

AN ABSTRACT OF THE THESIS OF

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Title: THERAPEUTIC NON-DIRECTIVE PLAY WITH LOW
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The purpose of the study was to investigate the effectiveness of therapeutic non-directive play treatment with third grade boys who were low achievers in reading and to determine how treatment was associated with changes in reading achievement: vocabulary and comprehension; reading attitude and academic self-concept; role expectations and self-adequacy. Five public elementary schools in the Lebanon-Crowfoot area provided a population of 107 third grade boys who were identified as having an I.Q. of 90 or above. A reading achievement test (Gates-MacGinitie, Primary C, Form 1) was administered in order to obtain reading age. The subjects whose reading comprehension age was 1.4 (one year, four months) below mental age were designated as being underachievers in reading. The 52 boys who met the criteria were given pre-tests on reading attitude (Primary Pupil Reading Attitude Inventory) and academic self-concept (Self-Concept and Motivation Inventory).

The subjects were then placed in one of four experimental groups: therapeutic non-directive play and reading, therapeutic non-directive play only, reading only, or control. The treatment groups experienced 27 sessions and each session was of a 30-minute duration. The control group had only the pre- and post-testing common to all.

Six hypotheses were formulated which compared therapeutic non-directive play and reading with therapeutic non-directive play only, reading only, or the no treatment control group. The specific areas compared were reading achievement, reading attitude, and self-concept. Analysis of variance, one-way classification was applied to the pre-test, post-test and post-test/pre-test group differences in order to determine if there were significant findings. If the F ratio was significant at the .05 level, the Table of Least Significant Differences was consulted in order to ascertain which experimental group was producing the effect.

The analysis of data revealed that the therapeutic non-directive play and reading group demonstrated greater significant gains (.05 and .01) in role expectations, an element of self-concept (post-test) and in total self-concept (post-test/pre-test) than the play only, reading only, or the control group. The play only group produced more significant results (.01) in the post-test/pre-test measures in

total self-concept than the reading only or the control group. There were no significant differences among groups in reading achievement or reading attitude.

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THERAPEUTIC NON-DIRECTIVE PLAY WITH LOW ACHIEVERS IN READING

I. INTRODUCTION

Today, 7000 years after man first began to record his ideas in writing, the ability to read has become an absolute necessity (Penney, 1970). This task of learning to read is a demand imposed by our culture at a certain age and is recognized as an essential developmental goal (Athey, 1969). However, if present trends continue, eight million children in America's elementary and secondary schools, or one child in seven, will not be successful in acquiring the necessary reading skills (USDHEW, 1969). Often, reading disability results in a disability in almost every area of learning. If a student does not have adequate reading skills, learning problems develop in English, social studies, science and other school subjects. Academic failure due to limited reading performance is a primary problem confronting many students.

There is no one single cause for all reading disabilities. The factors, physical, psychological, social or educational, contributing to a child's inability to read are both numerous and complex. In an intensive five year study of 30 cases of reading failure, Robinson (1946) discovered that social, visual and emotional difficulties appeared most frequently as causes of reading disability. However, regardless

of what the causation has been, each child experiences failure.

According to Austin (1958), when difficulty in reading does occur, the accompanying feelings of failure and frustration often lead to emotional conflicts. Many studies support this view and show poor readers as having a high frequency of emotional and social problems. Smith (1961) concluded that the incidence of maladjustments among poor readers was significantly greater than among good readers. Gates (1947) estimated that 75 percent of severely disabled readers showed some personality maladjustment but Harris (1961) believed this was a low estimate. Bricklin and Bricklin's data (1967) indicated that 90 percent of the cases of underachievement were caused by emotional conflicts. Holmes (1955) observed the following relationship between reading and the emotions:

1. Personality difficulties are frequently but not universally associated with reading difficulties.
2. In cases where they occur together, personality difficulties may be causes, concomitants, or results of reading difficulties.
3. Emotional difficulties usually appear as part of a constellation of difficulties causing reading retardation.
4. There is no single personality pattern characteristic of reading failure and there is no proved one-to-one relationship between type of adjustment difficulties and type of

reading disabilities.

5. Symptoms associated with reading difficulties are commonly aggressive reactions, withdrawing tendencies or general insecurity and apprehension.
6. If emotional adjustment disturbances are one of a group of primary causes of reading difficulties, retardation in other academic learnings often occurs.
7. If reading difficulties are a cause of emotional difficulties, skilled remedial work in reading may clear up rather easily a considerable number of difficulties. If deep-seated personality difficulties are a cause of reading difficulties ordinary remedial work is likely to be ineffective and more intensive therapy is required.

"Most, if not all, of our guidance problems are related to, if not caused by failure in reading" (Strang, 1966). There seems to be general agreement that emotional and/or social conflicts may cause or be caused by reading failure.

Otto and McMenemy (1966) summarized the problems disabled readers exhibited: nervous tension, inadequate self-concept, fear of or antagonism toward learning to read, chronic fear of failure, poor attention span, undue dependence on approval, anxiety, introversion, malingering, anti-social behavior, irresponsibility, inability to accept blame, and many like reactions and responses. Sebeson (1970) also

found that

poor readers show evidences of emotional instability, emotional immaturity or lack of social confidence. Feelings of inadequacy and nervousness or feelings of discouragement may indicate a low self-concept and result in under-achieving in academic subjects.

A group of studies have investigated the relationship between self-concept and achievement. A study by Shaw and McCune (1960) showed a significant relationship between a pupil's self-concept of ability and his academic achievement. Several authorities have consistently emphasized that unfavorable self-acceptance leads to poor school achievement, low aspiration, a negative attitude, and frustration and doubt about one's future (Van Hoose, 1968).

Bond and Tinker (1957) considered that adverse attitudes toward reading are frequently due to failure in reading. A consensus of investigators including Ladd (1933) and Sandin (1944) reported that successful achievers formed positive attitudes toward reading, while reading disability cases held unfavorable attitudes. McKillop (1952) discovered attitudes to be related to a number of the processes involved in reading--to perception, to learning and recall, to reasoning and judgment. Attitude seems to be an important determiner of the reading response.

Gates (1949) described reading as

essentially a thoughtful process, but one which is more than thought getting since it embraces all the higher mental processes: evaluating, judging, imagining, reasoning, problem-solving. In addition, reading involves not only

mental but also emotional processes. In whole-hearted reading activity the child does more than understand and contemplate; his emotions are stirred; his attitudes and purposes are modified; indeed, his innermost being is involved.

Reading is a very complex response made by the whole child.

If effective education is concerned with the development of the whole child, we must meet emotional needs as well as intellectual needs. "A poor self-concept does not permit the best growth in the cognitive area and inadequate intellectual power may hinder the development of a full personality" (Meeks, 1968). Because of this complex interaction, schools need to recognize that they can no longer place the major emphasis on the cognitive domain and largely ignore the affective domain (Athey, 1969).

Marksheffel and Meeks (1968) believe it is the responsibility of the guidance role to provide interactions essential to cognitive and affective development. Because of the relationship between emotional adjustment and reading achievement, counseling and remedial reading are often combined in dealing with reading problems. George Spache (1954) concluded, after analyzing the test results of 50 retarded readers, that the average retarded reader was a "candidate for play therapy or some other psychotherapeutic approach because of the common social maladjustment present." The findings of a second study reported by Spache in 1957 were consistent with those of the 1954 study.

Several studies (Gardner and Ransom, 1968; Ohlsen, 1964; Cohn, 1963; McGowan, 1968; Winkler et al., 1965; Jackson, 1969) have been conducted with reading underachievers who received a group counseling experience. Because play constitutes the child's medium of expression, the therapeutic non-directive play approach would seem to be more applicable for counseling the younger child. Marx (1967) and Ohlsen (1966) recommend the use of play materials in group counseling because verbalization is difficult for the primary age child. However, few studies have investigated the effectiveness of a therapeutic non-directive play, group counseling approach designed for poor readers.

Axline (1947a) reported a study of 50 second graders who were described as poor readers. The children were given the opportunity for emotional expression through the techniques of non-directive play therapy. Several children showed gains in reading age including some of 16 and 17 months.

A further study of the effects of non-directive play therapy in cases of reading retardation was conducted by Bills (1950a). An own-control design showed significantly more gain in reading scores during the play therapy period, compared with the control period. This gain was maintained during the post-therapy period.

Seeman and Edwards (1954) selected fifth and sixth grade students who ranked low in personal adjustment and low in reading achievement. The experimental group was exposed to a permissive, play activity

experience with a teacher-therapist. The experimental group gained on reading achievement but showed no difference on sociometric scores.

Purpose of the Study

The purpose of this research is to investigate the effectiveness of using therapeutic non-directive play treatment with third grade boys who are low achievers in reading and to determine how the treatment is associated with changes in reading achievement, reading attitude and academic self-concept.

Hypotheses

H₁: Experimental group 1 (play and reading) will demonstrate significantly greater positive changes in reading achievement than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

H₂: Experimental group 1 (play and reading) will demonstrate significantly greater positive changes in reading attitude than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

H₃: Experimental group 1 (play and reading) will demonstrate significantly greater positive changes in academic self-concept than experimental group 2 (play only), experimental group 3 (reading only),

or the control group.

H₄: Experimental group 2 (play only) will demonstrate significantly greater positive changes in reading achievement than experimental group 3 (reading only) or the control group.

H₅: Experimental group 2 (play only) will demonstrate significantly greater positive changes in reading attitude than experimental group 3 (reading only) or the control group.

H₆: Experimental group 2 (play only) will demonstrate significantly greater positive changes in academic self-concept than experimental group 3 (reading only) or the control group.

Limitations of the Study

1. Time limitation may contribute to following conditions:
 - a. Difficult to measure change in self-concept during a nine week period.
 - b. Difficult to measure change in reading attitude during a nine week period.
 - c. Difficult to measure change in reading achievement during a nine week period.
2. Unable to randomly assign each subject to a treatment or control group.
3. Conducting the study in one geographic area may limit findings for the general population.

Significance of the Study

The children who participated in the experimental groups, play and reading activity or the play only activity, are expected to make a significantly greater gain in reading achievement, academic self-concept and reading attitude than the reading only or control group. If this expectation is realized, it may be concluded that therapeutic non-directive play is an effective approach in meeting the needs of low achievers in reading and should become a part of the developmental guidance program in the elementary school.

Definition of Terms

The following terms and definitions will be used consistently throughout this study:

Underachiever in Reading, Low Achiever in Reading, Disabled Reader, Retarded Reader, Poor Reader

Mental ability or intelligence is one of the primary determinants of academic achievement; therefore, an underachiever in reading or any of the above terms may be one who achieves in reading below the levels expected from his chronological age and mental abilities. In order to find the degree of reading disability, one must compute chronological age (CA) in years and months, mental age (MA) in years and months, and reading age (RA) in years and months. RA is derived directly from the norms of a standardized reading achievement test

(Otto and McMenemy, 1966).

Formula: Mental Age (MA) - Reading Age (RA) = Disability in
Reading (years, months)

This study has selected the following criterion: If a child's reading age in comprehension is 1.4 (one year and four months) below mental age, he is considered to be a disabled reader. The Oregon State Department of Education suggests that achievement grade equivalent scores on acceptable standardized tests will be no higher than 1.5 for grade three.

Therapeutic Non-Directive Play, Play Therapy, Play Activity

Play therapy is a relationship between the child and the therapist in the setting of a playroom, where the child is encouraged to express himself freely, to release pent-up emotions and repressed feelings, and to work through his fear and anger so that he comes to be himself and functions in terms of his real potentials and abilities
(Moustakas, 1959).

Because of the child's level of development of verbal expression, play constitutes a natural and spontaneous medium of expression. Through play and non-verbal behaviors, the children express their accumulated feelings of insecurity, hostility, fear, bewilderment, and confusion.

Counselor/Child Relationship

The counseling relationship is one in which the responsibility for

decision and growth rests with the counselee (Hill, 1969). "The time is yours to use as you wish," explains the counselor as he structures the relationship. Through a climate of permissiveness and acceptance, the children have a chance to solve their own problems, make their own choices and take the responsibilities for themselves. The counselor is sensitive to the child's facial expressions, his movements and to his verbal expressions. The child's feelings are reflected by the counselor-- "You feel angry today." Reflection of feeling is the added element that helps to clarify the feelings and develop insights.

Limitations

The children are given freedom of verbal expression and movement with fewer restrictions than in a regular classroom situation. However, limits define the boundaries of the relationship and tie it to reality. Limits offer security and at the same time permit the child to move freely and safely in his play. The following limits were defined and explained to the child when he broke them.

1. There was a definite time to begin and end the sessions. ("I see that our time is up for today. We'll have to stop now.")
2. All items were to remain in the play room. ("I know you want to take that home but you have to use it here.")
3. Blocks, large pieces of clay or other objects were not to be thrown at each other. ("You can play with those blocks in

other ways but you can't throw them at each other. ")

Setting

The toys and materials helped to establish an informal setting. A variety of play materials were used. The initial arrangement of the play things was maintained throughout the play therapy sessions. Materials available were:

Expressive media: crayons, chalk and board, color pens, building blocks, clay, hand puppets, family dolls, telephone, tinker toys, puzzles;

Aggressive toys: guns, knives, beanbag, pounding bench, toy soldiers, Indians and cowboys;

Regressive toys: baby bottle, dolls, dollhouse.

Academic Self-Concept

The Academic Self-Concept is how a child views his role as a learner in school. It is the student's sum of experiences, perceptions, attitudes, and feelings about school and schoolwork (Farrah, Milchus and Reitz, 1968).

II. REVIEW OF THE LITERATURE

It is easy to recognize how a child enhances his physical growth as he learns to jump, run, climb and balance. It is not so easily seen that children acquire a deeper understanding of themselves and others when in play they take different roles, act out their fantasies, conflicts, fears, aggressions and confusions. A child is challenged by the environment he creates in play: to imagine, explore, experiment, fail and succeed. And in the process he begins to learn who he is, what he can do and how he can best live with others (LeShan, 1967).

The child at play has long been of significance in the history of civilization. Toys have been found in the ruins of ancient Greece, Egypt, Babylonia, China and among the remains of the Aztec civilizations. Plato is often cited as the first to have recognized the practical value of play from his prescription in the Laws to distribute apples among the boys to help them learn Arithmetic and to give real miniature tools to three-year-olds who were later to become builders (Millar, 1968). Play as a technique for understanding and aiding children was advocated by Rousseau in the 18th Century. Even though Rousseau's references were directed toward learning, he formulated a principle which was later the foundation of some modern approaches to child therapy (Dimick and Huff, 1970).

Play Analysis

As Freud learned more and more about the feelings of adults, he was also discovering a great deal about how these adults had felt as

children. Freud's followers began to develop a body of knowledge about childhood feelings and needs that children were unable to express verbally. These early researchers began to realize that the application of adult techniques of free association, dream analysis, verbalization of anxiety, exploration of the past and analysis of developmental stages was difficult, if not impossible, with most young children. It was discovered that play was the child's language for the expression of unconscious needs and feelings; and if adults were perceptive enough to look and listen sensitively, play could be used as the language by which a child communicated.

Other therapists began to adapt the play activity technique which came to be known as play therapy. Jackson and Todd (1950) interpreted the play activities:

... the reliving of missed play phases is one of the aspects of the therapy of play. To give the child an opportunity of going back to an earlier phase and to play as he then wanted to but for some reason could not, is a case of psychological reculer pour mieux sauter.

Non-Directive Play

As the concept of client-centered therapy was formulated, the play technique with children lost much of its directive-diagnostic aspect and became a non-directive therapeutic tool (Lebo, 1955). Non-directive play therapy developed from the work of Carl Rogers (1942, 1951) and his associates. Virginia Axline (1947b) was among the first

to successfully apply non-directive methods to play therapy with children.

Research in Non-Directive Play

Research in the field of therapeutic non-directive play has been presented in a number of articles during the past 20 years. However, Ginott (1961), Lebo (1953), Haworth (1964), Dorfman (1951) and L'Abate (1968) found non-directive play promising when evaluated subjectively but believed there was a real need for methodical research.

Bixler (1945), Bloomberg (1948) and Axline (1949, 1964) presented single case histories. However, the present study will attempt to review research in non-directive play conducted with groups of children.

The Process of Therapeutic Non-Directive Play

The process of play therapy has never been subjected to a large scale investigation; the few available studies in this area are based on a limited number of cases (Ginott, 1961). A study by Landisberg and Snyder (1946) using a population of four, ages five and six, noted an increase in released feelings as the therapy sessions progressed, most of which were directed toward others, not the counselor or self. There was an increase in emotional release from 50 percent for the first two-fifths of therapy to 70 percent during the last three-fifths.

Expression of negative feelings increased, whereas expression of positive feelings remained the same.

Finke (1961) did not find positive or negative trends in statements made by six subjects, ages eight to 14. However, Finke did cite three stages of therapy:

1. In the first stage the child is either reticent or verbose. If aggression is to be part of his pattern, it will be seen at this point.
2. In this stage, if aggression has occurred, it is now decreased. Also noted are testing of limits, and imaginative play.
3. In the last stage, the child makes more of an effort to relate to the therapist and draw him into the games.

Both Finke (1961) and Landisberg and Snyder's (1946) studies indicated that the children's attitudes change during therapy and that the changes can be quantitatively reported.

Lebo (1952) undertook a study of the relationship between chronological age and the types of statements made by children in play therapy. Using Finke's (1961) categories, he concluded that as the children became older, they told the therapist fewer of their decisions, spent less time in testing limits, made fewer attempts to draw the therapist into their play, and voiced more of their likes and dislikes. In a later study, Lebo (1956) reported that fewer statements were made by 12-year-olds than by any other age group. Further research (Lebo and Lebo, 1957) has indicated that chronological age and aggressiveness

affects the type of statement children make.

Two process studies were conducted by Moustakas. In one study (1955b) he postulated that in play therapy a child goes through a sequence of emotional growth that corresponds to the normal emotional development of early childhood:

First level: Undifferentiated and ill-defined positive and negative feelings prominent;

Second level: Emergence of focused positive and negative feelings in response to parents, siblings and other people;

Third level: Ambivalent feelings distinctive;

Fourth level: Negative feelings in primary focus, sometimes specific;

Fifth level: Ambivalent negative and positive attitudes prominent;

Sixth level: Positive feelings predominant and appear as organized attitudes. Negative attitudes also present. Both positive and negative attitudes differentiated, focused, direct, and generally in line with reality.

Moustakas found that disturbed children show the following process in play-therapy:

(a) diffuse negative feelings, expressed everywhere in the child's play; (b) ambivalent feelings, generally anxious or hostile; (c) direct negative feelings, expressed toward parents, siblings and others, or in specific forms of regression; (d) ambivalent feelings, positive and negative, toward parents, siblings, and others; and (e) clear, distinct,

separate, usually realistic, positive and negative attitudes, with positive attitudes predominating in the child's play.

In the second study, Moustakas (1955a) compared patterns of emotional growth of normal and disturbed children. Moustakas hypothesized that disturbed children express negative attitudes more frequently and more intensely than do well-adjusted children. The study confirmed Moustakas' hypothesis; although both groups expressed similar types of negative attitudes, the disturbed children expressed a significantly greater number of negative attitudes and with greater intensity.

Ginott (1961) believed the process studies cited above yielded only a few verified generalizations:

1. The process of play therapy can be measured objectively.
2. Children's expressions of feelings are changed in a discernible direction during therapy.
3. Chronological age and aggressiveness affect the type of statement made by children in therapy.

Personal and Social Changes

Fleming and Snyder (1947) attempted to study the effects of non-directive group play therapy upon personality test performance. The first of these was Rogers' Test of Personality Adjustment, an objective paper and pencil test. The second was a Guess Who test, which allows a rating of children by their peers. The third test, Fleming's

Sociometric Test, requests the child to name two persons in his group with whom he would and would not like to do things. The therapy subjects were four boys and three girls between the ages of eight and one-half and 11 and one-half years. The other 39 children served as controls. All were residents of a children's home and were selected because, out of 46 children tested, they ranked low on a combination of the three measures. The results indicated that on all three tests the experimental group of girls improved significantly more than the control group. The greatest improvement was in personal feelings toward self, and the least improvement was in social adjustment. The experimental group of boys did not improve significantly more than the control group. The results were in accord with the therapists' clinical impressions.

Dorfman (1958) made an objective and adequately controlled investigation of the outcomes of therapeutic non-directive play. In the study it was hypothesized that personality changes occur during therapy but do not occur in the same child during a no-therapy period and do not occur in control cases. Tests used were Rogers' Test of Personality Adjustment, Machover Human Figure Drawing, sentence completion and follow-up letters written by the children. The experimental group, numbering 12 boys and five girls, were seen in individual play therapy for an average of 19 sessions. These children were tested four times: (1) 13 weeks before therapy; (2) immediately

prior to therapy; (3) immediately following therapy, and (4) a year and a half after therapy. The purpose of the test 13 weeks prior to therapy was for each child to serve as his own control during a no-therapy period. Another group of 17 children were given the pre- and post-tests but no therapy over the same length of time as the experimental group. Results indicated that there was an improvement in test scores in the control group. Although individuals may show "spontaneous remission," the group as a whole did not. It was further concluded that therapy improvements can be made without concomitant parent counseling, and that effective therapy can be done in a school setting.

Cox (1953) conducted a study with two groups of orphanage children, nine in each group, who were matched on several measures of adjustment and on a sociometric rating. The experimental group was given ten weeks of play therapy. The control group received no therapy. Results indicated that about one-half of the experimental group showed improvement in the areas measured both at termination of play therapy and at a 15-week follow-up. None of the control group showed gains.

Mehlan (1953) employed non-directive group play therapy with institutionalized familial defective children. Using personality test scores and behavior ratings as the criteria for change, the study yielded slightly more changes in the therapy group, compared to controls, on scales of the Haggerty, Olson, Wickman Behavior Ratings.

In a study by Seeman, Barry and Ellenwood (1956), an experimental design controlling for the effects of regression was used, since both the experimental and control groups were chosen from children with extreme scores on adjustment. Following individual play therapy sessions, the experimental group showed significant changes in reputation test scores, teacher rating changes were in the predicted direction but not significant, and, for aggressive children, there was a shift away from aggressive ratings.

Therapist-Child Interaction

The interaction of children and therapist in a play therapy situation was investigated by Moustakas and Schalock (1955). Two groups of children, one with serious emotional problems and the other without such problems, were analyzed. Eighty-five percent of the therapist's interaction with the children involved:

1. attentive observation (therapist observes and listens while child plays)
2. recognition of stimulation (therapist shows recognition by "Uh, uh, I see")
3. giving information verbally
4. interpretation by restating verbalized feelings
5. seeking information of an impersonal nature.

Non-Directive Play with Reading Disabilities

The use of reading achievement as an indirect indication of change attributable to play therapy is based on the idea that reading is an extremely complex skill, and sensitive to interference from emotional maladjustment in children (Lewis, 1965). Axline (1947a) has reported upon the effects of a non-directive therapeutic method in cases of reading retardation in an elementary school. Thirty-seven second grade children, diagnosed as being retarded in reading (by means of a teacher rating and standardized reading tests) were selected for the study. Their Stanford-Binet I. Q. range was from 80 to 148. The children were placed in a special class, where the teacher attempted to create a therapeutic environment in which adjustment and learning might occur together. There was no emphasis placed upon learning to read. Children were encouraged to express their attitudes in the presence of an understanding and permissive teacher. This was an adaptation of a non-directive approach for classroom use. At the end of the school term, children were re-tested with the Gates Primary Reading Tests for Grades One and Two. During this three-and-one-half month period, there were several remarkable gains in reading age, including some of 16 and 17 months. However, no statistical analysis was made by Axline.

Seeman and Edwards (1954) tested the hypothesis that a therapeutic approach to teaching will yield significant changes in personality

and in reading performance. The investigators included the following procedures in the experimental design: (a) identify children who rank low in personal adjustment and in reading achievement; (b) provide an experience which is therapeutic in intent; (c) measure the effects of this experience upon personal adjustment and reading performance, and (d) provide adequate controls so as to rule out alternative explanations of the experimental outcome. The samples used in the study were drawn from the fifth and sixth grade classes of a large city. The children were predominantly of lower socio-economic status.

The selection of children low in reading achievement was based upon the Gates Reading Survey. The selection criterion here was a reading score significantly lower than average expectation for the grade. The Tuddenham form of the Reputation Test was used for the identification of children who ranked low in personal adjustment. After the groups were selected, the Rogers Personality Test was administered. This test was chosen to yield another measure of personal adjustment.

The experimental treatment consisted of the teacher-therapist meeting with the children in groups of four to seven for one-half hour daily. Varied materials were provided, including art materials, books, and games. The teacher made it clear to the children that they could use the time as they wished. The teacher's intent throughout the sessions was to maintain an open, permissive, understanding

atmosphere which could encourage exploration and expression by the children.

The reading gain of the experimental group was significantly greater than the gain of the control group. There were no significant differences in personality measures.

Bills (1950a) included in his study a group of third graders classified as slow learners. The students were in a special class because of an inability to learn at a normal rate and not because of intellectual or emotional factors. This study was an investigation of the effects of individual and group play therapy on the reading level of retarded readers. Eight retarded readers were selected for the play therapy experience. The criterion of reading retardation was a negative discrepancy between mental age and reading age. The study was designed to include three periods of 30 school days each. The first period was a control period, which was intended to measure the gains of the children during a period in which no play experience was given. During the second period, the therapy period, the children were given a play therapy experience of a non-directive nature. The third period was included to measure the gains which followed immediately after therapy. A measure of intelligence was obtained during the control period and measures of silent and oral reading abilities were made before each of the three periods and following the third period. The study concluded: (1) significant changes in reading

ability occurred as a result of the play therapy experience, (2) personal changes can occur in non-directive play therapy in as little as six individual and three group play therapy sessions, and (3) there appears to be no common personality maladjustment present in the group of retarded readers.

In a second study, the same author (Bills, 1950b) tested a corollary hypothesis and discovered that retarded readers who were not emotionally maladjusted would not improve in reading skills with play therapy.

Follow-Up Studies

In a long range follow-up, Axline (1950) selected 30 successful play therapy case records. Of these, 22 subjects were available for a follow-up study. Nineteen of the subjects were still successfully adjusted a year later, two were successfully adjusted three years after the original contacts. A follow-up of 24 of the 37 children used in previous research (Axline, 1947a) was made five years later. Of this group originally designated as poor readers, five were honor roll students and four others had reading skills adequate for their grade placement.

Summary

Non-directive play therapy appears promising when evaluated

subjectively. Most of the research studies cited in this review of literature have involved attempts to show that the therapeutic non-directive approach is effective in treating various problems. However, there is an absence of reliable research data. Both Lebo (1953) and Ginott (1961) reviewed the research on non-directive play through 1960 and concluded that few studies have provided substantiating data in support of the philosophical aspects of play therapy. Further experimental confirmation is needed in order to prove the effectiveness of therapeutic non-directive play.

III. METHODOLOGY

Selection of Subjects

The subjects who participated in this experiment were selected from five public elementary schools. These schools were located in the same geographic area, Lebanon and Crowfoot. Both elementary districts are served by one union high school. The Lebanon-Crowfoot area is located 90 miles south of Portland and has a city limits population of 6,550. In the immediate fringe area, the additional population is approximately 15,000. The wood products industry and agriculture provide a majority of the employment for the community.

The design of the study called for the identification of a group of boys at the third grade level who were underachievers in reading. The total enrollment of 120 third grade boys in the five public elementary schools was selected as the source for such subjects. A population of boys who met the following criteria was identified:

1. third grade enrollment,
2. intelligence quotient (I. Q.) of 90 or above.

The intelligence quotient scores were obtained from results of the California Test of Mental Maturity, Primary Level I, which had been administered on October 17, 1969, by classroom teachers.

There were 107 third grade boys who were identified as having an I. Q. of 90 or above based upon the group test results of the California

California Mental Maturity, Primary I.

The 107 boys were given the Gates-MacGinitie Reading Test Primary C, Form 1, by this investigator. A graduate student in guidance and counseling assisted in the administration of the test. The reading test consisted of two parts: vocabulary and comprehension. The vocabulary test was given first with a 20-minute time allowance. After a suitable rest period, the 30-minute comprehension test was administered. The testing periods were from November 6 to November 13. The testing sessions were held in the third grade classrooms of the elementary schools.

The raw scores and grade equivalent scores were obtained for each subject from the vocabulary and comprehension sections of the Gates-MacGinitie Reading Test. A comparison of mental age (obtained from the California Test of Mental Maturity, Primary I) and reading age (obtained from the Gates-MacGinitie Reading Test, Primary C, Form 1) was computed in order to establish reading disability. The subjects in this study, third grade boys, whose reading age in comprehension was one year, four months (1.4) below mental age were designated as being underachievers in reading.

Fifty-four third grade boys met the criteria for the study. After permission was granted to conduct this study with the boys in their classrooms, the teachers were not consulted in the selection of these students. Fifty-two of the boys remained for the full nine weeks of the

research. The boys' chronological age mean of 8.6 was believed to be an appropriate age for members of a third grade group. The range of I.Q. scores was 90-119 with a group mean I.Q. of 104.6.

Procedure

Additional Testing

The selected subjects, 52 third grade boys, were removed from their regular classrooms for additional testing. The library and special education rooms in the elementary schools were used for this purpose.

The tests given were:

1. Primary Pupil Reading Attitude Inventory (Askov, 1968)
2. Self-Concept and Motivation Inventory (Farrah, Milchus and Reitz, 1968)

Assignment to Groups

Three groups received some kind of treatment and one control group had only the pre- and post-testing common to all.

Group I. Therapeutic non-directive play and reading

Group II. Therapeutic non-directive play

Group III. Reading

Group IV. Control

Each experimental group was divided into two sub-groups in order to reduce the number of group members. Group size consisted

of not less than five or not more than eight subjects. A larger group size is not recommended because it becomes too lively and makes it impossible for the counselor to observe the activities and to react to each child (Ginott, 1961).

The five public elementary schools in the Lebanon and Crowfoot area which were involved in this study were: Green Acres, Cascades, Santiam, Queen Anne and Crowfoot. Determination of the type of treatment for each group was based upon transportation of students, scheduling, space availability, and availability of materials. No criteria other than feasibility were considered.

Green Acres School had a total of 23 third grade boys who met the criteria for this study. Eight of the boys were assigned to a control group, eight were assigned to therapeutic non-directive play, and seven were assigned to a therapeutic non-directive play and reading group. These subjects were randomly selected for the three groups by the use of the table of random digits (Wallis and Roberts, 1956). Thus, there were three groups conducted within this school.

The Crowfoot School had a total of 11 third grade boys who met the study criteria. Five of the boys were selected for the control group and six were placed in a therapeutic non-directive play and reading group. The table of random digits (Wallis and Roberts, 1956) was again used for specific group placement.

Five boys in the third grade of Queen Anne School were identified

as being eligible for the study. All of these boys were placed in a therapeutic non-directive play group. At Santiam School, eight third grade boys were assigned to a reading group. Also assigned to a reading group were five third grade boys at Cascades School.

There was a total of 52 subjects or four experimental groups of 13 subjects each, three sub-groups from one school, two sub-groups from one school and three sub-groups from three separate schools. Table 1 illustrates the assignment of subjects to treatment or control groups.

Table 1. Distribution of Subjects Within the Four Experimental Groups.

Experimental Groups	Sub-groups	Treatment	Number of Subjects	Schools
E ₁	(1)	Play and Reading	7	Green Acres
	(2)	Play and Reading	6	Crowfoot
E ₂	(1)	Play only	8	Green Acres
	(2)	Play only	5	Queen Anne
E ₃	(1)	Reading only	8	Santiam
	(2)	Reading only	5	Cascades
E ₄	(1)	Control (no treatment)	8	Green Acres
	(2)	Control (no treatment)	5	Crowfoot
			N = 52	

Experimental Group Sessions

Each of the three treatment groups met three days a week for 30-minute sessions which amounted to a total of 90 minutes per week. The nine-week sessions began on December 1, 1969 and were concluded on February 12, 1970. There was a one-week interruption for the Christmas holidays but this should not affect the results of the study because all of the subjects experienced the vacation. The graduate student who assisted with initial testing, also assisted with groups for the first nine weeks of the sessions.

Green Acres School

Experimental Group I, sub-group 1, non-directive play and reading, met on Monday, Wednesday and Thursday from 11:00-11:30 a.m. Alternate weeks were designated for the ten sessions of non-directive play and for the ten sessions of reading. Experimental Group II, sub-group 1, received the non-directive play activity on Monday, Wednesday and Thursday from 10:30-11:00 a.m. The control group members only met as a group for the pre-test and post-test sessions with no special attention during the intervening time.

Crowfoot School

Experimental Group I, sub-group 2, participated in non-directive play or reading during alternate weeks. The group met on Tuesday,

2:00-2:30 p. m.; Wednesday, 2:15-2:45 p. m., and Thursday from 2:15-2:45 p. m. The control group met only for the pre-test and post-test sessions.

Queen Anne School

Experimental Group II, sub-group 2, participated in non-directive play on Monday, 1:30-2:00 p. m.; Tuesday, 12:30-1:00 p. m., and Thursday, 11:00-11:30 a. m.

Santiam School

Experimental Group III, sub-group 1, experienced a reading activity on Monday, 12:30-1:00 p. m.; Tuesday, 12:30-1:00 p. m., and Wednesday, 11:00-11:30 a. m.

Cascades School

Experimental Group III, sub-group 2, participated in a reading activity on Monday, 9:50-10:20 a. m.; Wednesday, 10:00-10:30 a. m., and Thursday, 1:30-2:00 p. m.

Instruments

Three instruments were selected to be used in this study. One instrument, Gates-MacGinitie Reading Test, Primary C, Form 1 (Gates-MacGinitie, 1965), was given to determine the reading

achievement level in vocabulary and comprehension. The Primary Pupil Reading Attitude Inventory (Askov, 1968) was administered to measure attitudes toward recreational reading. The third instrument was the Self-Concept and Motivation Inventory (Farrah, Milchus and Reitz, 1968) which included elements of Motivation: Goal/Achivement Needs, Failure Avoidance; and elements of Self-Concept: Role Expectations and Self-Adequacy. This research will only involve the elements of Self-Concept in the Self-Concept and Motivation Inventory.

Gates-MacGinitie Reading Test (1965)

The Gates-MacGinitie Reading Test, published by Teachers College Press, Columbia University, New York City, New York, was selected to determine reading achievement. The Primary level C, form 1 and 2, was chosen because of its recommended use in third grade. This eight-page test for third grade children consists of two parts: vocabulary and comprehension. The vocabulary test samples the child's ability to recognize and analyze isolated words; the comprehension test measures ability to read and understand whole paragraphs. Each test contains a series of exercises of increasing difficulty.

The raw score on either the vocabulary or comprehension test was the total number of items for which the subject chose the correct answer. Each subject's raw score was then converted into a grade

score and later a reading age. Tables of vocabulary and comprehension norms for the pre- and post-tests were presented in the manual.

The norms for the Gates-MacGinitie Reading Test were established by administering the tests to a nationwide sample of approximately 40,000 pupils in 38 communities. The alternate form reliability coefficient for Primary C, vocabulary, was .85 and the split-half reliability was .89. The alternate form reliability coefficient for Primary C, comprehension, was .87 and the split-half reliability was .91.

Primary Reading Attitude Inventory

The Primary Pupil Reading Attitude Inventory is an experimental instrument developed by Eunice Askov, Wisconsin Research Development Center for Cognitive Learning, University of Wisconsin, Madison, Wisconsin. This instrument measures attitudes toward recreational reading. The inventory consists of two versions, one for boys and one for girls. It does not require reading or writing. There are two picture frames on each page with a total of nine non-reading activities and three reading activities depicted (Appendix A). Each of the three reading pictures is paired with each of the nine non-reading pictures, allowing the subject to choose between reading and some other activity 27 times. Thus a score of 27 indicated that reading was consistently chosen over the nine other activities; a score of zero

indicated that reading was not chosen at all as a preferred activity. The subject responds by marking an x through the picture of the activity he likes the best.

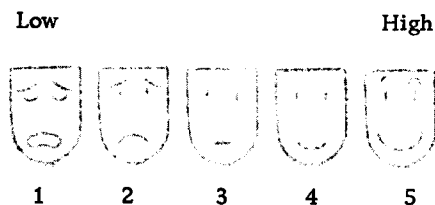
In the reliability study Askov conducted in 1968, the mean score on the first administration of the Primary Pupil Reading Attitude Inventory was 10.20. The mean of the scores when the test was given one week later was 9.49. The test-retest reliability coefficient with a one-week interval was significant beyond the .001 level of significance ($r = .906$). A concurrent validation study was made with 94 second and third grade children in three classrooms to determine if there was a significant difference between the high and low interest groups. A t test ($t = 3.36$) indicated that the means of the Primary Pupil Attitude Inventory scores of the two groups were different at the .01 level of significance.

Self-Concept and Motivation Inventory (1968)

The SCAMIN (Self-Concept and Motivation Inventory) (Appendix B) is distributed by Person-o-Metrics of Dearborn Heights, Michigan. The Later Elementary form was selected for this study because it was devised for grades three through six. Four main factors are assessed: achievement needs, failure avoidance, role expectations and self-adequacy. This research will be concerned only with those elements of self-concept which consist of role expectations and

self-adequacy. Role expectations are the positive acceptance of the aspirations and demands that the students think significant others expect of them. Self-adequacy is the positive regard with which a student views his present and future probabilities of success.

The 48 items were read orally to the group in one 30-minute session because interest was sustained throughout the examination period. A separate answer sheet (Appendix B) was given to each boy. The boys were instructed to mark one of the noses of the five faces which illustrated their feelings in response to the statement read by the examiner. The faces represented scores from left to right on a five-point scale as follows:



The top half of the second page (of the answer sheet), items 25-30 and 37-42, were factors relating to role expectations. The bottom half of the answer sheet (second page), items 31-36 and 43-48, contained factors of self-adequacy. The sum total of role expectation items and self-adequacy items equalled self-concept ($RE + SA = SC$).

The SCAMIN, Later Elementary form, has a reliability of .83. The Later Elementary Form has been shown to correlate with semantic differentials of self and racial pride. Roth and others found

that SCAMIN is operating independently of intelligence scores (Milchus, 1969).

Treatment of Data

The results of pre-tests and post-test scores in reading achievements: vocabulary and comprehension; reading attitude and elements of self-concept: role expectations and self-adequacy, were analyzed. The one way analysis of variance was used to determine which gains are significant. Significance was tested both at the .05 and .01 levels.

Summary

The 52 third grade boys who participated in this study were selected from five elementary schools in the Lebanon and Crowfoot area. The boys were identified as being third graders of average and above intelligence, with a reading age in comprehension one year and four months below mental age. Other tests administered were the Primary Pupil Attitude Inventory and the Self-Concept and Motivation Inventory. The 52 boys were placed in three treatment groups: therapeutic non-directive play and reading, non-directive play, reading, and a control group. Each of the treatment groups met three days a week for nine weeks. The sessions were of a 30-minute duration. The sessions began on December 1, 1969 and were completed on February 12, 1970. Post-testing was concluded on March 10.

IV. FINDINGS

This study was conducted to investigate the effectiveness of using therapeutic non-directive play treatment with third grade boys who were low achievers in reading and to determine how the treatment was associated with changes in reading achievement, reading attitude and academic self-concept.

Equivalence of Groups

The control and experimental groups were established in Chapter III using the following criteria:

1. boys
2. third grade enrollment
3. I. Q. of 90 or above
4. reading age in comprehension 1.4 years below mental age

Analysis Procedure

The analysis of variance, one-way classification, was used to evaluate pre-test, post-test and pre-test/post-test differences for hypotheses one through six. The analysis of variance, one-way classification, is a method for dividing the variation observed in experimental data into different parts, each part assignable to a known source, cause or factor. The analysis of the variance is used to test

the significance of the differences among the means of a number of different samples. Experiments which employ one independent variable are said to involve one basis of classification. This statistical method can be found in Chapter 18 of Statistical Analysis in Psychology and Education (Ferguson, 1966).

Analysis of Variance: One-Way Classification

Using the following model:

$$Y_{ij} = \mu + G_i + \epsilon_{ij}$$

where

Y_{ij} is the response

μ is the over-all mean

G_i is the group effect

ϵ_{ij} is the random error

$i = 1, \dots, g$

$j = 1, \dots, n$

Analysis of Variance for Group Test Differences

<u>Source of Variation</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Groups	$g-1$	GSS	$\frac{GSS}{g-1}$	$\frac{GMS}{EMS}$
Error	$g(n-1)$	ESS	$\frac{ESS}{g(n-1)}$	
Total	$gn-1$	TSS		

Least Significance Differences

Using the following model:

Ranked Means	- d	- c	- b
a (largest)	a- d	a- c	a- b
b	b- d	b- c	
c	c- d		
d (smallest)			

The Least Significant Difference (L. S. D.) table will be consulted if the F ratio is significant at the .05 or .01 levels. The L. S. D. table will be used in order to determine which groups contributed to the significant findings.

Hypothesis One

H_1 : Experimental group 1 (play and reading) will demonstrate significantly greater positive changes in reading achievement than experimental group 2 (play only), experimental group 3 (reading only) or the control group.

Data on reading achievement were obtained from raw scores based upon two reading sub-tests of the Gates-McGinitie Reading Test: vocabulary and comprehension. A one-way analysis of variance was applied to pre-test, post-test and post-test/pre-test scores in both reading vocabulary and reading comprehension. Summaries of the data on reading achievement appear in Tables 2-13. Tables 2, 4 and 6

Table 2. Analysis of Variance for Pre-Test Group Differences:
Reading Vocabulary.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	453.90	151.30	2.24
Error	48	3238.15	67.46	
Total	51	3692.06		

Table 3. Least Significant Differences for Table 2.

Source	Ranked Means	-d	-c	-b
C*	a. 25.92308	7.76923	3.23077	1.23077
P & R	b. 24.69231	6.53846	2.00000	
R	c. 22.69231	4.53846		
P	d. 18.15385			

LSD .05 = 6.38199

LSD .01 = 8.44381

* C (control); P & R (play and reading); R (reading); P (play)

Table 4. Analysis of Variance for Post-Test Group Differences:
Reading Vocabulary.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	96.52	32.17	.3689
Error	48	4186.31	87.21	
Total	51	4282.83		

Table 5. Least Significant Differences for Table 4.

Source	Ranked Means	-d	-c	-b
P & R	a. 27.69231	3.46154	2.61539	.92308
C	b. 26.76923	2.53846	1.69231	
R	c. 25.07692	.84615		
P	d. 24.23077			

LSD .05 = 7.25643

LSD .01 = 9.60075

Table 6. Analysis of Variance for Post-Test/Pre-Test Group Differences: Reading Vocabulary.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	188.00	62.67	1.85
Error	48	1629.70	34.00	
Total	51	1817.70		

Table 7. Least Significant Differences for Table 6.

Source	Ranked Means	-d	-c	-b
P	a. 6.07692	5.23077	3.69230	3.07692
P & R	b. 3.00000	2.15385	.61523	
R	c. 2.38462	1.53847		
C	d. .84615			

LSD .05 = 4.52752

LSD .01 = 5.99022

Table 8. Analysis of Variance for Pre-Test Group Differences:
Reading Comprehension.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	15.08	5.03	.0827
Error	48	2914.84	60.75	
Total	51	2930.92		

Table 9. Least Significant Differences for Table 8.

Source	Ranked Means	-d	-c	-b
C	a. 17.00000	1.38462	.61538	.15385
R	b. 16.84615	1.23077	.46153	
P & R	c. 16.38462	.76924		
P	d. 15.61538			

LSD .05 = 6.05605

LSD .01 = 8.01257

Table 10. Analysis of Variance for Post-Test Group Differences:
Reading Comprehension.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	170.08	56.70	1.03
Error	48	265.20	55.25	
Total	51	2822.23		

Table 11. Least Significant Differences for Table 10.

Source	Ranked Means	-d	-c	-b
P & R	a. 20.53846	4.61538	4.15384	2.46154
C	b. 18.07692	2.15384	1.69230	
P	c. 16.38462	.46154		
R	d. 15.92308			

LSD .05 = 5.77573

LSD .01 = 7.64168

Table 12. Analysis of Variance for Post-Test/Pre-Test Group Differences: Reading Comprehension.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	174.38	58.13	1.83
Error	48	1525.84	31.79	
Total	51	1700.23		

Table 13. Least Significant Differences for Table 12.

Source	Ranked Means	-d	-c	-b
P & R	a. 4.15385	5.07693	3.38462	3.07693
C	b. 1.07692	2.00000	.30769	
P	c. .76923	1.69231		
R	d. -0.92308			

LSD .05 = 4.38089

LSD .01 = 5.79622

present the analysis of variance for reading vocabulary, and Tables 3, 5 and 7 report the least significant differences of ranked group means in reading vocabulary. The analysis of variance for the pre-test group differences in reading vocabulary produced an F ratio of 2.24, the post-test differences, an F of .3689, and the post-test/pre-test differences, an F of 1.85. The analysis of variance for the pre-test differences in reading comprehension (Table 8) produced an F of .0827, post-test (Table 10) F was 1.03 and post-test/pre-test (Table 12) F was 1.83. Consulting a table of F with $df = 3$ associated with the numerator and $df = 48$ with the denominator, the value of F required for significance at the .05 level is 2.79. It can be concluded that experimental group 1 (play and reading) did not demonstrate significantly greater positive changes in reading achievement than experimental group 2 (play only), experimental group 3 (reading only) or the control group. Thus, the first hypothesis was not confirmed.

Hypothesis Two

H₂: Experimental group 1 (play and reading) will demonstrate significantly greater positive changes in reading attitude than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

To assess significance of differences in reading attitude using the Primary Pupil Reading Attitude Inventory test, analysis of variance was applied to the group differences in pre-test, post-test and post-test/pre-test scores. Summaries of the analysis of variance for the

data on reading attitude appear in Tables 14-19. The pre-test F of 2.20 (Table 14), the post-test F of .9898 (Table 16) and the F of 1.01 on the post-test/pre-test (Table 18) were not significant at the .05 level. Experimental group 1 (play and reading) did not demonstrate greater positive changes in reading attitude than experimental group 2 (play only), experimental group 3 (reading only), or the control group. Therefore, the findings did not confirm the second hypothesis.

Hypothesis Three

H₃: Experimental group 1 (play and reading) will demonstrate significantly greater positive changes in academic self-concept than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

To measure academic self-concept the two elements, role expectations and self-adequacy were individually assessed and combined in a single self-concept score. The results of the analysis of variance for role expectations in pre-test scores showed no significant differences among groups. Table 20 summarized the pre-test scores. The analysis of post-test differences for role expectations showed some significant findings. According to L.S. D. Table 23, there was a significant difference at the .01 level between the play and reading group and the control group. Also at the .05 level, there was a significant difference between the means of the play and reading group and the play only group. These results confirm hypothesis three that experimental group 1 (play and reading) will demonstrate significantly

Table 14. Analysis of Variance for Pre-Test Group Differences of Reading Attitude.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	199.15	66.38	2.20
Error	48	1449.54	30.20	
Total	51	1648.70		

Table 15. Least Significant Differences for Table 14.

Source	Ranked Means	-d	-c	-b
C	a. 8.76923	5.30769	3.92308	3.53846
P & R	b. 5.23077	1.76923	.38462	
R	c. 4.84615	1.38461		
P	d. 3.46154			

LSD .05 = 4.26994

LSD .01 = 5.64943

Table 16. Analysis of Variance for Post-Test Group Differences:
Reading Attitude.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	128.77	42.92	.9898
Error	48	2081.54	43.37	
Total	51	2210.31		

Table 17. Least Significant Differences for Table 16.

Source	Ranked Means	-d	-c	-b
C	a. 8.23077	3.92308	2.76923	.69231
P & R	b. 7.53846	3.23077	2.07692	
R	c. 5.46154	1.15385		
P	d. 4.30769			

LSD .05 = 5.11681

LSD .01 = 6.76990

Table 18. Analysis of Variance for Post-Test/Pre-Test Group Differences: Reading Attitude.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	53.31	17.77	1.01
Error	48	844.77	17.60	
Total	51	898.08		

Table 19. Least Significant Differences for Table 18.

Source	Ranked Means	-d	-c	-b
P & R	a. 2.30769	2.84615	1.69231	1.46154
P	b. .84615	1.38461	.23077	
R	c. .61538	1.15384		
C	d. -0.53846			

LSD .05 = 3.25969

LSD .01 = 4.31279

Table 20. Analysis of Variance for Pre-Test Group Differences:
Role Expectations.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	170.98	56.99	1.35
Error	48	2030.46	42.30	
Total	51	2201.44		

Table 21. Least Significant Differences for Table 20.

Source	Ranked Means	-d	-c	-b
R	a. 48.23077	4.30769	3.00000	.30769
P & R	b. 47.92308	4.00000	2.69231	
C	c. 45.23077	1.30769		
P	d. 43.92308			

LSD .05 = 5.05364

LSD .01 = 6.68632

Table 22. Analysis of Variance for Post-Test Group Differences:
Role Expectations.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	509.08	169.69	3.89*
Error	48	2092.15	43.59	
Total	51	2601.23		

* $F > F_{.05}$

Table 23. Least Significant Differences for Table 22.

Source	Ranked Means	-d	-c	-b
P & R	a. 50.00000	8.69231**	5.76923*	4.61538
R	b. 45.38462	4.07693	1.15385	
P	c. 44.23077	2.92308		
C	d. 41.30769			

* Significant at the .05 level

** Significant at the .01 level

LSD .05 = 5.12984

LSD .01 = 6.78714

Table 24. Analysis of Variance for Post-Test/Pre-Test Group Differences: Role Expectations.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	300.21	100.07	2.80*
Error	48	1714.31	35.72	
Total	51	2014.52		

* $F > F_{.05}$

Table 25. Least Significant Differences for Table 24.

Source	Ranked Means	-d	-c	-b
P & R	a. 2.07692	6.00000*	4.92307*	1.76923
P	b. .30769	4.23077	3.15384	
R	c. -2.84615	1.07693		
C	d. -3.92308			

* Significant at the .05 level

LSD .05 = 4.64357

LSD .01 = 6.14376

Table 26. Analysis of Variance for Pre-Test Group Differences:
Self-Adequacy.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	298.15	99.39	2.48
Error	48	1922.15	40.05	
Total	51	2220.31		

Table 27. Least Significant Differences for Table 26.

Source	Ranked Means	-d	-c	-b
R	a. 44.23077	6.30769	3.69231	1.38462
P & R	b. 42.84615	4.92307	2.30769	
C	c. 40.53846	2.61538		
P	d. 37.92308			

LSD .05 = 4.91701

LSD .01 = 6.50555

Table 28. Analysis of Variance for Post-Test Group Differences:
Self-Adequacy.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	305.62	101.87	2.34
Error	48	2092.31	43.59	
Total	51	2397.92		

Table 29. Least Significant Differences for Table 28.

Source	Ranked Means	-d	-c	-b
R	a. 43.23077	5.92308	3.00000	.15385
P & R	b. 43.07692	5.76923	2.84615	
P	c. 40.23077	2.92308		
C	d. 37.30769			

LSD .05 = 5.13003

LSD .01 = 6.78739

Table 30. Analysis of Variance for Post-Test/Pre-Test Group Differences: Self-Adequacy.

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	209.31	69.77	2.18
Error	48	1533.85	31.95	
Total	51	1742.69		

Table 31. Least Significant Differences for Table 30.

Source	Ranked Means	-d	-c	-b
P	a. 2.30769	5.53846	3.30769	2.07692
P & R	b. .23077	3.46154	1.23077	
R	c. -1.00000	2.23077		
C	d. -3.23077			

LSD .05 = 4.39170

LSD .01 = 5.81052

Table 32. Analysis of Variance for Pre-Test Group Differences:
Self-Concept (SC = RE + SA).

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	911.14	303.71	2.45
Error	48	5949.54	123.95	
Total	51	6860.67		

Table 33. Least Significant Differences for Table 32.

Source	Ranked Means	-d	-c	-b
R	a. 92.46154	10.61539	6.69231	1.69231
P & R	b. 90.76923	8.92308	5.00000	
C	c. 85.76923	3.92308		
P	d. 81.84615			

LSD .05 = 8.65065

LSD .01 = 11.44541

Table 34. Analysis of Variance for Post-Test Group Differences:
Self-Concept (SC = RE + SA).

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	1477.70	492.59	3.76*
Error	48	6296.31	131.17	
Total	51	7774.08		

* $F > F_{.05}$

Table 35. Least Significant Differences for Table 34.

Source	Ranked Means	-d	-c	-b
P & R	a. 93.07692	14.46154**	8.61538	4.46154
R	b. 88.61538	10.00000*	4.15384	
P	c. 84.46154	5.84616		
C	d. 78.61538			

* Significant at the .05 level

** Significant at the .01 level

LSD .05 = 8.89918

LSD .01 = 11.77423

Table 36. Analysis of Variance for Post-Test/Pre-Test Group Differences: Self-Concept (SC = RE + SA).

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Groups	3	895.75	298.58	3.84*
Error	48	3731.23	77.73	
Total	51	4626.98		

* $F > F_{.05}$

Table 37. Least Significant Differences for Table 36.

Source	Ranked Means	-d	-c	-b
P	a. 2.61538	9.76923**	6.46153	.30769
P & R	b. 2.30769	9.46154**	6.15384	
R	c. -3.84615	3.30770		
C	d. -7.15385			

** Significant at the .01 level

LSD .05 = 6.85067

LSD .01 = 9.06391

greater positive changes in role expectations (an element of self-concept) than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

Hypothesis Four

H₄: Experimental group 2 (play only) will demonstrate significantly greater positive changes in reading achievement than experimental group 3 (reading only) or the control group.

Results of reading achievement: reading vocabulary and reading comprehension were treated in hypothesis one. However, the F ratio was not significant at the .05 or .01 levels. Tables 2-13 summarized findings for the pre-test, post-test and post-test/pre-test measures. Experimental group 2 (play only) did not demonstrate greater positive changes in reading achievement than experimental group 3 (reading only) or the control group.

Hypothesis Five

H₅: Experimental group 2 (play only) will demonstrate significantly greater positive changes in reading attitude than experimental group 3 (reading only) or the control group.

The results of the analysis of variance applied to the scores from the reading attitude pre-test, post-test, and post-test/pre-test are reported in Tables 14-19. As stated in hypothesis two, there were no significant interactions affecting the responses of group 2 (play only). The experimental group 2 (play only) did not demonstrate

greater positive changes in reading attitude than experimental group 3 (reading only) or the control group. Therefore, hypothesis five was rejected.

Hypothesis Six

H₆: Experimental group 2 (play only) will demonstrate significantly greater positive changes in academic self-concept than experimental group 3 (reading only) or the control group.

Self-concept was assessed by the combination of two separate tests, one in role expectations and one in self-adequacy. Experimental group 2 (play only) scores were significantly different at the .01 level in the post-test/pre-test results in the analysis of variance for differences of total self-concept (Table 36). These results confirm the hypothesis that the experimental group 2 (play only) will demonstrate significantly greater positive changes than experimental group 3 (reading only) or the control group.

Summary

The data collected for this study were reviewed and analyzed in this chapter. The one-way analysis of variance was applied to the pre-test, post-test, and post-test/pre-test results relating to the six hypotheses. The L. S. D. table was consulted if the F ratio was significant at the .05 or .01 levels. Hypotheses three and six were accepted as there were statistically significant differences among the

experimental groups and the control group. The play and reading group (experimental group 1) demonstrated greater significant gains in role expectations (post-test) and in total self-concept (post-test/pre-test) than the play only, reading only, or the control group. The play only group produced significant results in the post-test/pre-test measures of total self-concept. Hypotheses one, two, four and five were rejected because there were no significant findings.

V. SUMMARY AND CONCLUSIONS

Summary

Academic failure due to limited reading performance is a primary problem confronting many students. The discrepancy between intellectual ability and achievement level identifies these students as being underachievers in reading. Underachievement is both a problem to the individual, who may suffer from a personal sense of failure, and to society, which loses the contribution of an individual's full potential. Torrance (1962) aptly described an underachiever as

a scorned imagination, an unused memory, tabooed sensations, an interrupted thought, a rejected question, a forbidden daydream, an unexpressed idea, an unsought judgment, an unpainted picture, an unsung song, a safely hidden poem, unused talent. These make an underachiever.

It is believed that reading encompasses the total person, both the intellectual and emotional components. If the developmental task of learning to read is not adequately realized, conflicts arise and are often accompanied by emotional and/or social problems. There seems to be general agreement among reading authorities that reading failure may cause or be caused by emotional and/or social conflicts. Unsuccessful readers have been shown to have poor self-concepts which also may contribute to poor school achievement and negative attitudes toward reading.

Because of the relationship between emotional adjustment and

reading achievement, counseling and remedial reading instruction are often combined in dealing with reading problems. Several studies have been conducted with reading underachievers who received a group counseling experience. However, the therapeutic non-directive play approach would seem to be more applicable for counseling the younger child because play is the child's medium of expression.

Few reliable studies have been conducted using the therapeutic non-directive play approach with poor readers. Some of the studies reviewed lacked scientifically sound experimental designs. Often the studies were conducted with institutionalized children or with children who were assigned to "special classrooms." The number of subjects in the sample was sometimes less than six and individual case studies were presented as evidences of successful results.

The purpose of the present research was to investigate the effectiveness of using therapeutic non-directive play treatment with third grade boys who were low achievers in reading and to determine how treatment is associated with changes in reading achievement: vocabulary and comprehension; reading attitude and academic self-concept; role expectations and self-adequacy. Five public elementary schools in the Lebanon-Crowfoot area provided a population of 107 third grade boys who were identified as having an I. Q. of 90 or above. A reading achievement test (Gates-MacGinitie, Primary C, Form 1) was administered in order to obtain reading age. The subjects whose

reading comprehension age was 1.4 (one year, four months) below mental age, were designated as being underachievers in reading. The 52 boys who met the criteria were given pre-tests on reading attitude (Primary Pupil Reading Attitude Inventory) and academic self-concept (Self-Concept and Motivation Inventory). The subjects were then placed in one of four experimental groups: therapeutic non-directive play and reading, therapeutic non-directive play only, reading only, or control. Each experimental group was divided into two sub-groups in order to reduce the number of group members. Group size consisted of not less than five or not more than eight subjects.

Six hypotheses were formulated which compared therapeutic non-directive play and reading with therapeutic non-directive play only, reading only or the no treatment control group. The specific areas compared were reading achievement, reading attitude and self-concept. The hypotheses tested were as follows:

Hypotheses

H_1 : Experimental group 1 (play and reading) will demonstrate significantly greater positive changes in reading achievement than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

H_2 : Experimental group 1 (play and reading) will demonstrate significantly greater positive changes in reading attitude than

experimental group 2 (play only), experimental group 3 (reading only), or the control group.

H₃: Experimental group 1 (play and reading) will demonstrate significantly greater positive changes in academic self-concept than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

H₄: Experimental group 2 (play only) will demonstrate significantly greater positive changes in reading achievement than experimental group 3 (reading only) or the control group.

H₅: Experimental group 2 (play only) will demonstrate significantly greater positive changes in reading attitude than experimental group 3 (reading only) or the control group.

H₆: Experimental group 2 (play only) will demonstrate significantly greater positive changes in academic self-concept than experimental group 3 (reading only) or the control group.

Findings

In order to assess the data, the analysis of variance, one-way classification was applied to the pre-test, post-test, and post-test/pre-test group differences in order to determine if there were significant findings in reading achievement, reading attitude or self-concept. If the F ratio was significant at the .05 level, the Table of Least Significant Differences was consulted in order to ascertain which

experimental group was producing the response.

Rejected hypotheses:

H₁: Experimental group 1 (play and reading) did not demonstrate significantly greater positive changes in reading achievement than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

H₂: Experimental group 1 (play and reading) did not demonstrate significantly greater positive changes in reading attitude than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

H₄: Experimental group 2 (play only) did not demonstrate significantly greater positive changes in reading achievement than experimental group 3 (reading only) or the control group.

H₅: Experimental group 2 (play only) did not demonstrate significantly greater positive changes in reading attitude than experimental group 3 (reading only) or the control group.

Accepted hypotheses:

H₃: Experimental group 1 (play and reading) demonstrated significantly greater positive changes in academic self-concept than experimental group 2 (play only), experimental group 3 (reading only), or the control group.

H₆: Experimental group 2 (play only) demonstrated significantly greater positive changes in academic self-concept than experimental

group 3 (reading only) or the control group.

Conclusions

The present experiment was not successful in showing significant differences in academic performance level of the underachiever in reading who was exposed to a therapeutic non-directive play treatment. Nor was there supportive evidence to indicate that therapeutic play would significantly contribute to a change in reading attitude. However, data yielded significant results in support of the hypotheses that greater positive changes in academic self-concept would be demonstrated by the therapeutic non-directive play and reading group, and the play only group, than by the reading only group or the control group.

As a result of these findings, perhaps it could be said that teaching alone is not enough. The more structured programs experienced by the reading group or the control group did not contribute to significant differences in reading achievement, reading attitude or in self-concept. However, the students who experienced play therapy produced some significant evidence in regard to feelings about self:role expectancies and self-concept. These findings seem to indicate that interactions with peer group and a counselor in an informal setting could produce a more positive academic self-concept than the reading or control groups in the more formal environment. Perhaps for those children who have experienced failure, therapeutic play

offers the opportunity to experience success, and as a result a more positive academic self-concept emerges. Measured changes in reading achievement may be forthcoming, therefore, the groups may be re-evaluated at a later time.

Recommendations

The following recommendations are presented on the basis of information gained from the present study:

1. School districts should identify children who show signs of a reading problem in primary grades so that specialized group or individual help in reading or counseling can be provided. Perhaps this would prevent the development of severe reading and emotional problems in later years.
2. Therapeutic non-directive play counseling or group counseling experience should be provided for the student who is an underachiever in reading in order to improve the child's feelings about himself.
3. Investigation of the value of therapeutic non-directive play should be conducted in a longitudinal type study for a two to five year period.
4. An extended series of therapeutic play sessions may need to be continued for those individual children who seem to need additional play experience.

5. Follow-up testing should be done with the present experimental groups because there seems to be a pattern of positive increments in ranked means appearing in the play only group and also in the play and reading group in the areas of reading achievement, reading attitude, and academic self-concept.

Therapeutic play has a place in the school that is concerned about the development of the whole child, not the making of a student but of a person.

BIBLIOGRAPHY

- Askov, Eunice N. 1968. Primary pupil reading inventory. Madison, University of Wisconsin. Research and Development Center for Cognitive Learning.
- Athey, Irene. 1969. Affective factors in reading. Paper presented at International Reading Association, Kansas City, Kansas. May 2, 1969.
- Austin, Mary C. 1958. Retarded readers speak. *Reading Teacher* 12:24-28.
- Axline, Virginia. 1947a. Non-directive therapy for poor readers. *Journal of Consulting Psychology* 11:61-69.
- _____ 1947b. *Play therapy*. Boston, Houghton Mifflin. 379 p.
- _____ 1949. Mental deficiency--symptom or disease. *Journal of Consulting Psychology* 13:313-327.
- _____ 1950. Play therapy experiences as described by child participants. *Journal of Consulting Psychology* 14:53-63.
- _____ 1964. *Dibs: in search of self; personality development in play therapy*. Boston, Houghton Mifflin. 186 p.
- Bills, Robert E. 1950a. Non-directive play therapy with retarded retarded readers. *Journal of Consulting Psychology* 14:140-149.
- _____ 1950b. Play therapy with well adjusted retarded readers. *Journal of Consulting Psychology* 14:246-249.
- Bixler, R. H. 1945. Treatment of a reading problem through non-directive play therapy. *Journal of Consulting Psychology* 9:105-118.
- Bloomberg, Claire M. 1948. An experiment in play therapy. *Childhood Education* 25:177-180.
- Bond, Guy L. and Miles A. Tinker. 1957. *Reading difficulties, their diagnosis and correction*. New York, Appleton-Century-Crofts. 486 p.

- Bricklin, Barry and Patricia M. Bricklin. 1967. Bright child poor grades: the psychology of underachievement. New York, Dell Publishing Company. 164 p.
- Cohn, Benjamin, Charles F. Combs, Edward J. Gibian and A. Mead Sniffer. 1963. Group counseling: an orientation. *Personnel and Guidance Journal* 42:355-358.
- Cox, F. N. 1953. Sociometric status and individual adjustment before and after play therapy. *Journal of Abnormal and Social Psychology* 48:354-356.
- Dimick, Kenneth M. and Vaughn E. Huff. 1970. Child counseling. Dubuque, William C. Brown. 254 p.
- Dorfman, Elaine. 1951. Play therapy. In: *Client-centered therapy* by Carl R. Rogers. Boston, Houghton Mifflin. p. 235-277.
- _____ 1958. Personality outcomes of client centered child therapy. *Psychological Monographs* 72:1-21.
- Farrah, George A., Norman J. Milchus and William Reitz. 1968. The self-concept and motivation inventory. Dearborn Heights, Person-o-metrics.
- Ferguson, George A. 1966. *Statistical analysis in psychology and education*. 2d ed. New York, McGraw-Hill. 446 p.
- Finke, Helene. 1961. Changes in the emotionalized attitudes in six cases of play therapy. In: *Psychotherapy with children: the theory and practice*, by Haim G. Ginott. New York, McGraw-Hill. p. 137, 208.
- Fleming, Louise and William Snyder. 1947. Social and personal changes following non-directive group play therapy. *American Journal of Orthopsychiatry* 17:101-116.
- Gardner, James and Grayce Ransom. 1968. Academic reorientation: a counseling approach to remedial readers. *Reading Teacher* 21:529-536.
- Gates, Arthur I. 1947. *The improvement of reading*. 3d ed. New York, Macmillan. 421 p.
- _____ 1949. Reading in the elementary school. *National Society for the Study of Education. Forty-eighth Yearbook, Part*

- II, Chicago, University of Chicago Press. p. 4.
- Gates, Arthur I. and Walter H. MacGinitie. 1965. Gates-MacGinitie Reading Tests. New York, Teachers College, Columbia University.
- Ginott, Haim. 1961. Group psychotherapy with children: the theory and practice of play therapy. New York, McGraw-Hill. 208 p.
- Harris, Albert J. 1961. How to increase reading ability. 4th ed. New York, David McKay. 387 p.
- Haworth, Mary R. (ed.). 1964. Child psychotherapy, practice and theory. New York, Basic Books. 459 p.
- Hill, George E. and Eleanore B. Luckey. 1969. Guidance for children in elementary schools. New York, Appleton-Century-Crofts. 598 p.
- Holmes, Jack A. 1955. Emotional factors and reading disabilities. Reading Teacher 10:14.
- Jackson, Lydia and Kathleen M. Todd. 1950. Child treatment and the therapy of play. New York, Ronald Press. 159 p.
- Jackson, Robert. 1969. Results of early identification and guidance of underachievers. Review of Education Research, Guidance and Counseling, vol. XXX, no. 2. p. 190.
- L'Abate, Luciano. 1968. Design for a playroom. ERIC Ed. 019 133, PS000862.
- Ladd, M. R. 1933. The relation of social, economic and personal characteristics to reading ability. In: Reading difficulties: their diagnosis and correction, by Guy L. Bond and Miles A. Tinker. p. 110.
- Landisberg, Selma and W. U. Snyder. 1946. Non-directive play therapy. Journal of Clinical Psychology 2:203-214.
- Lebo, Dell. 1952. The relationship of response categories in play therapy to chronological age. Child Psychiatry 2:330-336.
- _____ 1953. The present status of research on non-directive play therapy. Journal of Consulting Psychology 17: 177-183.

- Lebo, Dell. 1955. The development of play as a form of therapy from Rousseau to Rogers. *American Journal of Psychiatry* 112:418-422.
-
- _____ 1956. Age and suitability for non-directive play therapy. *Journal of Genetic Psychology* 89:231-238.
- Lebo, Dell and Elaine Lebo. 1957. Aggression and age in relation to verbal expression in non-directive play therapy. *Psychological Monographs* 71:1-12.
- LeShan, Eda. 1967. *Conspiracy against childhood*. New York, Atheneum Press. p. 116.
- Lewis, W. W. 1965. Continuity and intervention in emotional disturbance: a review. *Exceptional Children* 31:465-475.
- McGowan, Richard J. 1968. The effect of a brief contact interview with low ability, low achieving students. *The School Counselor* 15:386-389.
- McKillop, Anne Selley. 1952. *The relationship between the reader's attitude and certain types of reading response*. New York, Teachers College, Columbia University. 101 p.
- Marksheffel, Ned D. and Anna R. Meeks. 1968. Remedial reading and elementary school counseling for disadvantaged children. Unpublished research proposal. 52 p.
- Marx, Sanford H., James F. Redding and Leonard J. Smith. 1967. A program of group counseling. *Elementary School Guidance and Counseling* 2:33-43.
- Meeks, Anna R. 1968. *Guidance in elementary education*. New York, Ronald Press. 237 p.
- Mehlman, B. 1953. Group therapy with mentally retarded children. *Journal of Abnormal and Social Psychology* 48:53-60.
- Milchus, Norman J. 1969. *Person-o-metrics*, Dearborn Heights, Michigan. Personal communication.
- Millar, Susanna. 1968. *The psychology of play*. Baltimore, Penguin Books. 288 p.

- Moustakas, Clark and Henry D. Schalock. 1955a. An analysis of therapist-child interaction. *Child Development* 26:143-157.
- Moustakas, Clark E. 1955b. Emotional adjustment and the play therapy process. *Journal of Genetic Psychology* 86:79-99.
- _____ 1955c. Frequency and intensity of negative attitudes expressed in play therapy: a comparison of well-adjusted and disturbed children. *Journal of Genetic Psychology* 86:309-325.
- _____ 1959. *Psychotherapy with children: the living relationship*. New York, Ballentine Books. p. 257.
- Ohlsen, Merle M. 1964. Counseling within a group setting. In: *Perspectives on the group process, a foundation for counseling with groups*, by C. Gratton Kemp. Boston, Houghton Mifflin, Chapter 21.
- _____ 1966. Counseling children in groups. Report from school guidance in Illinois. Springfield, Superintendent of Rules Instruction. ERIC EDO 10-890. 15 p.
- Otto, Wayne and Richard A. McMenemy. 1966. *Corrective and remedial teaching*. Boston, Houghton Mifflin. 377 p.
- Penney, Monte M. 1970. Looking deep into the reading process. *American Education* 6:24-25.
- Robinson, Helen M. 1946. *Why pupils fail in reading*. Chicago, University of Chicago Press. 257 p.
- Rogers, Carl R. 1942. *Counseling and psychotherapy*. Boston, Houghton Mifflin. 450 p.
- _____ 1951. *Client-centered therapy*. Boston, Houghton Mifflin. 560 p.
- Sandin, A. A. 1944. Social and emotional adjustments of regularly promoted and non-promoted pupils. In: *reading difficulties: their diagnosis and correction*, by Guy L. Bond and Miles A. Tinker. p. 110.
- Sebeson, Lucille. 1970. Self-concept and reading disabilities. *Reading Teacher* 23:462.

- Seeman, Julius and Benner Edwards. 1954. A therapeutic approach to reading difficulties. *Journal of Consulting Psychology* 18: 451-453.
- Seeman, J., E. Barry and C. Ellenwood. 1956. Counseling process and outcomes of play therapy. *American Psychologist* 11:428-432.
- Shaw, M. C. and J. T. McCune. 1960. The onset of academic underachievement. *Journal of Educational Psychology* 51:102-108.
- Smith, Henry P. and Emerald U. Dechant. 1961. *Psychology in teaching reading*. Englewood Cliffs, Prentice Hall. 470 p.
- Spache, George. 1954. Personality characteristics of retarded readers as measured by the picture frustration study. *Educational and Psychological Measurement* 14:191-196.
- _____ 1957. Personality patterns of retarded readers. *Journal of Educational Research* 50:461-469.
- Strang, Ruth. 1966. The relation of guidance to the teaching of reading. *Personnel and Guidance Journal* 44:831-836.
- Torrance, E. Paul. 1962. Who is the underachiever? *National Education Association Journal* 51:15.
- United States Office of Health, Education and Welfare. 1969. Report of the Secretary's (HEW) National Advisory Committee on Dyslexia and Related Reading Disorders. Washington, D. C., U. S. Office of Health, Education and Welfare. 90 p.
- Van Hoose, William H. 1968. *Counseling in the elementary school*. Itasca, F. E. Peacock. 217 p.
- Wallis, W. Allen and Harry V. Roberts. 1956. *Statistics, a new approach*. Glencoe, The Free Press. 646 p.
- Winkler, Ronald C. et al. 1965. The effects of selected counseling and remedial techniques on underachieving elementary school students. *Journal of Consulting Psychology* 12:384-387.

APPENDICES

APPENDIX A

THE PRIMARY PUPIL
READING ATTITUDE INVENTORY

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(Permission to publish has
been granted by the authors)

PLATE I

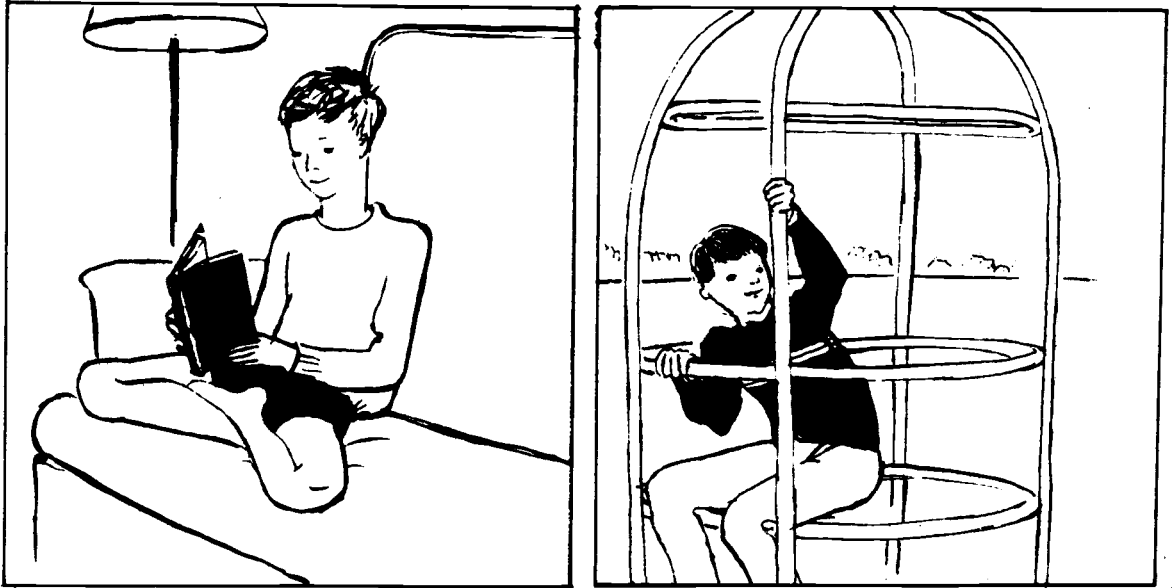


PLATE II

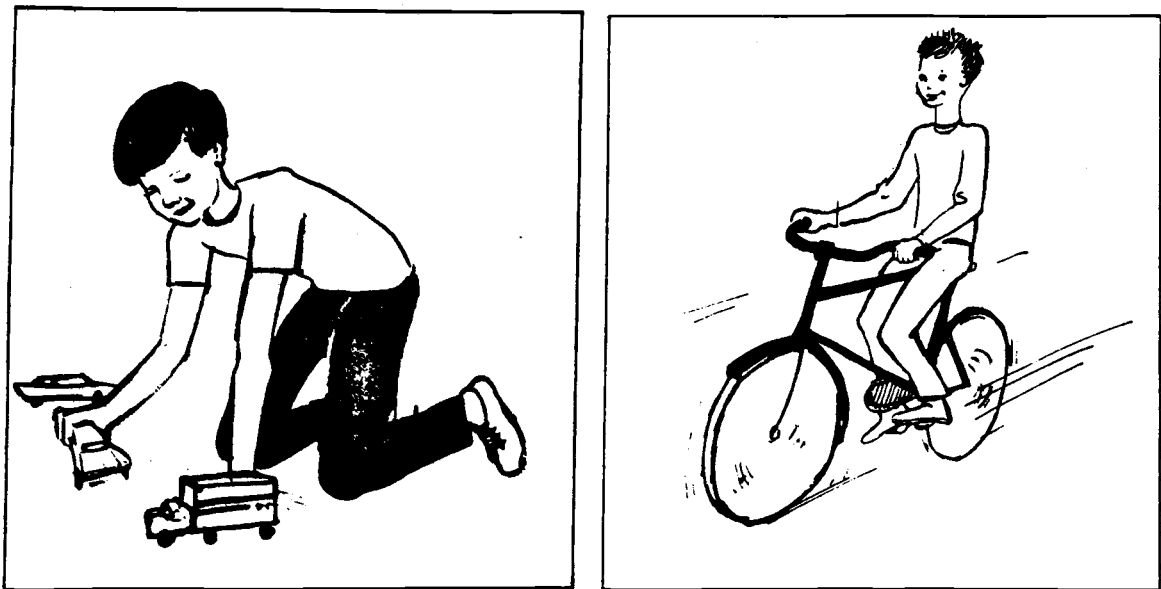


PLATE III

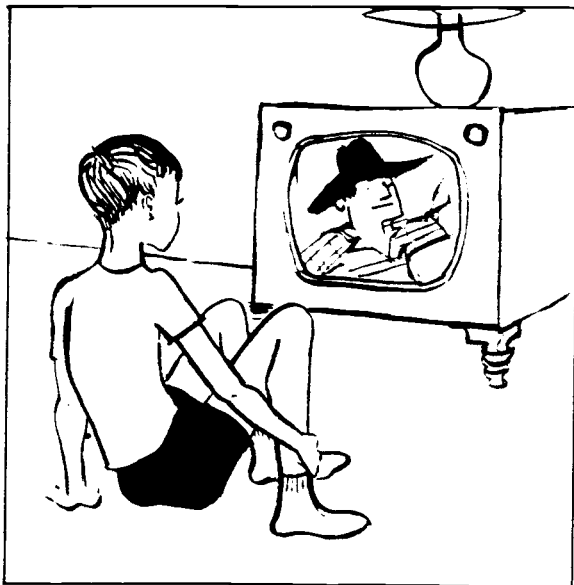


PLATE IV



PLATE V



PLATE VI

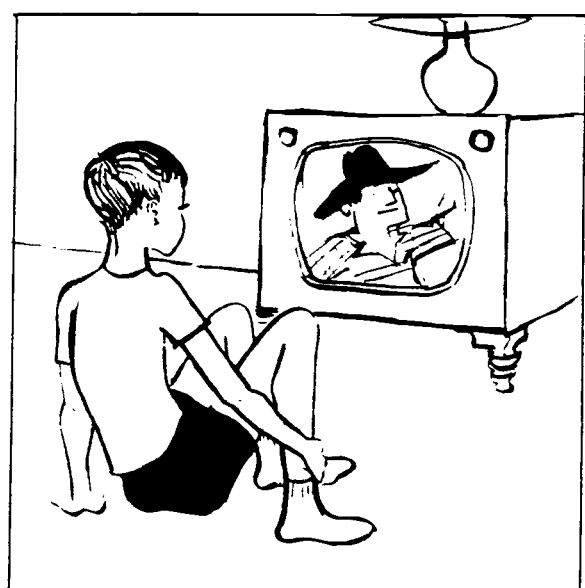


PLATE VII



PLATE VIII

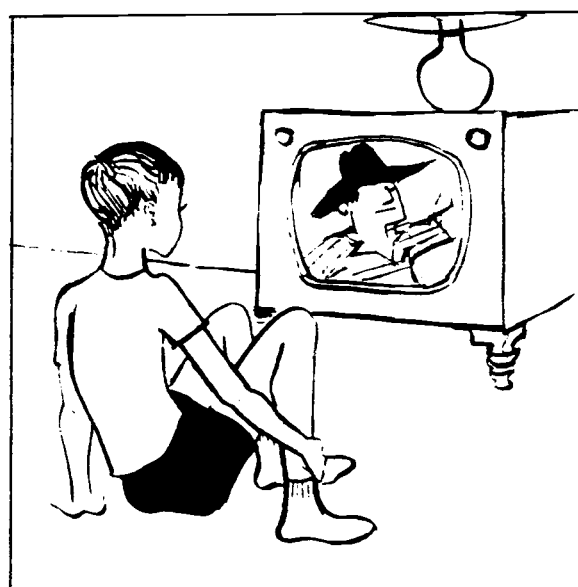
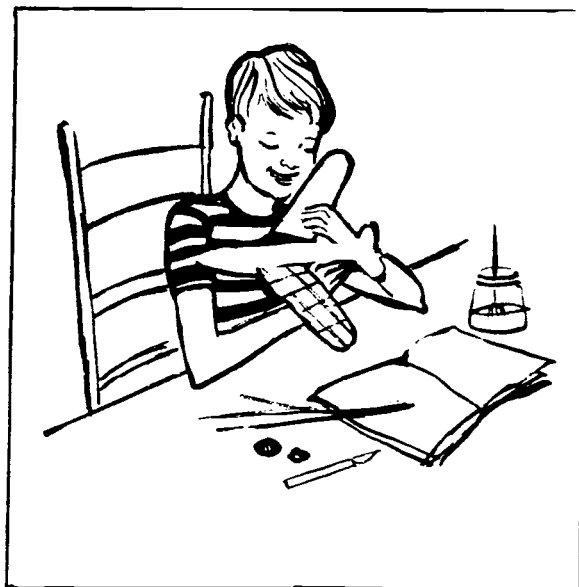


PLATE IX

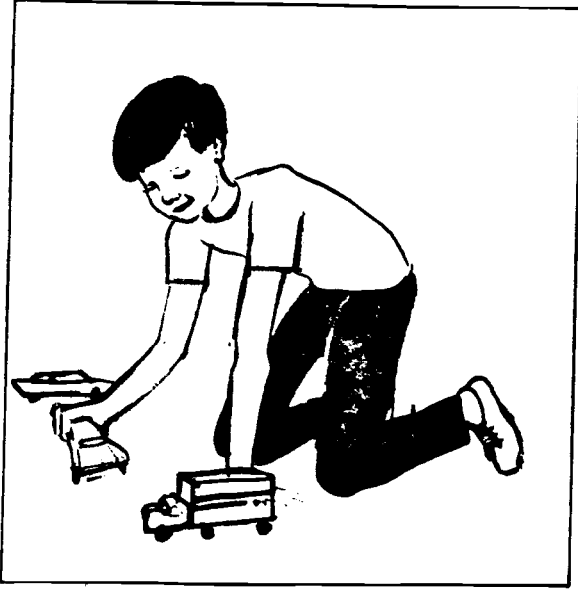


PLATE X



PLATE XI

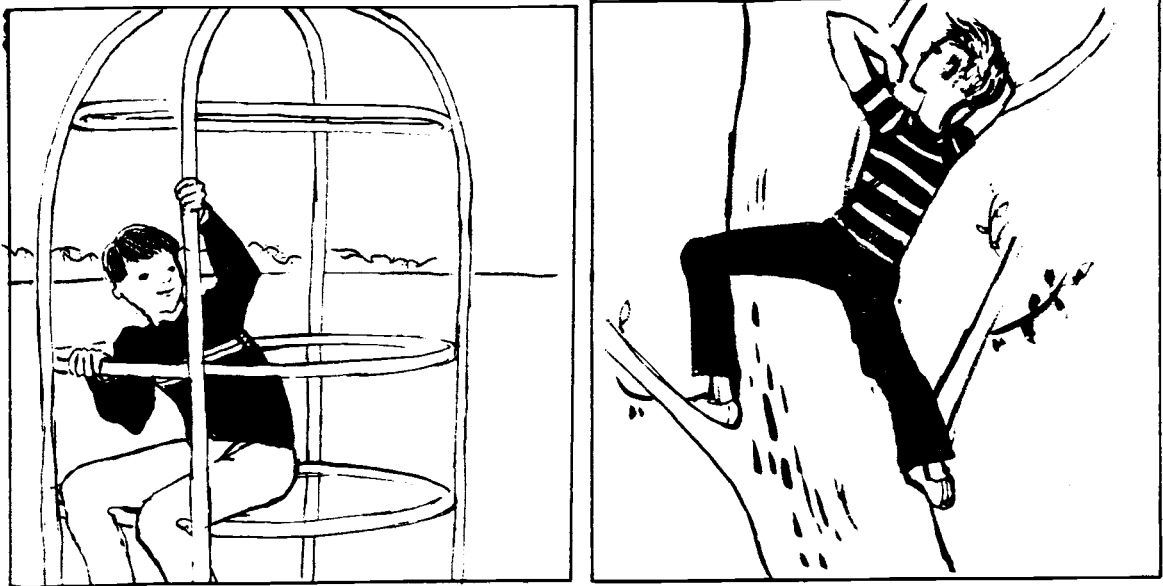


PLATE XII



PLATE XIII

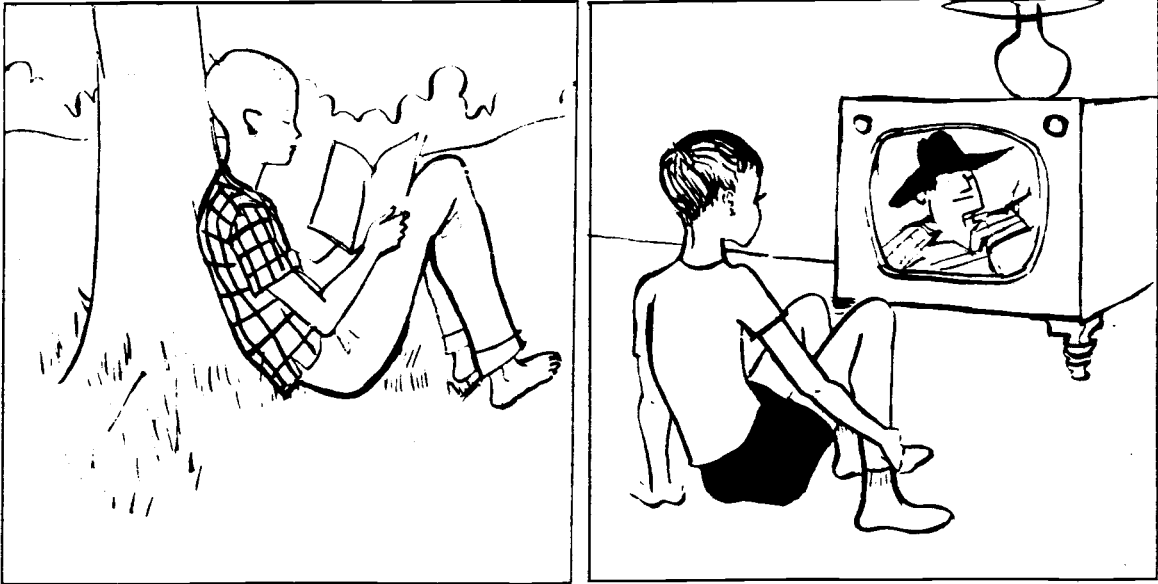


PLATE XIV

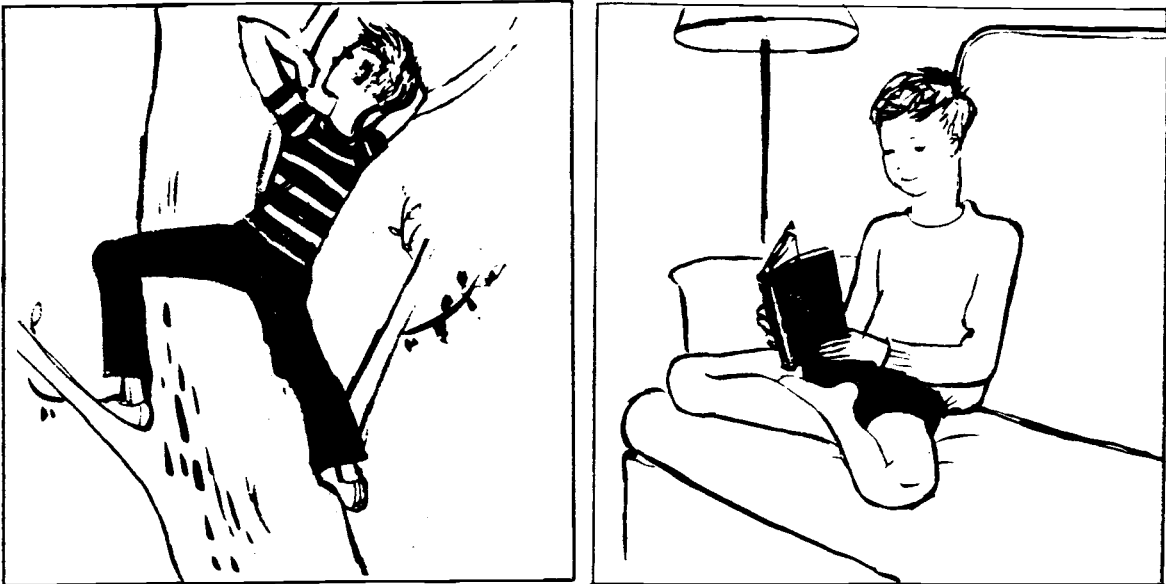


PLATE XV



PLATE XVI

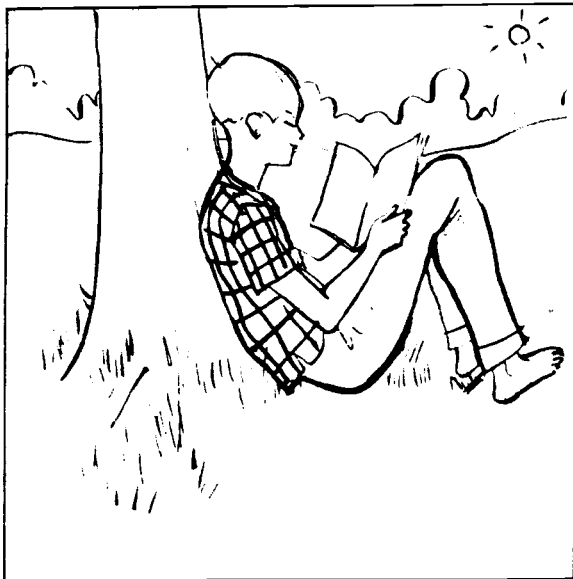


PLATE XVII



PLATE XVIII

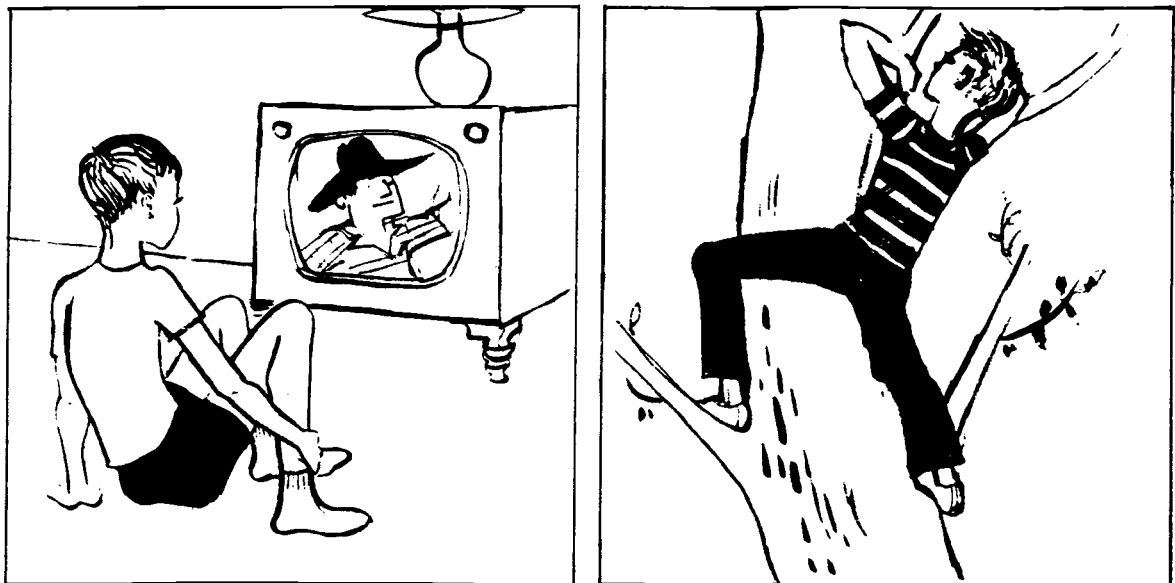


PLATE XIX

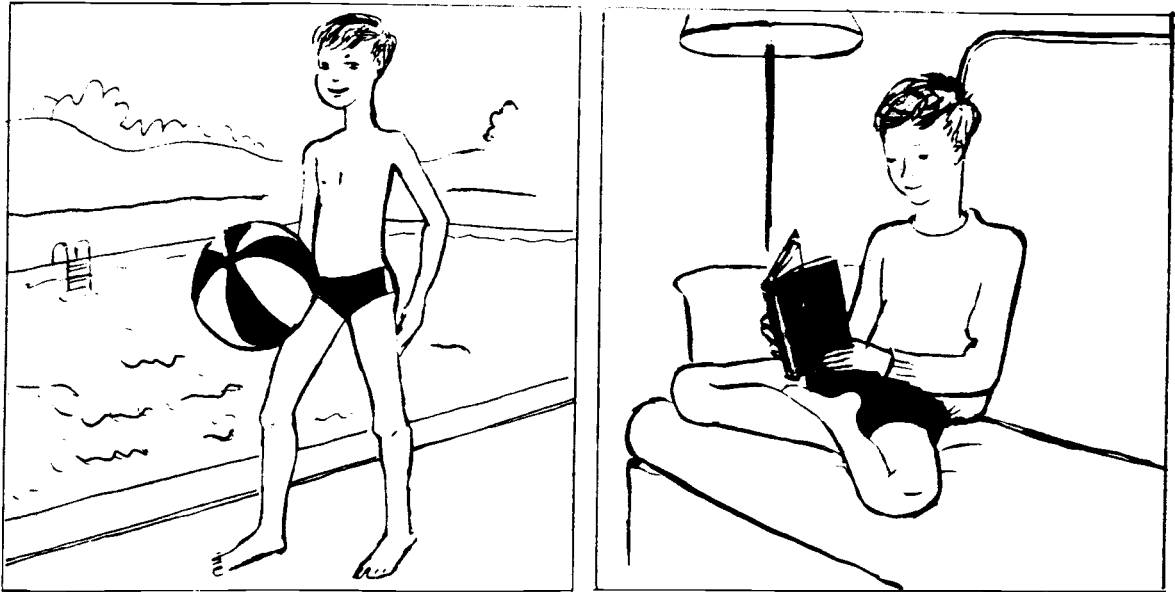


PLATE XX

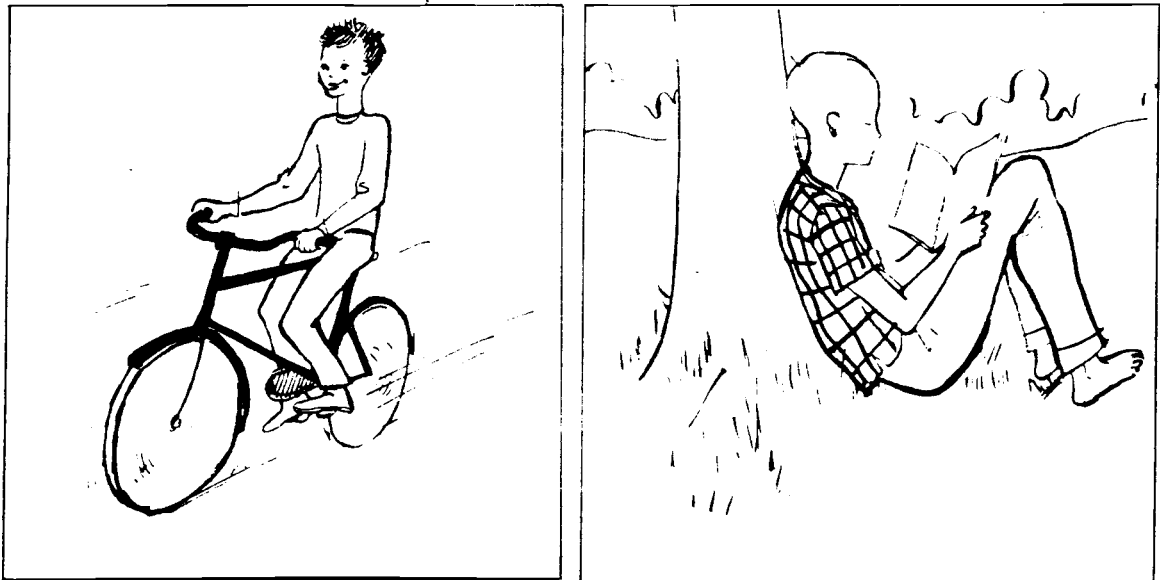


PLATE XXI

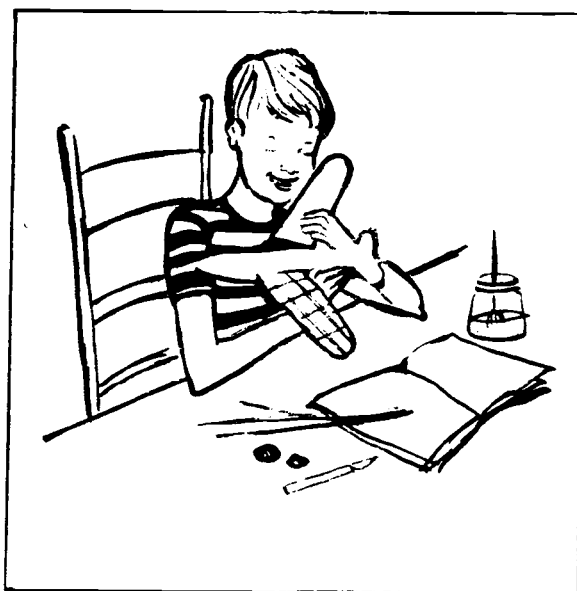
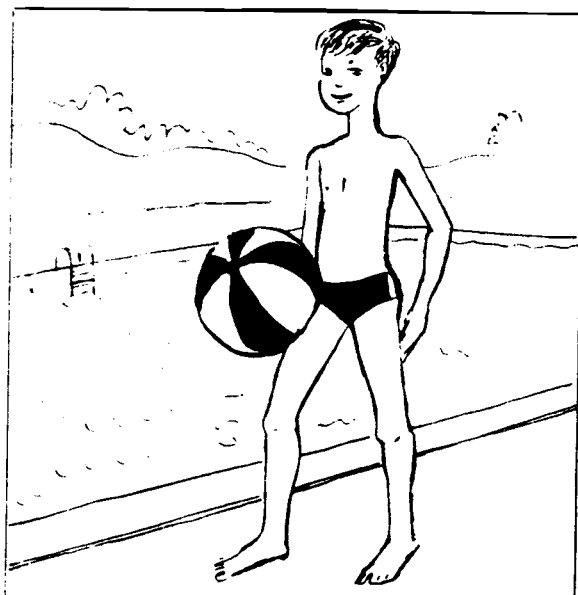


PLATE XXII



PLATE XXIII

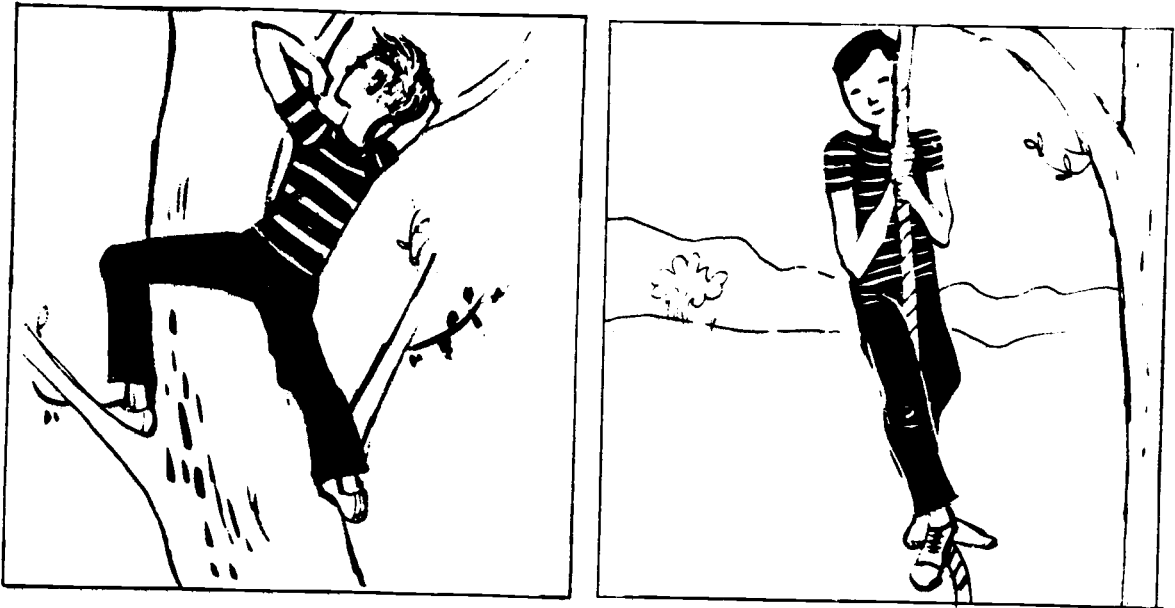


PLATE XXIV

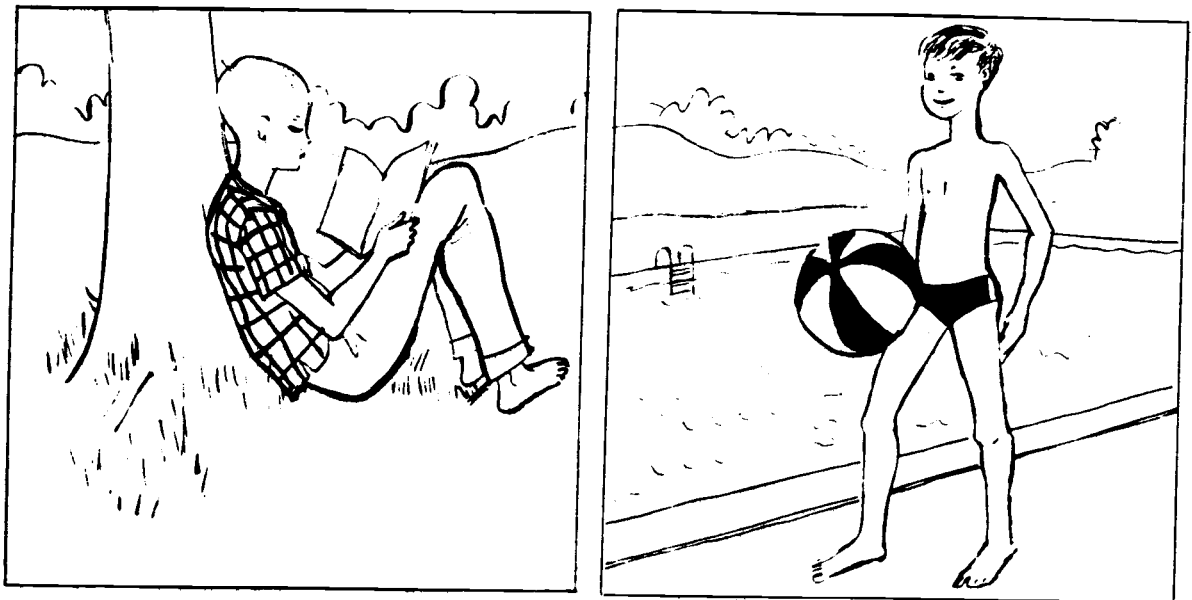


PLATE XXV



PLATE XXVI

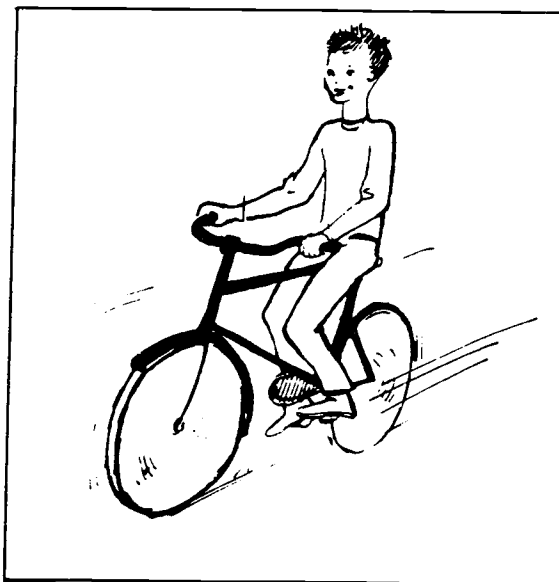


PLATE XXVII



PLATE XXVIII

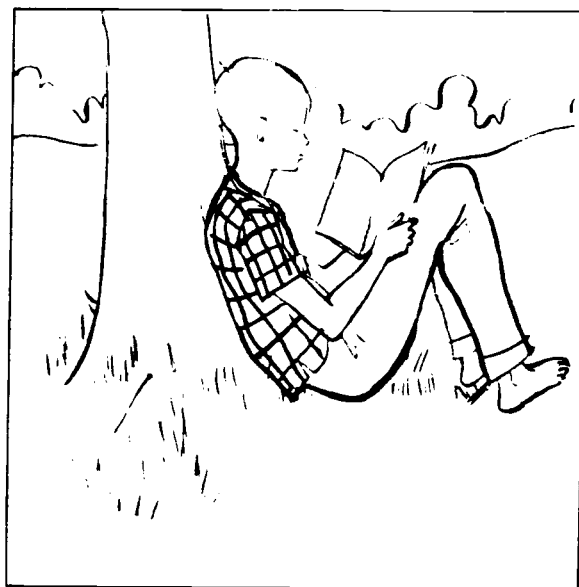
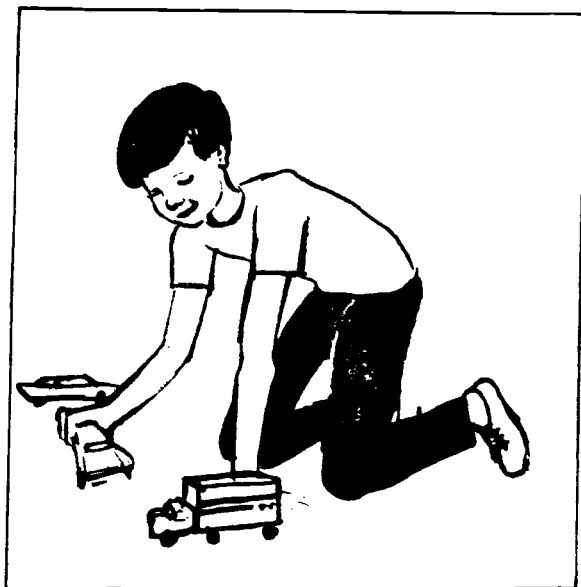


PLATE XXIX

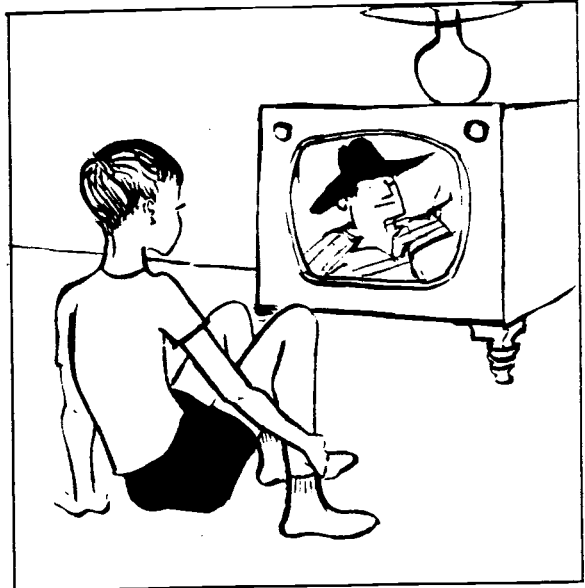


PLATE XXX

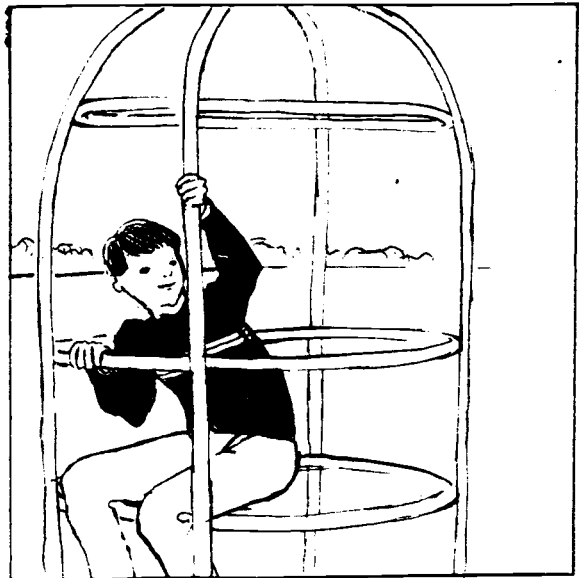


PLATE XXXI

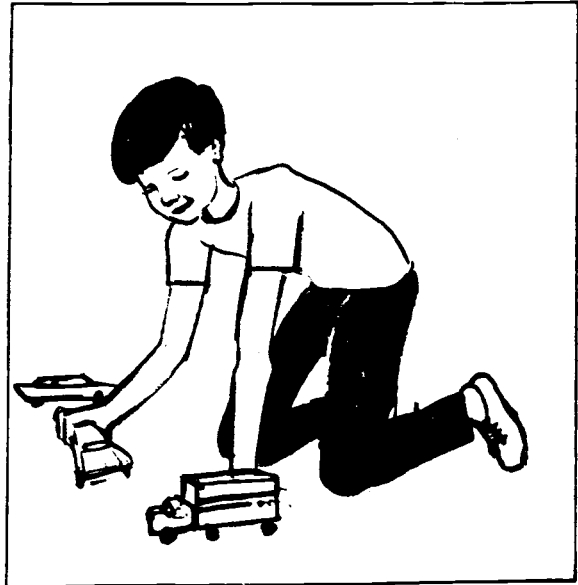


PLATE XXXII

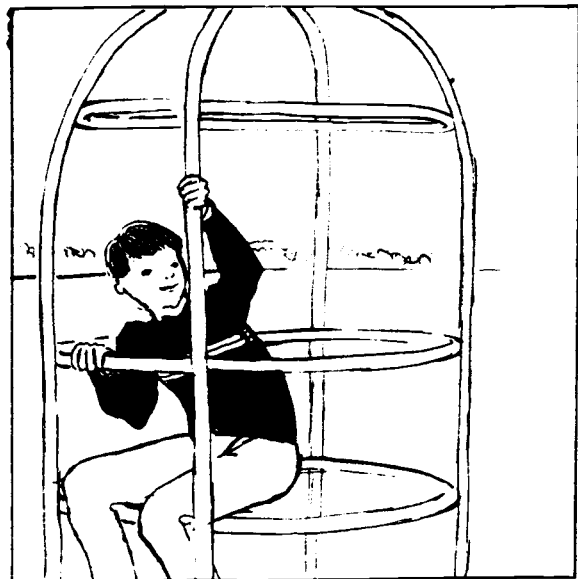
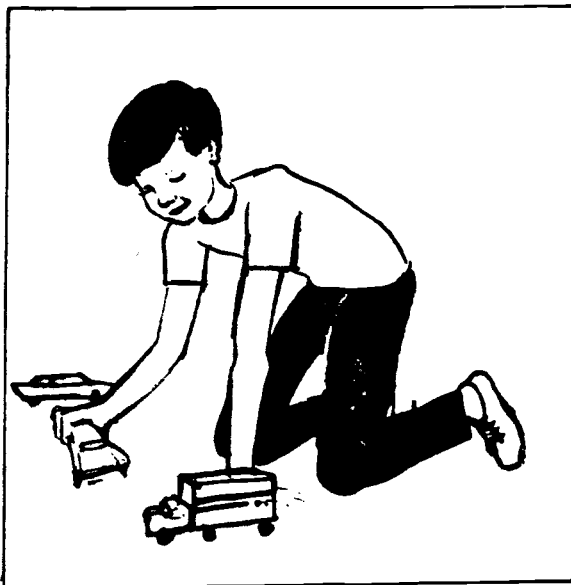


PLATE XXXIII

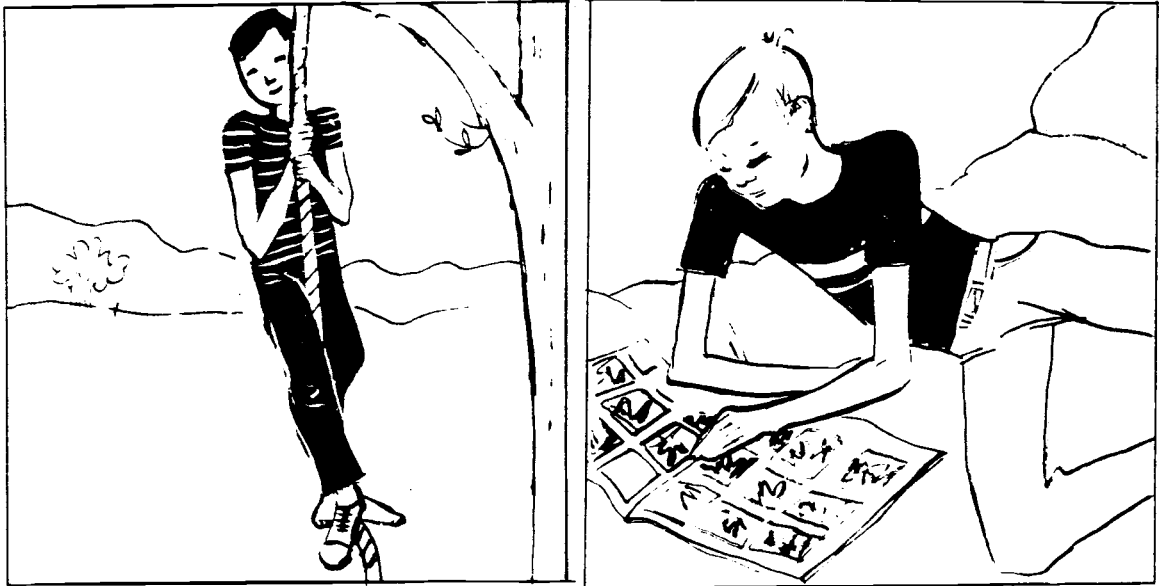


PLATE XXXIV

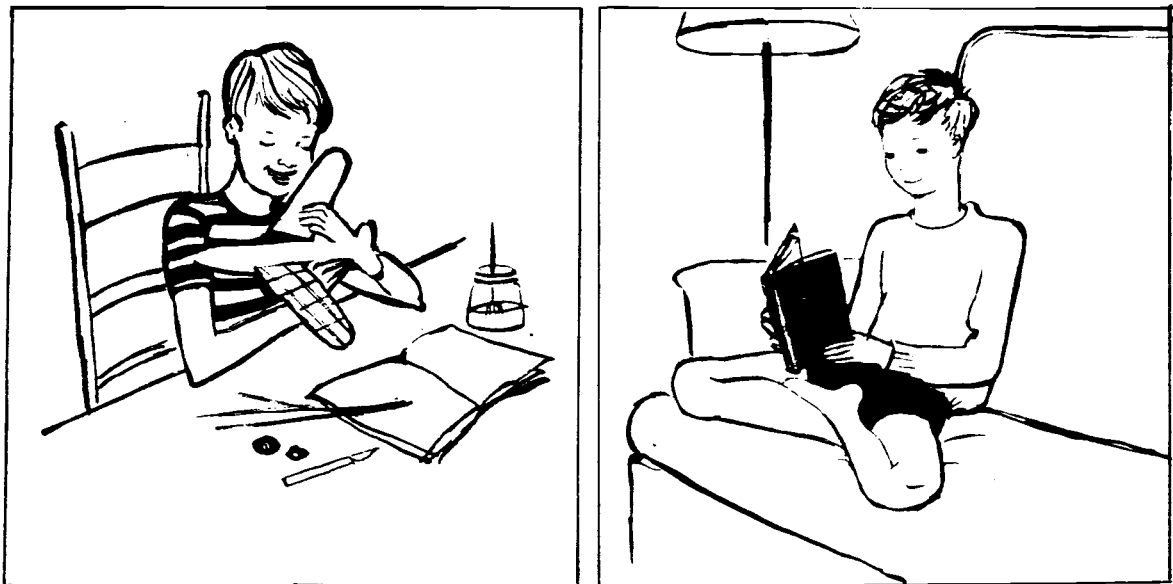


PLATE XXXV

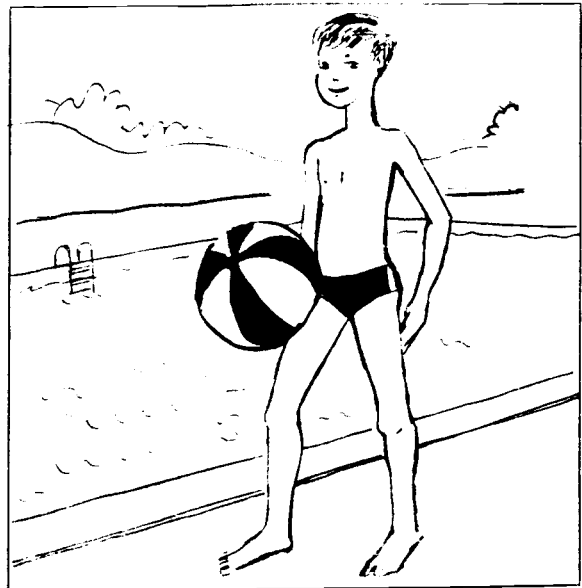


PLATE XXXVI

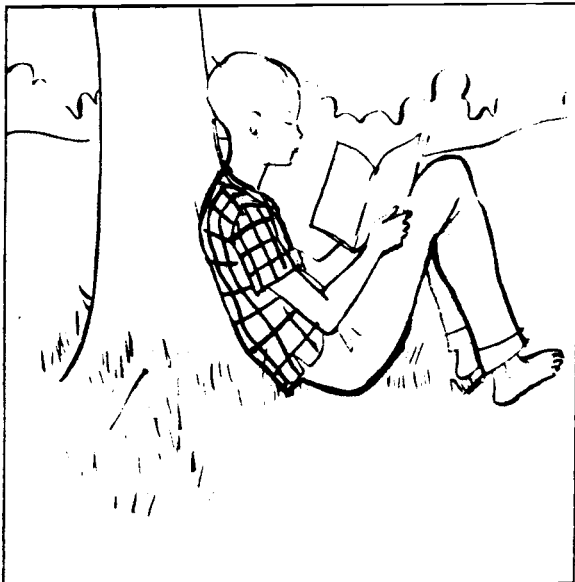


PLATE XXXVII

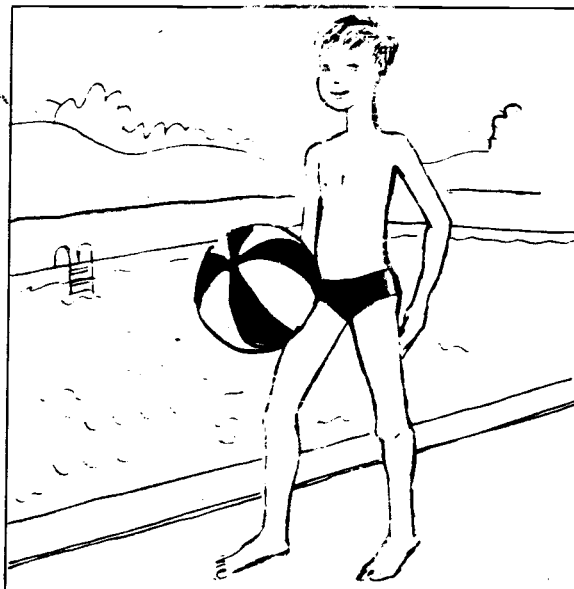


PLATE XXXVIII

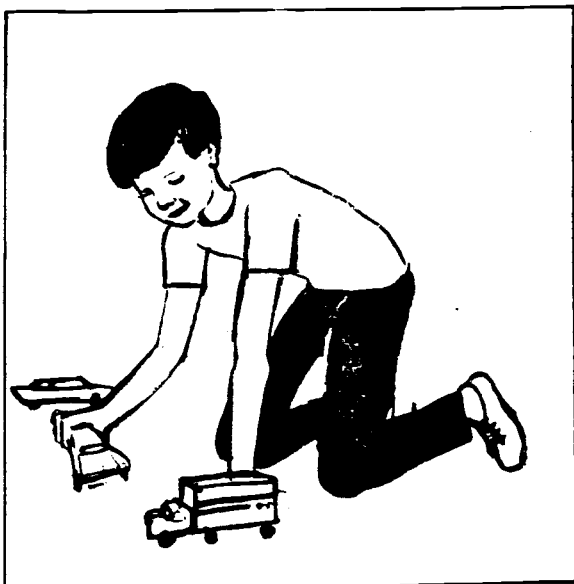


PLATE XXXIX

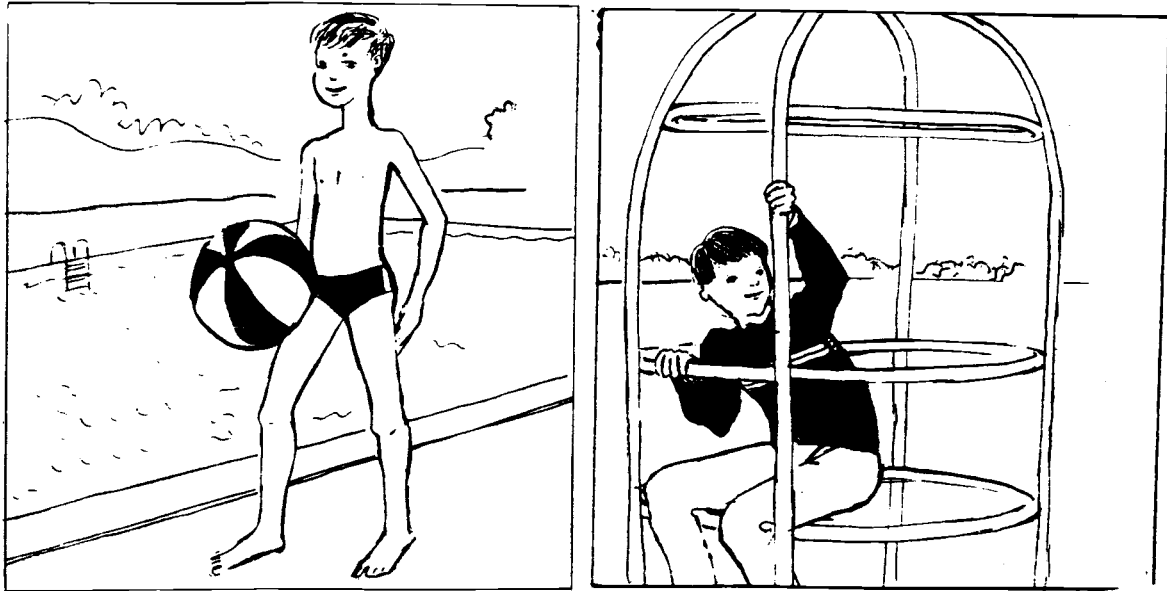


PLATE XL



APPENDIX B

THE SELF-CONCEPT AND
MOTIVATION INVENTORY

George A. Farrah, Norman J. Milchus
and William Reitz

(Permission to publish has
been granted by the authors)

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 face 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 ? | 13. . . if you could discuss a newspaper story with your parents ? |
| 2. . . if you could make the teacher happy with your arithmetic ? | 14. . . if a teacher said that you were getting better all the time ? |
| 3. . . if you were elected the leader of your reading group ? | 15. . . if you could tell a brother, sister, or friend the meaning of a word he / she needed to know ? |
| 4. . . if you had just been put on safety patrol or service squad ? | 16. . . if you were able to read like a grown-up ? |
| 5. . . if you could help with a bulletin board ? | 17. . . if you were learning to read and spell some words that you might use someday ? |
| 6. . . if you could sing in the school chorus or play in a school band ? | 18. . . if you thought of going to school to learn new ideas ? |
| 7. . . if you had to tell your parents that you had lost your coat ? | 19. . . if you were telling your parents that you had broken a window ? |
| 8. . . if you had to ask the teacher for help with your arithmetic ? | 20. . . if a teacher told you that he / she was disappointed in your effort ? |
| 9. . . if you made a mistake in front of the whole class ? | 21. . . if when choosing up teams for a class game, you were chosen last ? |
| 10. . . if you found that you had erased the right answer ? | 22. . . if you had done something that would get you a spanking ? |
| 11. . . if you could not answer an easy question ? | 23. . . if you had to recopy a paper that was not neat ? |
| 12. . . if you had to go to school in the summer ? | 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? | 37. . . .when your parents tell you how good your school-work will be? |
| 26. . . .if a teacher calls you to the desk to answer a question? | 38. . . .when your teacher tells you how much you should be reading next year? |
| 27. . . .if the boys and girls in the class had to pick the best readers in your reading group? | 39. . . .if an older student asked your brother, sister, or friend if you were a "good sport"? |
| 28. . . .if you had the chance to do an extra science experiment? | 40. . . .thinking of the best schoolwork you would like to do? |
| 29. . . .if you were starting a book with a dull cover, but which was supposed to be interesting? | 41. . . .if you started to study something new in arithmetic? |
| 30. . . .if a school club was looking for members in your class? | 42. . . .if someone was telling you what your class will be like next year? |
| 31. . . .when one of your parents has a talk with one of your teachers? | 43. . . .when you bring home your report card? |
| 32. . . .if a teacher asked you to help a student with some new work? | 44. . . .when a teacher tells everyone to do their very best work? |
| 33. . . .if your class had to choose partners to do some work? | 45. . . .if the smartest children could to-out-n'-play? |
| 34. . . .when you think of how good you are doing in reading? | 46. . . .if you were called upon often, every day? |
| 35. . . .if you had some hard arithmetic problems to do? | 47. . . .if you picked a thick book to read and to tell the class about? |
| 36. . . .if you went to the office of the school? | 48. . . .when you think of all the children in class who like you? |

DOUBLE CHECK

SCORING NOTE

	<u>Items</u>	<u>Factor</u>	<u>Faces Scored from left to right</u>
<u>Page One</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)

Page Two

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)