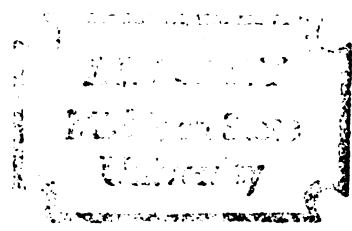


IMPROVEMENT OF READING SKILLS IN ADOLESCENTS

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ABSTRACT

IMPROVEMENT OF READING SKILLS IN ADOLESCENTS

By

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A six week reading program utilizing individualized, programmed instructional materials was combined with a parental intervention in an attempt to improve the reading skills of adolescent students from a poor, rural area of Michigan. Students were randomly assigned to reading program alone or parental involvement conditions. A group of non-volunteers for the reading program was used for a control group. The parental intervention consisted of a series of letters sent to the parents during the course of the program informing them of their child's progress and detailing ways in which they could help. In addition the parents also received a visit from the experimenter about midway through the program during which the material covered in the letters was explained in greater detail.

Students were tested both before and after the reading program on reading achievement, academic locus of control, and perceived parental expectations. Grades were obtained for students in the non-control conditions. An

analysis of covariance indicated that the reading program had a significant effect on achievement. The parental intervention had a marginal (non-significant) effect on English grades. Significant correlations were found between academic achievement and locus of control. When the correlations were broken down by sex and experimental condition the experimental groups were shown to have a different pattern of correlations than the control group. For the control group males had a high positive correlation between achievement and acceptance of responsibility for success, while females had a high correlation between achievement and acceptance of responsibility for failure. In the experimental groups males had a positive correlation between achievement and total locus of control, while females had a negative correlation.

It was concluded that reading programs utilizing individualized, programmed instruction could be effective with disadvantaged adolescents. School systems that adopted these techniques would have a relatively high probability of success if used with such students. Suggestions were made for further research on parental interventions with adolescents.

IMPROVEMENT OF READING SKILLS
IN ADOLESCENTS

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Mitchell Fleischer

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To Carol

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CHAPTER I

INTRODUCTION

One of the major problems facing our educational institutions today is the fact that a large number of students cannot read at a skill level commensurate with their grade. Precise figures are not available, but there are estimates claiming that from 10 percent to 20 percent of American adults are disabled readers (Peterson, 1972). The estimates cover such a range because the definition of "disabled" varies. In some cases it may mean someone who is simply not reading up to his or her grade level, while in others it may only include those who are three or more years behind. Suffice it to say that there is clearly a problem no matter what definitions are employed. Reading difficulties pose problems for both the individual who possesses them and for the society in which he lives. The ability to read is the key to success in our present educational system, and success in the educational system is closely related to success later in life. Obviously the inability to read a want-ad or job application form will severely hinder a person in his pursuit of employment. Data from the 1970 census clearly point this out. For the

male population over twenty-five, 87 percent of those with a twelfth grade education were employed, but only 65 percent of those with an eighth grade education were. The figures look even worse for those with less schooling. There is also a clear correlation between years of education and income, and between income and children's reading levels (Title I, 1968).

While the effects of inadequate reading ability on the individual is clear there is also a considerable effect on the society as a whole. Levin (1972) showed that there are billions of dollars lost to the economy each year due to lack of education. He estimates that 5-10 percent of the economic loss due to crime and welfare can be directly attributed to inadequate education. This means a dollar loss of from four to eight billion dollars per year. The problems cover a much wider area than just economic losses. Levin showed that there was a correlation between voting activity and years of schooling. For whites over twenty-five, only 64 percent of those with eight years of school voted in the 1968 presidential election, while 76 percent of those with twelve years of school voted. Certainly the problem goes beyond mere participation in the voting booth. For the democratic system to remain (or become) effective it requires an educated, informed citizenry. Citizens who cannot read can be neither educated nor informed.

The problem addressed in the current study is the question of what can be done about these reading problems.

A considerable body of work (Coleman, 1966; Dave, 1963; Wolf, 1964; Smith, 1972; and Mayeske, 1973) indicates that student personality and background factors are the key elements in determining achievement. In spite of this work, the typical response to reading difficulties has been to implement a reading program utilizing materials and instruction of some sort within the school setting exclusively. While few would argue that improved instructional techniques are necessary, it seems clear that most investigators have ignored the personality and environmental determinants that are the keys to achievement. The present investigator takes the position that it is possible to make changes in one or both of these individual factors, and to thereby bring about an improvement in a student's achievement level. In the present study three classes of variables were either manipulated or measured in order to determine their effect on achievement. These were personality variables (notably Locus of Control), home environment variables, and reading program variables.

Effect of Student's Background

The Title I report (1968) indicates that reading difficulties seem to be concentrated among people from lower economic groups. One possible reason for this concentration might be that poor people are less intelligent and consequently cannot learn to read at expected levels. Their inability to read adequately therefore results in

their poverty. Another notion might be that students from low socio-economic groups live in impoverished school districts. As a consequence they have inadequate facilities and less qualified teachers than better endowed school districts. Until recently little research has been conducted on these concepts. A series of studies have found that factors within the student's background may be the crucial determinants of academic success.

In a pair of related studies Dave (1963) and Wolf (1964) found that certain environmental process variables were strongly related to academic achievement and IQ. The variables they examined were achievement press, language models, academic guidance, activeness of the family, intellectuality in the home, and work habits of the family. Dave discovered that these environmental process variables had a much stronger relationship with achievement than did IQ or socio-economic variables such as parents' income or education levels. The implication of Dave's study is that poverty or a parent's lack of education do not automatically determine a child's level of achievement. What happens in the home is far more important than anything else. Working with the same group of fifth graders as Dave, Wolf reported that the same group of environmental process variables were highly correlated with IQ. Since it would be unreasonable to assume that a child's IQ has much influence on his home environment, Wolf's study indicates that the environment in some way determines what the child's IQ will be. Both

studies clearly highlight the importance of the home environment as a determining factor in both achievement and intelligence.

The Coleman Report (1966) provided further evidence that background factors were the key variables when looking at determinants of achievement. Coleman found that there were two primary areas that accounted for the differences in achievement levels within a school. These were student background factors and student attitudes. Eight background factors were of noticeable importance:

1. Urbanism of background and migration
2. Parents' education
3. Structural integrity of the home
4. Smallness of the family
5. Items in the home (e.g., TV, refrigerator, auto, etc.)
6. Reading material in the home (e.g., encyclopedia, books, newspapers)
7. Parents' interest in the child
8. Parents' educational desires for the child (p. 298)

These background factors accounted for about 25 percent of the within school variance in achievement. The most important student attitude factor was the extent to which the student felt that he had some control over his own destiny (Locus of control). Between 35 and 40 percent of the within school variance is accounted for when the effects of both background factors and locus of control are combined. Smith (1972) by correcting some errors that Coleman made, found that the effect of background factors had been underestimated; that is, background was even more important than Coleman had thought. Mayeske et al. (1973), in another

study using Coleman's data also confirmed the importance of background in determining achievement levels.

Other research has focused on specific parent behaviors as they relate to achievement. Working with pre-schoolers in the Head Start program, Hess (1969) reported that there was a number of parental behavior factors which correlated with achievement. These included interest and involvement with the child's activities, diffuse intellectual stimulation, parents having high regard for the child, and pressure for self-reliance. Gordon (1969) and Scheinfeld (1969) also reported that similar factors were related to achievement.

The previous discussion has provided evidence to show that a number of home and family background variables are important and possibly causal factors in achievement. Considering the importance of these factors, it is clear that they must be considered whenever an attempt is made to improve achievement. While a considerable amount of work has been done on reading programs that focus on the child as isolated within the school setting, they have shown very limited success. Rarely does a program enable a child to actually catch up to his peers (Office of Education, 1972; Mich. Dept. of Education, 1971).

A few programs have attempted to help the child both with a reading program and with home involvement that has some effect on the variables described by Dave (1963) and Coleman (1966). Hawkrige (1968), in his review of the

compensatory education literature, noted that parental involvement was a component of a number of successful programs for pre-school and elementary children. A few of these programs, notably the School and Home Program of Flint, Michigan, and the Pre-School Program of Fresno seem to have actually affected some of the background variables. The Pre-School Program in Fresno attempted to have at least one parent from each child's home participate once a week as a parent volunteer in the classroom. There were also parent-teacher meetings twice per month. Parents who could not attend the meetings were kept informed by bulletins, letters, and phone calls. The School and Home Program in Flint specifically involved working with parents to help improve a child's achievement. Parents were given a specific list of activities for the home:

1. Provide a quiet period at home each day for the child to study
2. Read regularly to the child
3. Read regularly in the presence of the child
4. Show interest in the child's work
5. Prevent school aged child's work from being destroyed by pre-schoolers
6. Have paper and pencils available in the home for school work
7. Get the child enough food and sleep prior to school days
8. Remind the child about school responsibilities

Teachers held regular monthly meetings with parents in order to reinforce the activities on this list.

Most of the other programs described by Hawkrige that involved parents involved them in a superficial manner, as in advisory or administrative roles in which frequently

only a few parents were involved. While such a system provides for parental input into the educational process (certainly a positive move) it does nothing to change the atmosphere in the child's home. A more recent example of this situation is the Federal Title I compensatory education programs (National Advisory Council, 1975), which must, by law, include some provisions for "parent involvement." This has been interpreted to mean that "parent councils" must be created. These almost always turn out to be simple advisory boards.

In a series of studies, Brookover and his students (1965, 1967) used parent meetings in an attempt to improve achievement. Brookover felt that self-concept of academic ability was a key variable in determining a child's achievement. He conceived of it as both an intervening and threshold variable; that is, it is a necessary but not sufficient condition for academic success. Brookover attempted to manipulate self-concept by having group meetings with parents at which he tried to change the parents' expectations for the child and thereby to affect the child's self-concept. While he was successful at changing the children's self-concept ratings, he was not able to have a significant effect on their grades. One reason for this may have been that while he did provide an avenue for self-concept enhancement, he made no attempt to change any of the other conditions that had resulted in academic failure. To summarize Brookover's study, he took children who were

behind their classes academically and raised their self-concepts of academic ability. The children had still gained no new knowledge that would enable them to catch up with the rest of their classmates.

The present study attempted to involve parents in a manner similar to the manner they were involved in the School and Home Program in Flint. Parents were involved in conjunction with a reading program that provided an avenue for the children to improve their skills.

Locus of Control

One of the factors that Coleman (1966) reported as highly related to achievement was Locus of Control. This personality factor, first discussed by Rotter (1966) has been studied by many investigators with a view toward its effect on academic achievement. The main premise underlying the concept of Locus of Control is that some people feel more personally responsible for the events that occur around them. This is referred to as an internal locus of control, since events are perceived as emanating from within the individual. People with an external locus feel that outside forces rule their lives, that they have little or no control over the events happening to them. In general, most authors feel that being "internal" is the preferable locus, the argument being that if a person feels he has control over the events occurring in his life he will be more likely to take direct personal action when he has a

problem. If an external person has a problem he is more likely to wait for the controlling outside forces to solve the problem. DeCette, Wolk, and Soucar (1972) argue that the external orientation may actually be adaptive under certain circumstances, such as when failure is inevitable. Such circumstances could easily occur in a situation of a child with many of the background factors that prognosticate failure and who does poorly in school. Such a child might learn to view school as a situation of inevitable failure. The development of an external locus of control in such a situation could help prevent the formation of a dangerously low self-concept.

Evidence for DeCette, Wolk, and Soucar's point has been reported by Battle and Rotter (1963) and by Crandall, Katkovsky, and Crandall (1965). Both studies found that there was a correlation between social class and locus of control, with higher S.E.S. children being more internal. Another study (Clifford & Cleary, 1972) showed that an internal orientation was related to both achievement and I.Q. One possible explanation for this phenomenon may have been found by Phares (1965) who concluded that internals and externals differ in both their attentiveness to and recall of material that is immediately present in the environment. A later study (Davis & Phares, 1967) reported a difference between internals and externals in the degree to which they actively sought additional relevant information in order to solve a problem. Both internals and externals

received the same amount of materials, but the internals utilized more of it.

An interesting locus of control scale has been developed by Crandall, Katkovsky, and Crandall (1965). Their Intellectual Achievement Responsibility (IAR) scale measures locus of control in two ways. It measures responsibility for success (I+) and responsibility for failure (I-) and it measures these for academic situations only. Since the correlation between the two subscales is only about .5 to .6 Crandall et al.'s distinction between responsibility for successes and failures may be important. Thus, there may be children who are internal with regard to failure and external with regard to success. Similarly there may be individuals who are internal with regard to success and external in regard to failure. Messer (1972) while confirming Clifford and Cleary's finding that internal orientation correlates with grades and achievement, found that males with high I+ (accepts responsibility for success) and females with high I- (accepts responsibility for failure) yielded the highest correlations with achievement. In a study of academic cheating by Johnson and Gormly (1972) females with high I- cheated more than other girls. IAR made no difference in cheating among the males in the study. Clearly sex is an important factor to be considered when discussing locus of control as measured by the IAR scale.

To a great extent the above discussion has referred to correlations, from which no causal relationships can usually be inferred. However, Calsyn (1973) using the technique of cross-lagged panel analysis has determined what he calls "predominant causes" by reanalyzing the data from several studies. He found that for males locus of control was a predominant cause of academic achievement. There was no such effect for females. Based upon these findings it would seem that a profitable approach would be to attempt to improve a child's locus of control (i.e., make it more internal) as a part of the overall program.

Methods of Instruction

An effective program to help children who have reading difficulties should include both a component to effect some changes on the home background variables of the child and a component that will directly assist him in improving his reading level. While not a great deal of research has been done to discover what affects the home background, a considerable amount has been done to determine the most effective methods of teaching reading. Two techniques that have been considered to be highly effective are programmed instruction and individualized instruction. Programmed instruction is usually associated with teaching machines or various forms of self-instruction manuals where the student studies small instructional blocks of materials, answers some questions and receives immediate reinforcement

for correct answers. As Lumsden (1974) has pointed, "programmed instruction is not, by itself, individualized. Each individual may benefit from some particular combination of programs and/or instructional method." (p. 146). The key to programmed instruction, whether it be by the use of teaching machines or a programmed book that the student uses himself, is that it frees the teacher to float from student to student, as help is needed (Cohen, 1965). This results effectively in a one-to-one teacher to student ratio, which can then result in truly individualized instruction. Cohen feels that individualized instruction is the most effective educational technique because (1) the content of learning is adapted to the individual's needs; (2) the level of content fits the individual's capability and level of achievement; (3) the speed of teaching is adjusted to the individual's own pace; and (4) the frequency of the student's response to the teaching stimuli is intensified.

Individualized instruction methods can be especially suited for use by disadvantaged children. Riessman (1962) has pointed out that "the deprived are more concerned with what might be termed functional responsibility, rather than symbolic training for the future" (p. 42). He also points out that many so-called "slow learners" may actually be just that, slow, rather than not having the capability to learn, they just may be slower than the others in picking it up. Programmed, individualized instruction should be the

appropriate technique for such a person, since it tends to deal with specific, concrete skills and moves at whatever pace the student is capable of attaining.

An example of a programmed instructional technique that has been highly effective with "deprived" students is the Reading Attainment System (Grolier, 1967). In a study involving high school aged boys who were incarcerated in a boys training school (Gormly & Nittoli, 1971), improvements of over one year in reading level were attained from a program using the Reading Attainment System (RAS) for only six weeks. Johnson (1974), also using the Reading Attainment System, achieved similar gains using a group of high school aged boys from a Manpower training program.

Intervention with Older Students

The preceding discussion has emphasized the need to make changes in the home environment as a necessary step toward the improvement of academic skills. Some questions that are related to this point have not yet been answered. When is the best time to make these changes and when is it too late to intervene? Probably there would be little argument that the changes should be made prior to birth. A large number of prenatal and early childhood programs exist that are attempting to do just that. However, the problem cannot be avoided that there presently exists and will probably always exist large number of older children (and adults for that matter) who lack adequate academic

skills. Thus, the question remains, when is it too late to intervene?

As mentioned previously, Hawkridge (1968) said that parental intervention could be an effective technique when used with elementary and pre-school children. He could make no reference about older students because none of the studies included in his review had attempted to use parental intervention with such a population. One possible reason for this may be that most investigators feel that children should start to "catch up" early in their school years, or before it is too late. A study by the Stanford Research Institute (1973) points out that while little work has been done with older children in compensatory education it can be very useful. The study indicated that many children may not be ready to read at the usual age, but often are able to make normal progress when started a few years later. Unfortunately in the normal school setting such children simply fall behind and are rarely able to catch up with their peers. Brookover et al. (1965) showed that while peers gain increasing importance with age, parents are still the most significant academic others for high school age students. For a group of tenth grade students Erickson (1969) found that parental expectations were highly correlated with achievement, although this was more important for males than for females.

Since there have been few reported studies involving the use of parental intervention with older children, the

present study attempted just that. Parents of junior and senior high school students were involved in such a way as to affect variables in the home environment.

The current study combined programmed reading instruction with a parental intervention that was designed to affect some of the home background variables described by Dave and by the Coleman Report. The students involved were junior and senior high school students from a poor, rural area of Michigan.

The experiment consisted of three conditions. The first was the Reading Program--Parental Involvement Condition. The students in this condition participated in a summer reading program that included thirty hours of instruction. The parents of these students received letters and a visit from the experimenter in which a range of topics was discussed. In the second condition, or Reading Program Alone Condition, students participated in the same summer reading program, but no parental involvement was initiated. Their parents were not contacted by the experimenter during the course of the program. The third condition was the No Treatment Control Group. This group only participated in the pre- and post-testing. They did not participate in the reading program, nor were their parents contacted.

Hypotheses

1. A reading program utilizing programmed, individualized instruction (such as the Reading Attainment System) will cause an improvement in Reading Achievement and classroom grades.

2. Students involved in a reading program will benefit from a parental intervention that affects home background variables. This will be evident from achievement test scores, grades, and personality measures.

3. Students whose parents have high academic expectations for them will show higher academic achievement.

4. As measured by the Intellectual Achievement Responsibility scale, responsibility for success (I+) will be of greater importance for males as a predictor of academic success than for females. Responsibility for failure (I-) will be of greater importance for females as a predictor of academic success than for males.

CHAPTER II

METHOD

Subjects

The subjects were 140 male and female students from three school districts in central, rural Michigan. They ranged in age from 10 to 17 years, and were drawn from the fifth through eleventh grades. Two of the schools that the subjects came from were in the lower quarter of schools in the state in reading scores, while the third was in the bottom half. All three were in the bottom half in socioeconomic status, teacher's salaries, and a number of other indicators of school quality as measured by state assessment criteria (Mich. Dept. of Ed., 1971).

Initially five schools in the area were asked to participate in the summer reading program, at no cost to the school. Of the five one refused to participate, one agreed to participate but could not find students that were willing to attend; thus three schools actually contributed students to the program. In early spring the schools submitted a list of students they felt would benefit from a summer reading program. These students were selected by

the schools based on test scores or teacher recommendations. All students from these lists were pre-tested in the May preceding the operation of the program. Approximately ten students were eliminated from the list because their high test scores clearly indicated they had little need for a reading program. Of the remaining students a sample of eighty was chosen at random to be asked to participate in the program. A letter was then sent to the parents of these students informing them about the program and urging them to have their children participate.

When the program began in late June approximately twenty students appeared. This was an unexpectedly small number. As a consequence, letters were sent to the parents of the remaining fifty students from the lists provided by the schools, inviting them to have their children participate. In total thirty students agreed to participate in the reading program. An additional forty-eight were post-tested and constituted the no treatment control group.

Instructional Resources

Centers

Two centers were set up in local schools for the six week, thirty hour program. Twenty students attended at the Mecosta center, while ten attended at Reed City. No transportation was provided. At both centers regular classroom facilities were available.

Instructors

Four teachers were used, two of whom were experienced teachers from local schools. The other two teachers were college students with no prior teaching experience who were living locally with their parents for the summer. The two experienced teachers taught at the Mecosta center, while the two inexperienced teachers worked at the Reed City center. At each center the teachers worked on alternate days. All four teachers were trained in the use of the reading materials during one four hour session prior to the start of the reading program.

Materials

The materials used were the Reading Attainment System (Grolier, 1967). This system utilized high interest materials (including stories about motorcycles, credit, moon landings, etc.) but was written at varying degrees of difficulty from third through seventh grades. It was intended for use by students who were in junior and senior high school and for older people who had not yet finished school. The use of high interest materials solved the problem of lack of appropriate reading materials for older students. Through the use of this system it was no longer necessary to give anyone reading at the third grade level materials written for third graders. In this system the students were able to choose the selections they wished to

read from twenty at each of twelve levels. At the beginning of the program students were assigned to a specific level based upon their reading test scores.

Each selection consisted of a three page story and two tests. One test covered vocabulary, while the other measured comprehension. The students had their own record books in which they recorded the results of their tests and kept track of their progress on a chart. When a student scored 70 percent or better on the tests from five selections within a level they then moved on to the next level. By keeping track of their own progress in this manner, students were reinforced each time they recorded the completion of a selection. They were then able to progress at their own speed, rather than the speed of the median person in the class. The instructor was also able to help each student as requested.

Procedure

The design consisted of a true experiment which compared two experimental treatments, and a quasi-experiment which compared the two experimental conditions with a non-equivalent control group. The thirty students who volunteered for the reading program were randomly assigned to one of two conditions: (1) Reading Program Alone (N=15) or (2) Parental Involvement (N=15). The non-equivalent control group consisted of forty-eight students who did not

volunteer for the summer program but who were pre- and post-tested.

Dependent Measures

All subjects were tested five to six weeks prior to the beginning of the reading program on the following measures:

1. Gates-MacGinitie Reading Test (1965), Form D.

This test provided four scores: (a) Speed--the raw score for which was the number attempted on that part of the test; (b) Accuracy--the raw score for this was the number correct on the Speed subtest; (c) Vocabulary; and (d) Comprehension. Grade equivalents were provided for the raw scores obtained. These grade equivalents were used to assign students to their appropriate grade level on the RAS.

2. Perceived Parental Expectations. This was the same scale used by Brookover et al. (1965). It measured the student's perceptions of his parents' expectations for him in academic matters. Brookover found a test-retest reliability for this scale to be .41 for males and .70 for females. This scale is included in Appendix A.

3. Intellectual Achievement Responsibility Scale. This was the scale developed by Crandall, Katkovsky, and Crandall (1965). The IAR has two subscales which measure responsibility for success (I+) and responsibility for failure (I-). Crandall et al. found that the test-retest

reliability for the sum of the two subscales (I total) to be .69. This scale is presented in Appendix B.

During the last day of the reading program in July all participants were post-tested on the above measures. In the case of the Gates-MacGinitie an alternate form was used. For the other measures the same questions were asked. Students who had not participated in the program were retested during the first two weeks of school in September. Transcripts of grades were obtained for students in both reading program groups (but not for those in the control group) approximately six months after the reading program was completed.

Reading Program Procedure

Students in both reading program conditions participated in the reading program equally. The instructors were not told which students were in which conditions. Students utilized the Reading Attainment System. The teachers sat in front of the classroom and were available to provide assistance whenever a student requested it. The teachers also gave verbal reinforcement whenever a student finished a story or moved on to a higher level.

The program lasted for six weeks, although almost half of the students finished the RAS (and consequently left the program) before that period of time elapsed. Classes were held one hour per day, five days per week, for a total of thirty possible hours of instruction.

Parental Intervention Procedure

At the end of each week in the program students in the Parental Involvement Condition were sent a letter telling them how much progress their child had made during that week, and providing them with some suggestions that they could use to help their child improve further. Parents of children in the Reading Program Alone condition were not contacted.

The main emphasis of these letters was to convince the parents that their child could actually succeed in school, contrary to all their past experiences. This was done by telling them how well the reading program in general was working, and specifically, how much progress their child was making. In addition, various suggestions were made for working with the child in the home. These suggestions generally included reinforcing the child for reading whenever that particular behavior occurred, having the parents set a better example for the child by reading more themselves, and having the parents take a greater interest in the child's reading habits. Copies of these letters are in Appendix C.

At the end of the third week the parents were sent a letter that suggested a meeting with the experimenter and told them they would be receiving a telephone call to make the arrangements. The parents were then called and appointments made to meet with them individually, either in the

home or at the school where the reading program was taking place.

The parent meetings were scheduled during the fourth and fifth weeks of the program. At the meetings the parents were again told about their child's progress. They were shown a graph detailing the upward trend of their child's achievements. This was done by providing them with a cumulative graph of the number of selections he or she had completed up to that point. Next, the reading program itself was described in detail, including a display of the materials used in the Reading Attainment System. The various tests used in the system were described. The experimenter then made a few suggestions for ways the parents could encourage their child to read more. The ideas suggested in the letters were repeated and more were recommended. These included having a dictionary in the house and having the child be in charge of looking up words for the whole family. In general the emphasis was on increasing the parent's involvement with the child as it would relate to reading and to increase the use of positive reinforcement for actual reading behavior. A copy of the actual script used for the parent meetings will be found in Appendix D. The areas covered above are included in it. While the experimenter did memorize the speeches from the script, parent reactions varied tremendously. Consequently much of the interaction at each meeting was improvised,

although all of the points in the script were covered at each meeting.

After the meetings the parents continued to receive the weekly letters until their child dropped out of the program or the program was completed, whichever came first. When the final testing was completed the parents were told how much progress had been made and were given further encouragement to continue to help their child at home.

Control Condition

Students in this condition were non-volunteers for the reading program. They were tested both before and after the reading program, but received no additional instruction or parent contact, other than the invitation to participate in the program. Grades could not be obtained for this group.

CHAPTER III

RESULTS

Equivalence of Treatment Groups

Considering the small size of the two treatment groups the question certainly arises about whether the randomization was successful in assuring that the two groups were equivalent. Another problem is the question of whether the No Treatment Control Group can be considered to be an equivalent comparison group. This last question arises because those who volunteered to be in the reading program (i.e., those students who made up the two treatment groups) can be considered to be a self-selected group. This can be considered a threat to internal validity as described by Campbell and Stanley (1963). To help answer these questions a one-way analysis of variance was done for all of the pre-test data, plus age and grade in school (Table 1). There were no significant differences between the three groups on any of the variables. In the case of the two treatment groups these tests show that the randomization was a success, since the two groups were drawn from the same population of volunteers. In the case of the control group there is clearly some basis for using it as a

comparison group, although there may be some motivational differences due to self-selection present.

Table 1.--Summary of ANOVA of Pre-test Data for All Groups.

Variable	F (df)	p
Age	0.93 (2,78)	.40
Grade	1.31 (2,81)	.28
Reading Speed	2.53 (2,81)	.09
Reading Accuracy	1.82 (2,81)	.19
Vocabulary	2.88 (2,81)	.06
Comprehension	0.62 (2,81)	.54
Perceived Parental Expectations	1.50 (2,81)	.23
I+	1.19 (2,81)	.31
I-	0.59 (2,81)	.56
I total	0.05 (2,81)	.95
English Grades	1.15 (1,28)	.29
Math Grades	0.59 (1,27)	.45

Effect of Experimental Conditions

In order to determine the effectiveness of the treatment conditions, an Analysis of Covariance was done for each of the achievement, personality, and grade measures, using the pre-test scores for each measure as the covariate. Analysis of Covariance was used, rather than the more usual Analysis of Variance, in order to improve the effects of randomization (Cochran, 1957). This technique is "a statistical, rather than an experimental method . . . to 'control' or 'adjust for' the effects of one or more uncontrolled variables, and permit, thereby, a valid

evaluation of the outcome of the experiment" (Ferguson, 1966). Although there were no significant differences between the groups, there were some. Analysis of Covariance should therefore result in a more valid test of the hypotheses.

The specific technique used was to test for differences between the conditions on the post-test scores, covarying ("holding constant") the pre-test score on that particular variable. This "corrected" each analysis for whatever differences there might have been between the groups in the beginning.

The findings from the ANCOVA provided strong evidence for the effectiveness of the reading program and some tentative evidence for the effectiveness of the parental intervention.

Speed

The Speed subtest of the Gates-MacGinitie Reading Test measures how fast students can read a short passage, but does not take accuracy into account. The results of this analysis (Table 2) show that there was a significant effect ($F=5.10$; $df=2,72$; $p<.01$). Unfortunately the means of the three groups (Table 3) do not provide clear evidence for what the effect is. By pooling the two groups that were in the reading program (the parental involvement group and the reading program alone group) it is clear (Table 4) that the reading program significantly ($F=8.45$; $df=2,72$;

Table 2.--Analysis of Covariance--Post-test Speed Score by Experimental Condition with Pre-test Speed Score as Covariate.

Source	df	MS	F
Covariate (Pre-test Speed)	1	610.41	38.59**
Main Effects (Experimental Cond.)	2	80.73	5.10*
Residual	72	15.82	

** = (p<.001)

* = (p<.01)

Table 3.--Post-test Mean Scores (with Standard Deviation in Parentheses).

N	Condition	Unadjusted Means	Means Adjusted for Covariate
14	Parental Intervention	17.07 (2.95)	18.39
14	Reading Program Alone	19.07 (4.31)	20.34
48	Control	17.23 (5.91)	16.47

Table 4.--Analysis of Covariance--Post-test Speed Score by Experimental Condition (Pooled) with Pre-test Speed Score as Covariate.

Source	df	MS	F
Covariate (Pre-test Speed)	1	610.41	38.23**
Main Effects (Experimental Cond.)	1	134.84	8.45*
Residual	73	15.97	

** = (p<.001)

* = (p<.005)

$p < .005$) improved reading speed as compared to the control group.

Accuracy

The Accuracy subtest of the Gates-MacGinitie consists of the number of correct answers on the reading speed subtest. An ANCOVA (Table 5) on the accuracy scores produced a significant effect ($F=6.40$; $df=2,72$; $p < .01$). Again the means (Table 6) do not show what was having the effect. Pooling the parental involvement and reading program alone groups (Table 7) shows that the reading program significantly improved reading accuracy ($F=12.66$; $df=2,72$; $p < .001$).

Comprehension

The comprehension subtest of the Gates-MacGinitie involves reading a short passage and then answering a few questions about the content of the passage. This ANCOVA produced a similar result to the speed and accuracy analyses. There was a significant effect (Table 8; $F=12.24$; $df=2,72$; $p < .001$) but the means (Table 9) do not show what the effect was. By pooling the two reading program groups again it is clear that the reading program improved comprehension significantly (Table 10; $f=24.81$; $df=1,73$; $p < .001$).

Based on the results obtained from the reading test there can be little question that the reading program used in this study was effective in improving the reading skills of the students involved. However, it would appear overall

Table 5.--Analysis of Covariance--Post-test Accuracy Score by Experimental Condition with Pre-test Accuracy Score as Covariate.

Source	df	MS	F
Covariate (Pre-test Accuracy)	1	756.31	80.93**
Main Effects (Exp. Cond.)	2	59.80	6.40*
Residual	72	9.35	

** = (p<.001)

* = (p<.003)

Table 6.--Accuracy Post-test Mean Scores (with Standard Deviations in Parentheses)

N	Condition	Unadjusted Means	Means Adjusted for Covariate
14	Parental Intervention	16.57 (3.08)	17.81
14	Reading Program Alone	16.14 (4.73)	17.21
48	Control	15.52 (5.31)	14.85

Table 7.--Analysis of Covariance--Post-test Accuracy Score by Experimental Conditions (Pooled) with Pre-test Accuracy as Covariate.

Source	df	MS	F
Covariate (Pre-test Accuracy)	1	756.31	81.75**
Main Effects	1	117.13	12.66**
Residual	73	9.25	

** = (p<.001)

Table 8.--Analysis of Covariance--Post-test Comprehension Score by Experimental Condition with Pre-test Comprehension as Covariate.

Source	df	MS	F
Covariate (Pre-test Comprehension)	1	2233.15	34.56**
Main Effects	2	790.72	12.24**
Residual	72	64.62	

** = ($p < .001$)

Table 9.--Comprehension Post-test Mean Scores (with Standard Deviations in Parentheses)

N	Condition	Unadjusted Means	Means Adjusted for Covariate
14	Parental Intervention	37.79 (7.18)	38.14
14	Reading Program Alone	36.86 (8.99)	38.02
48	Control	29.02 (11.39)	28.58

Table 10.--Analysis of Covariance--Post-test Comprehension Score by Experimental Condition (Pooled) with Pre-test Comprehension as Covariate.

Source	df	MS	F
Covariate (Pre-test Comprehension)	1	2233.15	35.04**
Main Effects	1	1581.34	24.81**
Residual	73	63.74	

** = ($p < .001$)

that the parental involvement manipulation had very little effect. There was, however, some tenuous evidence from the students' grades that parental involvement may have had some influence.

English Grades

The English grades used were grades from the students' transcripts for classes entitled "English," "reading," "literature," or some title that was clearly related to language skills. The pre-test grades were the mean of the fall and spring semester grades for the year previous to the reading program. The post-test grades were the fall semester grades for the term immediately following the reading program. Grades could not be obtained for the students in the Control condition. As a consequence the analysis of English grades tested only for differences between the two treatment conditions. Table 11 shows the results of the Analysis of Covariance, while the means are presented in Table 12. Although the results are not significant ($F=1.38$; $df=1,23$; $p<.25$), the means do seem to indicate that there has been a positive increase favoring parental involvement.

Two interesting findings, which may help to account for the differences in English grades, relate to attendance and the number of stories read. Students in the parental involvement condition attended an average of three more reading program classes ($F=1.06$; $df=1,26$; $p<.30$) and read

Table 11.--Analysis of Covariance--Post-test English Grades by Experimental Condition with Pre-test English Grades as Covariate.

Source	df	MS	F
Covariate (Pre-test English Grades)	1	7.20	.09
Main Effects	1	108.24	1.38*
Residual	23	78.64	

* = ($p < .25$)

Table 12.--Mean English Grades Post-test (with Standard Deviation in Parentheses).

N	Condition	Unadjusted Means*	Means Adjusted for Covariate
12	Parental Intervention	1.71 (1.10)	1.71
13	Reading Program Alone	1.29 (0.75)	1.29

*Grades based on scale 4.0=A, 3.0=B, etc.

an average of nine more stories in the Reading Attainment System ($F=1.50$; $df=1,26$; $p<.25$). While these results are not significant at the usual probability levels they may provide some indication of the process which may have occurred as a result of the parental involvement manipulation.

The Analyses of Covariance showed that the experimental manipulations had no effect on overall grade point average. There was also no effect on the measures of Intellectual Achievement Responsibility or on Perceived Parental Expectations. There were, however, a number of findings of a correlational nature to report.

Personality

One readily apparant finding was the relatively strong and highly significant correlations between both subscales of the IAR and the achievement test measures (Table 13). While this is interesting, a closer look at the data reveals something of even greater interest. When the correlations were broken down by sex (Table 14) it became clear that the correlations in Table 13 were due for the most part to the importance of IAR for males, and the relative weight given to males due to their numerical superiority in the sample (there were 61 males and 23 females). The data in Table 14 would appear to show that the correlation between achievement and IAR(+) is much higher for males, while the correlation between achievement

Table 13.--Correlations Between IAR and Achievement Measures.

	I+pre	I-pre	Itot pre	I+post	I-post	Itot post
Speed (pre)	.117	.236	.214	.073	.334	.375
Speed (post)	.314	.168	** .288	** .275	.119	** .288
Accuracy (pre)	.172	** .283	** .276	.166	** .287	** .301
Accuracy (post)	.335	* .221	*** .332	* .233	* .236	*** .337
Vocabulary (pre)	.175	* .198	* .225	.116	** .273	* .245
Vocabulary (post)	.128	* .199	* .198	.032	*** .334	* .232
Comprehension (pre)	* .213	* .251	** .280	** .298	** .267	*** .375
Comprehension (post)	.130	.039	.100	** .182	*** .367	*** .356

* = ($p < .05$)** = ($p < .01$)*** = ($p < .001$)

Table 14.--Correlations Between IAR and Achievement Measures for Males and Females.

	I+pre		I+post		I+pre		I+post		I-pre		I-post		I-post	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Speed (pre)	.151	-.034	.094	-.016	.196	.491	.220	.579						
Speed (post)	.391	-.024	.320	.097	.181	.224	.015	.571*						
Accuracy (pre)	.231	-.080	.194	.056	.250	.508	.232	.526						
Accuracy (post)	.448*	-.073	.228	.258	.218	.335	.103	.695*						
Vocabulary (pre)	.309*	-.350	.129	.068	.204	.200	.207	.294						
Vocabulary (post)	.301*	-.431	.031	.036	.218	.108	.311	.438						
Comprehension (pre)	.357*	-.331	.363	.066	.292	.112	.273	.255						
Comprehension (post)	.249*	-.314	.222	.056	.064	.080	.354	.389						

*Difference between these correlations for Males and Females is significant at the .05 level.

and IAR(-) is higher for females. However, when separate correlations were computed for the experimental group (Table 15) and the control group (Table 16) it became clear that this was only the case for the controls. For the experimental group (those subjects in both the Parental Involvement and Reading Program Alone conditions), the males' IAR (both positive and negative) had a positive correlation with achievement while the females had a negative correlation between achievement and IAR. This seems to only be the case for the vocabulary and comprehension achievement measures however. There do not appear to be any consistent differences on either the speed or accuracy measures. Thus, while the control groups' correlations would seem to support the findings in the rest of the literature (Crandall, Katkovsky, & Crandall, 1965; Clifford & Cleary, 1972; Johnson & Gormly, 1972), the experimental group is clearly different. The difference in the pattern of correlations also holds up when comparing the pre-test correlations (i.e., when both IAR and achievement were measured at the pre-test), thereby indicating that the control and experimental groups were drawn from somewhat different populations.

A very interesting finding was the rather strong positive correlation found between Perceived Parental Expectations and IAR (Table 17). This shows that the child's perceptions of his parents expectations of himself is closely related to the child's own expectations for himself.

Table 15.--Correlations Between IAR and Achievement for Males and Females (Reading Program Subjects Only).

	M		F		M		F		M		F	
	I+pre	I+post	I+pre	I+post	I+pre	I+post	I+pre	I+post	I+pre	I+post	I+pre	I+post
Speed (pre)	.187	-.222	.413	.186	.489	.717	.482	.543				
Speed (post)	.532	.189	.370	.367	.494	.448	.417	.662				
Accuracy (pre)	.347	-.073	.457	.206	.525	.721	.523	.535				
Accuracy (post)	.615	.115	.343	.327	.409	.370	.450	.720				
Vocabulary (pre)	.485*	.096	-.426	-.237	.499*	-.288	.520	.163				
Vocabulary (post)	.415*	-.085	-.428	-.285	.334	-.259	.603	.108				
Comprehension (pre)	.401	.317	-.210	-.181	.421	-.077	.490	-.005				
Comprehension (post)	.638*	.445	-.380	-.186	.242	-.267	.473	.328				

*Differences significant ($p < .1$).

Table 16.--Correlations Between IAR and Achievement for Males and Females (Control Condition Subjects Only).

	M		F		M		F		M		F	
	I+pre	I+pre	I+pre	I+pre	I+post	I+post	I+post	I+post	I-pre	I-pre	I-post	I-post
Speed (pre)	.083	-.342	.267	-.107	.139	.368	.132	.674				
Speed (post)	.351	-.305	.381	-.068	.103	-.007	-.108	.411				
Accuracy (pre)	.115	-.375	.346	.011	.183	.462	.117	.640				
Accuracy (post)	.348	-.295	.288	.229	.155	.283	-.041	.658				
Vocabulary (pre)	.148	-.325	.144	.211	.147	.525	.191	.463				
Vocabulary (post)	.193	-.455	.103	.158	.194	.300	.169	.668				
Comprehension (pre)	.305	-.448	.390	.212	.265	.275	.175	.526				
Comprehension (post)	.085	-.307	.126	.109	-.035	.140	.304	.317				

That is, if the child thinks that his parents believe he can do something, he believes that he can too. This confirms Brookover's conclusion that parental attitudes toward the child are related to the child's attitudes toward himself.

Table 17.--Correlations Between IAR, GPA, and Parental Expectations Scale.

	PE (pretest)	PE (post-test)
I+ (pre)	.392***	.292***
I+ (post)	.515***	.228***
I- (pre)	.341***	.249***
I- (post)	.317**	.234**
I total (pre)	.440***	.325***
I total (post)	.561***	.334***
GPA (pre)	.288	.389*
GPA (post)	.277	.494**

* = (p<.05)

** = (p<.01)

*** = (p<.001)

Table 17 also shows that Perceived Parental Expectations at the post-test are related to overall grade point average (GPA). This could indicate that participation in the reading program heightened the parents' awareness of their child's GPA and thereby made their expectations more congruent with reality. This interpretation is possible since the students in the Control condition were not involved in any analysis involving grades. There was little other evidence to support the third hypothesis, that

students whose parents had high expectations for them would show high achievement. No correlations were found between Perceived Parental Expectations and any of the achievement test scores.

One set of correlations was found that was totally unexpected. This was the negative correlation between attendance in the program and the achievement measures (Table 18). The reason for this would seem to be related to one of the limitations of this particular program, that only one type of material was used. As noted previously, the RAS had an upper limit of the seventh grade. Beyond that a student would normally be expected to "graduate" to some other set of materials. Unfortunately, in this six week program there were no other materials. The expectation had been that when a student reached the top level of stories he or she would continue to read in the RAS at any level desired. In practice however, this never happened. Usually when a student completed the requisite five selections at the top level he or she was never seen again. Thus, what happened was that the students with high initial reading scores usually started higher and worked faster than the less intelligent ones, and as a consequence, reached the highest level more quickly. Naturally by the end of the program, most of the students who scored high on the reading tests were gone, leaving the rest with the best attendance rankings. Probably, if provisions had been made

for other materials to be available, the opposite results would have been obtained for this correlation.

Table 18.--Correlations Between Attendance and Achievement Measures.

	Attendance
Speed (pre)	-.357*
Speed (post)	-.290*
Accuracy (pre)	-.328*
Accuracy (post)	-.125
Vocabulary (pre)	-.187
Vocabulary (post)	-.225
Comprehension (pre)	-.066
Comprehension (post)	-.012

* = ($p < .05$)

CHAPTER IV

DISCUSSION

There were two primary questions raised in the introduction to this study. The first was whether a remedial reading program consisting of individualized, programmed instruction could be successful with older students, that is, students in junior and senior high school. The second major question was whether the background factors described by the Coleman Report, Dave, and Wolf as being the essential determinants of achievement could be manipulated so as to improve a student's academic performance.

The first question was answered in a very positive fashion. Compared with the control group those students that used the Reading Attainment System made greater strides on three of the four achievement subtests. Clearly, when given the proper materials older students are able to make significant achievements in a remedial reading program. There is therefore little reason to avoid placing considerable emphasis on such programs for junior and senior high school students who are deficient in reading.

The answer to the second question is considerably less clear than the answer to the first. Since the question about background factors has really only been raised in the context of older students, it brings up the problem that, although the home environment has been shown to be a key influence on achievement, is it a continuing influence throughout school (or life), or does the environmental influence of early life have an immutable effect? If there is a continuing influence then it should be possible to make changes in the home environment and as a consequence affect achievement. If the effects of early childhood cannot be reversed, then any attempts at compensatory education are useless. This study has only provided some limited answers to these questions.

The question of background factors was tested by the comparison between the Parental Intervention group and the Reading Program Alone group. Although there were no significant differences between the two groups, there are a number of explanations available that may explain this. One possible explanation would naturally be that the parental manipulation had no effect, that involving parents is not a useful means of improving a student's academic achievement. While this hypothesis cannot be entirely rejected, there is some evidence to the contrary, namely the difference between the two groups on English grades that approaches significance. This leads to some other potential explanations. First, the sample may have been too small.

A sample size of thirty (the total number in both the parental involvement and Reading Program Alone conditions) did not provide many degrees of freedom for an F test. With a larger sample more significant results might have been obtained. Second, the manipulation of parental involvement may have been too weak. The relatively mild intervention (six letters plus one meeting) may not have been strong enough nor long enough (six weeks) to show up effectively on the measures used in this study. In addition it is possible that there was an effect that could be measured with the instruments used but that it was not strong enough to show up with the small sample. It would seem most likely that some combination of these was taking effect, with the most important being the strength of the manipulation.

Assuming that there was an effect on English grades, some explanation is in order to explain why there was effect on grades, but not on achievement test scores. It may be that, due to the parental intervention, the parents were made more aware of their child's scholastic difficulties. Their parents then placed more emphasis on schoolwork in the home by taking more interest in the child's homework and progress in school. Thus, there was no effect on test scores taken immediately after the program ended, but there may have been an effect on the child's performance in school. There was no measure made of parental behavior, so unfortunately there can be no test of this hypothesis.

These results have a number of implications for future research. Since it would appear that the mild parental intervention used in this study had some beneficial effect, further work should determine the type and strength of intervention necessary to obtain the optimal benefit. Since much of the parental contact in this study was by mail it would seem likely that future studies should concentrate more on personal contacts with the parents. For the most part there is little reason why such research could not be carried on by the local school districts themselves. The amount of financial outlay would be minimal and the potential benefits to students enormous. Each school could have an outreach program to attempt to influence the student's home environment. This could be done utilizing regular classroom teachers, or special personnel from the school. Individual and group meetings with parents should be held to explain what needs to be done in the home to help their children improve academically.

A word of warning is in order at this point. There are two ways the schools could accomplish the task of working with parents. On the one hand, the schools could use undercover agents and coercive techniques to discover what the parents are doing and to force them to act the way they are "supposed to." On the other hand, they can be straight forward with the parents and explain exactly what is going on and where the problems lie. Clearly the

latter method is the only one that would ever gain acceptance among the population at large. Most likely it would also be the most successful. Based upon the experience of this study it would seem that most parents are eager to help their children if only someone would let them know what needs to be done.

Of considerable importance and interest are the findings concerning the personality measures. The most prominent of these is the correlation between achievement and the locus of control measure (IAR). While the correlations for the control group support the findings of other investigators (Crandall et al., 1965; Clifford & Cleary, 1972; Johnson & Gormly, 1972), the correlations for the experimental groups do not. Since the experimental groups consisted entirely of volunteers it may be assumed that they were somewhat more motivated than the control group. It may also be that the parents of the children in this group were more interested in education than the parents of the children in the control group. To some extent this may be supported by the correlations for males in the experimental group since there was a positive correlation between achievement and IAR for them. The negative correlations for the females are much more difficult to explain. One curious point about them is that the correlations are rather strongly negative for the vocabulary and comprehension subtests, but strongly positive for the speed and accuracy subtests. Since the accuracy subtest is highly

dependent on the speed subtest (by the nature of how the tests are constructed), and the comprehension subtest is probably somewhat dependent on vocabulary skills, it makes conceptual sense that the scores should be paired in that manner. Clearly the two sets of subtests are measuring different kinds of skills. Unfortunately the skills measured by the vocabulary and comprehension subtests are the ones most similar to the common notion of "Achievement." For females (in this sample) then locus of control is negatively correlated with "achievement," that is, females who assume responsibility for their actions have lower achievement levels than females who deny that responsibility. This would seem to confirm DeDette, Wolk, and Soucar's (1972) notion that an external orientation is adaptive under certain circumstances. It may be that for these females failure seems inevitable. That would appear not to be the case for the males in the sample since they have a positive correlation between achievement and locus of control. The reasons for this difference may lie in the particular social system in which these children live. Perhaps in the small, poor, rural communities where these children were brought up girls were not expected to achieve highly or to obtain a high level of education. More emphasis may have been placed on achievement for boys. Since these differences were not obtained for the control group, such attitudes probably did not exist on a community wide basis, but may have been operating within certain

isolated family groups. Certainly further study into this phenomenon is in order.

Clearly the most important result from this study was the highly significant effect of the reading program itself. Since the reading program consisted of individualized, programmed instruction, such techniques can be recommended to local schools as a highly effective technique of improving reading skills.

It should be stressed that this program was effective with adolescents in junior and senior high school with whom (based upon their reading skill levels) traditional programs had little effect. It would seem then that an effective (and inexpensive) technique is readily available to teach remedial reading to this adolescent population. Schools should begin adopting it immediately. A number of schools, including one of the schools that participated in this study are presently doing just that. If further research sheds more light on the effectiveness of parental involvement perhaps the two techniques combined will go a long way toward alleviating the problems of reading disabilities in adolescents.

REFERENCES

REFERENCES

- Battle, E. S., and Rotter, J. B. "Children's Feelings of Personal Control as Related to Social Class and Ethnic Group." Journal of Personality, 1963, 31, 482-90.
- Brookover, W. B.; LePere, J. M.; Hamachek, D. E.; Thomas, S.; and Erickson, E. S. Self-Concept of Ability and School Achievement II. East Lansing: Michigan State University, 1965.
- Brookover, W. B.; Erickson, E. S.; and Joiner, L. Self-Concept of Ability and School Achievement III. East Lansing: Michigan State University, 1967.
- Calsyn, R. J. "The Causal Relationship Between Self-Esteem, Locus of Control, and Achievement: Cross-Lagged Panel Analysis." Unpublished Ph.D. Dissertation, 1973, Northwestern University.
- Census, U.S. Educational Attainment. U.S. Government Printing Office, 1972.
- Clifford, M. M., and Cleary, T. A. "The Relationship Between Children's Academic Performance and Achievement Accountability." Child Development, 1972, 43, 647-55.
- Cochran, W. G. "Analysis of Covariance: Its Nature and Uses." Biometrics, 1957, 261-81.
- Cohen, A. S. "Reading: Large Issues, Specific Problems, and Possible Solutions." In A. J. Reiss, Schools in a Changing Society. New York: Free Press, 1965.
- Coleman, J. S.; Campbell, E. Q.; Hobson, C. J.; McPartland, J.; Mood, A. M.; Weinfeld, F. D.; and York, R. L. Equality of Educational Opportunity. Washington: Department of HEW, 1966.

- Crandall, V. C.; Katkovsky, W.; and Crandall, V. J. "Children's Beliefs in Their Own Control of Reinforcements in Intellectual-Academic Situations." Child Development, 1965, 36, 91-110.
- Dave, R. H. "The Identification and Measurement of Educational Process Variables that Are Related to Educational Achievement." Unpublished Ph.D. Dissertation, 1963, University of Chicago.
- Davis, W. G., and Phares, E. J. "Internal-External Control as a Determinant of Information-Seeking in a Social Influence Situation." Journal of Personality, 1967, 35, 547-61.
- DeDette, J.; Wolk, S.; and Soucar, E. "Atypical Patterns in Locus of Control and Non-Adaptive Behavior." Journal of Personality, 1972, 40, 287-97.
- Erickson, E. S. "Normative Influence of Parents and Friends on Academic Achievement." Unpublished Ed.D. Dissertation, 1969, Michigan State University.
- Ferguson, G. A. Statistical Analysis in Psychology and Education. New York: McGraw-Hill, 1966.
- Gates, A. I., and MacGinitie, W. H. Gates-MacGinitie Reading Tests. New York: Teachers College Press, Columbia University, 1965.
- Gordon, I. J. "Developing Parent Power." In Hess, R. D., Parental Behavior and Children's School Achievement. Princeton: Educational Testing Service, 1969.
- Gormly, J., and Nittoli, M. "Rapid Improvement of Reading Skills in Juvenile Delinquents." Journal of Experimental Education, 1971, 40, 45-48.
- Grolier Educational Company. Reading Attainment Systems. New York, 1967.
- Hawkridge, D. G.; Chalupsky, A. B.; and Roberts, A. O. H. "A Study of Selected Exemplary Programs for the Education of Disadvantaged Children." Final Report on Project No. 0809013, U.S. Office of Education, 1968.
- Hess, R. D. "Parental Behavior and Children's School Achievement." Princeton: Educational Testing Service, 1969.

- Johnson, C. D., and Gormly, J. "Academic Cheating: The Contribution of Sex, Personality, and Situational Variables." Developmental Psychology, 1972, 6, 320-25.
- Levin, H. "The Costs to the Nation of Inadequate Education." In U.S. Senate Publication, The Effects of Dropping Out, 1972.
- Lumsden, D. B. "Individualized Instruction Through the Use of Programmed Instruction." Educational Forum, 1974, 38, 145-52.
- Mayeske, G. W.; Okada, T.; Beaton, A. G.; Cohen, W. M.; and Wilser, C. E. A Study of the Achievement of Our Nation's Students. Department of HEW Publication No. (OE)72-131, 1973.
- Messer, S. B. "The Relation of Internal-External Control to Academic Performance." Child Development, 1972, 43, 1456-62.
- Michigan Department of Education. Michigan Assessment of Education, 1971.
- National Advisory Council on the Education of Disadvantaged Children. Annual Report, 1975.
- Office of Education. Title I Annual Report. FY 1971, Department of HEW, 1972.
- Peterson, J. Reading Failure. National Reading Center, GPO, 1972.
- Phares, E. J. "Differential Utilization of Information as a Function of Internal-External Control." Journal of Personality, 1968, 36, 649-62.
- Riessman, F. The Culturally Deprived Child. New York: Harper, 1962.
- Scheinfeld, D. R. "On Developing Developmental Families." In R. D. Hess, Parental Behavior and Children's School Achievement. Princeton: Educational Testing Service, 1969.
- Smith, M. S. "Equality of Educational Opportunity: The Basic Findings Reconsidered." In Mosteller, F. and Moynihan, D. P., On Equality of Educational Opportunity. New York: Random House, 1972.
- Stanford Research Institute. Report on Compensatory Education, 1973.

Title I, Second Year Annual Report. Washington: Government
Printing Office, 1968.

Wolf, R. M. "The Identification and Measurement of Environmental Process Variables Related to Intelligence."
Unpublished Ph.D. Dissertation, University of
Chicago, 1964.

APPENDICES

APPENDIX A

PERCEIVED PARENTAL EXPECTATIONS SCALE

PERCEIVED PARENTAL EXPECTATIONS SCALE*

Please answer the following questions as you think your parents would answer them. Circle the number in front of the statement that best answers each question.

1. How do you think your Parents would rate your school ability compared with other students your age?
 - a. among the poorest
 - b. below average
 - c. average
 - d. above average
 - e. among the best
2. Where do you think your Parents would say you rank in a high school class?
 - a. among the poorest
 - b. below average
 - c. average
 - d. above average
 - e. among the best
3. Do you think your parents would say you have the ability to complete college?
 - a. definitely not
 - b. probably not
 - c. not sure either way
 - d. yes, probably
 - e. yes, definitely
4. Do you think your Parents would say you have the ability to complete professional training in law, medicine, or dentistry?
 - a. definitely not
 - b. probably not
 - c. not sure either way
 - d. yes, probably
 - e. yes, definitely

5. What kind of grades do you think your Parents would say you are capable of getting?

- a. mostly F's
- b. mostly D's
- c. mostly C's
- d. mostly B's
- e. mostly A's

*Perceived Parental Expectations Questionnaire,
(Brookover et al., 1967)

APPENDIX B

**INTELLECTUAL ACHIEVEMENT
RESPONSIBILITY SCALE**

INTELLECTUAL ACHIEVEMENT

RESPONSIBILITY SCALE*

In this next series of questions we are trying to find out some of your opinions. There are no right or wrong answers. Please CHECK the statement that YOU feel best completes each sentence.

1. If a teacher passes you to the next grade, would it probably be

_____ a. because she liked you, or
_____ b. because of the work you did?
2. When you do well on a test at school, is it more likely to be

_____ a. because you studied for it, or
_____ b. because the test was especially easy?
3. When you have trouble understanding something at school, is it ususally

_____ a. because the teacher didn't explain it clearly, or
_____ b. because you didn't listen carefully?
4. When you read a story and can't remember much of it, is it usually

_____ a. because the story wasn't well written, or
_____ b. because you weren't interested in the story?
5. Suppose your parents say you are doing well in school. Is this likely to happen

_____ a. because your school work is good, or
_____ b. because they are in a good mood?
6. Suppose you did better than usual in a subject at school. Would it probably happen

_____ a. because you tried harder, or
_____ b. because someone helped you?

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

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

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

32. Suppose you are explaining how to play a game to a friend and he learns quickly. Would that happen more often
- _____ a. because you explained it well, or
_____ b. because he was able to understand it?
33. Suppose you're not sure about the answer to a question your teacher asks you and the answer you give turns out to be wrong. Is it likely to happen
- _____ a. she was more particular than usual, or
_____ b. because you answered too quickly?
34. If a teacher says to you, "Try to do better," would it be
- _____ a. because this is something she might say to get pupils to work harder, or
_____ b. because your work wasn't as good as usual?
- _____

*Intellectual Achievement Responsibility Questionnaire (Crandall et al., 1965).

APPENDIX C

LETTERS TO PARENTS

May 11, 1974

Dear Parent:

Your child has been selected for a six-week summer reading program. Eighty children from Mecosta and Osceola counties will be included in the program. Children were selected on the basis of difficulties in reading and high potential for improvement. The program is one of demonstrated value and we expect many of the children to show rapid improvement.

The program begins June 17 and ends July 29, with no meeting on July 4. The two centers are Reed City High School and the Mecosta Elementary School buildings. It will be necessary for parents to arrange for transportation to whichever center is closer. Sessions will run 50 minutes, beginning on the hour, and each child should attend one session per day. The sessions are 5 days per week, Monday through Friday.

There are four different sessions each day for your convenience in bringing your child to the program. Times are: 10 and 11 a.m.; 1 and 2 p.m. at each location. After June 17, please select the time which is most convenient. Once you choose a time, always bring your child at the same time each day. If you want to change the time of your child's lesson please talk with the program teacher.

June 17 is the first day of class. On this first day there will be an exception to our ordinary schedule. On the 17th please bring your child to the center they will attend according to the following schedule: Mecosta Elementary Bldg.: 10 or 11 a.m., Reed City High School Bldg.: 1 or 2 p.m. That is, you may bring your child to Mecosta at either of the morning times, or to Reed City at either of the afternoon times. Starting on June 18 the regular schedule of four times per day will begin.

If you wish to have your child participate in this program, please sign the enclosed form. This form should be brought to me on June 17. If there are any questions please contact your local school district or myself.

Sincerely,

Charles D. Johnson, Ph.D.
Phone: 517-353-5015

CDJ/lr

June 25, 1974

Dear

We would like to thank you for encouraging your child to participate in the summer reading program being conducted by your school.

Very often parents feel that they are uninformed about what is going on in school and about what kind of progress their child is making. In this summer reading program we hope to keep you better informed. Each week you will receive a report on your child's progress in addition to some useful information about how you can help right at home.

During the course of the reading program your child will read a series of stories about a number of interesting topics, including science, history, social studies and many others. While he or she is reading the story your child will be learning about English grammar, spelling, and vocabulary. Thus reading skills will improve, while your child is learning about subjects he or she is interested in. The students get to choose which stories they read, based upon their own interests; however they must choose stories at their own reading level. They receive two tests on each story. When they score 70% or better on the tests for five stories, they get to move on to the next level. We will describe more about the reading program next week when we again report to you on your child's progress.

Hopefully we will be able to meet with and speak to each of you personally, either at the school or in your home, about the reading program and how it works.

If you should have any questions concerning the program or your child's progress, please feel free to send us a note, either with your child or to the above address.

Yours truly,

Charles Johnson
Reading Program Director

Mitchell Fleischer
Assistant Director

During the past week your child_____, read___stories.

July 2, 1974

Dear

We hope that by now your child has talked to you about the summer reading program and has let you know how he feels about it. We've found that almost all of the children are taking a very strong interest in the reading materials and are really enjoying the way the system works.

In our last letter we said that we would tell you more about how the reading program works. One of the most important parts of this reading program is how interesting the materials are. Very often children with reading problems are unable to find books that they are interested in reading and are written at their reading level. For example, suppose a 14 year old child could only read at the 4th grade level. Until now he probably would only be able to read 4th grade level books, written for 9 year old children. Of course these would not be very interesting to him. The reading program your child is in uses books that are written with the interests of older children in mind, but at lower reading levels. There are 240 different stories, including stories about motorcycles, karate, sharks, modeling, job hunting and many others.

The best part of this is that while each child is reading a story he is also improving his reading skills. One way this reading program can help even more is if you, as parents, take a strong interest in it and how your child is doing. Let your child know that you are interested in his progress. Ask him how he feels about the program. If you find from these reports that he is doing well, let him know how you feel about that.

Next week we'll talk about some more things you can do at home to help your child improve his reading skills.

Yours truly,

Charles Johnson
Reading program Director

Mitchell Fleischer
Assistant Director

July 9, 1974

Dear

Since we have now passed the half-way point in the summer reading program I would like to make arrangements soon to meet with as many parents as possible before the program ends. The purpose of these individual meetings will be to discuss your child's progress in the reading program. We will discuss how this program works and why it is working so well and what can be done to continue your child's progress after the program ends.

I would like to meet with each of you personally either in a conference room at the school while your child is in the reading class, or in the privacy of your own home. I'll be calling you up starting next Monday to find out what is the most convenient for you.

Yours truly,

Mitchell Fleischer
Assistant Program
Director

July 24, 1974

Dear

I would like to thank all of you for meeting with me last week. I hope that your children will benefit from our discussion. This week, in addition to the usual report on your child's progress, I will review some of the points we discussed last week.

As you remember we went over some things that you could do at home to help your child to continue to improve after the reading program is over. The first was to make him feel good about reading. One way to do this is to say something nice to him whenever you see him reading, any nice compliment will work wonders. The second suggestion I made was to give him something you have already read and to discuss it with him after he's read it. This will make him read the way he needs to in school. The third point I mentioned was to make a game of using the dictionary. Put your child in charge of looking up words for the whole family. This will greatly increase his vocabulary skills.

Remember, the most important thing is to get your child to read as much as possible. Buy what books he or she wants if you can, or use your local library. Whether you make use of my suggestions or whether you think up new ways on your own, just try to get your child to read more. You'll be glad you did.

Yours truly,

Mitchell Fleischer
Assistant Program Director

July 30, 1974

Dear Parents,

Now that the Summer Reading Program is over I'm sure that all of you are eagerly awaiting the news of how well your child has done in it. One way of measuring this is to give your child a reading test and to compare the scores with the reading test he took last May. Before the program ended we told the children that they would be tested in September after school started. Unfortunately due to some problems that have come up we must try to test all of the children who participated before the end of August. We did test those children who attended the last day of class, July 29 on that date. Quite a number, including your child did not attend that day.

We are therefore going to set up another testing date on Monday, August 5 for your child and the others who were not tested. Even if your child participated in the reading program for only a short time he or she may still have made some gains. Thus we urge you to have your child tested anyway. I'm sure you will be very interested to find out how much your child gained from the reading program.

There will be TWO test times, on August 5. The first will be at the Mecosta Elementary School at 10:30 AM. The second will be at the Reed City High School at 2 PM. I will try to contact all of you by phone to find out if your child needs transportation. We only have a limited amount of transportation so please try to arrange your own if this is possible.

If you have any questions concerning this letter please contact us at the above address or call us at 517-355-5015. Naturally we will let you know the results of the tests as soon as we have graded them. Thank you very much for your help.

Yours truly,

Charles Johnson
Reading Program Director

Mitchell Fleischer
Assistant Director

December 20 1974

Dear Parents,

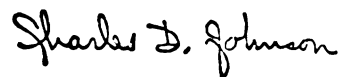
We now have the results of the testing from the reading program your child was in over the summer. Unfortunately there was quite a bit of delay in grading the tests. That is the reason this letter is being sent to you so many months after the reading program ended.

We found that almost every child who participated in the program made some improvements. Even those who only came to four or five classes improved a little.

We feel certain that these gains could not have been made without the help of all the parents involved. A child must have the help and interest of his parents in order to make improvements such as these. Therefore, we thank you for your help.

If you have any questions about the results of these tests or would like more information, please feel free to write to us at the above address.

Yours truly,



Charles Johnson
Reading Program Director

Mitchell Fleischer
Assistant Director

APPENDIX D

SCRIPT FOR VISIT WITH PARENTS

SCRIPT FOR VISITS WITH PARENTS

The following is a script that was generally followed during the visits with the parents. There was ample opportunity for interaction with the parents especially at a number of junctures that invited discussion.

(after general introductions and small talk)

Before I explain about how the reading program works let me show you this chart that shows how well (child's name) is doing. (Show graph). The bottom line is the number of weeks _____ has been in the program and the line on the left shows improvement. Each of these numbers corresponds to one of the color levels I'm sure _____ has told you about.

We use a program called the Reading Attainment System that was developed by the U.S. government for older children with reading problems. These are some of the materials we use (show materials). There are 12 levels in the system. Those are the levels you see on the chart in front of you. Each level is just a little bit harder than the one before it. Let me show you these two stories that are in levels right next to each other. (Show 2 booklets). As you can see there is hardly any difference. These are

two of the easier levels. Now look at this one from the most difficult level. (Show booklet.) As you can see the words are much harder (point at skill card words) and the print is much smaller. You can see that the topics are ones that would be of interest to most kids. (Spread out a number of stories on the table and point to the titles, read some titles.) There are 20 stories at each level, so there are plenty of topics for anyone's interests. They also contain some good things to know, such as ____ (read title again) or _____. Other stories are designed just to catch someone's interest and get them to read more.

First the child chooses a story he wants and reads it. Then he is tested on it. First he takes the Reading Check (point). This tests how well he understands what he has read. We've found that there are two ways of reading things. One way is the way you or I read most of the time, quickly, skipping things and without depth. The other way is for school. For this you have to read very carefully since you will be tested. The Reading Check trains your child to read for school. After he completes the Reading Check he gets this skill card (show one). This is essentially a vocabulary test.

Now, these are not just tests, but learning tools also. This is because each child checks his own tests. That way they find out not only what they got right, but they get to correct their own mistakes. As you know we all

learn best from our own mistakes. Well do you have any questions so far about how all this works?

While this short program is very good and your child is making a lot of progress, as you can see (point to chart), it does only last six weeks. We've got to do more to have a really lasting effect. We've found that one of the most important places for emphasis on reading is the home. There are quite a few things that you can do. I've got just a few suggestions that I like to bring up with parents, but I'm sure that you will be able to think of many more.

The first suggestion that I like to make is what I call the old "pat-on-the-back" approach. And I don't mean with a stick either (haha). What I mean is that we are often quick to punish a child when he does something wrong, but sometimes we forget to reward him when he does things right. I don't know why we do that, I do it myself too. Now I don't mean you have to go out and buy presents whenever you catch _____ reading a book. Just saying that he's doing fine, or any kind of compliment will probably make him feel pretty good. If you can get him feeling good when he's reading, he may start feeling good about reading and then will do it more. That's the best thing you could possibly do.

Another thing you could do is play a little game. If you're reading something you think _____ might be interested in, give it to him to read. When he's done with

it discuss it with him, ask a few questions. This will be just like taking the Reading Check (point). It will force him to read like he needs to for school.

There's another game I like to suggest to parents. Do you have a dictionary around the house? What you can do with a dictionary is to put _____ in charge of it. Whenever someone in the family doesn't know a word, _____ is the one to look it up. When he does this he'll not only be learning the words he's looking up, but he'll get in the habit of using the dictionary, and this can be one of the best skills he'll ever learn.

Well, you can probably think up many more ways of getting _____ to practice reading. That's what he mostly needs, practice! do you have any questions about what we've discussed this morning?

Well, just remember, do the best you can to encourage _____ to read as much as possible. While he's certainly made a lot of progress over the past few weeks, he can only continue to improve with your help. I'll continue to be in touch with you about _____'s progress and I'll also let you know the results after we test the kids again in September.

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