

AN ABSTRACT OF THE THESIS OF

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Title: A STUDY OF THE RELATIONSHIP BETWEEN A SMALL
GROUP DISCUSSION ACTIVITY, THE SELF-CONCEPT AND
READING ACHIEVEMENT OF SELECTED FOURTH GRADE
BOYS AND GIRLS.

Abstract approved: *Redacted for Privacy*
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This study was conducted to investigate the relationship between the Human Development Program (HDP) and reading achievement and between HDP and the self-concept of selected fourth grade students attending a public school. A further purpose was to investigate the relationship between fourth grade students' measured feelings of responsibility for the consequences of their academic behaviors (internality) and reading achievement and between internality and self-concept. The subjects were randomly placed into treatment and control groups on the basis of the students' feelings of internality and the students' sex. The 32 treatment subjects were exposed to 19 twenty-five minute sessions of HDP activities within a ten week period. The 32 control subjects received no attention other than the pre- and

post-testing that all subjects received. Reading achievement was measured with the Informal Reading Inventory (IRI). Self-concept was measured with the Self-Concept and Motivation Inventory (SCAMIN) and internality was measured with the Intellectual-Academic Responsibility Questionnaire (IAR).

Hypotheses one and two studied the relationship between the control and experimental groups' mean gain scores on reading achievement and on self-concept. Hypotheses three and four studied the relationship between scores of internality of the experimental group subjects and mean gain scores on reading achievement and on self-concept.

Hypotheses one and two were analyzed with a two-way analysis of covariance using the pre-test as the covariate. One factor was the treatment; the other factor was the IAR quartile. Hypotheses three and four were analyzed with an unpaired t test on the gain in pre- to post-test scores, adjusted for pre-test scores. Significance was tested at the .05 level of confidence.

The results yielded a significant relationship at the .05 level on hypothesis one. Hypothesis one was rejected and it was concluded that the participation of the experimental subjects in the Human Development Program was associated with reading achievement. No significant difference was discovered for hypotheses two, three or four.

A Study of the Relationship Between a Small Group
Discussion Activity, the Self-Concept and Reading Achievement
of Selected Fourth Grade Boys and Girls

by

Wilbur John Jackson

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A STUDY OF THE RELATIONSHIP BETWEEN A SMALL GROUP
DISCUSSION ACTIVITY, THE SELF CONCEPT AND
READING ACHIEVEMENT OF SELECTED
FOURTH GRADE BOYS AND GIRLS

I. INTRODUCTION

Conant (1959) describes elementary guidance as one of the greatest needs for elementary students. He reports that many of the states he surveyed are recommending guidance and counseling services for all school children from kindergarten through high school to help the student understand himself in relation to his needs and the demands of his environment. Meeks (1968) states,

There is acceptance of the concept of a need for guidance in elementary education and increasing agreement as to the goals of such a process. The emphasis on such fundamental learnings as growth in self-understanding, responsibility to self and others, ability to make wise decisions and exercise control over environment, and reactions to the environment, is encouraging in this day of pressures on the school to stress academic learnings. (Meeks, 1968, p. 8)

Cottingham (1967) and Dimick and Huff (1970) suggest that elementary guidance is an important addition to the elementary school program to facilitate the well being of children. Blocher, Dustin, and Dugan (1971) and Tiedeman and Fields (1962) support the growth of guidance as a profession.

Even though an authority on general education and leaders in the guidance movement are in support of guidance programs, the public,

school boards and administrators are asking guidance personnel to provide measurable outcomes in support of the contribution counselors and the guidance program are making to the growth and development of the children in their care. Many of the activities that are developmental in nature have not shown empirically that participation by students in that particular activity contributes to the child or to other elements of the school program.

An example of a program needing support is the Human Development Program. The Human Development Program (HDP) was developed by Bessell and Palomares (1969) as a curricular approach to developmental guidance activities and is presently being implemented in many schools nationally. The activities of the program are conducted in a small group discussion format and are designed to develop the child's awareness of self, his inter-personal relations skills and his feelings of mastery of self through interaction with the counselor and students. The children are given the opportunity to become constructively involved in developing their own personal effectiveness, self-confidence and understanding of the cause and effect of their interpersonal actions.

Figure 1 represents the relationships the author perceives between several of the elements of the guidance process and student outcomes. The Human Development Program is designed to provide a climate and the experiences for students that eventuate in the

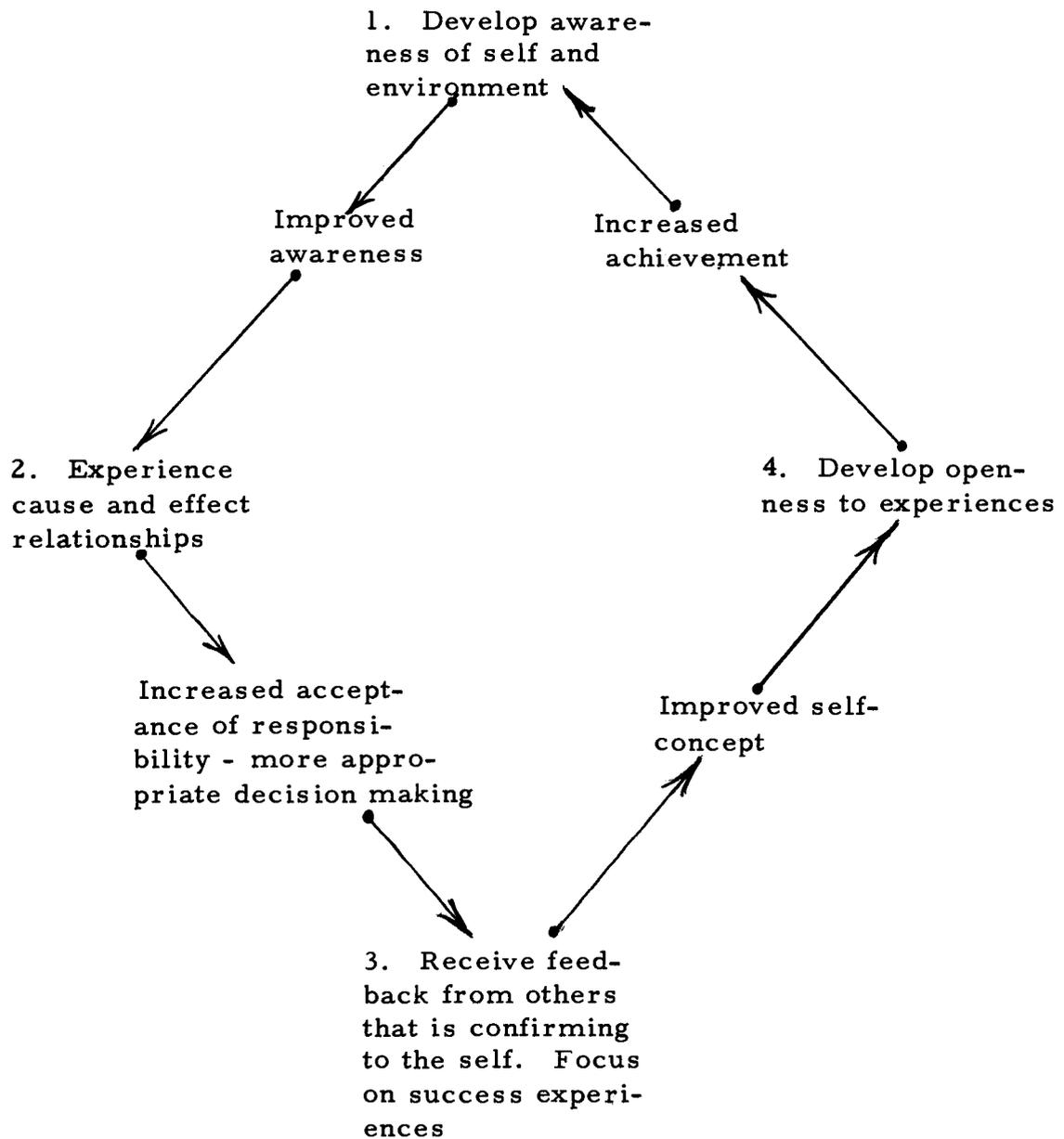


Figure 1. The relationship perceived between elements of the guidance process and student outcomes.

described student outcomes.

The awareness of self and the environment appears to be basic to understanding the cause and effect relationships of human behavior and human interaction. For the most appropriate decision that results in effective behaviors, the individual must have adequate information about self and about the functioning of others and the objective world. The person must also sense that action taken will result in a predictable outcome. According to Hamachek,

If a person is to behave effectively and appropriately, his perceptions of reality must be fairly accurate. When one's perception of himself and/or others is inaccurate, he is more likely to undertake actions which have little chance of success. Indeed, he could seriously reduce his opportunities for engaging in many things he might otherwise do and enjoy if it were not for his misperceptions. (Hamachek, 1971, p. 58)

In regards to information seeking behavior, Davis and Phares (1967) found that persons with an internal locus of control are superior to persons with an external locus of control in actively seeking information relative to problem solution. Individuals with an internal locus are persons who tend to feel they are effective agents in determining the occurrence of consequences. Externals, however, tend to believe that forces beyond their control determine the occurrence of consequences. Seemans and Evans (1962) report that internals are more likely to engage in behaviors that will confront a problem directly, whereas, externals are less likely to engage in these behaviors.

A person, who is aware, and who makes decisions and takes actions that are appropriate to the setting, has a high likelihood of receiving feedback from his significant others that is confirming to his self. Phares (1968) demonstrates that internals as compared to externals have a greater tendency toward action oriented solutions that results in greater success, and ultimately less anxiety. Efran (1963) found that the tendency to forget failures is significantly related to internal scores.

One's conception of self is developed principally from the perception the individual has as to how significant others view him.

Dager (1964) states,

Self images are based initially on the interactional relationships the child has learned before the development of the self. But there after self image involves the child's perceiving, registering, and interpreting the repetitive reflections from distinctive and meaningful role relationships. He evaluates his behavior in terms of the response others make to him. From this process evolves his self image, and he will have a self image for each distinctive and meaningful role relationship experienced. (Dager, 1964, p. 754)

Jersild (1952) describes the development of the self in these terms,

The self is acquired. It is not ready made. It develops as a person with his inborn abilities and tendencies and all that is inherent in his make up, meets up with the experiences of life. The development is influenced strongly by his relationships with other people. The development of self is influenced by the child's growing powers of perception and, in time, by his ability to imagine, to form large and comprehensive concepts, to appreciate values and commitments, and to take a stand for or against. (Jersild, 1952, p. 16)

As the individual develops a concept of his self that is positive, as he believes more strongly that he can trust himself to engage others and the contingencies of the world, he permits his perceptual screen to enlarge and opens himself to a wider diversity of experiences. This presents the possibility that the individual will become more constructively creative and increase his achievement as a result of this enlarged view of the world and the broader array of experience available to him. Combs, Avila, and Purkey (1971) state,

It would be hard, indeed, to overestimate the importance of a positive view of self for effective behavior. The self is the center of a person's existence, his frame of reference for dealing with life. Persons who approach life with a "can do" are already far ahead of those who begin with a "can't do" attitude, expecting defeat. With a positive view of self one can dare, be open to experience, and confront the world with open arms and quiet certainty. Negative views of self may lock a person in a vicious circle in which efforts to deal with life are always too little, too late or inappropriate. (Combs, Avila, and Purkey, 1971, p. 144)

Openness to experience is described by Rogers (1961) as one of the conditions that seems to be most clearly allied with the individual producing a constructively creative act. Openness to experience is the opposite of psychological defensiveness, a condition of defending the organization of the self from certain experiences except as they might come into awareness in a distorted fashion. Openness to experience means that varieties of concepts, beliefs, perceptions and hypotheses are allowed within the awareness, as compared to narrowness and

rigidity as to that which is permitted to awareness. Rogers (1961) maintains,

The more the individual has available to himself a sensitive awareness of all phases of his experience, the more sure we can be that his creativity will be personally and socially constructive. (Rogers, 1961, p. 354)

The research suggests that a relationship exists between the personal dimensions of (1) awareness of self and one's environment; (2) the acceptance of the cause and effect of one's actions; (3) the evaluation of one's self as positive; and (4) the openness that one has to experiences. Bessell and Palomares (1969) describe the Human Development Program as,

Curricular approach for educational programs which is designed to give children the opportunity to become constructively involved in developing their own personal effectiveness, self confidence, and an understanding of the causes and effects in interpersonal relationships. . . . The scope and sequence of the lessons provide experiential activities for the development of skills in children needed for personal adjustment, success in academic endeavors and other life challenges. The child learns to appreciate what others do for him. He is permitted to be honest about his resentments instead of learning to deny their existence or to repress them. For twenty minutes each day the learning climate for the children is open and free. Security is in the "magic circle." (Bessell and Palomares, 1969, p. 1)

Research with children aimed at discovering the results of their experiences in the Human Development Program is limited. Further research needs to be conducted to verify the contribution the program can offer as one activity of an elementary guidance program.

Purpose of the Study

The purpose of this study is to investigate the relationship between the Human Development Program and reading achievement and between the Human Development Program and the self-concept of selected fourth grade students attending a public school. A further purpose was to investigate the relationship between locus of control and reading achievement and between locus of control and self-concept of these same fourth grade students.

Statement of the Problem

This study was undertaken to determine whether or not a group of children in an experimental group at the fourth grade level in the public schools will show a greater change in reading achievement and self-concept if they have experienced the Human Development Program than a control group. An additional aspect of the study was to determine whether or not experimental subjects in the lower quartile on internality as measured by the Intellectual Academic Achievement Responsibility Questionnaire (IAR) will show greater change in reading achievement and self-concept as compared to experimental subjects in the upper quartile on internality as measured by the IAR. The control group received no special attention other than pre- and post-testing.

A two-way analysis of covariance with the pre-test scores as the covariate, was used in testing hypotheses I and II. Hypotheses III and IV were analyzed with an unpaired t test on the gain in pre- to post-test scores, adjusted for pre-test scores. Significance was tested at the .05 level of confidence.

Null Hypotheses

- H₁. There will be no significant difference between the control and experimental groups' mean gain scores on Reading Achievement as measured by the Informal Reading Inventory (IRI).
- H₂. There will be no significant difference between the control and experimental groups' mean gain scores on Self-Concept as measured by the self-concept scale of the Self-Concept and Motivation Inventory (SCAMIN).
- H₃. There will be no significant difference in mean gain scores in Reading Achievement between the experimental subjects who by rank order of the Intellectual-Academic Achievement Responsibility Questionnaire (IAR) pre-test scores are in the lower quartile and the experimental subjects who by rank order of the IAR pre-test scores are in the upper quartile.
- H₄. There will be no significant difference in mean gain scores in self-concept between the experimental subjects who by rank order of the IAR pre-test scores are in the lower quartile and

the experimental subjects who by rank order of the IAR pre-test scores are in the upper quartile.

Definition of Terms

Human Development Program

The Human Development Program is a systematic curricular plan with scope and sequence. The aim of the program is to provide experiences to promote growth in the affective domain. Experiences are provided that offer the children the opportunity to become constructively involved in the development of personal awareness, a feeling of mastery of self and the objective world, and an understanding of interpersonal relations.

The Human Development Program proposes (1) that it is important for each individual to become aware of his feelings, thoughts, and behaviors and to learn how to deal with them; (2) that it is of value for an individual to become realistically convinced of his ability to learn to interact and master significant portions of his environment; and (3) that it is important for an individual to become aware of the feelings, thoughts and behaviors of other people and to understand how others affect him and he affects others.

Counselor

The counselor who led these sessions has been the counselor in this school for three years. He has the following objective qualifications:

1. Completion of the five-day training program conducted by Dr. Uvaldo Palomares, the co-developer of the program.
2. Follow-up development of the program skills by working with students the age of these subjects.
3. Conducted workshops to train others in the attitudes and skills of the program.
4. A Standard Counselor's Certificate of the State of Oregon.

The principle roles of the counselor are to listen; to present a secure climate for individuals to share feelings and behaviors; to assure that all activities can be done successfully by all students; to assure that all individuals will have an opportunity to be heard; to model appropriate interpersonal behaviors; and to gradually transfer leadership to the students (Appendix D).

Self Concept

For this study, self-concept is an academic self concept that represents how the child feels in relation to his family, peers, teachers, school and school work as measured by the SCAMIN

Self-concept Scale. A single score represents the academic self-concept of the child. The SCAMIN is described in more detail in Chapter III.

Reading Achievement

For this study reading achievement is represented by a score on the Informal Reading Inventory (IRI) that indicates the child can read graded material at that stated instructional reading level. The Informal Reading Inventory is described in more detail in Chapter III.

Internality-Externality

For this study internality is represented by a score on the Intellectual-Academic Achievement Responsibility Questionnaire (IAR) that is aimed at assessing the children's beliefs in their being responsible for the reinforcement received in intellectual-academic achievement situations. Externality is the extent the children believe parents, teachers and peers are responsible for the reinforcement they receive in intellectual-academic achievement situations. The Intellectual-Academic Achievement Responsibility Questionnaire is described in more detail in Chapter III.

Limitations of the Study

The following limitations are recognized in this study.

1. The outcomes of the study could be related to the counselor as a variable.
2. The difference in scores between the experimental and control groups may be related to the experimental group perceiving themselves as receiving special attention rather than to the specific treatment.
3. The Human Development Program is designed as a curricular approach to be used over an extended time period. Nineteen sessions may be insufficient for measurable treatment effect.
4. The randomizing into treatment and control groups includes initial placement into quartile groups from a ranking of the Intellectual-Academic Responsibility Questionnaire scores. The results are limited to groups having these characteristics.
5. The study does not include population variables other than grade, sex and the dimension of internality-externality.
6. The validity of the measurement instruments may be questionable.

II. REVIEW OF THE LITERATURE

This review of the literature will include investigations that studied the relationships between the dimensions of self-concept, achievement (specifically reading achievement, where available), internality, and group guidance and counseling treatment approaches. Group guidance and counseling treatment approaches for this review are defined as activities that appear in the report to be focused at the affective domain in one or both of the following areas:

1. The social-emotional growth of the child.
2. The self direction of the child in the activity.

Self Concept and Reading Achievement

There is research that demonstrates a relationship between self-concept and reading achievement at the various school levels. The relationship seems to persist even when a diverse set of criterion measures are used for the dimensions of self-concept and reading achievement.

Wattenberg and Clifford (1964) studied the relationship of self-concept to beginning achievement in reading. Three tests were administered to 128 kindergarten children from middle and working class neighborhoods. As a measure of intellectual ability, the Detroit Beginning First Grade Intelligence Test was given routinely

near the close of the second semester of kindergarten. A self-concept score was obtained by tape recording remarks the children made while drawing pictures of their families. The remarks were categorized by raters and scores developed for Quantified Self-concept (competence) and Quantified Self-concept (good-bad). The raters' product-moment correlation ranged from .71 to .89. At the end of the second grade, post-tests were given to measure the self-concept. Also, reading tests from the textbook series publisher were used to arrive at reading scores. The results indicated that measures of self-concept taken in kindergarten have high predictive value of reading achievement two and one-half years later. The measures of self-concept and reading achievement had a low relationship to the mental test scores. The authors suggest that measures of self-concept as to competence and personal worth, if taken early in kindergarten, will be highly predictive of reading achievement in the early school years of the child.

Padelford (1969) studied 238 students from grades three through six in a suburban elementary school serving a middle and lower class community to determine if there is a significant positive relationship between reading achievement and self-concept. Data were gathered by administering pre- and post-test criterion measures for reading and self-concept. Post-test scores and gains from pre- to post-test scores were analyzed by correlation methods, t tests and analysis of

variance. A significant positive relationship was found between reading achievement and self-concept among the subjects of the study.

The author did not provide the significance level.

Brunkan and Shen (1966) investigated the relationship between personality characteristics and effective, and efficient readers. The Reading Versatility Test (RVT) and the Adjective Check List (ACL) were administered to entering college freshmen. The Scholastic Achievement Test (SAT) scores were already available on these students. From the results of the RVT, 321 students were selected for the study. Thirty-eight students were identified as efficient readers, 226 students were identified as effective readers and 57 students were identified as ineffective readers. They were further divided into groups according to reading rate. For each ACL scale and each SAT score the differences among the subgroups were analyzed using a two-dimensional factorial design, one factor being Reading Quality, and the other Reading Rate. An analysis of variance, the F test and the t test were used in making sub-analyses where appropriate. High rate efficient and high rate effective readers as compared to low rate inefficient and ineffective readers were significantly higher (.01) on Self-Confidence, Dominance, Exhibitionism, Autonomy and SAT Verbal. The author concludes that high rate effective and efficient readers are self-confident, independent persons with leadership ability as well as high general verbal ability. They appear to have

few self-doubts and guilt feelings. They tend not to defer to others or have any excessive need for heterosexual relations and do not feel the need for help with problems that may be bothering them.

In summary, the research by Wattenberg and Clifford (1964) reported that self-concept seems to be highly predictive at the kindergarten level of reading achievement two and one-half years later. Padelford (1969) found a significant positive relationship between reading achievement and self-concept. Brunkan and Shen (1966) discovered a relationship between efficient and effective readers and the self-confident, independent person. These studies seem to indicate that reading achievement and self-concept are positively related.

Group Treatments and Reading Achievement

If the assumption is accepted that self-concept and reading achievement are positively related, group guidance and counseling approaches that focus on allowing and developing an increased valuing of self should have some potential for being related to reading achievement.

Crider (1964) studied the effectiveness of selected group guidance procedures upon the relationship of personality conflict and reading achievement. Eighteen fourth grade subjects from a Mississippi elementary school were selected and classified for the purposes of the study as being of average or above intelligence, retarded in

reading, and experiencing some personality conflicts. This classification was made on the basis of individual scores on the Gates Reading Survey, Form 1, The California Test of Personality, Form AA, and the Otis Quick-Scoring Mental Ability, Alpha Test, Form A.

Nine pairs of subjects were matched according to age, sex and test scores. These matched pairs were placed into a control group and an experimental group. Both groups attended class as usual. The experimental group, in addition to attending class, participated in selected group guidance activities for a period of 30 minutes, three times each week for 12 weeks.

When using a t test for statistical treatment of the test-retest data the experimental group, as compared to the control group, had a mean gain in reading achievement significant at .01 level of confidence. The difference between the mean scores of the experimental and control group on the personality variable was significant at the .01 level of confidence in favor of the experimental group. The conclusion of the researcher is that group guidance may be effectively used with fourth grade pupils who are experiencing personality conflict and reading disability to increase their development in both of these areas.

Fisher (1952), as cited by Smith (1955, p. 22) investigated three different treatments as they relate to reading gains. The treatments were group interview therapy, remedial reading, and group interview

therapy and remedial reading. Thirty residents of an institution for delinquent boys, all who were at least three years retarded in reading achievement, were placed in three groups of ten students each. The groups were equated for reading achievement and intelligence of the students. Each of the groups received one of the treatment effects. The author reported the group that received group interview therapy as making significantly greater reading gains than the remedial reading group or the group that received remedial reading and group interview therapy. The manner in which the data were analyzed was not reported.

Winkler et al. (1965) utilized selected counseling and remedial techniques with underachieving elementary school students to determine the relationship these treatment effects have to improved achievement as measured by grade point average (GPA) and certain personality variables as measured by the California Test of Personality. One hundred-eight underachieving fourth graders were randomly assigned to one of five experimental conditions: individual counseling, group counseling, reading instruction, Hawthorne-effect and control. Six male counselors were randomly assigned to the various treatment conditions so that there were at least two different counselors involved in each treatment. The treatment groups each met in private rooms for approximately one-half hour for each of the 14 sessions.

The mean gain scores of achievement were computed as the difference between the pre-treatment GPA and post-treatment GPA. The mean gain of the California Test of Personality Total Adjustment scores were utilized for the measurement of personality change. These data were analyzed by the groups-within-treatment design with the unweighted group mean as the unit of analysis. There was no significant difference discovered for any of the relationships. The authors suggest the lack of significance might be a result of under-achievement being more than a surface phenomenon that is not easily modified or partially due to methodological and procedural considerations.

Carlton and Moore (1966) offered evidence that self-selected and self-directed dramatization of stories by first, second, third and fourth grade children in a regular classroom resulted in significantly greater gains in reading achievement and favorable gains in self-concept as compared to matched control groups who received reading instruction chiefly through the traditional use of the basal reader in small groups or whole class situations. The subjects were from public elementary schools in a low socio-economic area of a large city.

Students were pre-tested with the Gray-Votaw-Rogers Achievement Test on vocabulary and paragraph meaning. Post-testing was accomplished with a comparable form. A pre- and post-checklist questionnaire was used to measure self-concept. The t test was used

to determine the significance of difference of gain in reading achievement. The first and second grade treatment group achieved a reading gain significant at the .01 level of confidence. The third and fourth grades treatment group reading gain was significant at the .02 level of confidence. The decreased number of checks on the self-concept checklist questionnaire on the post-treatment as compared to pre-treatment measurement caused the investigators to infer a positive change in the treatment subject's self-concept.

Crider (1964) discovered a significant relationship between group guidance activities and reading achievement. Fisher (1952), after partialing out intelligence, reported positive associations between reading achievement and group interview therapy. Carlton and Moore (1966) offered evidence that self-selected and self-dramatization of stories is significantly related to reading achievement. Winkler et al. (1965), however, did not find a relationship between selected counseling techniques and gain in the general dimension of grade point average. Group guidance activities appear to be significantly related to reading achievement.

Group Treatment and Self-Concept

If the conclusion may be made that (1) reading achievement and self-concept are related and that (2) some group guidance approaches and reading achievement are related, it seems reasonable that

(3) some group guidance approaches and self-concept would be related.

Hoyser (1971) assessed the effectiveness of therapeutic non-directive play treatment with third grade boys in producing changes in reading achievement, reading attitude and academic self-concept. Fifty-two boys, identified as underachieving in reading, were placed in one of four experimental groups; therapeutic non-directive play and reading; therapeutic non-directive play only; reading only; or control. Each treatment group experienced 27 thirty minute sessions. The control group had only the pre- and post-testing common to all experimental groups. Pre- and post-testing involved administration of a reading achievement test (Gates-MacGinitie, Primary C, Form 1), a reading attitude inventory (Primary Pupil Reading Attitude Inventory) and an academic self-concept inventory (Self-Concept and Motivation Inventory). An analysis of variance, one-way classification was applied to the pre-test, post-test and post-test/pre-test group differences to determine if there were significant findings. The results indicated a significant positive change (.01) of the self-concept scores of subjects in the therapeutic non-directive play and reading group as compared to the play only, the reading only, or the control groups. Likewise, the play only group produced more significant gains (.01) than the reading only or the control only group in improved self-concept. There was no significant gain in reading scores.

House (1970) examined the effects of non-directive group play on the self-concept of 36 second grade students who were identified as underachosens on a sociometric test. Twelve of these individuals were assigned to each of three treatment groups. Treatment for the experimental group was group play for ten weeks. Control group I received a specialized reading experience for ten weeks and control group II received no attention other than pre- and post-testing. The Self-Concept and Motivation Inventory was administered to the subjects to obtain pre- and post-treatment self-concept scores. The two-factor mixed design: repeated measures on the one factor analysis of variance was used to compare experimental and control group scores. Subjects exposed to non-directive play did show a significantly greater increase (.01) in self-concept scores than those subjects in the control groups.

Crow (1971) compared three different elementary school group counseling approaches: a structured aural approach, a structured visual approach, and an unstructured approach. The sample included the entire sixth grade class of a middle class Texas elementary school. Thirty-six of the 96 subjects were tested prior to the counseling experience and immediately following. Coopersmith's Self-Esteem Inventory (long form) and his Behavior Rating Form were used to measure self-concept and teacher rated behavior, respectively. One 45 minute group counseling session was held each week with each group

for 12 weeks. The students in the aural approach sessions listened to audio tapes of topics and situations that they would then discuss. The students in the visual approach sessions viewed transparencies and pictures. The counselor then asked questions pertaining to the pictures to elicit discussion by the students. In the unstructured group approach the counselor allowed the students themselves to decide what they would talk about. A simple analysis of variance was used to test the significance of gain from pre-test to post-test on all the variables among the four experimental groups. The combined treatment groups, as compared to the control groups, made greater gains on the variables self-concept, sociometric status, emotional expansiveness, and teacher rated behavior. The gain for emotional expansiveness was significant at the .01 level. The total group of treatment boys showed a significant (.01) gain over the total group of treatment girls on self-concept. There was no significant difference in gain between the two structured approaches and the unstructured approach.

Hoyser (1971) and House (1970) discovered a significant relationship between non-directive play and self-concept with primary aged students. Crow (1971) reported a positive relationship between self-concept and the combined gains of three different group counseling approaches; a structured aural approach, a structured visual approach and an unstructured approach. This limited evidence suggests an association between group guidance and counseling and self-concept.

However, tentativeness would be prudent with such a conclusion.

Internality and Achievement

The dimension of internality is the belief that a person has control of the outcomes of his actions. A person who is aware of self and the environment has more data for making appropriate action decisions. Believing that one can respond to this data in a manner that will consequate in specified outcomes allows one to perceive himself as having a degree of power. A positive self-concept would seem to be related to an internal feeling of power or control over outcomes.

Crandall, Katkovsky and Crandall (1965) studied the relationship between achievement and internality. The sample for this study included 923 elementary and high school students drawn from five different schools. The socioeconomic status of the sample compared favorably with Hollingshead's Two Factor Index of Social Positions. The Intellectual Achievement Responsibility Questionnaire was administered to obtain a score that represented the child's feelings of internality. The Iowa Test of Basic Skills scores were used for the measure of achievement for the third, fourth and fifth grade students. For these students, internality scores correlated positively and significantly with the reading, mathematics and language sub-scores and with the total achievement test scores. It is proposed by the authors that a belief in self-responsibility constitutes a motivational influence

upon the achievement performance and should predict behavior on tasks where motivation accounts for a relatively large proportion of the variance over and above the student's ability or acquired knowledge.

Seeman (1963) investigated the relationship between feelings of powerlessness, the low expectancy that the individual's own behavior determines the occurrence of goals or rewards he seeks, and the learning of information. The basic proposition in this study is that the individual's control over events is a crucial factor in the learning process. Eighty-five young offenders from a reformatory that contained only those who had been officially defined as amenable for rehabilitation were used for this study. The average age of the sample was 21 years. All subjects for the study had at least an intelligence quotient of 100 and a ninth grade education. Measurements were made of the subject's sense of powerlessness. The inmates in the study were then all presented information in a disguised and controlled manner so that they would be motivated to read the information, without at the same time arousing test taking sets or achievement motives. A multiple choice test was administered to determine retention of information. The results revealed a significant (.02) relationship between a sense of powerlessness and low retention of information.

Crandall, Katkovsky and Crandall (1965) reported positive and significant correlations between internality scores and reading, mathematics, language sub-scores and total achievement test scores of third, fourth and fifth grade students. Seemans (1963) discovered a significant positive relationship between powerlessness and low retention of information of young offenders in a reformatory. These studies suggest that achievement is related to a person's belief that he has internal control over outcomes.

Summary

A review of the literature seems to indicate a significant positive relationship between self-concept and reading achievement. A significant positive relationship seems evident between different group guidance and counseling treatment effects and reading achievement and between different group guidance and counseling treatment effects and self-concept. However, it is difficult to arrive at the conclusion that (1) a change in self-concept from a treatment effect results in a parallel change in reading achievement, or (2) a particular group guidance and counseling approach is more effective than other group guidance and counseling approaches in causing positive change in reading achievement and/or self-concept.

There is a paucity of reported research that investigates the relationship between group guidance and counseling treatment effects

and self-concept and/or reading achievement at the elementary level. This may be accounted for, in part, by the need for a more adequate fund of descriptive research to further define the nature of the dimensions being explored before experimental research can be conducted with any degree of discriminative power.

III. METHODS AND PROCEDURES

Sample

The sample consisted of 64 fourth grade children from a neighborhood elementary school of Salem, Oregon. Thirty-two students were in each group, treatment and control. This sample was selected from the 67 fourth grade students who were distributed among 142 students of a third and fourth grade team teaching setting that includes six classroom teachers. These students have the services of a school counselor who is employed full time in this school. The only criteria for selection as a subject for this investigation was that the student be in the fourth grade at the school and that he or she be selected at random from the pool of 67 students. This unrestrictive criteria was a necessary requisite to study the effects of the treatment as a developmental guidance activity for fourth grade students.

Measuring Instruments

Intellectual-Academic Responsibility Questionnaire

The Intellectual-Academic Responsibility Questionnaire (IAR) was developed by Crandall, Katkovsky and Crandall (1965) to assess the degree that children believe that they, rather than other people, are responsible for their intellectual-academic successes and failures.

The instrument (see Appendix A) is an extension of the work of Phares (1957) and Rotter (1960). This earlier research was with adult subjects and described reinforcements in a number of motivational and behavioral areas. The IAR is aimed at assessing children's beliefs in reinforcement responsibility exclusively in intellectual-academic situations.

The IAR consists of 34 forced choice questions. Seventeen of the items assess the student's belief in his being responsible for his academic successes (internality-success) and 17 items assess his belief in his being responsible for his academic failures (internality-failure). Three scores can be obtained: internality score for success (I +), internality score for failures (I -) and a total internality score (I). The possible range of scores is 0-34 for the total internality dimension. The consistency of responses for 47 subjects in grades 3, 4 and 5 using a product-moment correlation on a two month interval for a test-retest situation was total I score .69; I + .66; and I - .74. Using a t test these correlations were all significant at the .001 level. The test is based on construct validity.

Self-Concept and Motivation Inventory

The Self-Concept and Motivation Inventory (SCAMIN) was developed by Farrah, Milchus and Reitz (1968). The Later Elementary form is designed to be used with fourth through sixth grade students

(Appendix B). The inventory contains 48 self descriptive items. The items are read to the subject individually or in groups. Each subject reacts on a separate answer sheet on which there are five faces that represent different degrees of sadness - happiness. The subject is instructed to mark the nose of the face which best illustrates his feelings in response to the statement.

Four sub-factors are assessed: goal and achievement needs, failure avoidance, role expectations and self adequacy. The sub-factors goal and achievement needs and failure avoidance were not considered in this investigation as these factors represent dimensions other than academic self-concept. The sub-factors role expectations and self adequacy combine to yield an academic self concept main factor. The possible range of scores for this factor is 12-120. Role expectation is defined as the positive acceptance of the aspirations and demands that the student believes significant others expect of him in regards to school concerns. Self-adequacy is the positive regard with which the student views his present and future probabilities of academic success. The academic self-concept is defined as the child's view of his role as a learner in school. It is the child's perceptions of his experiences, attitudes and feelings about school and school work. The sum total of the role expectation items and the self adequacy items equals academic self concept ($RE + SA = SC$).

Using the Spearman-Brown formula on split halves (odd-even), a reliability of .82 was obtained for 102 sixth graders from a lower middle class, suburban Detroit school. The test is based on construct validity.

Informal Reading Inventory

The Informal Reading Inventory (IRI) uses graded material to establish reading levels based on the student's accuracy in word recognition and comprehension. The reading levels are independent (books the student can read with ease), instructional (books the student can read with assistance) and frustrational (books which are too difficult for the student and may lead to frustration). The students instructional grade level score was the reading achievement measure used in this investigation. The instructional reading level is more specifically described as the level at which the student needs and can profit from instruction. His comprehension is from 70 to 89 percent after both oral and silent reading. He correctly pronounces 95 to 98 percent of the running words when reading orally. He averages no more than one oral reading error in 11 running words when reading orally. His oral reading is fluent, and his phrasing is proper. He shows no signs of tension or nervousness, and does not move his lips or whisper when reading silently.

Procedures

The procedures included pre-testing of the entire fourth grade class of the school chosen for the investigation, the assignment of students to the various treatment and control groups, the procedures with the treatment and control groups, the post-testing of the subjects and the treatment of the data.

Pre-testing

All students in the fourth grade at the school chosen for the investigation were administered the Intellectual-Academic Responsibility Questionnaire (IAR) and the Self-Concept and Motivation Inventory (SCAMIN) in their classroom groups by the counselor. The Informal Reading Inventory (IRI) was administered to all the fourth grade students individually by a certified auxiliary teacher. The auxiliary teacher has been at the school for five years and is the person who has been regularly testing the students with the IRI.

Formation of the Treatment and Control Groups

To test for the differential effects of the dimension of internality on the student's gain in reading achievement or self-concept, the subjects were distributed at random to the eight separate groups as determined by their ranking on the Intellectual-Academic Achievement

Responsibility Questionnaire (IAR) and their sex. The sex of the subjects were considered to provide equal numbers of each sex in a group. A boy and a girl from each quartile on the IAR was in each group as a result of (1) being grouped by IAR quartile and sex, and (2) being placed at random from these groupings sequentially into the various treatment and control groups. This resulted in each group, treatment and control, consisting of 32 students.

Treatment Groups

There were four boys and four girls in each of the four treatment groups. Two times a week for nine weeks and once the tenth week the students went from their classrooms at the designated time to participate for 25 minutes with the school counselor in a Human Development Program experience. The counselor would offer cues (Appendix C) or topics on which the students could share. The topics would be concerned with (1) awareness of the students' feelings, thoughts and behaviors and learning how to deal with them; (2) providing activities that could be done successfully by all students to develop feelings of mastery; and (3) developing an understanding in the students of how they affect the feelings, thinking and behavior of others, both negatively and positively. The counselor then had the responsibility of providing a secure climate for openness and sharing among the students (Appendix D). The treatment group children received no

other service from the school counselor during this period. The teachers knew the students were being released to work with the school counselor, but were not aware of the nature of the experience or any of the expected outcomes.

Control Groups

The control groups received no attention other than the pre-testing and the post-testing that was received by all subjects in the investigation. The control group children received no service from the counselor during this period.

Post-testing

The subjects were post-tested with the Intellectual-Academic Responsibility Questionnaire (IAR), the Self-Concept and Motivation Inventory (SCAMIN), and the Informal Reading Inventory (IRI) during the week immediately following the completion of the treatment. The IAR and the SCAMIN were administered to the classroom groups by the counselor. The IRI was administered individually by an auxiliary teacher. This auxiliary teacher has IRI testing as a usual part of her responsibility. The IRI testing plan provided for treatment and control subjects to be tested in a random order to disallow for any tester bias to the results because of the order of testing.

Treatment of Data

The results of pre-testing and post-testing on the following areas were analyzed: reading achievement, self-concept, and the differential effect internality has on reading achievement and self-concept. Hypotheses I and II were analyzed with a two-way analysis of co-variance using the pre-test scores as the co-variate. One factor was treatment; the other factor was the IAR quartile. Hypotheses III and IV were analyzed with an unpaired t test on the gain in pre- to post-test scores, adjusted for pre-test scores. Significance was tested at the .05 level of confidence.

Summary

The 64 fourth grade boys and girls who participated in this study were from a neighborhood elementary school of Salem, Oregon. All students in the fourth grade in this school had equal opportunity to be a part of the study. The students were pre- and post-tested with the Intellectual-Academic Responsibility Questionnaire (IAR), the Self-Concept and Motivation Inventory (SCAMIN), and the Informal Reading Inventory (IRI). The students were placed into four treatment groups and four control groups at random with consideration being given to the students IAR quartile ranking and sex. Each of the treatment groups met for 25 minutes, two times each week for a total of 19 sessions,

to experience with the school counselor Human Development Program activities. The control groups received no attention but pre- and post-testing. Data were analyzed using a two way analysis of covariance for hypotheses I and II and an unpaired t test for hypotheses III and IV.

IV. FINDINGS

This study was conducted to investigate the relationship between The Human Development Program (HDP) and reading achievement and between HDP and the self-concept of selected fourth grade students attending a public school. A further purpose was to investigate the relationship between fourth grade students' measured feelings of responsibility for the consequences of their academic behaviors (internality) and reading achievement and between internality and self-concept. The subjects were placed into treatment and control groups at random with consideration being given to the student's feelings of internality and the student's sex. The 32 treatment subjects participated in 19 twenty-five minute sessions of Human Development Program activities within a ten week period. The control subjects received no attention other than pre- and post-testing. Reading achievement was measured with the Informal Reading Inventory (IRI). Self-concept was measured with the Self-Concept and Motivation Inventory (SCAMIN) and internality was measured with the Intellectual-Academic Responsibility Questionnaire (IAR). The IAR and SCAMIN appear in Appendix A and B, respectively. The IRI is described in Chapter III. The raw data on the SCAMIN, IAR and IRI appear in Appendix C.

Analysis Procedure

For the purpose of statistical analysis, hypotheses I, II, III and IV were stated in the null form. Hypotheses I and II were analyzed with a two-way analysis of covariance using the pre-test as the covariate. One factor was the treatment; the other factor was the IAR quartile. Hypotheses III and IV were analyzed with an unpaired t test on the gain in pre- to post-test scores, adjusted for pre-test scores. Significance was tested at the .05 level of confidence.

The results of the tests for each of the four hypotheses are described below.

Hypothesis One

H₁: There will be no significant difference between the control and experimental groups' mean gain scores on reading achievement as measured by the Informal Reading Inventory.

Data on reading achievement were obtained from pre- and post-tests of 62 fourth grade students using the Informal Reading Inventory (IRI). A two-way analysis of covariance with the pre-test as the covariate was used in analyzing hypothesis one. One factor of the analysis was the treatment; the other factor was the IAR quartile. The adjusted mean gain score for the experimental subjects was .43 as compared to .17 for the control group. The F ratio was 6.49. The

critical value is 4.03 at the .05 level of confidence. Therefore, it was concluded that a significant difference between the experimental and control groups at the .05 level of confidence does exist. Hypothesis one was rejected for this sample on the basis of these results. The results appear in Table 1. Figure 2 displays the results in graphic form. The analysis of covariance for reading achievement scores appears in Table 5 in Appendix E.

Table 1. A comparison of the reading achievement scores of the experimental and control groups using the pre-test mean, mean gain, adjusted mean gain and F ratio.

Groups	Pre-Test Mean	Mean Gain	Adjusted Mean Gain	F Ratio
N = 31 Experimental	3.85	.42	.43	
N = 31 Control	3.90	.18	.17	6.49**

** Significant at the .05 level.

Hypothesis Two

H₂: There will be no significant difference between the control and experimental groups' mean gain scores on Self-Concept as measured by the self-concept scale of the Self-Concept and Motivation Inventory.

Pre- and post-test data on self-concept were collected for the 60 subjects using the self-concept scale of the Self-Concept and Motivation Inventory (SCAMIN). A two-way analysis of covariance

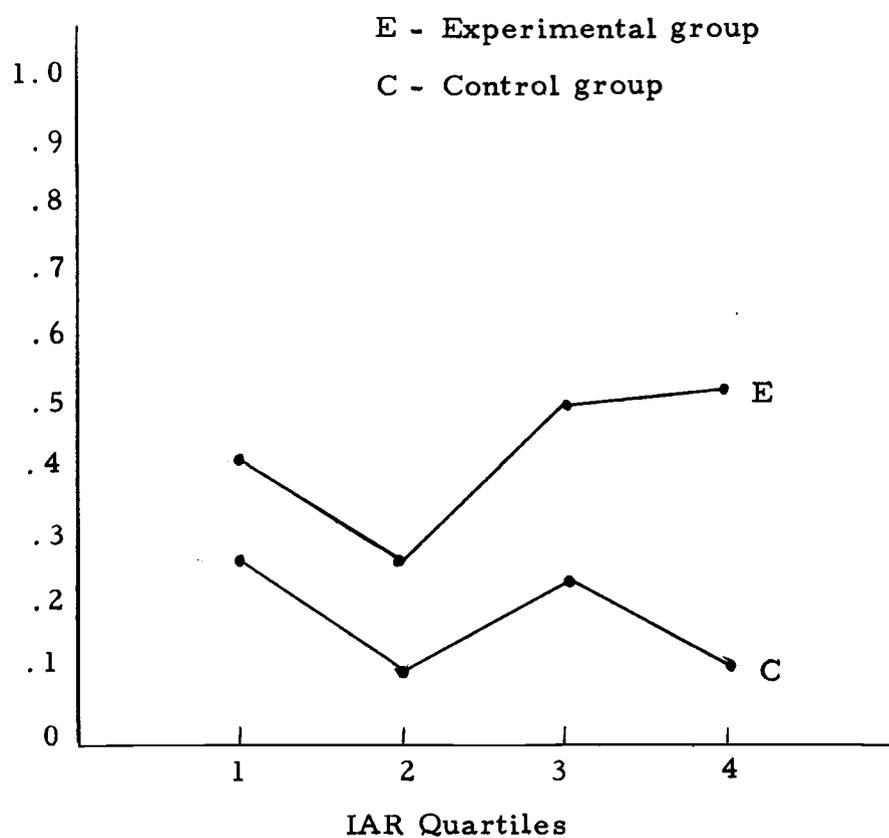


Figure 2. A comparison of treatment and control groups adjusted mean gain scores in reading achievement by IAR quartiles.

with the pre-test as the covariate was used in analyzing hypothesis two. One factor of the analysis was the treatment; the other factor was the IAR quartile. The adjusted mean gain score for the experimental subjects was .88 as compared to .86 for the control group. The F ratio was 0. The critical value is 4.00 at the .05 level of confidence. Therefore, it was concluded that a significant difference at the .05 level of confidence does not exist between the experimental and control groups of this study. Hypothesis two cannot be rejected on the basis of these results. The results appear in Table 2. Figure 3 displays the results in graphic form. The analysis of covariance for self-concept scores appears in Table 6 in Appendix E.

Table 2. A comparison of the self-concept scores of the experimental and control groups using the pre-test mean, mean gain, adjusted mean gain and F ratio.

Groups	Pre-Test Mean	Mean Gain	Adjusted Mean Gain	F Ratio
N = 29 Experimental	85.14	.97	.88	
N = 31 Control	85.48	.77	.86	0

Hypothesis Three

H₃: There will be no significant difference in mean gain scores in Reading Achievement between the experimental subjects who by rank order of the Intellectual-Academic Achievement Responsibility

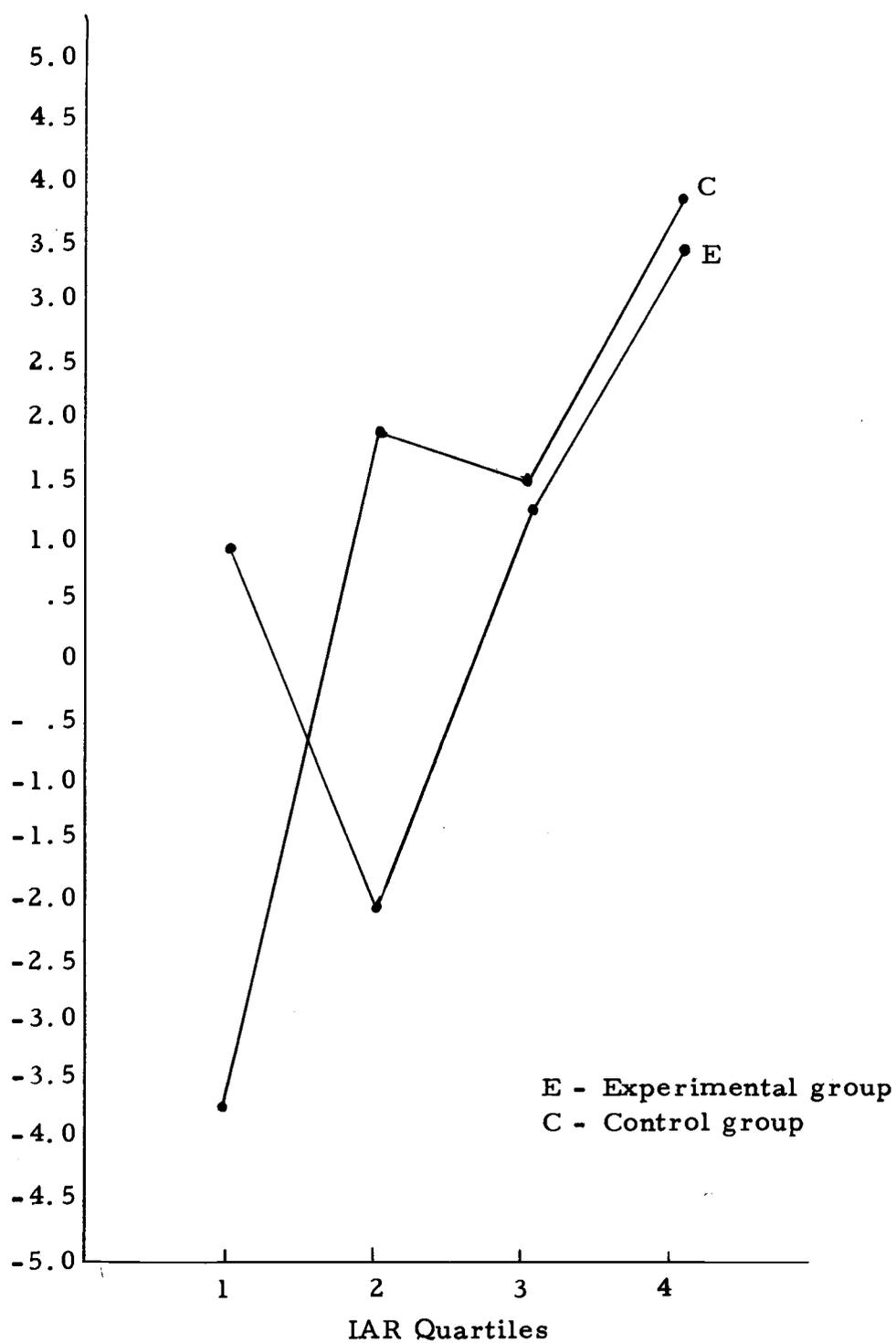


Figure 3. A comparison of treatment and control groups adjusted mean gain scores in self-concept by IAR quartiles.

Questionnaire (IAR) pre-test scores are in the lower quartile and the experimental subjects who by rank order of the IAR pre-test scores are in the upper quartile.

Data on reading achievement were obtained from pre- and post-tests of 15 fourth grade students using the Informal Reading Inventory (IRI). An unpaired t test on the gain in pre- to post-test scores, adjusted for pre-test scores, was used in analyzing hypothesis three. The adjusted mean gain score for the IAR lower quartile experimental subjects was .41 as compared to .52 for the IAR upper quartile experimental subjects. The t test was -.543. The critical value is 2.008 at the .05 level of confidence. Therefore, it was concluded that a significant difference at the .05 level of confidence does not exist between the IAR upper quartile experimental subjects and the IAR lower quartile experimental subjects. Hypothesis three cannot be rejected on the basis of these results. The results appear in Table 3. The analysis of covariance for reading achievement appears in Table 5 Appendix E.

Table 3. A comparison of the reading achievement scores of the IAR upper quartile experimental subjects and the IAR lower quartile experimental subjects using the pre-test mean, mean gain, adjusted mean gain and the t test.

Groups	Pre-Test Mean	Mean Gain	Adjusted Mean Gain	t
N = 7				
IAR Upper Quartile	4.19	.49	.52	
N = 8				
IAR Lower Quartile	3.30	.48	.41	-.543

Hypothesis Four

H₄: There will be no significant difference in mean gain scores in Self-Concept between experimental subjects who by rank order of the IAR pre-test scores are in the lower quartile and the experimental subjects who by rank order of IAR pre-test scores are in the upper quartile.

Pre- and post-test data on self-concept were collected for the 14 subjects using the self-concept scale of the SCAMIN. An unpaired t test on the gain in pre- to post-test scores, adjusted for pre-test scores, was used in analyzing hypothesis four. The adjusted mean gain score for the IAR lower quartile experimental subjects was 1.94 as compared to 3.52 for the IAR upper quartile experimental subjects. The t test was -.732. The critical value is 2.008 at the .05 level of confidence. Therefore, it was concluded that a significant difference at the .05 level of confidence does not exist between the IAR upper quartile experimental subjects and the IAR lower quartile experimental subjects. Hypothesis four should be held tenable on the basis of these results. The results appear in Table 4. The analysis of covariance for reading achievement appears in Table 6 in Appendix E.

Table 4. A comparison of the self-concept scores of the IAR upper quartile experimental subjects and the lower quartile experimental subjects using the pre-test mean, mean gain, adjusted mean gain and the t test.

Groups	Pre-Test Mean	Mean Gain	Adjusted Mean Gain	t
N = 7 IAR Upper Quartile	82.00	5.14	3.52	
N = 7 IAR Lower Quartile	82.86	2.14	1.94	-.732

Summary

The data collected for this study were reviewed and analyzed in this chapter. Hypotheses I and II were analyzed with a two-way analysis of covariance using the pre-test as the covariate. One factor was the treatment; the other factor was the Intellectual-Academic Responsibility Questionnaire (IAR) quartile. Hypotheses III and IV were analyzed with an unpaired t test on the gain in pre- to post-test scores, adjusted for pre-test scores. Significance was tested at the .05 level of confidence. Null hypothesis I was rejected as a significant difference did exist in reading achievement between the treatment group subjects, who experienced the Human Program activities, as compared to the control group subjects, who did not experience the Human Development Program activities. Null hypothesis II was not rejected because there was no significant differences between the

experimental and control group in self-concept gain. Null hypotheses III and IV were not rejected because there was no significant measurable reading achievement or self-concept gains as a result of the treatment for the IAR upper quartile experimental subjects as compared to the IAR lower quartile experimental subjects.

V. SUMMARY

Research tends to suggest that a relationship exists between the personal dimensions of (1) awareness of self and one's environment; (2) the acceptance of the cause and effect of one's actions; (3) the evaluation of one's self as positive; and (4) the openness one has to experience. The studies, likewise, suggest the existence of a relationship between these dimensions and achievement.

The purpose of this study was to investigate the effectiveness of the Human Development Program (a program designed to develop within the child awareness, mastery of self and the environment, and positive social interaction) in improving self-concept and reading achievement of fourth grade students. An additional purpose was to explore if the degree of responsibility a person accepts for his academic outcomes (internality) affects reading achievement and self-concept in a differential manner when the student participates in the Human Development Program.

The 64 subjects were placed into treatment and control groups at random with consideration being given to the students' feelings of internality and the students' sex. The 32 treatment subjects were involved in 19 twenty-five minute sessions of the Human Development Program within a ten week period. The 32 control subjects received no attention other than the pre- and post-testing that all subjects

received. Reading achievement was measured with the Informal Reading Inventory (IRI). Self-concept was measured with the Self-Concept and Motivation Inventory (SCAMIN) and internality was measured with the Intellectual-Academic Responsibility Questionnaire (IAR).

The null hypotheses tested follows:

- H₁: There will be no significant difference between the control and experimental groups' mean gain scores on Reading Achievement as measured by the Informal Reading Inventory (IRI).
- H₂: There will be no significant difference between the control and experimental groups' mean gain scores on Self-Concept as measured by the self-concept scale of the Self-Concept and Motivation Inventory (SCAMIN).
- H₃: There will be no significant difference in mean gain scores in Reading Achievement between the experimental subjects who by rank order of the Intellectual-Academic Responsibility Questionnaire (IAR) pre-test scores are in the lower quartile and the experimental subjects who by rank order of the IAR pre-test scores are in the upper quartile.
- H₄: There will be no significant difference in mean gain scores in self-concept between the experimental subjects who by rank order of the IAR pre-test scores are in the lower quartile and the experimental subjects who by rank order of the IAR pre-test scores are in the upper quartile.

Hypotheses I and II were analyzed with a two-way analysis of covariance using the pre-test as the covariate. One factor was the treatment; the other factor was the IAR quartile. Hypotheses III and IV were analyzed with an unpaired t test on the gain in pre- to post-test scores, adjusted for pre-test scores. Significance was tested at the .05 level of confidence.

The results on hypothesis I indicated a significant relationship (.05) does exist for this sample between participation in the Human Development Program (HDP) and reading achievement. Students in HDP for ten weeks made an adjusted mean gain score of .43 in reading achievement. This represents 4.3 months growth in reading achievement. The control students, those that did not participate in HDP, made an adjusted mean gain score of .17. This represents 1.7 months growth in reading achievement for the ten week period. The students in HDP made over twice as much reading achievement gain as did the control students during the ten weeks time period. Gains in self-concept as a result of participation in HDP were not measurably significant at the end of ten weeks.

The results of this study revealed significant gains in reading achievement, but no gains were revealed in self-concept. These results are contrary to the outcomes of Hoyser's (1971) study. Hoyser assessed the effectiveness of non-directive play with third grade boys who were identified as under-achieving in reading. The

students' gain was significant (.01) for self-concept, but not significant for reading achievement.

It is difficult to ascertain the variables that are responsible for the different outcomes. Possible variables to consider are the nature of the treatments, the different lengths of time, the different instruments for measuring reading achievement, the one grade level difference of the subjects for Hoyser's (1971) study, the sex ratio difference of the subjects in the samples, and the difference in reading achievement level of the subjects.

The present study did not show significant differences in mean gain scores for self-concept or significant mean gains in reading achievement or self-concept for students who have different degrees of internality. A tendency does appear when the results are graphed for those students in the IAR upper quartile to make more mean gain than students in the lower IAR quartile. However, there is no statistical significance to that tendency and there is no measurable relationship of that tendency to the treatment.

Conclusions

It may be concluded from this investigation, within the limitations of the study, that the mean gain score in reading achievement may be significantly greater for students who participate in the Human Development Program as compared to those students who do not

participate in the program. It may not be concluded that the Human Development Program has any effect on the student's self-concept or that there will be a differential effect on reading achievement or self-concept of students who score at the various IAR quartiles.

Some of the limitations that may be related to the outcomes of this study are:

1. The Human Development Program is designed as a curricular approach to be used over an extended period of time. Nineteen sessions may be insufficient treatment for a measurable change in self-concept.
2. An analysis by sex may have revealed significant relationships that were not evident from analyzing group data. The treatment may be differentially related to the boys' self-concept as compared to the girls' self-concept.

Recommendations for the Schools

Because reading is considered essential by many of the educational decision makers for the most effective functioning in our culture, it is an academic skill given priority for the available resources in many school districts. It, therefore, seems reasonable that those activities that increase reading gain should receive a high degree of support from the available school district resources. This position and the information gained from the present study results in the

following recommendations for the schools:

1. The Human Development Program activities and climate should be explored as one activity of the regular school program at the elementary school level.
2. The placement of counselors in all elementary schools should be considered to conduct the Human Development Program for the students.
3. Pilot programs should be considered to investigate the value of counselors training teachers to conduct the Human Development Program as a part of the regular classroom activities.

Recommendations for Further Research

Research to date has concentrated on discovering the relationship of a general treatment activities (self-directed play, HDP, group counseling) on general student outcomes (GPA, achievement) over short periods of time. It would seem fruitful to discover the explicit conditions that result in specific student outcomes. Based on this assumption, the following is recommended:

1. Conduct a longitudinal study of the effects of the Human Development Program to ascertain if the variables unmeasurable in this short term study would have significance in a long term investigation.

2. Research should be conducted to attempt to partial out the conditions of the various group treatments that lead to significant student reading achievement and self-concept gains.
3. Research should be conducted to attempt to identify the specific student dimension that can be affected by specific treatment effects to achieve specific student outcomes.
4. Research should be conducted that analyzes the data by sex.
5. Research should be conducted that uses the treatment time of day as a variable.

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APPENDICES

APPENDIX A

IT HAPPENS THIS WAY FOR ME!

FOR EACH SITUATION LISTED BELOW THERE ARE TWO STATEMENTS OF THINGS THAT COULD HAPPEN FOR YOU. CHECK THE ONE THAT BEST DESCRIBES WHAT HAPPENS TO YOU AND HOW YOU FEEL. THERE ARE NO WRONG OR RIGHT ANSWERS. JUST CHECK THE ONE THAT BEST DESCRIBES WHAT HAPPENS TO YOU AND HOW YOU FEEL.

1. If a teacher passes you to the next grade, would it probably be
 a. because she liked you, or
 b. because of the work you did?
2. When you do well on a test at school, is it more likely to be
 a. because you studied for it, or
 b. because the test was especially easy?
3. When you have trouble understanding something in school, is it usually
 a. because the teacher didn't explain it clearly, or
 b. because you didn't listen carefully?
4. When you read a story and can't remember much of it, is it usually
 a. because the story wasn't well written, or
 b. because you weren't interested in the story?
5. Suppose your parents say you are doing well in school. Is this likely to happen
 a. because your school work is good, or
 b. because they are in a good mood?
6. Suppose you did better than usual in a subject at school. Would it probably happen
 a. because you tried harder, or
 b. because someone helped you?

7. When you lose at a game of cards or checkers, does it usually happen
_____ a. because the other player is good at the game, or
_____ b. because you don't play well?
8. Suppose a person doesn't think you are very bright or clever.
_____ a. can you make him change his mind if you try to, or
_____ b. are there some people who will think you're not very bright no matter what you do?
9. If you solve a puzzle quickly, is it
_____ a. because it wasn't a very hard puzzle, or
_____ b. because you worked on it carefully?
10. If a boy or girl tells you that you are dumb, is it more likely that they say that
_____ a. because they are mad at you, or
_____ b. because what you did really wasn't very bright?
11. Suppose you study to become a teacher, scientist, or doctor and you fail. Do you think this would happen
_____ a. because you didn't work hard enough, or
_____ b. because you needed some help and other people didn't give it to you?
12. When you learn something quickly in school, is it usually
_____ a. because you paid close attention, or
_____ b. because the teacher explained it clearly?
13. If a teacher says to you, "Your work is fine," is it
_____ a. something teachers usually say to encourage pupils, or
_____ b. because you did a good job?
14. When you find it hard to work arithmetic or math problems at school, is it
_____ a. because you didn't study well enough before you tried them, or
_____ b. because the teacher gave problems that were too hard?
15. When you forget something you heard in class, is it
_____ a. because the teacher didn't explain it very well, or
_____ b. because you didn't try very hard to remember?

16. Suppose you weren't sure about the answer to a question your teacher asked you, but your answer turned out to be right. Is it likely to happen
_____ a. because she wasn't as particular as usual, or
_____ b. because you gave the best answer you could think of?
17. When you read a story and remember most of it, is it usually
_____ a. because you were interested in the story, or
_____ b. because the story was well written?
18. If your parents tell you you're acting silly and not thinking clearly, is it more likely to be
_____ a. because of something you did, or
_____ b. because they happen to be feeling cranky?
19. When you don't do well on a test at school, is it
_____ a. because the test was especially hard, or
_____ b. because you didn't study for it?
20. When you win at a game of cards or checkers, is it
_____ a. because you play real well, or
_____ b. because the other person doesn't play well?
21. If people think you're bright or clever, is it
_____ a. because they happen to like you, or
_____ b. because you usually act that way?
22. If a teacher didn't pass you to the next grade, would it probably be
_____ a. because she "had it in for you," or
_____ b. because your school work wasn't good enough?
23. Suppose you don't do as well as usual in a subject at school. Would this probably happen
_____ a. because you weren't as careful as usual, or
_____ b. because somebody bothered you and kept you from working?
24. If a boy or girl tells you that you are bright, is it usually
_____ a. because you thought up a good idea, or
_____ b. because they like you?

25. Suppose you became a famous teacher, scientist or doctor. Do you think this would happen
_____ a. because other people helped you when you needed it, or
_____ b. because you worked very hard?
26. Suppose your parents say you aren't doing well in your school work. Is this likely to happen more
_____ a. because your work isn't very good, or
_____ b. because they are feeling cranky?
27. Suppose you are showing a friend how to play a game and he has trouble with it. Would that happen
_____ a. because he wasn't able to understand how to play, or
_____ b. because you couldn't explain it well?
28. When you find it easy to work arithmetic or math problems at school, is it usually
_____ a. because the teacher gave you especially easy problems,
or
_____ b. because you studied your book well before you tried them?
29. When you remember something you heard in class, is it usually
_____ a. because you tried hard to remember, or
_____ b. because the teacher explained it well?
30. If you can't work a puzzle, is it more likely to happen
_____ a. because you are not especially good at working puzzles,
or
_____ b. because the instructions weren't written clearly enough?
31. If your parents tell you that you are bright or clever, is it more likely
_____ a. because they are feeling good, or
_____ b. because of something you did?
32. Suppose you are explaining how to play a game to a friend and he learns quickly. Would that happen more often
_____ a. because you explained it well, or
_____ b. because he was able to understand it?

33. Suppose you're not sure about the answer to a question your teacher asks you and the answer you give turns out to be wrong. Is it likely to happen
- a. because she was more particular than usual, or
 - b. because you answered too quickly?
34. If a teacher says to you, "Try to do better," would it be
- a. because this is something she might say to get pupils to try harder, or
 - b. because your work wasn't as good as usual?

APPENDIX B

THE SELF-CONCEPT AND MOTIVATION INVENTORY
(SCAMIN): WHAT FACE WOULD YOU WEAR?
LATER ELEMENTARY FORM

MANUAL OF DIRECTIONS

This form is to be used with third, fourth, fifth and sixth grade students. A beginning third grade class may be given the Inventory in two halves if the teacher feels the class cannot sustain interest for 48 questions.

Preparations

Read the Inventory to yourself before giving it. Labels, such as "service squad" or "grade" may have to be changed to conform to local terminology.

Allow at least 30 to 35 minutes for the reading of the introduction and questions, and the repeating of missed items. If a second sheet, with a name grid, is attached, add an additional 20 minutes, or fill it in the next day.

Pupils will need a dark lead pencil if the Inventory is to be scored by machine.

Read the questions aloud to the pupils without emphasizing any particular word or using any special facial expression. Discourage class clowns quickly.

Draw the five faces on the black board.

Distribute the response sheets. Request that the top be filled in: full name, date, school, and teacher's name. Students over the third grade can usually fill out the data box on the back of the response sheet: semester, sex, and grade ("S" is for special education rooms). Student numbers are entered from top to bottom. The test administrator or coordinator will inform you if he/she wants you to use student numbers, or use the six unlabeled special-purpose rows.

Remind the pupils that the response space must be darkened thoroughly.

Introduction

Read all the following introduction to the pupils (except for the directions in parentheses).

No one knows how you really feel about things. If you slipped on a banana peel--and felt silly about it--you might get up looking like this happy face. (Point to the face with the small smile.)

But inside yourself, you might really feel like this unhappy face. (Point to the small frown.)

If you hurt yourself, you might even feel like wearing this very unhappy face. (Point to the crying face.)

How would you feel inside if certain imaginary (or "make-believe") things happened to you?

Find the shaded sample box at the top. Fill in a nose on the one face you would wear if someone said that he had a surprise for you. Darken in all of the nose on the fact that you would probably feel like wearing if someone said that he had a surprise for you.

(Darken in your blackboard noses as you read the following:) Some of you may have picked the very unhappy face, or the somewhat unhappy face. Some picked the face in the middle, which does not feel one way or the other. Others picked the somewhat happy face and the very happy face.

Whatever face you picked is right if it is the way that you really feel inside.

Let's start with the first row of faces. Darken only one nose in each row. Listen carefully. I will repeat each question twice. Do not skip any questions. The first question . . .

TURN PAGE

(Preface questions with:) What face would you wear. . .

1. . . . if you were reading a story that you had written for your parents ?
2. . . . if you could make the teacher happy with your arithmetic ?
3. . . . if you were elected the leader of your reading group ?
4. . . . if you had just been put on safety patrol or service squad ?
5. . . . if you could help with a bulletin board ?
6. . . . if you could sing in the school chorus or play in a school band ?
7. . . . if you had to tell your parents that you had lost your coat ?
8. . . . if you had to ask the teacher for help with your arithmetic ?
9. . . . if you made a mistake in front of the whole class ?
10. . . . if you found that you had erased the right answer ?
11. . . . if you could not answer an easy question ?
12. . . . if you had to go to school in the summer ?
13. . . . if you could discuss a newspaper story with your parents ?
14. . . . if a teacher said that you were getting better all the time ?
15. . . . if you could tell a brother, sister, or friend the meaning of a word he/she needed to know ?
16. . . . if you were able to read like a grown-up ?
17. . . . if you were learning to read and spell some words that you might use someday ?
18. . . . if you thought of going to school to learn new ideas ?
19. . . . if you were telling your parents that you had broken a window ?
20. . . . if a teacher told you that he/she was disappointed in your effort ?
21. . . . if when choosing up teams for a class game, you were chosen last ?
22. . . . if you had done something that would get you a spanking ?
23. . . . if you had to recopy a paper that was not neat ?
24. . . . if you had to go back and start your grade all over again ?

(Preface questions with:) What face would you wear...

25. ... if your parents were talking about the jobs you will be wanting to have when you are grown-up?
26. ... if a teacher calls you to the desk to answer a question?
27. ... if the boys and girls in the class had to pick the best readers in your reading group?
28. ... if you had the chance to do an extra science experiment?
29. ... if you were starting a book with a dull cover, but which was supposed to be interesting?
30. ... if a school club was looking for members in your class?
31. ... when one of your parents has a talk with one of your teachers?
32. ... if a teacher asked you to help a student with some new work?
33. ... if your class had to choose partners to do some work?
34. ... when you think of how good you are doing in reading?
35. ... if you had some hard arithmetic problems to do?
36. ... if you went to the office of the school?
37. ... when your parents tell you how good your school-work will be?
38. ... when your teacher tells you how much you should be reading next year?
39. ... if an older student asked your brother, sister, or friend if you were a "good sport"?
40. ... thinking of the best schoolwork you would like to do?
41. ... if you started to study something new in arithmetic?
42. ... if someone was telling you what your class will be like next year?
43. ... when you bring home your report card?
44. ... when a teacher tells everyone to do their very best work?
45. ... if the smartest children could go-out-n'-play?
46. ... if you were called upon often, every day?
47. ... if you picked a thick book to read and to tell the class about?
48. ... when you think of all the children in class who like you?

DOUBLE CHECK

SCORING NOTE

<u>Page One</u>	<u>Items</u>	<u>Factor</u>	<u>Faces Scored from left to right</u>
Top half of page	1- 6 13-18	Goal and Achieve- ment Needs (GAN)	1, 2, 3, 4, 5
Bottom half of page	7-12 19-24	Failure Avoidance (FA)	5, 4, 3, 2, 1
GAN + FA = Motivation (MOT)			
<u>Page Two</u>			
Top half of page	25-30 37-42	Role Expectations (RE)	1, 2, 3, 4, 5
Bottom half of page	31-36 43-48	Self-Adequacy (SA)	1, 2, 3, 4, 5
RE + SA = Self-Concept (SC)			

APPENDIX C

Pre and Post-test IRI Reading Achievement Scores by IAR Quartile and Sex

Subject	IAR Quartile	Sex	Treatment		Control	
			Pre	Post	Pre	Post
1	1	M*	4.5	5.0	3.2	3.2
2	2	M	2.2	3.1	4.0	4.5
3	3	M	5.0	5.0	4.5	5.0
4	4	M	7.0	7.0	3.2	3.2
5	1	F	2.2	3.1	2.2	3.1
6	2	F	2.1	2.1	5.0	5.0
7	3	F	4.0	4.0	4.5	4.5
8	4	F	7.0	7.0	3.1	3.2
9	1	M	4.0	4.5	4.5	5.0
10	2	M	4.5	5.0	5.0	5.0
11	3	M	6.0	7.0	2.2	3.1
12	4	M	2.1	2.2	3.1	3.2
13	1	F	4.0	4.5	2.1	2.2
14	2	F	4.5	4.5	5.0	5.0
15	3	F	4.5	4.5	5.0	5.0
16	4	F	5.0	6.0	6.0	6.0
17	1	M	4.0	4.5	2.2	3.1
18	2	M	3.2	4.0	3.1	3.2
19	3	M	3.2	4.5	1.0	**
20	4	M	.5	1.0	4.5	4.5
21	1	F	2.2	3.1	5.0	5.0
22	2	F	5.0	5.0	3.2	3.2
23	3	F	3.2	4.0	4.0	4.0
24	4	F	3.1	**	3.1	3.1
25	1	M	4.5	4.5	4.5	4.5
26	2	M	3.1	3.2	4.0	4.0
27	3	M	4.5	5.0	4.5	4.5
28	4	M	4.5	5.0	2.2	3.1
29	1	F	1.0	1.0	4.0	4.0
30	2	F	4.0	4.0	4.5	4.5
31	3	F	4.5	4.5	4.5	4.5
32	4	F	3.2	4.5	5.0	5.0

* M = Male

F = Female

** Subject moved

Pre- and Post-Test SCAMIN Self-Concept Scores by IAR Quartile and Sex

Subject	IAR		Treatment		Control	
	Quartile	Sex	Pre	Post	Pre	Post
1	1	M*	76	80	88	89
2	2	M	67	80	92	97
3	3	M	117	94	75	86
4	4	M	93	93	106	101
5	1	F	90	88	105	86
6	2	F	83	85	79	90
7	3	F	96	94	83	86
8	4	F	83	87	84	94
9	1	M	70	92	80	78
10	2	M	75	73	89	93
11	3	M	77	79	69	80
12	4	M	87	88	85	103
13	1	F	81	83	79	73
14	2	F	84	74	95	83
15	3	F	86	92	90	88
16	4	F	88	95	77	72
17	1	M	98	87	67	77
18	2	M	80	84	90	88
19	3	M	89	89	96	**
20	4	M	73	81	82	78
21	1	F	73	**	90	84
22	2	F	86	80	83	76
23	3	F	93	91	79	75
24	4	F	89	**	95	95
25	1	M	85	75	80	73
26	2	M	89	91	86	82
27	3	M	103	98	85	80
28	4	M	70	80	96	106
29	1	F	80	90	81	86
30	2	F	***	***	100	104
31	3	F	90	88	84	87
32	4	F	88	86	76	74

* M = Male

F = Female

** Subject moved

*** Patterned invalid score

APPENDIX D

Human Development Program Session Topics by Session Number

1. Good feelings and bad feelings.
2. Pleasant and unpleasant thoughts.
3. Positive and negative behavior.
4. Mixed feelings about something.
5. Mixed thoughts about something.
6. Positive and negative parts of certain behaviors.
7. Mastery in language.
8. Mastery in mathematics.
9. Self powers to do and to be .
10. Ability to do for self.
11. Power to get what one needs.
12. Power to get into trouble.
13. Getting and giving approval.
14. Getting and giving disapproval.
15. Giving and earning approval for kind behavior.
16. Getting attention.
17. Making another feel good or bad.
18. Feeling included or excluded.
19. Review

Counselor Behaviors for Leading Human
Development Program Activities

1. ACTIVE LISTENING

- a. Show external signs of listening by eye contact, nodding appropriately, smiling, gestures, posture, etc.
- b. Ask open-ended questions: "Would you like to tell us more about that?"
- c. Ask specific questions only if you are sure they are non-threatening and sure that the person welcomes them as help.
- d. Ask specific questions to clarify what the other means to say, to help him put into words what he wants to communicate.
- e. Allow for times of silence and thought. Calm silence is trust-building. Don't feel you have to jump in every time someone stops talking.
- f. Observe signals that people want to talk; leaning forward, seeking eye contact with you, stealing glances at you, pursing their lips, moving their seats in, etc. Invite them to speak: "Do you have something, Jack?"
- g. Never take the "ball" away from participants. They are the stars.

2. FOCUS ON FEELINGS

- a. Go from experience to feeling: "How did that make you feel?"
- b. Encourage comprehensive description of the feeling: "How did the feeling come on you?" "At what moment, if there was one, did you have that feeling of joy?"
- c. Accept all feelings as real without labeling them good or bad: "You really felt that deeply, didn't you?" "It sounds like that feeling was important to you."

- d. Notice and point out feeling-reactions participants have to others' feelings: "You seemed involved in what Bill was saying. Have you experienced the same thing?"
- e. Note group feelings: "The group was really with you."
- f. Remember a word or phrase the person used that is feeling-based, and phrase a question around it. "When you were telling about camping and finding the waterfall, you mentioned the sound of the water. You said it as if that were a part of the feeling for you." If you were accurate, the person will be able to describe the feeling more fully.

3. GIVE RECOGNITION

- a. Look at each one gently and calmly when you speak to him.
- b. Learn each one's name and if you forget, ask for it again. Don't be afraid to make a mistake.
- c. Thank each participant for his contribution when he speaks unless participants are responding quickly and appropriately to each other. Then give recognition by non-verbal means: nods, eye contact, smile.
- d. Praise good listening when another can review or respond to what a speaker says: "You were listening."
- e. Give recognition for participants' expressing of feelings, of group support, of risk-taking: "You really looked happy when you spoke about that." "The group was deeply involved in what you were saying." "It sounded like you shared something that was really personal and important to you." Then let the person say more if he wants to.

4. PARAPHRASE

- a. Use words the speaker himself used as much as possible.
- b. Particularly when a participant is able to speak on the topic only in incomplete ideas, repeat back to him the gist of what he says briefly so he can realize how far he's progressed with the idea, and can continue further with it if he wants to.

- c. Don't put words in his mouth, but do supply words for which he already has a concept or experience and needs words to express. There is a fine line between taking over what he is saying, and saying just enough to assist him in putting a complete idea together.
- d. Use paraphrasing to obtain his help in making you understand what he means: "You mean. . . ?" Don't stop his momentum, however, just to clarify for yourself some detail. Stay in his frame of reference.

5. REVIEW

- a. From time to time, when the flow of conversation slows down or when several have spoken, ask for a review: "Let's see where we've come. . ." Then ask if anyone in the group would review what was said.
- b. Be able yourself to repeat succinctly what each person has said. In the beginning, you will do most of the reviewing. If the person reviewing does not touch accurately on a particular individual, either ask that individual or someone else if they could fill in or add to what was said in review.
- c. The purpose is to give another increment of recognition to those who spoke and to those listening attentively enough to review accurately.
- d. Review can be used to bring digressions back to the topic. Don't "put down" someone who digressed, but thank him sincerely: "Thank you, Ed. Now let's see what we've talked about so far."
- e. Either yourself or a participant should review at the conclusion, mentioning each by name and addressing him rather than speaking about him: "Ronnie, you said. . ." rather than "he said. . ."

6. FOCUS ON SIMILARITIES AND DIFFERENCES

- a. The purpose of this is to show young people how much the same they are and that their differences are not a bad thing.

- b. Reviewing and paraphrasing flow naturally into focusing on similarities and differences: "Let's see where we've come. Jim, you said... which sounds something like what Billy was saying."
- c. The ability to verbalize similarities and differences implies a fairly advanced stage of development that we are not likely to find in very small children.
- d. Once the young people are able to paraphrase each other's answers to some degree and can review well, ask them first if they can identify similarities and differences before you do it yourself: "Does anyone hear a sort of pattern in what we have said?" "Do we seem to experience a sense of success or competence in similar or different ways?"
- e. Little of this can be used, perhaps once a session. Do not push for a "daily lesson to be learned" or drive for a "pat" sense of closure not felt first by the children themselves.

7. INVOLVE EVERYONE

- a. To encourage the reticent child, ask him if he would like to whisper his answer to you or to someone next to him. When he tells, respond encouragingly, then ask if he would like to tell the group also.
- b. Ask him if the group could try to guess what his answer might be. Once he says okay, he becomes involved in saying yes or no, and usually tells eventually.
- c. Deal with disrupters' feelings without blame: "You seem to feel angry today... Would you like to tell us how you feel? ...Is there anything we can do to help you get over the feeling?"
- d. Watch carefully for signs that reticent children want to be invited in. When you see such signs, ask gently, "Jack?" "Would you like to take a turn?"
- e. Involve the timid by inviting them to review what someone just said. If they can get even one word out, you can give recognition for their good listening. They must go from tiny success to tiny success.

- f. Touch children who are "acting out" while giving eye attention to the one speaking. Perhaps have children change seats to separate troublesome pairs.
- g. If a child does not take a turn today, remember this and be sure to give him an early chance (and many chances) tomorrow.

8. TRANSFER LEADERSHIP

- a. Ask if they have questions for each other.
- b. Become aware of how many are ready to jump in, and permit the silences that will allow them to. Use facial expression, glance, and gesture to encourage this spontaneity.
- c. Make general statements encouraging others' spontaneous responses to speakers: "If any of you have responses to what someone says, jump right in."
- d. From time to time give specific invitations: "Does anyone have a comment for Jack?"
- e. As soon as someone is ready, offer him formal leadership of the group, from announcing the topic to the conclusion. He may also conduct a group discussion to decide upon a topic, majority vote deciding. Intervene only if the group is becoming a disaster; and then only to get it running again.
- f. An intermediate stage is to turn over leadership in the middle of a session to a child who is almost doing it already.
- g. Give supportive recognition afterwards for everything the child leader did well, plus helpful critique.
- h. Participate in all the circles, but gradually turn over leadership of two-thirds of the circles to the young people.

APPENDIX E

StatisticsTable 5. Analysis of covariance for reading achievement scores.

Source of Variation	df	S. S.	M. S.	F	P
Total	61	9.560			
Covariate	1	1.052	1.052	7.79	
Adjusted Total	60	8.504			
Treatment	1	0.876	0.876	6.49	.02
IAR Quartile	3	.307	.102	.76	N.S.
Interaction	3	.151	.050	.37	N.S.
Error	53	7.160	.135		

Table 6. Analysis of covariance for self-concept scores.

Source of Variation	df	S. S.	M. S.	F	P
Total	59	3,890.9			
Covariate	1	223.3	223.3	5.23	
Adjusted Total	58	3,667.6			
Treatment	1	.0	.0	.0	N.S.
IAR Quartile	3	223.2	71.2	1.66	N.S.
Interaction	3	140.1	46.7	1.10	N.S.
Error	51	2,304.5	42.7		