother got in trouble a lot with.

N.H. You have to pay \$17 just to change a phone?

F. Yeah. I know it's <sup>so</sup>pretty high fee.

K.G. Just for a lousey seven numbers too.

N.H. My grandmother's got a private line.

F. Unlisted?

K.G. We used to have a party line with this other lady. Then if you didn't get off the phone right away, she'd start hollering and stuff.

F. On a party line?

M.A.G. Yeah.

N.H. You can hear other people talk on a party line. But on ours we can't hear anyone talk.

M.D. We can. We've got a party line at our (words lost). And we can hear her say, "Come on and eat" or something.

F. Are you the only person where the phone rings? Like when it rings, does it ring in anybody else's house?

M.D. No.

F. Well, that's not a party line.

M.D. Oh, yeah. It's an extension, G.

K.G. I didn't say party line, stupid! You said it.

M.D. You said it!

N.H. Listen to it on the tape. (Laughs)

K.G. Yeah. Play it back. (Several talking and saying "No" to the idea of replaying tape.)

F. I want to talk about a little something today.

K.G. About what?

F. Where we ended up last week.

General: Oh, no . . .



K.G. About the naked man?!

F. No. (Some laughter)

M.D. You know, out where my aunt lives they have those kind of phones. One time my cousin picked up the phone and he heard someone else talking.

F. Yeah. Now that's a party line.

M.D. I wish I were out there.

C.B. Yeah. So you could listen to everybody's phone call.

N.H. I wouldn't want everybody to hear what I'm saying.

M.D. We got these walkie talkies for Christmas onetime. And one guy said, "Wake up." And we could hear them talking back and forth.

C.B. That would be funny! Listening to them talk.

F. How would you feel about someone listening to your conversation?

N.H. Oh, no.

C.B. No.

M.D. We tried to yell through it to see if they could hear us. (Short silence)

M.D. Those walkie talkies don't go very far. They're a big fake. We got 'em a long time ago.

K.G. If somebody had a party line and listened to what my grandmother says to my mother, boy they'd never pick up that party line again. What a sermon would they get! Ha! Ha!

F. If your mother was on the phone, you say?

K.G. My grandmother! (Laughing)

M.D. That sounds like G.'s grandmother.

F. What . . . your grandmother is kind of rough too?

K.G. No. She calls my mother. She tells my mother, "Nah! Nah! Nah!" My mother says, "I didn't call to get a sermon!" (Laughs) She's like a preacher.

N.H. (Laughs)

M.D. My . . .

F. Does she preach at you too?

K.G. No, my grandmother doesn't preach at me, cause she's too slow.

M.D. My grandmother can't yell. She can yell but she doesn't scare you.

K.G. (Laughing) I know. My grandmother's the same way.

F. Oh.

K.G. I don't care what she does. She don't scare me. She talks a lot.

M.D. When I'm running from the kitchen yelling, "Grandma!"

K.G. I go in the other room and I laugh at her. (Laughs) Like you'll be in one room . . . I'll be watching TV at her house sometimes. And she's in there talking to me. And you go, "What did she say?" Because like if the dog's in there, she'll be talking to the dog. And you at the same time. And I'll go out there, "What did you say?" She goes, "I wasn't talking to you."

M.D. She's going, "Fido -- KATHY!" (Laughs)

M.A.G. My grandmother never talks and when she does talk, you can't understand it. She talks so soft.

F. Does she live with you? or near you?

M.A.G. No, she lives down in Ohio. (Short silence)

F. Okay, everybody was here last week by the time we got to the end of the session except C. S. I was interested in what happened. We were close enough to the end when M. started crying for people to leave and kind of get away from the situation. And I'm wondering who felt embarrassed and how you felt when she started crying?

K.G. Who?

F. When M. started crying. You weren't here last week.

K.G. No.

- F. We were talking about Speck and a lot of other things. People being murdered and a lot of other things and rapists and stuff. How bad it was in neighborhoods and stuff. And M. started crying about how her sister <sup>who</sup> almost got killed last summer in California.
- K.G. Oh yeah.
- F. And what happened was P.G. And I think it was . . . Oh M. (M.A.G.) stayed. And there was some third person here.
- M.D. G.? C.?
- F. No. At the end there was only me, P., you and C.B. I stayed and M. was here.
- M.A.G. N. was out in the hall.
- F. Well, what kind of typically happens is that when another person is having some kind of intense emotional experience, like pain or crying or something, other people tend to get embarrassed and they leave. . .
- M.D. Talk about (word lost).
- F. And that's kind of what happened last week. And so it's not that I didn't expect it to happen. But I do think it's something important for you to understand from both sides. How, you know, it might be the way we get into situations that that's why people feel embarrassed. (Interrupted by two girls entering the room.) But anyway, I think that what's typical of our whole society is that we're not supposed to cry in public. And if you do, you feel bad about it. Or if another person feels bad, what you try to do is shut them up. And I think it's important for us to start talking about how we <sup>fe</sup> feel when M. started crying. And how M. felt. And what seems to be the most effective way to handle it. Not for that particular situation but in other similar situations.

- K.G. I don't think M. felt embarrassed because M.'s not that . . . I don't know, I wasn't here but if I was here, I wouldn't have walked out.
- F. How did you feel about . . . what happened last week? Were you aware that people were getting up and leaving?
- M.D. Nnnn . . . No. I was just crying.
- F. How did you feel last week?
- M.D. If [name] had been here, she would have started crying too.
- F. Well, that's what C. (C.B.) was saying. Well, you can tell her.
- C.B. Well, I felt I didn't want to stay to make things worse. So I just waited (in the hall).
- F. Well, you were saying when somebody starts crying, you start crying.
- C.B. Yeah. I do.
- M.D. Sometimes that happens to me sometimes.
- F. M., how did you feel last week?
- M.J. I felt sorry for her. But after I left I was thinking what we had talked about before? About how like if someone is needing help and people just pass them by and leave them alone and stuff.
- K.G. Yeah.
- M.J. And after I left I felt kind of stupid because we had been talking about it and then everyone left. . . left her alone. So we did the same thing to her.
- F. That's really true. It's <sup>o</sup>good point. I hadn't thought of it that way. Almost that by leaving we . . . dropped her . . . walked out on her.
- K.G. Like maybe you could go help her or something. I don't know.
- M.D. But then this firetruck made a wrong turn.

F. Yeah. Well, I'm not that interested . . . I mean I'm glad that everything ended up okay (for your sister). But what I'm saying right now . . . not only in your situation but in all of our lives there are going to be other situations where somebody is going to cry or really have some strong emotional thing that they have to let out. Whether it's anger, or . . . usually the ones that are scarey are anger or really sad . . . when someone starts crying. And . . .

M.D. Oh, I do that sometimes.

F. I noticed that the people who felt more comfortable in terms of staying here were P. and M., and someone said N. was here. I just know there were three people other than M. and I and one of them was P.

M.D. Yeah. I think she (P.G.) brought me the Kleenex.

F. Yeah, she brought you the Kleenex. But I'm saying it's important for you all . . . each of you yourself, however you do it, to be aware of the importance of how you respond to somebody like that. You know, it might be that the person . . . some people when they cry need to be alone. But other people might feel abandoned when . . . if you get up and leave. So . . .

K.G. Yeah.

F. So maybe if you . . . like C. (C.B.) said, "I thought I would make things worse." Maybe for some people it will make things worse if they feel left all alone. So it's important for you to know how you feel in those situations. Whether you feel uncomfortable or embarrassed or whatever. (Short silence) Of if you're the one who's going to cry, that you realize it's not a weakness. It

~~took~~ a lot of strength for her to have enough . . . trust in the group for her (M.D.) to cry like that and enough strength not to just hold it in. That said a lot for her, to cry in front of us.

K.G. Um hm.

C.B. I do that sometimes.

F. Because it's hard to cry in public.

C.B. Um hm. Cause when I do, I'm really upset. And I have to cry on people's shoulders.

N.H. You haven't had a cigarette today. Are you quitting?

F. Well, Miss D. said that the rest of the faculty doesn't smoke (in the rooms). And she asked that I didn't, so I said, "Okay".

N.H. Oh.

F. You're the only that's noticed all day! Except me (laughing). I'd really like to have one. (Laughter. Silence.) How did you feel last week? Were you aware that people were getting up and leaving like M.(J.) was?

N.H. Yeah.

F. How did you feel?

N.H. I felt like crying. And I thought you shouldn't have asked her all those questions. That you should have left her alone.

F. Okay. Ummm. I'll explain later why I . . . Well, I might as well say it now. I don't know how you took it. You have a right to feel as you did. But I don't know if you (M.D.) had ever cried about it before but . . .

M.D. I did.

F. Well, apparently it wasn't all out. I felt that . . . usually, for me, and most other people I know, when you have to cry about

something, it usually comes up in somebody's actual death. If you haven't worked it out yourself on the inside, you need to work it and to start seeing that things were bad, but they may not <sup>be</sup> so bad afterwards. Which is why I was asking, "Are there any emotional scars?" "Did she get away okay?" "Is she still alive?" So that (she) you can at least see the, okay it was a bad thing that happened. But for right now today, at least for her things are okay. So it's so you can separate your feelings according to what did happen from what could have happened. And you probably would not have cried if I hadn't pushed you. But, you know, although the pain . . . I know it hurt, I'm sure that I kept pushing you. But I prefer to do that than to just let it go.

M.D. Yeah. It's true. I really don't cry at funerals. But I would. But see, like, President Kennedy. I was five years old when he died. And I cried. And I was at my grandmother's funeral and my uncle. Any of my relatives. I never cry. I . . . laugh. Because my mother and father were crying.

K.G. I know, me too.

M.D. And I was laughing. And we got outside of my grandmother's funeral. My brother starts crying "oooo". And I had to laugh.

F. What was funny then? What struck you funny?

M.D. No, it was . . . Because they were laughing.

F. They were laughing?

M.D. No. They were crying.

K.G. They were crying and you were . . .

M.D. It was kind of sad but . . . I don't know. I never cry at funerals.

M.A.G. Me neither. Like one time . . . it seems like when people are crying and you're not, you're embarrassed cause they're sad.

F. Do you think it's because you really are happy or . . . ?

M.D. No. No, cause when I'm happy I cry too.

K.G. No, not that you're happy.

M.D. It's like right then you don't have that in you. Like they were . . . like my ma grew up with my grandmother. But see I really didn't know my grandmother that well because she lived in Iowa and . . . well, she didn't move here to Chicago. But she would come for like a two week visit?

F. Uh huh.

M.D. And then we would go out there maybe once a year.

F. Well, most times at funerals a death doesn't hit me until maybe by the time they put the body in the ground. But it may be weeks later before it really hits me that this person is really dead. And then I can cry.

C.B. I know.

M.D. See my great aunt and great uncle when they died? I didn't cry at their funeral. My mom didn't either. Neither did my father. But see there were other people crying but I wasn't laughing that time.

F. Why do you think you laugh?

M.D. Because it's funny. Cause they were crying and I remember not crying.

K.G. It's not really that she laughed.

M.D. It's not funny they died or anything. It's just that it's funny because you're the only one not crying.

F. Why? Are you wondering if there's something wrong with you that you're not crying like the other people?

M.D. No. Like it was funny to see my brother cry because I've never seen him cry.



K.G. No, cause it's funny to see him crying.

C.B. It's funny to see a man cry. Because usually a man doesn't.

M.D. It's not really that funny, but . . .

F. Do you mean like a surprise or something?

K.G. Yeah. Surprise.

M.A.G. It's kind of like last week, you know. Like M. is always laughing and you never see her cry. Even her friends don't see her cry.

F. Did you laugh or smile when she started crying?

M.A.G. No.

F. Yeah, I'm just wondering. Sometimes you do just the opposite of what you feel to try and cover it up. I thought maybe that's what you meant.

M.A.G. I felt like laughing but I didn't want to do it out loud.

(Laughter)

F. What would you have been laughing about?

M.A.G. I don't know. Just seeing her cry.

C.B. Remember her face is real red when she cried?

F. Your mother?

C.B. No, her (to M.D.).

M.D. This is the first time I cried in this school.

C.B. This girl didn't want me and another girl to work on a project with her. And I started crying. Me and this girl started crying and Mr. P. [teacher] was like, "What's going on?" You know. And we started crying on his shoulder. And he let us go, you know. He doesn't care at all. Oh, Gee! And it was embarrassing after a while. And then he goes, "Don't let it bother you."

N.H. I cry real easily. Even on T.V. (laughs)

M.D. I know.

F. Do you get embarrassed when you cry in front of other people?

K.G. Yeah, I do.

C.S. I do.

N.H. No.

K.G. When it's something sad. I was almost ready to cry and then my sister looks at me and I start laughing. Just when I was ready to cry. And I do the same thing to her.

M.D. Like sometimes I look at T.V. programs that are sad. Like Shirley Temple shows. So anyway my sister makes fun of me when I cry.

F. Your sisters do that?

M.D. Yeah, when I start crying at T.V.

C.B. When my sister cries, she cries very easily. Like D.'s father and Lou Garrett she cried.

M.D. Well, see I like the players. But see I like both teams because I like their uniforms. (Laughing)

M.D. Well, they're different from now, you guys! (Laughter) See they're like antique uniforms. And so I like old things. I collect old things. Like my brother gave my father those old fashion shaving jars they used to put the shaving cream on their face? My grandfather probably had one of those. So we could not find anything to give him, so we went to this antique shop. I like to go in there because I like those lamps. My cousin gave my ma this antique lamp for her birthday. It's about this big. (About 1-1/2 to 2 feet) And it's real pretty but I don't know if it works. Yeah.

M.D. And then we had some of the stuff from my grandma. It was like antique. I don't know what happened to it but . . . I like old things . . . antiques. See I have a junk room with all kinds of old things I collected.

F. Maybe you'll be rich someday.

M.A.G. My whole closet looks like a junk room. (Laughter)

F. C., how do you respond when somebody is crying?

M.D. I feel sorry for them.

C.S. I don't know (words lost).

F. Do you feel comfortable, uncomfortable, embarrassed at all?

C.S. No.

F. Do you try to get out of the situation?

M.J. She cries. (Laughter)

F. You what? She cries?

M.J. One time this girl was crying and she started crying (words lost).

M.D. All together now, girls. (Loud screaming and giggling)

C.S. I don't know. I sit there and start thinking of all the things that could be the matter with her or that it could be me.

F. Are you embarrassed? When she just said you cry when somebody else does, are you embarrassed about that?

C.S. No. It's just that they're always teasing me about it. Cause every little thing, I'll cry. Or any time a sad show is on, I'll cry. And like Sounder, a dog, he got shot in the face you know. And you know that all the blood in his face was fake because it's just a movie. But still I couldn't stop crying. You should've seen me. I couldn't stop crying.

M.D. When the father came home I was crying happy tears because like my mom and dad was gone for a whole month in Europe. And like I kind of missed him, but I didn't start crying. So like I was thinking what if for that month he was in jail and I'd be very happy too.

- F. If he were in jail for a month, you'd be very happy? (Loud laughing and yells of "No!")
- M.D. No, I'd be happy for him to come home.
- F. Oh, I'm going to have to see that.
- M.D. It was a good show. (Short silence)
- F. Let me have a simple show of hands. Who thinks it's a weakness to cry in front of people?
- M.D. A weakness?
- K.G. I don't understand.
- F. Like if you cry in front of people you're weak somehow.  
(Several hands raised.)
- M.D. Oh, I'm strong though.
- F. I don't mean that kind of weak. I mean that you're a weak person that . . .
- N.H. Sometimes you try to hold it back and it just comes out.
- K.G. Yeah.
- M.D. Yeah. That's what I tried to do. I tried to hold it back but I couldn't.
- F. Yeah.
- C.B. Anyway, you look at it, you can't hold it back.
- F. Who would see it as a strength? (No hands raised) None of you?
- C.S. I would.
- M.D. I would too.
- F. Do you see it as a strength or weakness to cry? Instead of holding it in?
- M.A.G. I say strength.
- F. I agree. How did you feel last week when you gave M. the Kleenex? Or when she was crying? The whole situation.

- P.G. She felt pretty bad about her sister. I was going to cry but I was so scared. I don't know, my heart was just beating. So I just got to get out.
- K.G. Yeah, me too.
- F. But you stayed.
- P.G. I didn't want to leave.
- F. Why not?
- P.G. I don't know why. If I would've left I would have . . .
- F. Go on. Use your own words. If you would have left, you would have felt what?
- P.G. You know, like M. (M.J.) said if everybody was gonna leave. You know, then she'd be all alone, I don't know.
- F. Yeah, that's kind of what M. was saying she felt. Anyway its kind of typical that, you know, most people say you don't cry . . . that most people see that as a weakness. But if you try to really think how hard it would be for you to talk about something that you were crying about here. And really think about how hard it would be for you to cry in front of all of us, then you'd see that it's not a weakness, it's a strength. (Short silence)
- K.G. Hmmm!
- C.B. The only time that I cried one time was when my sister went to college. By that time I finally realized that w-we were close, you know, and v-very much close. My sister cried too. (Stuttering and voice is breaking)
- F. Knowing that she was going to go away?
- C.B. Yeah. Just about then. She finally said "Goodbye" and my eyes broke down. I couldn't help it, you know. And then my brother started crying. Because, you know, they fight like cats and dogs. And you know . . .

M.D. And then they end up fighting! (Laughter)

C.B. No! We didn't. But he did say, "Oh shut up!" You know.

"You can go."

M.D. Is it time to go already?! (Teachers entering the room early)

General: No.

F. About 5 or 10 more minutes.

C.B. And so . . . then my brother started crying . . . And that's the first time I ever really realized my brother really . . . loved my s-sister, you know. Cause that's all, y-you see them do is fighting and "Oh, I hate you!" You know. But they really don't mean it. It's normal.

F. Yeah. Um hmm. Something kind of similar to that came up in the other session today where they were saying how it's easy for those of us who have parents to talk about how much we hate them and stuff. But it's different for kids who don't have their parents. Then you realize that when you come up against something, you've got to figure it all out by yourself.

K.G. Yeah.

M.A.G. It was like my brother. He was going . . . going to the Air Force. So he went to try out but he didn't make it, you know. Before he took this test, he was telling me stuff like about his things. "Make sure it doesn't get broken" and all that. And like sometimes I go in his room when he's not home, you know. But then I think what if they sent him to Viet Nam to fight or something, you know. And what if he never comes home, you know.

F. Yeah.

M.A.G. Ohhh! (sighs. Short silence)

M.D. (Says something funny. Some laughs.)

F. Do you live with your grandmother only?

N.H. Yeah.

F. I remember you said something about the hours your grandmother makes you come in.

K.G. What?

F. One time when we were talking about curfews, you said your grandmother made you come in at 8:30 or so.

N.H. Oh yeah.

K.G. She lives with her grandmother and her brother.

M.D. Her grandmother has rules about what time she should come in.

F. Um hm. Are your parents alive?

N.H. No.

F. How? What happened?

N.H. (Starts to cry with face in hands.)

F. You don't want to talk about it? (Short silence.) You might as well let it out. Maybe you'll feel better. (Silence. N.H. crying.) Were you old enough to remember them?

N.H. (Shakes head "Yes") Umm.

M.D. Are you laughing? (to N.H.)

F. She's trying to get (words lost).

N.H. When I was five my mother died. Ummm. And last year my father died.

F. Oh, your father too. Umpf. (Silence) Was it . . . like a horrible death?

N.H. Well. No, after my mother died, my father had a heart attack. And after all that he was just sick and taking pills and everything.

F. Did she die a natural death? Or . . . ?

N.H. Well, she was . . . just 35 (sobbing).

F. Boy, that's young. (Silence)

N.H. And he was only . . . he'd just turned 41. (Pause)

F. Is your brother older or younger?

N.H. He's younger than me.

F. So he doesn't remember her as well.

N.H. No. He had to go live with my aunt because my dad couldn't keep both of us. He had to go to work.

F. So he had to live with your aunt, and you lived with your grandmother, for a while?

N.H. And then my father got married again and then, he came to live with us. Then we all lived together. (Sobbing)

F. Oh. (Silence) Is this grandmother your mother's mother or?

N.H. My father's. She always took care of us.

F. Even before . . . your father died?

N.H. Yeah.

F. Do you have anyone you can talk to? About that? You know, how you feel about it? You must feel lonely sometimes, huh? Do you have anybody you can talk with or do you have to keep it all in?

N.H. (Cries again) My monkey! (Some laughing)

F. You have a monkey? (Silence)

N.H. I had him when I was real little. He's a stuffed animal. (Crying)

F. Oh, a stuffed animal! (Surprised) Well, something's better than nothing.

M.D. I wanted a real live monkey. But my ma says it smells too much. (Slight laughing) Well, they do. My cousin had one. It really stunk. I guess she gave it away or sold it. Probably sold it.



M.A.G. I do that sometimes. Like one time I had real bad cramps, you know. And my mom and nobody else was home. Like my mom said you just have to live through it [cramps]. So I wanted something to hug and hold. And I had this [stuffed] turtle. So I hugged and held it. (Silence)

M.D. When I got that sore throat, I had to start holding my throat like this. Because it was so hard to swallow. When I had tonsillitis that really hurt when I had to swallow something. Like when I was swallowing something I had to grab onto the couch because it feels like something is poking at you . . . at your tonsils.

F. Um hmm.

M.D. And I just couldn't stand it.

F. How did? How did that fit in?

M.D. What?

F. Why did you think of that?

M.D. Well, she wanted to hold onto something.

F. And you wanted to hold onto the couch?

M.D. Yeah. No. I just wanted to hold on so I wouldn't fall over.

K.G. To get off the floor.

M.D. No! I was on the couch. Me and my brother both had it at the same time. So we had the couch together. It's like in parts and you can put it together.

F. A sectional?!

M.D. Yeah. So my brother and I would lay on it when we were sick. My mother kept it like that. So we could lay there and see the T.V. real good. And my mom's godchild too. He always plays in his playpen. And when I go around to get him, he sneaks back out. So I just let him stay there until I felt like getting up because I was real comfortable . . . comforting . . . comfort . . .

F. Can I ask you a question?

M.D. Huh?

F. Are you partly talking to take the heat off N.?

M.D. Ummm -- a little.

K.G. What?

F. Partly the reason that she's talking is to get the focus off of N.

K.G. Yeah. (Silence)

F. Do you feel uncomfortable when other people cry?

M.D. What?

F. Do you feel uncomfortable with N. crying?

M.D. Not really.

K.G. I feel like I should do something but I don't know what!

Several: Yeah.

K.G. I feel like crying too.

M.D. That's what I feel too.

F. Is there anything you feel like we could do? In terms of talking about it or anything?

K.G. You can't just keep crying all the time. Like it was too long in between each of their deaths. Like her father died a long time. Like her father suffered because he had to keep taking medicine like to make him better or something.

F. Um hm. To make who better?

K.G. Her father, you know.

F. He got sick as a result of his wife's death?

K.G. I don't know. Maybe before her death.

F. Well, that's what you're saying, isn't it? That he got sick with a heart attack after his wife's death. So he lived for six years longer.

N.H. Ten

F. Ten. Do you feel like you really accept it? The fact that they're gone or . . . ? Not like do you not ever miss them but like . . . ?

N.H. Well, hers. But not him (sobbing). It's like he's always there.

F. Um hm. And it's only you and your brother, right? Only the two of you?

N.H. (Nods "yes")

F. If you don't have anybody you can like talk it through with, like get to a point that you've got to live from now on, you may never get over it. You may never really realize and accept the deaths, other than your mothers. Which really doesn't . . .

N.H. (Starts heavier crying. Pause) Well, I can't talk to my grandmother about it because she just starts to cry. And, well, I'm close to my cousins but . . . well, their father died too and I don't know . . . if I can.

F. Does your family at all . . . like try not to talk about it? Like hoping that they don't hurt you but in the process not letting you get a chance to work it out with yourself.

N.H. Yeah. Well, I always have to bring it out.

F. But you're able to bring it out?

N.H. Some . . . like sometimes to my cousins I'll go, "He's dead" like that. And they'll change the subject right away.

F. How do you feel? Do you feel . . . cheated when they do that?

N.H. Yeah. (Sobbing)

F. That they should have at least let you talk about it?

N.H. Well, sometimes I . . . I feel uhh . . . I don't know. Sometimes I feel like they are but they don't want to say it like. It's not easy to talk about it, if they don't want to hear about it. (Crying again gets heavier.)

F. Um hmm. (Silence) I knew a girl once. I knew a guy who knew a girl once who was seeing her in treatment. And her father had died something like 21 years ago, by the time she was seeing him. And because people had always like thought they were doing the right thing by not talking about it. From the time he had died she had not been able to talk about it and she really had not buried him. After 21 years it was almost as if he had not died. And so although everybody thought they were doing the right thing by not talking about it, it caused her to have to keep it inside.

C.B. (Crying) I remember when my Uncle Joe died. He was like a father to me . . . (Silence)

F. Your Uncle Joe?

C.B. Yeah.

F. Your mother's brother?

C.B. No, my grandma's brother. (Crying with face in hands.)

F. Go on and let it out. (Crying)

M.A.G. (Begins nervously laughing)

F. Are you feeling embarrassed?

M.A.G. No, I feel so wierd with everyone crying.

F. I think everyone is aware that we're coming to the end of our session<sup>s</sup> And you only have two more times to really be together. (M.D. has begun to cry. And K.G. is obviously saddened but holding back her tears. M.A.G., C.S., P.G. and M.J. are smiling embarrassedly. M.J. and C.S. had been at a distance from the group. But moved into the circle about the time N.H. began to cry.)

F. Were you able to cry then? Did anyone let you cry it out?

C.B. No, I couldn't.

F. Why not?

C.B. I don't know.

F. You didn't or people didn't let you?

C.B. People didn't let me.

F. How long ago was this?

C.B. Two years ago.

F. That's a long time.

C.B. (Still crying) (Silence)

F. I hope that the girls that are . . . crying or feeling bad understand that the other girls are not laughing at you. I think they're all embarrassed and they don't know what to do with their mouths other than laugh.

K.G. (Loudly laughs which she typically does to mask her true feelings)

F. Is there anything you want to say, C.? (Pause) How old was he? You say uncle, but was he older than you?

C.B. Yeah, a lot older . . . See he died with brain damage. . .

F. Was he like a . . . ? Your father's not living with you, right?

C.B. No. (Cries harder) I don't have a father.

F. So he kind of acted like your substitute father?

C.B. (Shakes head affirmatively.)

F. So that's why you were so close to him?

C.B. (Shakes head affirmatively.)

(That is much noise from the next room and teachers are entering the session room to take chairs for a faculty meeting.)

F. This seems like the wrong time to stop the session. But if you want to talk, we can talk for a few minutes. Anybody can say anything. Because they're going to have this meeting. (Pause)

Do you feel a little better?

C.B. (Nods affirmatively. Still in tears)

(Silence)

F. Okay then. I'll see you next week.

# CORRELATION MATRIX FOR PRE-POST TEST SCORES

ON ALL TEST MEASURES FOR ALL GROUPS

	1	2	3	4	5	6	7	8
1. DAP I								
2. DAP II	.15							
3. DAP III	.25	.19						
4. DAP IV	.12	.04	.07					
5. DAP-Tot	.60***	.48***	.77***	.48***				
6. DAP-M	.60***	.48***	.77***	.48***	1.00***			
7. SA-T	.17	-.03	.18	-.06	.14	.14		
8. SA-M	.17	-.03	.18	-.06	.14	.14	1.00***	
9. WRAT Tot	.16	.20	.08	-.02	.16	.16	-.21	-.21
10. SG-2	.17	-.12	-.05	-.15	-.06	-.06	-.20	-.20
11. SG-3	.14	-.00	-.07	-.16	-.06	-.06	-.14	-.14
12. WRAT-Rdg GL	.21	-.10	-.10	+.08	.02	.02	-.12	-.12
13. WRAT-Splg GL	.03	.24	.07	-.08	.09	.09	-.13	-.13
14. WRAT-Ar GL	-.03	.19	.05	.06	.05	.05	-.19	-.19

\*  $r = \pm .2640$  significant at .05; \*\*  $r = \pm .3425$  significant at .01; \*\*\*  $r = \pm .4293$  significant at .001.

## CORRELATION MATRIX (Continued)

	1	2	3	4	5	6	7	8
15. WRAT-Rdg SS	.25	-.05	-.04	-.05	.07	.07	-.16	-.16
16. WRAT-Splg SS	.05	.21	.11	-.04	.14	.14	-.11	-.11
17. WRAT-Ar SS	.01	.24	.10	-.03	.12	.12	-.19	.19
18. TSCS-SC	-.04	.15	.08	+.21	.16	.16	.05	.05
19. T/F	.11	-.04	.06	-.11	.02	.02	-.03	-.03
20. Net C	.16	-.02	.10	-.05	.13	.13	-.05	-.05
21. Tot C	.08	.00	.06	-.22	.02	-.02	.19	.19
22. Tot P	.17	-.29*	-.07	.16	-.00	-.00	-.03	-.03
23. R 1	.05	-.04	-.01	.05	.02	.02	.04	.04
24. R 2	.21	-.25	-.09	.23	.04	.04	-.11	-.11
25. R 3	.15	-.32*	-.05	.01	-.07	-.07	.01	.01
26. Col A	.17	-.23	.02	.13	.06	.06	-.05	-.05
27. Col B	.22	-.20	-.06	-.14	-.07	-.07	-.01	-.01
28. Col C	-.03	-.12	-.09	.07	-.07	-.07	-.11	-.11
29. Col D	.25	-.29*	-.15	.15	-.03	-.03	.07	.07
30. Col E	.06	-.20	.02	.32*	.10	.10	-.08	-.08

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.



CORRELATION MATRIX (Continued)

	1	2	3	4	5	6	7	8
31. V Tot	-.14	.30*	.21	.11	.21	.21	.19	.19
32. V Col	-.23	.26	.17	-.02	.09	.09	.20	.20
33. V Row	-.00	.24	.19	.15	.24	.24	.02	.02
34. D	.15	-.20	.07	.11	.08	.08	.23	.23
35. D 5	.20	-.05	.14	.09	.17	.17	.15	.15
36. D 4	-.07	-.10	-.05	-.06	-.11	-.11	-.03	-.03
37. D 3	-.09	.22	.00	-.08	.01	.01	-.24	-.24
38. D 2	-.15	-.03	-.05	.03	-.08	-.08	-.05	-.05
39. D 1	.14	-.20	.05	-.00	.02	.02	.27*	.27*
40. DP	.19	-.26	-.09	.02	-.05	-.05	-.10	-.10
41. GM	.04	.19	.17	-.01	.17	.17	-.00	-.00
42. Psy	.09	-.09	-.00	-.20	-.07	-.07	.06	.06
43. PD	-.24	.08	-.04	-.05	-.11	-.11	.02	.02
44. N	-.19	.20	.02	-.13	-.05	-.05	.03	.03
45. PI	-.23	.05	-.16		.25	.25	-.07	-.07
46. NDS	.11	.01	.02	.06	.03	.03	.06	.06

\*  $r = +.2640$  significant at .05; \*\*  $r = +.3425$  significant at .01; \*\*\*  $r = +.4293$  significant at .001.

CORRELATION MATRIX (Continued)

	1	2	3	4	5	6	7	8
47. SD-MDS	-.11	-.04	-.05	-.06	-.11	-.11	.04	.04
48. I	-.04	-.14	-.06	.01	-.09	-.09	.03	.03
49. I-U	-.02	-.05	-.09	.07	-.10	-.10	-.06	-.06
50. I-G	.17	-.07	-.06	-.05	-.01	-.01	-.10	-.10
51. 6U Fct I	.02	-.13	-.01	-.06	-.06	-.06	.06	.06
52. 6U Fct II	.04	-.08	-.01	-.05	-.04	-.04	.06	.06
53. 6U Fct III	.00	-.10	-.01		-.04	-.04	.05	.05
54. 6G Fct I	.01	-.10	-.02		-.05	-.05	.05	.05
55. 6G Fct II	.04	-.09	.02	-.07	-.03	-.03	.11	.11
56. 6G Fct III	.05	-.11	-.03	-.05	-.05	-.05	.08	.08
57. 10 U Fct I	-.01	-.11	-.00	.02	-.03	-.03	.09.	.09
58. 10U Fct II	.01	-.09	-.00	.01	-.02	-.02	.11	.11
59. 10U Fct III	.01	-.13	.01	.03	-.02	-.02	.10	.10
60. 10G Fct I	-.01	-.11	-.00	-.02	-.05	-.05	.10	.10
61. 10G Fct II	-.00	-.11	-.01	-.06	-.06	-.06	.11	.11

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

# CORRELATION MATRIX (Continued)

	1	2	3	4	5	6	7	8
62. 10G Fct III	.04	-.10	.01	-.05	-.03	-.03	.14	.14
63. 14U Fct I	-.04	-.15	-.06	.04	-.08	-.08	.05	.05
64. 14U Fct II	-.03	-.18	-.02	-.01	-.08	-.08	.09	.09
65. 14U Fct III	.02	-.13	-.03	.03	-.04	-.04	.09	.09
66. 14G Fct I	-.08	-.13	-.04	.01	-.09	-.09	.05	.05
67. 14G Fct II	-.04	-.15	-.01	.02	-.06	-.06	.06	.06
68. 14G Fct III	-.06	-.12	-.04	.05	-.06	-.06	.07	.07
69. 17U Fct I	-.05	-.15	-.07	.04	-.09	-.09	.04	.04
70. 17U Fct II	-.04	-.17	-.03	.03	-.07	-.07	.09	.09
71. 17U Fct III	-.04	-.15	-.06	.05	-.07	-.07	.07	.07
72. 17G Fct I	-.08	-.14	-.06	.01	-.10	-.10	.05	.05
73. 17G Fct II	-.09	-.18	-.08	.01	-.13	-.13	.07	.07
74. 17G Fct III	-.08	-.12	-.06	.04	-.08	-.08	.07	.07
75. C-E 2	-.01	-.18	-.03	-.01	-.08	-.08	.05	.05
76. C-E 3	-.00	-.05	.02	.03	.01	.01	-.01	-.01

\*  $\underline{r} = + .2640$  significant at .05; \*\*  $\underline{r} = + .3425$  significant at .01; \*\*\*  $\underline{r} = + .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	1	2	3	4	5	6	7	8
77. C-E 4	.02	-.11	.02	.05	.00	.00	.11	.11
78. C-E 5	.05	-.16	-.02	-.03	-.05	-.05	.08	.08
79. C-E 6	.05	-.07	-.01	-.08	-.04	-.04	.14	.14
80. C-E 7-8	-.06	-.06	-.02	-.01	-.05	-.05	.06	.06
81. C-E 9	.08	.00	.09	-.12	.04	.04	.11	.11
82. C-E 10	.13	-.08	.15	-.09	.07	.07	.01	.01
83. C-E 11	.13	-.13	.04	-.09	-.01	-.01	.13	.13
84. C-E 12	.14	.00	.09	-.19	.04	.04	.14	.14
85. C-E 13	-.02	-.11	.04	-.05	-.04	-.04	.07	.07
86. C-E 14	-.10	-.15	.03	-.03	-.07	-.07	.14	.14
87. C-E 15	-.22	-.12	.03	-.10	-.14	-.14	.14	.14
88. C-E 16	-.07	-.08	.01	-.02	-.05	-.05	.01	.01
89. C-E M	-.04	-.14	-.02	-.04	-.08	-.08	-.06	-.06
90. SD-D 6	.04	.02	+.02	.01	.01	.01	.06	.06
91. SD-D 10	.02	-.05	-.01	-.25	-.11	-.11	.11	.11

\*  $\underline{r} = +.2640$  significant at .05; \*\*  $\underline{r} = +.3425$  significant at .01; \*\*\*  $\underline{r} = +.4293$  significant at .001.

CORRELATION MATRIX (Continued)

	1	2	3	4	5	6	7	8
92. SD-D 14	-.19	-.02	-.01	-.03	-.08	-.08	.02	.02
93. SD-D 17	-.15	-.03	-.03	-.06	-.11	-.11	.06	.06
94. IQ	-.06	.08	.05	-.01	.02	.02	.02	.02

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

# CORRELATION MATRIX (Continued)

	9	10	11	12	13	14	15	16
1. DAP I								
2. DAP II								
3. DAP III								
4. DAP IV								
5. DAP-Tot								
6. DAP-M								
7. SA-T								
8. SA-M								
9. WRAT Tot								
10. SG-2	.10							
11. SG-3	.10	.66***						
12. WRAT-Rdg GL	.52***	.03	.08					
13. WRAT-Splg GL	.57***	.02	-.03	.05				
14. WRAT-Ar GL	.74***	.19	.14	.25	.09			
15. WRAT-Rdg SS	.65***	.01	.07	.95***	.16	.29*		

\*  $\underline{r} = + .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	9	10	11	12	13	14	15	16
16. WRAT-Splg SS	.60***	.01	.00	-.00	.97***	.10	.15	
17. WRAT-Ar SS	.78***	.18	.14	.20	.15	.98***	.26	.17
18. TSCS-SC	-.12	-.14	-.01	.06	-.07	-.18	.08	-.06
19. T/F	.08	-.11	-.04	.14	-.06	-.10	.20	.02
20. Net C	-.00	-.15	-.07	.11	-.16	-.13	.16	-.09
21. Tot C	.08	.07	.02	.11	-.12	.11	.14	-.12
22. Tot P	.25	.08	.09	.30*	.11	.11	.32*	.10
23. R 1	.27*	-.02	.01	.17	.20	.13	.22	.20
24. R 2	.14	.19	.20	.18	.06	.08	.15	.05
25. R 3	.18	-.05	-.01	.29*	.04	.05	.33*	.04
26. Col A	.04	.04	.10	.21	-.02	-.09	.23	-.03
27. Col B	.36**	.15	.28*	.21	.14	.26	.26	.16
28. Col C	.18	.02	-.04	.11	.09	.14	.11	.10
29. Col D	.07	.09	.01	.05	-.11	.17	.06	-.12

\*  $r = \pm .2640$  significant at .05; \*\*  $r = \pm .3425$  significant at .01; \*\*\*  $r = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	9	10	11	12	13	14	15	16
30. Col E	.13	.03	.01	.26	.08	-.03	.27*	.11
31. V Tot	.04	-.28*	.21	-.11	.16	-.04	-.04	.17
32. V Col	.00	-.26	-.26	-.13	.20	-.10	-.07	.20
33. V Row	.11	-.13	-.07	-.10	.18	.07	-.06	.19
34. D	-.00	-.04	.02	.14	-.09	-.07	.18	-.05
35. D 5	.06	-.12	-.01	.17	-.12	-.04	.25	-.07
36. D 4	-.15	-.06	-.06	-.11	-.02	-.16	-.17	-.02
37. D 3	.15	.07	.01	.06	.16	.14	.05	.11
38. D 2	-.18	.04	-.03	-.29*	-.03	-.02	-.33*	-.06
39. D 1	.09	.11	.16	.20	.05	.04	.20	.05
40. DP	.19	.13	.15	.23	.03	.07	.25	.05
41. GM	-.33*	-.07	-.04	-.26	-.10	-.28*	-.30*	-.08
42. Psy	.28*	+.05	.04	.17	.09	.19	.21	.10
43. PD	-.24	-.18	-.17	-.11	-.16	-.20	-.11	-.14

\*  $r = \pm .2640$  significant at .05; \*\*  $r = \pm .3425$  significant at .01; \*\*\*  $r = \pm .4293$  significant at .001.



CORRELATION MATRIX (Continued)

	9	10	11	12	13	14	15	16
44. N	-.12	.08	.07	-.29*	.02	-.01	-.28*	.02
45. PI	.01	-.08	-.07	-.02	.07	.08	-.07	.04
46. NDS	-.01	-.05	.04	.03	.01	-.21	.13	.08
47. SD-MDS	-.17	-.01	.14	-.05	-.02	-.19	-.09	-.04
48. I	-.27*	.14	.28*	-.17	-.17	-.09	-.27*	-.18
49. I-U	-.17	.23	.33*	-.12	-.14	.01	-.20	-.16
50. I-G	-.13	.31*	.28*	-.16	-.22	.10	-.21	-.21
51. 6U Fct I	-.24	.20	.32*	-.13	-.12	-.09	-.23	-.14
52. 6U Fct II	-.21	.21	.30*	-.13	-.13	-.03	-.24	-.15
53. 6U Fct III	-.23	.21	.33*	-.13	-.14	-.05	-.24	-.15
54. 6G Fct I	-.26	.18	.32*	-.14	-.10	-.13	-.25	-.12
55. 6G Fct II	-.28*	.21	.32*	-.14	-.14	-.14	-.25	-.16
56. 6G Fct III	-.29*	.18	.28*	-.13	-.14	-.17	-.25	-.15
57. 10U Fct I	-.26*	.15	.27*	-.20	-.16	-.06	-.30*	-.18

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	9	10	11	12	13	14	15	16
58. 10U Fct. II	-.27*	.15	.29*	-.21	-.20	-.05	-.29*	-.20
59. 10U Fct III	-.25	.15	.24	-.16	-.17	-.04	-.28*	-.19
60. 10G Fct I	-.23	.14	.28*	-.15	-.12	-.07	-.24	-.14
61. 10G Fct II	-.23	.17	.32*	-.15	-.15	-.06	-.24	-.17
62. 10G Fct III	-.24	.18	.30*	-.16	-.16	-.06	-.24	-.17
63. 14U Fct I	-.30*	.12	.25	-.20	-.19	.10	-.30*	-.20
64. 14U Fct II	-.30*	.16	.28*	-.17	-.17	-.13	-.27	-.18
65. 14U Fct III	-.29*	.17	.28*	-.16	-.17	-.11	-.27*	-.19
66. 14G Fct I	-.28*	.10	.25	-.18	-.15	-.11	-.27*	-.17
67. 14G Fct II	-.30*	.13	.27*	-.18	-.19	-.13	-.27*	-.21
68. 14G Fct III	-.28*	.10	.21	-.16	-.14	-.12	-.26*	-.17
69. 17U Fct I	-.28*	.09	.23	-.19	-.14	-.12	-.28*	-.15
70. 17U Fct II	-.28*	.14	.27*	-.17	-.21	-.08	-.26*	-.22
71. 17U Fct III	-.30*	.09	.23	-.17	-.20	-.12	-.28*	-.21

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	9	10	11	12	13	14	15	16
72. 17G Fct I	-.28*	.09	.25	-.16	-.13	-.13	-.26	-.15
73. 17G Fct II	-.27*	.09	.24	-.15	-.17	-.12	-.23	-.18
74. 17G Fct III	-.27*	.08	.23	-.15	-.13	-.12	-.24	-.15
75. C-E 2	-.32*	.26	.38**	-.14	-.21	-.16	-.23	-.21
76. C-E 3	-.29*	.16	.26	-.11	-.12	-.14	-.23	-.17
77. C-E 4	-.24	.25	.21	-.06	-.27*	-.01	-.19	-.29*
78. C-E 5	-.28*	.29*	.38**	-.04	-.25	-.09	-.18	-.27*
79. C-E 6	-.10	.08	.22	-.04	-.01	-.00	-.13	-.05
80. C-E 7-8	-.25	.12	.22	-.13	-.15	-.07	-.25	-.16
81. C-E 9	-.10	.28*	.52***	-.04	-.14	.08	-.12	-.16
82. C-E 10	-.24	.38**	.45***	-.13	-.20	-.05	-.21	-.22
83. C-E 11	-.18	.23	.34*	-.15	-.30*	.05	-.21	-.25
84. C-E 12	-.17	.24	.33*	-.16	-.10	-.03	-.22	-.11
85. C-E 13	-.14	.20	.37**	-.11	-.27*	.12	-.21	-.25

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	9	10	11	12	13	14	15	16
86. C-E 14	-.28*	.26	.46***	-.03	-.16	-.14	-.15	-.19
87. C-E 15	-.21	.15	.35***	-.16	-.11	-.06	-.22	-.11
88. C-E 16	-.27*	.19	.31*	-.16	-.16	-.09	-.27	-.17
89. C-E M	-.29*	.18	.30*	-.16	-.19	-.10	-.27	-.20
90. SD-D 6	-.29*	.01	.09	-.13	.00	-.37	-.19	-.01
91. SD-D 10	.04	.07	.25	.18	.09	-.08	.15	.08
92. SD-D 14	-.12	-.04	.10	-.07	-.00	-.10	-.08	-.02
93. SD-D 17	-.11	.02	.16	.00	-.01	-.10	-.05	-.04
94. IQ	-.02	.01	-.05	.19	-.11	.09	.10	-.19

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	17	18	19	20	21	22	23	24
17. WRAT-Ar SS								
18. TSCS-SC	-.14							
19. T/F	-.04	.11						
20. Net C	-.07	.16	.90***					
21. Tot C	.10	.07	.31*	.28*				
22. Tot P	.09	-.14	.11	.12	-.12			
23. R 1	.14	.15	.17	.17	.14	.75***		
24. R 2	.07	-.14	-.08	-.05	-.27*	.71***	.29*	
25. R 3	.01	-.21	.13	.15	-.11	.78***	.51***	.29*
26. Col A	-.10	.07	.15	.14	-.01	.72***	.59***	.50***
27. Col B	.27*	-.29*	-.01	-.01	-.03	.61***	.35**	.44***
28. Col C	.13	-.28*	-.01	-.07	.27*	.53***	.30*	.46***
29. Col D	.12	-.23	-.10	-.03	-.11	.67***	.39**	.62***
30. Col E	-.03	.25	.23	.28*	-.07	.61***	.58***	.29*

\*  $r = \pm .2640$  significant at .05; \*\*  $r = \pm .3425$  significant at .01; \*\*\*  $r = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	17	18	19	20	21	22	23	24
31. V Tot	.01	.38**	.03	.14	.19	-.21	.12	-.26*
32. V Col	-.06	.38**	.01	.08	.23	-.26	.23	-.48***
33. V Row	.12	.14	.04	.12	.01	-.14	-.19	.11
34. D	-.08	.29*	.16	.27*	.35**	.37**	.39**	.14
35. D 5	-.01	.38**	.37**	.55***	.46***	.23	.33*	.04
36. D 4	-.15	-.12	.31*	.09	-.19	-.03	-.07	-.03
37. D 3	.15	-.13	-.11	-.15	-.25	-.28*	-.30*	-.09
38. D 2	-.05	-.26	-.52***	-.50***	-.16	-.16	-.14	-.19
39. D 1	.05	.11	-.14	-.15	.15	.49***	.42**	.33*
40. DP	.05	-.45***	.38**	.41**	.03	.74***	.46***	.51***
41. GM	-.25	.21	-.00	.02	-.04	-.69***	-.58***	-.28*
42. Psy	.19	-.60***	.19	.16	.26	-.08	-.26	-.07
43. PD	-.19	.45***	.25	.26	.27*	-.62***	-.31*	-.55***
44. N	.02	.17	-.18	-.22	.17	-.81***	-.55***	-.61***

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

# CORRELATION MATRIX (Continued)

	17	18	19	20	21	22	23	24
45. PI	.01	-.02	-.16	-.29*	.01	-.05	.09	-.13
46. NDS	-.16	.21	.38**	.46***	.42**	-.33*	-.26	-.24
47. SD-MDS	-.19	-.02	.10	.19	.04	-.06	-.07	.03
48. I	-.10	-.07	-.03	.04	-.24	-.16	-.30*	.08
49. I-U	-.00	-.04	.03	.06	-.03	-.19	-.26	.09
50. I-G	.11	-.16	-.05	-.03	-.15	-.20	-.31*	.02
51. 6JFct I	-.49	-.09	-.02	.01	-.22	-.17	-.28*	.07
52. 6J Fct II	-.05	-.13	-.03	.01	-.25	-.19	.34*	.08
53. 6J Fct III	-.08	-.16	-.04	-.02	-.27*	-.15	-.33*	.12
54. 6G Fct I	-.15	-.12	-.02	.03	-.22	-.19	-.32*	.06
55. 6G Fct II	-.15	-.09	.02	.07	-.20	-.14	-.27*	.08
56. 6G Fct III	-.18	-.09	-.01	.05	-.21	-.20	-.32*	.07
57. 10U Fct I	-.08	-.07	-.03	.00	-.28*	-.17	-.31*	.03
58. 10U Fct II	-.06	-.06	-.01	.05	-.27*	-.18	-.32*	.01

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	17	18	19	20	21	22	23	24
59. 10U Fct III	-.06	-.07	-.04	.01	-.29*	-.18	-.31*	.06
60. 10G Fct I	-.08	-.08	-.03	.01	-.27*	-.18	-.31*	.04
61. 10G Fct II	-.07	-.02	-.01	.01	-.24	-.16	-.28*	.05
62. 10G Fct III	-.07	-.04	-.00	.04	-.22	-.16	-.26	.02
63. 14U Fct I	-.12	-.08	-.03	.02	-.29*	-.16	-.31*	.08
64. 14U Fct II	-.15	-.09	-.01	.03	-.22	-.17	-.27*	.03
65. 14U Fct III	-.13	-.05	-.05	.00	-.26*	-.14	-.27*	.08
66. 14G Fct I	-.13	-.05	-.01	.07	-.22	-.13	-.24	.07
67. 14G Fct II	-.14	-.05	-.02	.09	-.20	-.13	-.23	.05
68. 14G Fct III	-.13	-.03	-.23	.03	-.26	-.15	-.26*	.07
69. 17U Fct I	-.14	-.07	-.02	.02	-.30*	-.16	-.30*	.08
70. 17U Fct II	-.10	-.05	-.01	.03	-.28*	-.10	-.25	.12
71. 17U Fct III	-.14	-.05	.00	.05	-.32*	-.12	-.28*	.11
72. 17G Fct I	-.15	-.07	.00	.06	-.24	-.15	-.27*	.09

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.



CORRELATION MATRIX (Continued)

	17	18	19	20	21	22	23	24
73. 17G Fct II	-.14	-.04	.02	.06	-.18	-.14	-.23	.05
74. 17G Fct III	-.14	-.06	-.01	.06	-.22	-.11	-.22	.08
75. C-E 2	-.20	-.14	-.06	-.06	-.12	-.11	-.22	.03
76. C-E 3	-.18	-.09	-.19	-.15	-.27*	-.06	-.25	.25
77. C-E 4	-.03	.08	-.05	-.03	-.10	-.09	-.16	.12
78. C-E 5	-.13	-.11	.04	.00	-.16	.03	-.13	.20
79. C-E 6	-.02	-.02	.02	.01	-.12	-.08	-.14	.09
80. C-E 7-8	-.09	-.03	-.02	.06	-.18	-.33*	-.42**	-.02
81. C-E 9	.06	-.16	-.14	-.09	-.10	-.14	-.27*	.09
82. C-E 10	-.06	-.04	-.16	-.13	-.17	-.16	-.28*	.11
83. C-E 11	.02	-.14	.23	.22	-.04	.03	-.08	.05
84. C-E 12	-.03	-.09	.06	.03	-.08	-.09	-.21	.05
85. C-E 13	.10	-.26	.09	.06	.01	-.09	-.17	.03
86. C-E 14	-.18	.07	-.08	-.08	-.03	-.03	-.04	.09

\*  $r = \pm .2640$  significant at .05; \*\*  $r = \pm .3425$  significant at .01; \*\*\*  $r = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	17	18	19	20	21	22	23	24
87. C-E 15	-.07	.01	.03	-.00	.02	-.19	-.11	-.12
88. C-E 16	-.11	-.15	-.02	-.03	-.10	-.16	-.24	.02
89. C-E M	-.12	-.06	.01	.04	-.16	-.17	-.28*	.06
90. SD-D 6	-.36**	-.05	.09	.21	-.02	-.15	-.19	-.03
91. SD-D 10	-.08	-.01	.04	.05	-.03	-.07	-.08	.05
92. SD-D 14	-.10	.07	.13	.23	.04	.01	.05	.02
93. SD-D 17	-.12	-.03	.06	.12	.11	-.05	-.03	.02
94. IQ	.05	.11	-.03	.00	-.08	-.04	-.09	.04

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

# CORRELATION MATRIX (Continued)

	25	26	27	28	29	30	31	32
17. WRAT-Ar SS								
18. TSCS-SC								
19. T/F								
20. Net C								
21. Tot C								
22. Tot P								
23. R 1								
24. R 2								
25. R 3								
26. Col A	.52***							
27. Col B	.57***	.40**						
28. Col C	.48***	.25	.19					
29. Col D	.52***	.39**	.36**	.33*				
30. Col E	.53***	.32*	.09	.23	.21			

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	25	26	27	28	29	30	31	32
31. V Tot	-.23	-.13	-.23	-.37**	-.16	.01		
32. V Col	-.24	-.27*	-.37**	-.29*	-.32*	.13	.80***	
33. V Row	-.19	-.00	-.02	.27*	.00	-.22	.64***	.14
34. D	.36**	.32*	.21	-.06	.18	.44***	.37**	.27*
35. D 5	.22	.17	.14	-.24	.15	.37**	.44***	.35**
36. D 4	-.02	.16	.14	.21	-.14	-.09	-.22	-.25
37. D 3	-.30*	-.38**	-.13	-.03	-.16	-.25	-.24	-.10
38. D 2	-.02	-.08	-.10	.11	-.03	-.18	-.19	-.10
39. D 1	.38**	.32*	.36**	.06	.29*	.37**	.22	.15
40. DP	.68***	.46**	.51***	.52***	.45***	.41**	-.34*	-.38**
41. GM	-.70***	-.41**	-.38**	-.54***	-.50***	-.45***	.06	.02
42. Psy	.06	-.13	.32*	.09	-.03	-.41**	-.18	-.26
43. PD	-.54***	-.44***	-.73***	-.26	-.55***	-.08	.21	+.41**
44. N	-.67***	-.64***	-.42**	-.59***	-.56***	-.42**	.35**	.39**

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	25	26	27	28	29	30	31	32
45. PI	.00	.13	-.07	.04	-.02	-.13	-.14	-.12
46. NDS	-.23	.21	-.12	-.27*	-.38**	-.14	.19	.16
47. SD-MDS	-.05	-.05	.09	-.28*	-.01	-.05	.16	+.00
48. I	-.16	-.12	.01	-.19	-.03	-.09	-.05	-.19
49. I-U	-.21	-.16	.17	-.32*	-.09	-.16	-.02	-.17
50. I-G	-.20	-.23	.13	-.10	-.06	-.07	-.24	-.23
51. 6U Fct I	-.18	-.15	-.03	-.14	-.06	-.07	-.07	-.15
52. 6U Fct II	-.20	-.16	-.00	-.13	-.06	-.14	-.10	-.22
53. 6U Fct III	-.16	-.14	-.02	-.08	-.04	-.09	-.11	-.24
54. 6G Fct I	-.18	-.16	-.03	-.15	-.06	-.10	-.05	-.16
55. 6G Fct II	-.13	-.10	-.02	-.13	-.03	-.07	-.05	-.18
56. 6G Fct III	-.19	-.15	-.03	-.15	-.05	-.11	-.05	-.17
57. 10U Fct I	-.14	-.11	-.05	-.17	-.02	-.07	-.04	-.17
58. 10U Fct II	-.13	-.14	-.04	-.18	-.03	-.06	-.05	-.17

\*  $\underline{r} = + .2640$  significant at .05; \*\*  $\underline{r} = + .3425$  significant at .01; \*\*\*  $\underline{r} = + .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	25	26	27	28	29	30	31	32
59. 10U Fct III	-.16	-.11	-.05	-.16	-.02	-.08	-.04	-.17
60. 10G Fct I	-.15	-.14	-.05	-.17	-.04	-.08	-.03	-.16
61. 10G Fct II	-.15	-.11	-.02	-.19	-.02	-.07	-.04	-.17
62. 10G Fct III	.13	-.10	-.01	-.19	-.03	-.07	-.03	-.15
63. 14U Fct I	-.16	-.11	-.03	-.15	-.01	-.08	-.08	-.20
64. 14U Fct II	-.15	-.11	-.01	-.20	-.07	-.07	-.04	-.15
65. 14U Fct III	-.13	-.08	-.02	-.16	-.00	-.09	-.07	-.17
66. 14G Fct I	-.11	-.10	-.01	-.20	-.01	-.05	-.00	-.14
67. 14G Fct II	-.15	-.08	-.02	-.25	-.02	-.03	-.02	-.14
68. 14G Fct III		-.09	-.03	-.22	-.01	-.05	-.00	-.14
69. 17U Fct I	-.15	-.12	-.05	-.13	-.01	-.06	-.06	-.18
70. 17U Fct II	-.12	-.04	-.02	-.13	.04	-.06	-.08	-.21
71. 17U Fct III	-.12	-.08	-.05	-.12	.01	-.02	-.07	-.20
72. 17G Fct I	-.15	-.10	-.03	-.19	-.02	-.09	-.00	-.16

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	25	26	27	28	29	30	31	32
73. 17G Fct II	-.13	-.07	.01	-.24	-.01	-.07	.01	-.14
74. 17G Fct III	-.11	-.07	-.01	-.20	-.00	-.04	.01	-.13
75. C-E 2	-.06	-.17	.01	-.02	-.08	.04	-.13	-.13
76. C-E 3	-.13	-.12	-.03	.00	.02	-.02	-.10	-.18
77. C-E 4	-.16	.01	-.04	-.12	-.03	.01	.01	-.09
78. C-E 5	-.00	-.02	.03	.05	.04	.12	-.19	-.24
79. C-E 6	-.15	.01	-.01	-.02	-.06	-.12	.05	-.01
80. C-E 7-8	-.30*	-.30*	-.12	-.21	-.18	-.14	.09	-.06
81. C-E 9	-.17	-.08	.06	-.07	-.04	-.22	-.07	-.17
82. C-E 10	-.17	-.16	.02	-.13	-.00	-.05	-.13	-.20
83. C-E 11	.10	.00	.09	-.06	.11	.17	-.12	-.18
84. C-E 12	-.07	.01	.07	-.17	-.02	-.08	-.02	-.17
85. C-E 13	-.11	.01	.09	-.03	-.03	-.19	-.05	-.17
86. C-E 14	-.10	.09	-.04	-.09	-.04	-.00	.04	-.00

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	25	26	27	28	29	30	31	32
37. C-E 15	-.20	-.03	-.07	-.17	-.20	-.16	.14	.05
88. C-E 16	-.14	-.13	.02	-.13	-.10	-.09	-.01	-.14
89. C-E M	-.17	-.13	-.00	-.17	-.09	-.05	.00	-.12
90. SD-D 6	-.07	-.07	-.04	-.20	-.00	-.11	.11	-.02
91. SD-D 10	-.10	-.14	.07	-.11	-.07	-.05	.03	-.04
92. SD-D 14	.01	-.00	.06	-.30*	.00	.09	.24	.08
93. SD-D 17	-.09	-.00	.08	-.31*	-.06	-.12	.19	.03
94. IQ	-.05	-.13	-.20	-.04	.12	-.02	.27*	.18

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.



CORRELATION MATRIX (Continued)

	33	34	35	36	37	38	39	40
33. V Row								
34. D	.22							
35. D 5	.28*	.34***						
36. D 4	-.11	-.35**	.56***					
37. D 3	-.15	-.78***	.45***	-.16				
38. D 2	-.27*	-.20	.48***	.27*	-.22			
39. D 1	.15	.77***	.54***	-.41**	-.46***	-.30*		
40. DP	-.19	.21	.15	.15	-.25	-.13	.15	
41. GM	.13	-.25	.17	.12	.13	.03	-.35**	-.50***
42. Psy	.06	-.21	.11	.09	.17	-.06	-.20	.33*
43. PD	-.05	-.07	.09	.08	.08	-.10	-.37**	-.45***
44. N	.26	-.19	.10	-.12	.20	.07	-.23	-.70***
45. PI	-.20	-.26	.44***	.45***	-.16	.52***	-.26	-.03
46. NDS	.22	.27*	.45***	-.23	-.08	-.44***	-.03	-.04

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	33	34	35	36	37	38	39	40
47. SD-MDS	.24	.11	.12	-.00	-.13	-.11	.05	.08
48. I	.09	-.10	.14	.17	-.05	.06	-.10	-.00
49. I-U	.12	-.05	.03	.03	-.00	-.08	-.02	-.01
50. I-G	-.19	-.28*	.18	.04	.24	.01	-.21	-.13
51. 6U Fet I	.01	-.06	.14	.18	-.09	.09	-.03	.02
52. 6U Fet II	.05	-.13	.17	.16	-.01	.05	-.08	.01
53. 6U Fet III	.05	-.11	.19	.19	-.04	.06	-.04	.05
54. 6G Fet I	.06	-.07	-.14	.16	-.07	.06	-.05	.02
55. 6G Fet II	.06	-.06	-.13	.19	-.08	.05	-.04	.06
56. 6G Fet III	.05	-.09	-.14	.18	-.00	.05	-.08	.02
57. 10U Fet I	.09	-.07	-.15	.20	-.10	.14	-.08	-.02
58. 10U Fet II	.09	-.09	-.14	.18	-.07	.10	-.11	-.01
59. 10U Fet III	.09	-.10	-.16	.20	-.06	.10	-.10	-.03
60. 10G Fet I	.10	-.07	-.14	.18	-.08	.11	-.07	-.02

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	33	34	35	36	37	38	39	40
61. 10G Fct II	.08	-.07	-.13	.18	-.07	.09	-.06	-.04
62. 10G Fct III	.07	-.04	-.10	.17	-.11	.11	-.05	-.03
63. 14U Fct I	.06	-.11	-.18	.20	-.05	.12	-.11	-.02
64. 14U Fct II	.05	-.04	-.13	.20	-.13	.12	-.05	-.00
65. 14U Fct III	.03	-.08	-.16	.19	-.08	.13	-.07	-.01
66. 14G Fct I	.11	-.04	-.10	.17	-.10	.06	-.07	.02
67. 14G Fct II	.10	.01	-.06	.15	-.14	.08	-.03	.02
68. 14G Fct III	.12	-.06	-.12	.17	-.10	.10	-.08	-.00
69. 17U Fct I	.07	-.12	-.18	.21	-.05	.12	-.12	-.00
70. 17U Fct II	.06	-.12	-.18	.22	-.06	.11	-.12	.02
71. 17U Fct III	.06	-.12	-.17	.23	-.05	.10	-.13	.00
72. 17G Fct I	.14	-.06	-.13	.19	-.10	.06	-.07	.02
73. 17G Fct II	.13	-.01	-.08	.17	-.14	.08	-.06	.01
74. 17G Fct III	.11	-.03	-.10	.17	-.12	.06	-.05	.05

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	33	34	35	36	37	38	39	40
75. C-E 2	-.14	-.01	-.16	.17	-.13	.17	.06	.05
76. C-E 3	.02	-.16	-.26	.18	.02	.08	-.00	.01
77. C-E 4	.04	.03	-.06	.11	-.15	.02	.07	-.05
78. C-E 5	-.12	-.03	-.17	.25	-.11	.05	.08	.17
79. C-E 6	.05	-.01	-.06	.14	-.08	-.10	.05	-.01
80. C-E 7-8	.18	-.08	-.08	.09	-.02	-.03	-.11	-.09
81. C-E 9	.06	-.07	-.08	-.03	.03	-.00	.05	-.05
82. C-E 10	-.04	-.14	-.18	.11	.00	.18	-.05	-.07
83. C-E 11	-.09	.04	-.02	.20	-.19	.00	.01	.23
84. C-E 12	.14	.11	-.02	.17	-.24	.02	.16	.04
85. C-E 13	.07	.04	-.04	.13	-.18	.10	.03	.11
86. C-E 14	.00	.13	-.02	.08	-.21	.04	.22	-.04
87. C-E 15	.13	.13	-.02	.17	-.31*	.14	.09	-.05
88. C-E 16	.09	.04	-.10	.14	-.18	.13	.09	.02

\*  $\underline{r} = + .2640$  significant at .05; \*\*  $\underline{r} = + .3425$  significant at .01; \*\*\*  $\underline{r} = + .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	33	34	35	36	37	38	39	40
89. C-E M	.09	.02	-.10	.18	-.12	.03	-.01	-.00
90. SD-D 6	.19	-.02	.05	.01	-.01	-.07	-.10	.05
91. SD-D 10	.06	.06	.07	-.04	-.01	-.08	.11	-.02
92. SD-D 14	.26	.19	.19	-.01	-.20	-.13	.08	.11
93. SD-D 17	.29*	.19	.13	.00	-.22	-.11	.15	.09
94. IQ	.20	-.07	-.03	-.02	.03	-.01	-.07	-.12

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

# CORRELATION MATRIX (Continued)

	41	42	43	44	45	46	47	48
33. V Row								
34. D								
35. D 5								
36. D 4								
37. D 3								
38. D 2								
39. D 1								
40. DP								
41. GM								
42. Psy	-.13							
43. PD	.36**	-.14						
44. N	.40**	.00	.48***					
45. PI	.04	-.03	-.11	-.10				
46. NDS	.30*	.21	.48***	.29*	-.42**			

\*  $r = + .2640$  significant at .05; \*\*  $r = + .3425$  significant at .01; \*\*\*  $r = + .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	41	42	43	44	45	46	47	48
47. SD-MDS	.16	.10	-.01	.06	.06	.12		
48. I	.27*	.09	-.02	.16	.06	-.02	.64***	
49. I-U	.31*	.09	-.04	.22	.02	.11	.76***	.86***
50. I-G	.23	.02	-.02	.25	-.03	-.02	-.01	.59***
51. 6U Fct I	.29*	.05	-.02	.14	.06	-.03	.56***	.96***
52. 6U Fct II	.29*	.10	-.03	.14	.04	-.04	.56***	.95***
53. 6U Fct III	.26	.11	-.05	.10	.07	-.07	.56***	.95***
54. 6G Fct I	.30*	.09	-.02	.15	.06	-.02	.65***	.96***
55. 6G Fct II	.27*	.07	-.03	.09	.06	-.04	.67***	.94***
56. 6G Fct III	.31*	.09	-.02	.13	.07	-.02	.64***	.95***
57. 10U Fct I	.24	.08	-.02	.16	.07	-.08	.45***	.94***
58. 10U Fct II	.23	.08	.01	.18	.04	-.04	.45***	.94***
59. 10U Fct III	.24	.10	-.02	.15	.08	-.09	.43**	.94***
60. 10G Fct I	.23	.11	-.02	.15	.06	-.04	.52***	.95***

\*  $\underline{r} = + .2640$  significant at .05; \*\*  $\underline{r} = + .3425$  significant at .01; \*\*\*  $\underline{r} = + .4293$  significant at .001.

CORRELATION MATRIX. (Continued)

	41	42	43	44	45	46	47	48
61. 10G Fct II	.22	.07	-.02	.17	.06	-.04	.51***	.94***
62. 10G Fct III	.22	.08	-.03	.14	.07	-.05	.50***	.94***
63. 14U Fct I	.27*	.06	-.03	.14	.08	-.07	.54***	.98***
64. 14U Fct II	.29*	.06	-.02	.15	.12	-.03	.63***	.97***
65. 14U Fct III	.26	.04	-.04	.13	.10	-.12	.57***	.97***
66. 14G Fct I	.24	.06	-.01	.13	.08	-.02	.70***	.99***
67. 14G Fct II	.26	.04	-.04	.13	.05	-.02	.70***	.97***
68. 14G Fct III	.26	.04	-.01	.14	.08	-.06	.67***	.98***
69. 17U Fct I	.25	.06	-.01	.14	.08	-.06	.55***	.98***
70. 17U Fct II	.21	.06	-.03	.09	.07	-.09	.52***	.97***
71. 17U Fct III	.22	.03	-.01	.11	.06	-.09	.53***	.97***
72. 17G Fct I	.27*	.07	-.01	.12	.07	-.01	.71***	.98***
73. 17G Fct II	.24	.06	-.01	.15	.08	.00	.73***	.97***
74. 17G Fct III	.22	.06	-.02	.10	.09	-.03	.74***	.97***

\*  $\underline{r} = + .2640$  significant at .05; \*\*  $\underline{r} = + .3425$  significant at .01; \*\*\*  $\underline{r} = + .4293$  significant at .001.



CORRELATION MATRIX (Continued)

	41	42	43	44	45	46	47	48
75. C-E 2	.20	.00	-.06	.08	.12	.05	.50***	.80***
76. C-E 3	.21	-.04	-.12	-.01	.08	.11	.51***	.76***
77. C-E 4	.21	-.10	.01	.09	.06	.14	.44***	.77***
78. C-E 5	.13	.01	-.12	-.10	.11	.15	.43***	.80***
79. C-E 6	.10	.09	.05	.05	.03	.03	.30*	.74***
80. C-E 7-8	.33*	.12	.13	.28*	.02	.08	.56***	.89***
81. C-E 9	.12	.23	-.07	.13	.05	.05	.38**	.71***
82. C-E 10	.25	.05	-.13	.17	.05	.13	.30*	.70***
83. C-E 11	.02	.13	-.05	-.01	.03	.06	.33*	.74***
84. C-E 12	.20	.11	-.14	.07	.05	-.00	.47***	.76***
85. C-E 13	.10	.24	-.08	.06	.13	.09	.32*	.64***
86. C-E 14	.11	-.05	.01	.06	.14	.09	.55***	.73***
87. C-E 15	.19	.04	.10	.21	.17	.07	.41**	.62***
88. C-E 16	.23	.09	-.10	.11	.13	.06	.60***	.80***

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	41	42	43	44	45	46	47	48
89. C-E M	.26	.06	.01	.16	.09	.01	.64***	.95***
90. SD-D 6	.23	.12	.02	.07	.05	.05	.78***	.44***
91. SD-D 10	.08	.14	-.03	+.03	-.01	.11	.58***	.51***
92. SD-D 14	.07	.02	.05	+.05	-.01	.14	.91***	.59***
93. SD-D 17	.17	.08	-.01	.05	.05	.16	.90***	.51***
94. IQ	.01	-.22	.12	+.05	-.04	.09	.04	.15

\*  $\underline{r} = + .2640$  significant at .05; \*\*  $\underline{r} = + .3425$  significant at .01; \*\*\*  $\underline{r} = + .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	49	50	51	52	53	54	55	56
49. I-U								
50. I-G	.53***							
51. 6U Fct I	.79***	.54***						
52. 6U Fct II	.81***	.58***	.98***					
53. 6U Fct III	.79***	.53***	.98***	.98***				
54. 6G Fct I	.82***	.49***	.98***	.98***	.98***			
55. 6G Fct II	.80***	.47***	.96***	.97***	.97***	.98***		
56. 6G Fct III	.81***	.53***	.97***	.97***	.97***	.99***	.98***	
57. 10U Fct I	.70***	.55***	.94***	.92***	.92***	.91***	.89***	.90***
58. 10U Fct II	.70***	.59***	.91***	.91***	.91***	.90***	.89***	.88***
59. 10U Fct III	.70***	.58***	.92***	.92***	.92***	.90***	.88***	.90***
60. 10G Fct I	.71***	.52***	.95***	.93***	.93***	.93***	.91***	.92***
61. 10G Fct II	.72***	.57***	.92***	.90***	.90***	.90***	.89***	.89***
62. 10G Fct III	.71***	.56***	.93***	.92***	.91***	.91***	.91***	.91***

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	49	50	51	52	53	54	55	56
63. 14U Fct I	.78***	.58***	.96***	.94***	.94***	.94***	.91***	.93***
64. 14U Fct II	.82***	.52***	.97***	.94***	.95***	.96***	.94***	.95***
65. 14U Fct III	.78***	.56***	.96***	.95***	.95***	.96***	.95***	.96***
66. 14G Fct I	.84***	.48***	.95***	.93***	.93***	.95***	.94***	.93***
67. 14G Fct II	.85***	.47***	.93***	.91***	.92***	.93***	.93***	.92***
68. 14G Fct III	.81***	.46***	.94***	.93***	.93***	.95***	.93***	.93***
69. 17U Fct I	.75***	.56***	.96***	.94***	.94***	.95***	.92***	.93***
70. 17U Fct II	.73***	.57***	.93***	.92***	.92***	.91***	.91***	.90***
71. 17U Fct III	.72***	.57***	.92***	.92***	.92***	.91***	.91***	.91***
72. 17G Fct I	.83***	.43**	.95***	.93***	.94***	.96***	.94***	.94***
73. 17G Fct II	.84***	.42**	.92***	.90***	.90***	.93***	.91***	.91***
74. 17G Fct III	.84***	.40**	.92***	.91***	.92***	.94***	.93***	.92***
75. C-E 2	.72***	.50***	.84***	.79***	.81***	.82***	.81***	.82***
76. C-E 3	.69***	.42**	.76***	.72***	.77***	.74***	.73***	.75***

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	49	50	51	52	53	54	55	56
77. C-E 4	.70***	.48***	.79***	.79***	.79***	.77***	.78***	.78***
78. C-E 5	.67***	.50***	.84***	.80***	.85***	.81***	.83***	.83***
79. C-E 6	.56***	.48***	.76***	.76***	.76***	.73***	.69***	.73***
80. C-E 7-8	.77***	.51***	.90***	.90***	.91***	.91***	.87***	.92***
81. C-E 9	.59***	.49***	.72***	.74***	.77***	.72***	.70***	.70***
82. C-E 10	.58***	.63***	.73***	.70***	.71***	.69***	.70***	.71***
83. C-E 11	.55***	.57***	.74***	.70***	.73***	.71***	.73***	.71***
84. C-E 12	.66***	.40**	.79***	.76***	.79***	.77***	.77***	.77***
85. C-E 13	.53***	.36**	.64***	.65***	.66***	.63***	.61***	.62***
86. C-E 14	.64***	.29*	.76***	.71***	.75***	.75***	.75***	.73***
87. C-E 15	.51***	.17	.65***	.61***	.61***	.62***	.60***	.58***
88. C-E 16	.76***	.35*	.82***	.79***	.81***	.81***	.79***	.81***
89. C-E M	.86***	.55***	.94***	.91***	.94***	.93***	.92***	.93***
90. SD-D 6	.50***	-.00	.40**	.43***	.44***	.54***	.58***	.57***

\*  $r = \pm .2640$  significant at .05; \*\*  $r = \pm .3425$  significant at .01; \*\*\*  $r = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	49	50	51	52	53	54	55	56
91. SD-D 10	.43**	.13	.54***	.54***	.51***	.56***	.58***	.56***
92. SD-D 14	.69***	-.05	.50***	.49***	.50***	.56***	.59***	.52***
93. SD-D 17	.70***	-.22	.46***	.45***	.46***	.53***	.54***	.50***
94. IQ	.08	.09	.12	.73***	.11	.09	.13	.11

\*  $\underline{r} = + .2640$  significant at .05; \*\*  $\underline{r} = + .3425$  significant at .01; \*\*\*  $\underline{r} = + .4293$  significant at .001.

# CORRELATION MATRIX (Continued)

	57	58	59	60	61	62	63	64
49. I-U								
50. I-G								
51. 6U Fct I								
52. 6U Fct II								
53. 6U Fct III								
54. 6G Fct I								
55. 6G Fct II								
56. 6G Fct III								
57. 10U Fct I								
58. 10U Fct II	.98***							
59. 10U Fct III	.98***	.97***						
60. 10G Fct I	.91***	.97***	.97***					
61. 10G Fct II	.99***	.97***	.96***	.98***				
62. 10G Fct III	.98***	.97***	.96***	.99***	.99***			

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

# CORRELATION MATRIX (Continued)

	57	58	59	60	61	62	63	64
63. 14U Fct I	.97***	.96***	.96***	.96***	.95***	.95***		
64. 14U Fct II	.94***	.92***	.93***	.94***	.92***	.93***	.97***	
65. 14U Fct III	.96***	.95***	.96***	.96***	.95***	.96***	.98***	.97***
66. 14G Fct I	.93***	.92***	.91***	.94***	.93***	.92***	.97***	.97***
67. 14G Fct II	.92***	.92***	.90***	.92***	.91***	.91***	.96***	.97***
68. 14G Fct III	.95***	.94***	.94***	.95***	.94***	.94***	.97***	.97***
69. 17U Fct I	.97***	.96***	.95***	.97***	.96***	.95***	.99***	.96***
70. 17U Fct II	.96***	.96***	.95***	.96***	.96***	.95***	.97***	.94***
71. 17U Fct III	.96***	.97***	.95***	.96***	.96***	.95***	.98***	.94***
72. 17G Fct I	.93***	.92***	.92***	.94***	.93***	.92***	.97***	.97***
73. 17G Fct II	.91***	.90***	.88***	.92***	.91***	.90***	.95***	.96***
74. 17G Fct III	.91***	.91***	.89***	.92***	.90***	.90***	.95***	.96***
75. C-E 2	.75***	.73***	.72***	.74***	.73***	.75***	.80***	.85***
76. C-E 3	.68***	.67***	.69***	.69***	.69***	.67***	.75***	.76***

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.



CORRELATION MATRIX (Continued)

	57	58	59	60	61	62	63	64
77. C-E 4	.73***	.71***	.76***	.70***	.70***	.73***	.76***	.79***
78. C-E 5	.79***	.77***	.79***	.78***	.79***	.79***	.81***	.83***
79. C-E 6	.75***	.73***	.79***	.76***	.73***	.77***	.74***	.73***
80. C-E 7-8	.87***	.85***	.89***	.88***	.83***	.85***	.88***	.90***
81. C-E 9	.73***	.74***	.75***	.75***	.74***	.76***	.70***	.71***
82. C-E 10	.73***	.70***	.73***	.74***	.76***	.75***	.70***	.70***
83. C-E 11	.79***	.81***	.77***	.75***	.78***	.77***	.75***	.72***
84. C-E 12	.81***	.77***	.79***	.82***	.82***	.85***	.76***	.78***
85. C-E 13	.68***	.64***	.69***	.67***	.64***	.70***	.65***	.67***
86. C-E 14	.70***	.67***	.69***	.70***	.71***	.72***	.72***	.78***
87. C-E 15	.67***	.63***	.63***	.67***	.65***	.69***	.63***	.69***
88. C-E 16	.78***	.71***	.75***	.78***	.75***	.78***	.78***	.84***
89. C-E M	.90***	.88***	.90***	.89***	.89***	.89***	.93***	.96***
90. SD-D 6	.31*	.32*	.30*	.36**	.33*	.35**	.37**	.44***

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	57	58	59	60	61	62	63	64
91. SD-D 10	.46***	.44***	.43***	.59***	.60***	.59***	.45***	.49***
92. SD-D 14	.43***	.44***	.40**	.47***	.48***	.44***	.49***	.55***
93. SD-D 17	.34**	.32*	.32*	.39**	.36**	.36**	.41**	.53***
94. IQ	.15	.18	.16	.16	.18	.17	.14	.08

\*  $\underline{r} = + .2640$  significant at .05; \*\*  $\underline{r} = + .3425$  significant at .01; \*\*\*  $\underline{r} = + .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	65	66	67	68	69	70	71	72
65. 14U Fct III								
66. 14 G Fct I	.96***							
67. 14G Fct II	.95***	.99***						
68. 14G Fct III	.98***	.99***	.97***					
69. 17U Fct I	.98***	.97***	.95***	.97***				
70. 17U Fct II	.96***	.95***	.94***	.96***	.98***			
71. 17U Fct III	.97***	.95***	.93***	.96***	.98***	.98***		
72. 17G Fct I	.96***	.99***	.98***	.99***	.97***	.95***	.95***	
73. 17G Fct II	.94***	.98***	.98***	.98***	.95***	.94***	.93***	.98***
74. 17G Fct III	.95***	.99***	.97***	.99***	.95***	.93***	.94***	.99***
75. C-E 2	.79***	.80***	.81***	.75***	.78***	.75***	.75***	.79***
76. C-E 3	.72***	.75***	.76***	.73***	.73***	.72***	.72***	.76***
77. C-E 4	.81***	.76***	.75***	.78***	.73***	.76***	.74***	.75***
78. C-E 5	.81***	.79***	.80***	.77***	.79***	.80***	.80***	.79***

\*  $r = \pm .2640$  significant at .05; \*\*  $r = \pm .3425$  significant at .01; \*\*\*  $r = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	65	66	67	68	69	70	71	72
79. C-E 6	.76***	.70***	.66***	.72***	.75***	.74***	.74***	.72***
80. C-E 7-8	.88***	.88***	.85***	.88***	.88***	.83***	.84***	.88***
81. C-E 9	.74***	.67***	.67***	.68***	.69***	.71***	.70***	.69***
82. C-E 10	.71***	.66***	.68***	.66***	.69***	.72***	.69***	.65***
83. C-E 11	.75***	.74***	.74***	.70***	.75***	.78***	.77***	.69***
84. C-E 12	.78***	.74***	.76***	.75***	.75***	.73***	.74***	.76***
85. C-E 13	.67***	.61***	.61***	.63***	.62***	.64***	.63***	.63***
86. C-E 14	.77***	.76***	.75***	.74***	.70***	.73***	.70***	.75***
87. C-E 15	.64***	.64***	.63***	.65***	.62***	.62***	.60***	.66***
88. C-E 16	.79***	.80***	.81***	.79***	.76***	.72***	.73***	.89***
89. C-E M	.93***	.94***	.94***	.93***	.92***	.90***	.90***	.94***
90. SD-D 6	.45***	.48***	.48***	.48***	.40**	.35**	.39**	.49***
91. SD-D 10	.50***	.51***	.48***	.51***	.50***	.48***	.49***	.54***
92. SD-D 14	.49***	.68***	.67***	.63***	.51***	.51***	.48***	.65***
93. SD-D 17	.44***	.58***	.59***	.55***	.40**	.38**	.36**	.60***
94. IQ	.15	.14	.11	.17	.15	.21	.20	.15

\*  $r = \pm .2640$  significant at .05; \*\*  $r = \pm .3425$  significant at .01; \*\*\*  $r = \pm .4293$  significant at .001.

# CORRELATION MATRIX (Continued)

	73	74	75	76	77	78	79	80
65. 14U Fct III								
66. 14G Fct I								
67. 14G Fct II								
68. 14G Fct III								
69. 17U Fct I								
70. 17U Fct II								
71. 17U Fct III								
72. 17G Fct I								
73. 17G Fct II								
74. 17G Fct III	.98***							
75. C-E 2	.77***	.77***						
76. C-E 3	.71***	.75***	.81***					
77. C-E 4	.76***	.75***	.73***	.66***				
78. C-E 5	.75***	.77***	.89***	.83***	.77***			
79. C-E 6	.66***	.70***	.59***	.62***	.70***	.65***		

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	73	74	75	76	77	78	79	80
80. C-E 7-8	.84***	.86***	.76***	.71***	.79***	.74***	.76***	
81. C-E 9	.64***	.67***	.63***	.62***	.61***	.63***	.78***	.72***
82. C-E 10	.63***	.61***	.71***	.74***	.60***	.74***	.50***	.66***
83. C-E 11	.76***	.69***	.65***	.48***	.59***	.77***	.52***	.63***
84. C-E 12	.73***	.73***	.65***	.65***	.66***	.75***	.70***	.70***
85. C-E 13	.61***	.60***	.62***	.42**	.66***	.62***	.67***	.67***
86. C-E 14	.75***	.75***	.78***	.67***	.79***	.75***	.69***	.70***
87. C-E 15	.67***	.64***	.63***	.42**	.60***	.53***	.60***	.65***
88. C-E 16	.78***	.79***	.85***	.74***	.73***	.81***	.63***	.81***
89. C-E 17	.92***	.93***	.87***	.82***	.85***	.87***	.77***	.93***
90. SD-D 6	.48***	.52***	.33*	.28*	.27*	.27*	.15	.43***
91. SD-D 10	.53***	.52***	.39**	.39**	.25	.40**	.40**	.45***
92. SD-D 14	.69***	.52***	.40**	.45***	.39**	.36**	.24	.49***
93. SD-D 17	.63***	.70***	.43***	.46***	.43***	.37**	.25	.47***
94. IQ	.14	.16	.20	.21	.20	.14	.25	.15

\*  $r = \pm .2640$  significant at .05; \*\*  $r = \pm .3425$  significant at .01; \*\*\*  $r = \pm .4293$  significant at .001.

CORRELATION MATRIX (Continued)

	81	82	83	84	85	86	87	88
81. C-E 9								
82. C-E 10	.71***							
83. C-E 11	.54***	.62***						
84. C-E 12	.70***	.70***	.66***					
85. C-E 13	.75***	.51***	.57***	.65***				
86. C-E 14	.76***	.60***	.55***	.62***	.70***			
87. C-E 15	.62***	.44***	.41***	.60***	.82***	.77***		
88. C-E 16	.66***	.67***	.57***	.78***	.80***	.77***	.78***	
89. C-E 11	.73***	.73***	.73***	.80***	.70***	.81***	.69***	.88***
90. SD-D 6	.28*	.21	.23	.40	.18	.36**	.15	.37**
91. SD-D 10	.52***	.46***	.27*	.53***	.33*	.43***	.42**	.43***
92. SD-D 14	.26	.26	.38**	.36**	.22	.49***	.39**	.49***
93. SD-D 17	.28*	.18	.17	.42**	.32*	.52***	.47***	.53***
94. IQ	.15	.15	.07	.05	.09	.15	.14	.06

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.

# CORRELATION MATRIX (Continued)

	89	90	91	92	93	94
81. C-E 9						
82. C-E 10						
83. C-E 11						
84. C-E 12						
85. C-E 13						
86. C-E 14						
87. C-E 15						
88. C-E 16						
89. C-E M						
90. SD-D 6	.42**					
91. SD-D 10	.47***	.39**				
92. SD-D 14	.57***	.58***	.45***			
93. SD-D 17	.54***	.59***	.42**	.85***		
94. IQ	.14	-.06	.10	.13	.04	

\*  $\underline{r} = \pm .2640$  significant at .05; \*\*  $\underline{r} = \pm .3425$  significant at .01; \*\*\*  $\underline{r} = \pm .4293$  significant at .001.



APPROVAL SHEET

The dissertation submitted by Naughne' La Vonne Thomas has been read and approved by the following Committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Date

January 14, 1974

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Director's Signature