

A STUDY OF RELATIONSHIPS
BETWEEN SELECTED FACTORS
AND THE SCHOOL ACHIEVEMENT
OF
MEXICAN - AMERICAN MIGRANT CHILDREN

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MARY ALEXANDER CAIN

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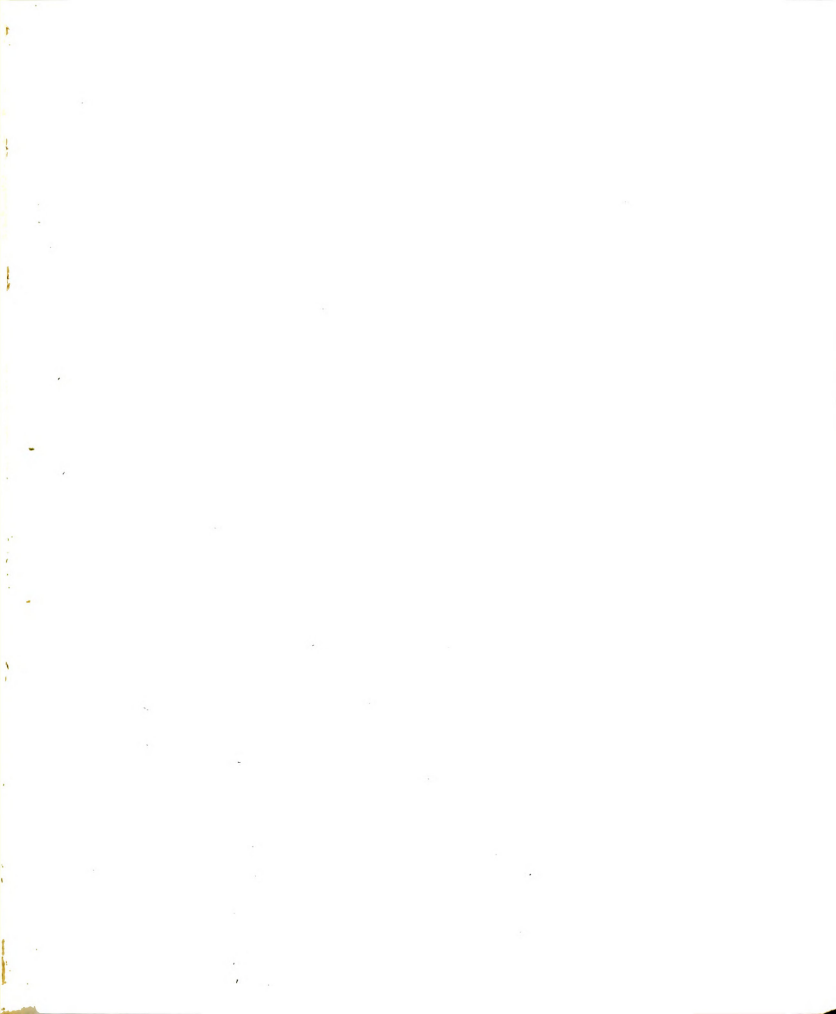
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ABSTRACT

A STUDY OF RELATIONSHIPS
BETWEEN SELECTED FACTORS AND THE SCHOOL ACHIEVEMENT
OF MEXICAN-AMERICAN MIGRANT CHILDREN

By
Mary Alexander Cain

This study investigated whether the factors of age, sex, parent-child relations, or modes of response to problems of frustration and failure, were related to the school achievement of Mexican-American migrant children. Typical patterns of parent-child relationships, as perceived by these children, and typical means employed in their problem-solving were also investigated.

Subjects of the study were 58 Mexican-American migrant boys and girls, ranging in age from seven through 13, who attended a summer school program in southwestern Michigan.

Standard scores in reading and arithmetic obtained by the school on the Wide-Range Achievement Test were used as measures of achievement. Trend analyses were made to determine whether standard achievement scores dropped with age. Analysis of variance was employed to discover possible differences in achievement

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between boys and girls. Perceptions of parent-child relationships were measured by the Roe-Siegelman Parent-Child Relations Questionnaire, and various child-rearing practices were compared by rank analysis of variance. A step-wise multiple regression analysis was used to discover possible relationships between patterns of child-rearing and achievement. Problems of frustration and failure related to the Mexican-American migrant child's life were introduced in five incomplete stories. Children's story completions were categorized by three judges, and chi-square analysis was used to determine whether modes of problem-solving were related to school achievement.

Arithmetic achievement equalled or excelled reading achievement at each age level. All achievement decreased beyond the nine-year-old level. While a quadratic relationship between reading scores and age proved not significant, a linear relationship between arithmetic scores and age was significant at the .01 level. No difference was discerned between the achievement of boys and of girls. Parent-child relations were perceived as significantly loving and protecting. The child-rearing dimensions of rejection and neglect were significantly less prevalent than other dimensions. Children saw themselves as more rewarded than punished. Mothers were seen as more protecting, more demanding, more rewarding and more

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punishing than fathers. Relatively lower reading and arithmetic scores were significantly related to mothers' rejection, neglect, and casualness. Fathers' love was positively related to arithmetic achievement, while their casualness was negatively correlated with reading and performance.

Forty-one per cent of children's story completions are goal-oriented, gratification-deferring, "middle-class" solutions. Thirty-four per cent of the solutions employed withdrawal from the problem. Appeals to authority, use of fantasy, and anti-social aggression made up only 25 per cent of the total responses. Despite the notion that typically middle-class modes of problem-solving tend to produce school success, the solutions produced by the subjects of this study bore no relationships to their achievement.

The findings of the study suggested desirable adult education practices, and the need for further research in the area of problem-solving. The discovery of currently acceptable child-rearing practices and typical "middle-class" problem solving among the Mexican-American migrant families of this sample emphasizes the need for further research to explore correlates of achievement.



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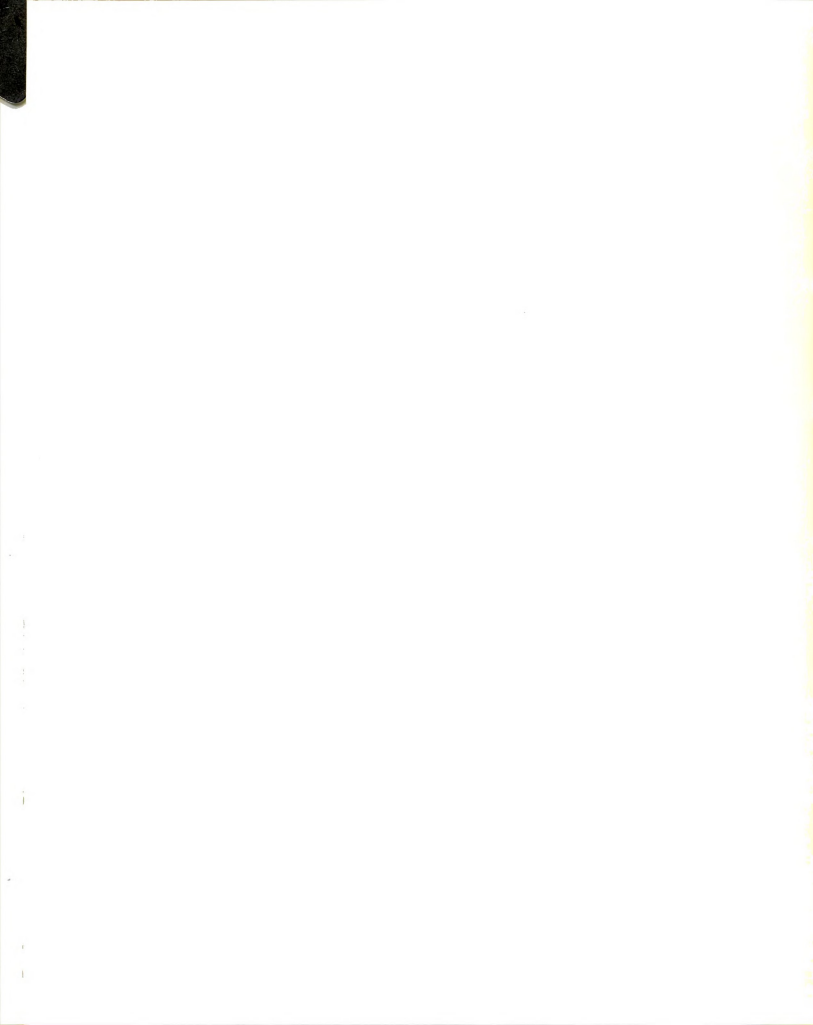
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CHAPTER I

INTRODUCTION

Background of the Problem

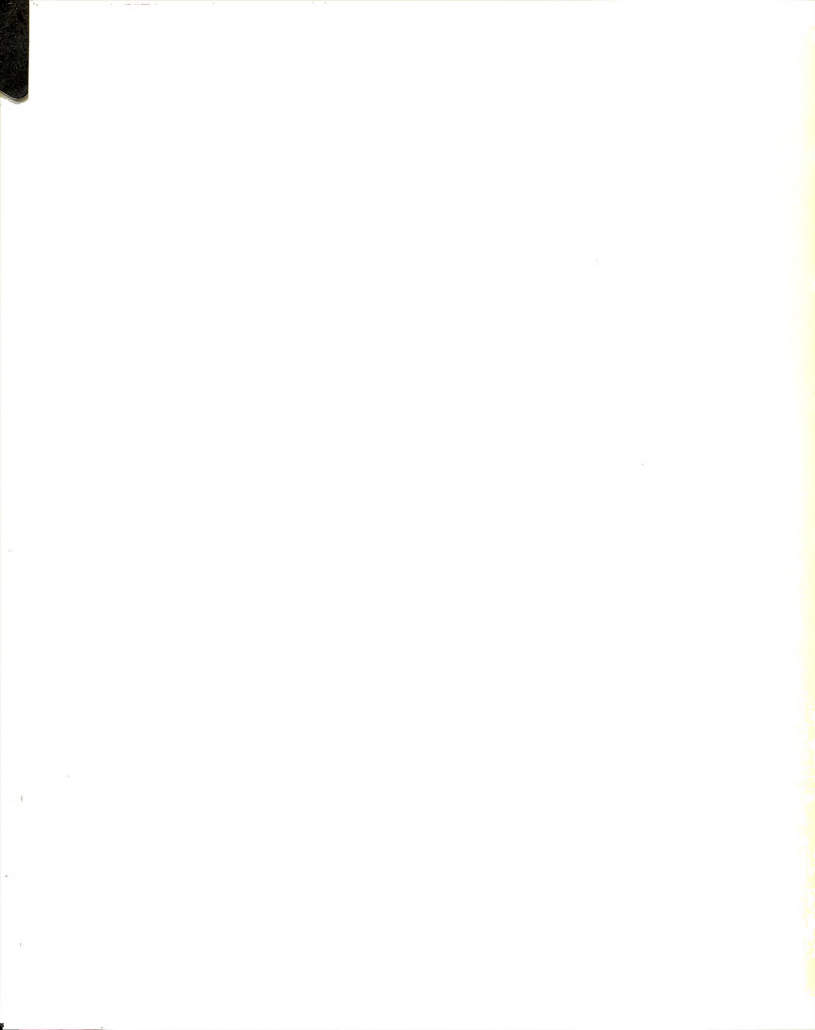
A large part of America's food supply is harvested by a population of migrant laborers who are estimated to number between one-half million and one million. Tens of thousands of children accompany their parents through life "on the season", living under conditions of poverty, deprivation, disease, humiliation, and hopelessness.¹ Estimates at the beginning of this decade indicated that the average migrant worker earned approximately \$900 a year for his work in the fields.²

The growers who hire migrant workers, beset by problems of unpredictable weather conditions, federal legislation, and social and labor organization, increasingly turn to mechanization as a means of cultivating and harvesting their crops.³ It is estimated that within ten years the need for migratory farm labor will disappear. Yet migrant workers are not sufficiently educated to gain other employment. Without effective education, they will remain in poverty, either in the fields, or in rural or urban slums, where they may seek

¹Descriptions of the conditions of migrant life may be found in: Koos, E.L., They Follow the Sun, Jacksonville: Florida State Board of Health, 1957; Moore, Truman E., The Slaves We Rent, New York: Random House, 1965; Reul, Myrtle E., Where Hannibal Led Us, New York: Vantage Press, 1966; and Shotwell, Louisa R., The Harvesters: The Story of the Migrant People, Garden City: Doubleday and Co., 1961.

²Moore, op. cit., 140.

³Kelly, Clarence F., "Mechanical Harvesting." Scientific American, 211 (August, 1967), 50-59.



a precarious living on the fringes of an affluent society in which they are not prepared to succeed.

Need for the Study

Most migrant children attend school infrequently. Their education lacks continuity, being constantly interrupted by their travels, by their work in the fields, and by the reluctance or inability of many school systems to accommodate migrant children in on-going school programs. A number of states have established temporary experimental plans for the education of migrant children, yet no consistent program for their education has been maintained. Consistent and concerted attempts to educate migrant children, so that they may find a place in society, are long overdue.

While there is general agreement that the migrant child is an under-achiever who will profit from welcoming teachers and individualized instruction,¹ little is known about the possible effect of specific aspects of the migrant child's culture or his family on his ability to achieve in school. Nor is much known about the appropriateness of the school program to which this child is exposed. In order to develop a more adequate educational program for migrant children and their families, specific information regarding many variables is necessary.

A study recently conducted by the State of Florida points up the recognized need for knowledge of psychological and cultural variables:

¹Shotwell, *op. cit.*, 165-6; Sutton, Elizabeth, Knowing and Teaching the Migrant Child. Washington: National Education Association, 1960.

What kind of unique challenges and needs does the migrant child have which result primarily from his mobile pattern of life?

School personnel and lay people need to deepen their understandings of migratory children and adults. Little is known of the exact thought processes and learnings from their social and economic environment, or the variation in all of these which occurs within and between ethnic groups. Stereotyped behaviors and values which are associated with the term "migrant" need to be replaced with factual information about their characteristics and the unique and distinctive needs, which primarily are the results of their life patterns and the subculture from which they come.¹

Florida's attempt to improve migrant education on a state-wide basis is seen in the work of the Chinsegut Hill Workshop of the University of South Florida. Some important recommendations coming from the workshop emphasize more specifically the following needs:

The need for studies of the migrant culture.

The need to develop teaching strategies utilizing the learning styles of migrant children.

The need to involve parents in their children's education and to help them to a better understanding of school and of the contributions the family can make to children's achievement.

The need to help the migrant child develop "positive attitudes toward himself, others, and school learning; behavior patterns which evince: (a) the ability to work for long range goals, (b) respect for hard, productive work,² (c) an awareness of his responsibility for his progress or success."³

¹State of Florida, Planning Florida's Migrant Education Program. Tallahassee: Department of Education, 1966, p. 30.

²Ironically, the educator's bias shows in this recommendation. Probably no one knows more about "hard, productive work" than the migrant farm laborer. What the author intends, perhaps, is "hard, productive work" of an academic nature.

³State of Florida, op. cit. 22-3.

The unique living conditions and subcultures of the migrant stream make it important that the relationship between subcultural variables and the migrant child's school achievement be investigated.

One group of migrant workers--distinct in customs, traditions, language, values, and family pattern--is made up of Mexican-Americans who travel north each spring from the southwestern states. These Spanish-speaking migrants represent the third largest minority group in the United States. Their language and other cultural differences may compound or alleviate learning difficulties encountered by other migrant children. The present isolation from other American citizens produces a unique culture whose general characteristics and their effects on school achievement may be studied. Those who work with migrant children have recognized the need for an examination of some of the factors which make the Mexican-American migrant child culturally different, and the possible effects of these factors on school achievement. The major attention of this study relates to some of these factors.

The Problem of Cultural Values

Throughout the succeeding discussions of parent-child relationships and modes of response to problems, contrasts will be made between middle- and lower-class practices and values as they relate to school achievement or achievement motivation. Research shows that middle-class values and behaviors are more likely to accompany school success. However, we do not intend to suggest that middle-class values

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are in any sense the "right" values or "better" values, but simply that, given the nature of our present schools and society, they bring greater success to those who hold them. The writer agrees with most current writers who suggest that the way to achieve a meeting-ground between the school and any "disadvantaged" child is to adjust school curriculum and instruction to the culture, the values, and the attitudes of the child, rather than unreasonably to expect the child suddenly to adopt the modes of the school. Attempts to "adjust" the child and thereby produce achievement have consistently failed. Knowledge of cultures different from that of the school could be used to help the school adjust to the child.

The Mexican-American culture contains many elements which can enhance human development and enrich human existence. Laughter, warmth, humor, color, imagination, generosity, and honest relationships are evident in the Mexican-American migrant culture, and in schools which accept migrant children and have concern for their growth. These elements of the migrant culture need not be sacrificed for school achievement.

If any personal bias, beyond that of concern for the migrant child, influences this study, it is not that one set of values is superior to another, but that there exists the possibility of helping the migrant child to greater achievement without the cost to the person which the more rigid middle-class values sometimes entail. It is the hope of this writer that schools will come to understand, to accept, and

to use the cultural difference of minority-group children in order to further their achievement and success. A fair statement of the writer's preference would also include her hope for a mixing of cultures and values as middle-class schools become more acceptant of lower-class cultures and thereby find ways for lower-class children to attain greater success, without rejection of the beautiful or the valuable in their heritage.

Purposes of the Study

Three cultural variables offer a beginning to the study of the Mexican-American migrant child and his school achievement. The parent-child relationships typical of this culture may, in other cultures previously studied, affect the motivation, the aspirations, and the achievement of the children of the culture. Typical modes of response to the problems and frustrations of living may also affect the child's approach to problems of school learning and achievement. The purposes of this study stemmed from assertions regarding the cumulative educational retardation of the migrant child as he grows older, and from the three cultural variables of sex-role expectations, parent-child relationships, and modes of response to problems.

Specifically, this study investigated: (1) the possible relationship between age and standardized achievement scores, (2) the possible relationship between sex and school achievement, (3) the parent-child relationships of the

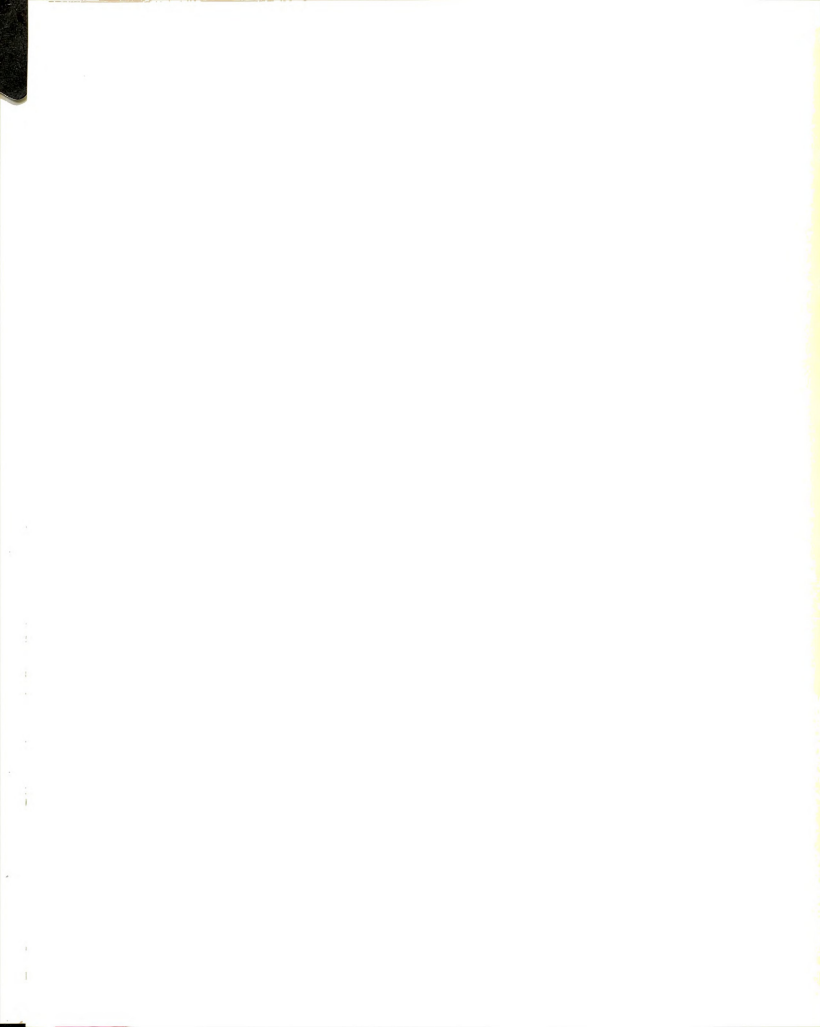
Mexican-American migrant family and their possible relationships with school achievement, and (4) the modes of response to the problems of Mexican-American migrant children and their possible relationship to school achievement.

The purposes of this study were:

1. to discover whether the cumulative school retardation found in earlier studies of Mexican-American migrant children exists in this sample.
2. to discover whether the sex of the Mexican-American migrant child is related to his school achievement.
3. to discover whether there is a typical pattern of parent-child relationships within the Mexican-American migrant culture.
4. to discover whether specific parent-child relationships are related to school achievement in Mexican-American migrant children.
5. to discover whether there are typical modes of approach to the solution of problems among Mexican-American migrant children.
6. to discover whether these modes of response to problems are related to the Mexican-American migrant child's school achievement.

Procedures

The Sample The subjects of this study were 58 Mexican-American migrant boys and girls, ranging in age from seven



through 13,¹ who attended at least part of an eight-week school program in southwestern Michigan during the summer of 1967. Children were chosen at random from a daily enrollment which ranged from 45 to 109. Selection was limited by the necessity to choose children who spoke English and who attended the school with sufficient regularity to make a program of testing possible. Although an effort was made to choose at random equal numbers of boys and girls representing various age groups, randomization was limited by the nature of the school enrollment.

Migrant parents sent their children to school on a voluntary basis. Many more migrant children stayed in the fields and camps than attended school. Hence, this sample represents only those children whose parents were willing to rise earlier, to undertake extra washing and ironing of children's clothes, and, in the case of older children, to forego the income their children could have earned in the fields. It is possible, therefore, that the subjects of this study constitute a sample of a particular set of Mexican-American migrants: those who are motivated to make extra sacrifices for the sake of their children's education.

In summary, factors influencing enrollment and factors influencing the feasibility of the testing program produced limitations in the sample used in this study.

¹owing to the irregular school attendance and the mobility of the children, and to the ensuing difficulties in administering tests, not all of the children were included in all phases of the study.

Instruments and Methodology of the Study

1. Measurement of Achievement Standard achievement scores in reading and arithmetic were obtained as part of the summer school program. The Wide-Range Achievement Test¹ was used for this purpose, and the school's measures were used in this study. The standard score of the WRAT has a mean of 100 and a standard deviation of 15. Because performance on these tests relies upon a language which is essentially foreign to the Mexican-American child, all tests were un-timed and were administered individually, giving subjects an advantage beyond that of the normal administration.

2. Age Differences in Achievement Each age level for which there was a sufficient sample was compared with other age levels by analysis of variance to determine whether standard achievement scores drop significantly with age.

3. Sex Differences in Achievement The mean achievement scores for boys and girls in reading and in arithmetic were compared to determine whether one sex was significantly superior to the other in reading or arithmetic achievement.

¹Jastak, J. F., and Jastak, S. R., The Wide-Range Achievement Test. Revised edition. Wilmington, Delaware: Guidance Associates, 1965. Further information concerning the WRAT, and scores of the subjects of this study, are contained in Appendix D.

4. Parent-Child Relationships The Roe-Siegelman Parent-Child Relations Questionnaire¹ was chosen as a measure of parent-child relationships in Mexican-American migrant families, because of its simplicity of administration, the feasibility of its use with children, the high reliability coefficients reported for each category measured by the instrument, and the possibility of comparison of the Roe-Siegelman factors with the findings of other studies related to child-rearing and parent-child relationships. The questionnaire was rewritten in simple language for administration to Mexican-American children.² (Appendix A contains forms of the Roe-Siegelman instrument for mothers and for fathers, as they were used in this study.)

The Roe-Siegelman PCR measures six treatments (e.g., "Demanding," "Casual," "Protecting") and four reward-punishment systems (e.g., "Direct-Object Reward," "Symbolic-Love Punishment") giving a total of ten scores which reflect responding children's perceptions of their relationships with their parents. The PCR includes separate forms for mothers and for fathers, since its authors found some items more reliable for one parent than another. Since

¹Roe, Anne, and Siegelman, Marvin, "A Parent-Child Relations Questionnaire." Child Development, 34 (June, 1963), 355-69.

²Dr. Roe's permission to revise forms of the questionnaire was granted through Barbara P. Brown, Executive Secretary, Center for Research in Careers, Graduate School in Education, Harvard University. Dr. Roe's kind permission and Miss Brown's assistance are gratefully acknowledged.

current theory holds that mothers may relate differently to their sons than to their daughters, and that fathers, too, have differing relationships with children of different sexes, the population of the present study was treated when possible as four groups: (a) mothers and daughters, (b) mothers and sons, (c) fathers and daughters, and (d) fathers and sons. Analysis of variance was used to discover possible major factors in the parent-child relationships of the subjects. Means of child-rearing categories were compared for each sub-group where warranted. Parent-child relationship variables were compared in high- and low-achieving subjects by multiple regression analysis.

5. Modes of Response to Problems of Frustration and Failure

It was assumed that Mexican-American migrant children who achieve to a significant degree would respond to frustration and failure in ways which are more typically "middle-class," i.e., with greater goal orientation, more deferment of gratification, more long-range planning, and greater achievement motivation, than their peers whose achievement is lower. Therefore, five unfinished stories concerning migrant children were constructed, after the manner of Miller and Swanson¹ and of Wallach and Kogan.² These stories are similar in purpose to the Rosenzweig

¹Miller, Daniel R., and Swanson, Guy E., Inner Conflict and Defense. New York: Henry Holt and Co., 1960.

²Wallach, Michael A., and Kogan, Nathan, Modes of Thinking in Young Children. New York: Holt, Rinehart and Winston, Inc., 1965. Pp. 211-16.

Picture Frustration Study¹ but, rather than concerning themselves with scooters, birthday parties, and the like, contain items and events familiar to the migrant child. Separate forms were prepared for boys and for girls. Each set of stories included the following problems:

- a. school frustration and failure
- b. frustration regarding a career
- c. lack of desired material possessions
- d. failure to live up to parental expectations
- e. rejection by peers because of inappropriate dress

Boys' and girls' forms were constructed to be as much alike as possible and were, in some cases, identical except for the sex of the "hero." The stories were then submitted to several persons with expert knowledge of the Mexican-American migrant culture. On the basis of their reactions, the stories were slightly modified in vocabulary.² (Appendix B contains the ten unfinished stories comprising the boys' and girls'

¹Rosenzweig, S., "Rosenzweig Picture-Frustration Study, Children's Form." In Projective Techniques with Children, edited by A. I. Rabin and Mary Haworth. New York: Grune and Stratton, 1960.

²Experts consulted were Mr. Manuel Alfaro, Migrant Consultant to the Michigan State Department of Education; Messrs. Harold Pena and Joe Sanchez, consultants with the Texas Migrant Education Project; Dr. Joe L. Frost, University of Texas, and Mrs. Frost, a teacher of migrant children; and Dr. Myrtle Reul, University of Georgia, then of the Department of Social Work, Michigan State University, who has spent many months living and working as a migrant. Messrs. Alfaro, Pena and Sanchez are former migrants. The writer gratefully acknowledges the kind and willing assistance of these people.

forms of this instrument.)

It was assumed that children, in completing the unfinished stories, would identify with the hero of the story, and that the solution they chose for him would reflect their typical modes of solution to similar problems. This assumption has limitations and is, as are all projective techniques, open to question.¹ Riessman and Miller² note that many projective tests are inappropriate to working-class subjects. In writing, examining, and revising the stories every attempt was made to present a cultural context familiar to the Mexican-American migrant child.

Children were tested individually. Each child was told a simple unfinished story as an example before the test was begun. If he finished the story in some way, it was assumed that he understood the process expected of him. Enough time was allowed to examine and to use the tape recorder to insure that the child felt comfortable with it. Then the first story was read to the child, and his completion was recorded on tape. About 45 minutes to one hour were required for the total procedure of completing all five stories. Story completions were subsequently transcribed from the tapes.

¹Cf. Anderson, Harold H., and Anderson, Gladys, L., eds., An Introduction to Projective Techniques. Englewood Cliffs: Prentice-Hall, Inc., 1951; and Murstein, Bernard I., ed., Handbook of Projective Techniques, New York: Basic Books, Inc., 1965.

²Riessman, Frank, and Miller, S. M., "Social Class and Projective Techniques." In Murstein, loc. cit., 95-106.

Using stories of children's problems in a study of fantasy and realism in children's story completions, Wallach and Kogan¹ assigned numerical scores to solutions offered by children, scoring '0' for "fantasy" responses and '1' for "Realism" responses. Somewhat different responses were expected in the present study. It was assumed that in completing the stories children would produce: (a) goal-oriented, gratification-deferring solutions, (b) reactions of withdrawal or resignation, (c) reactions of hostility or anti-social counter-aggression, (d) solutions relying upon appeal to authority, and (e) fantasy solutions. Three judges read and categorized each story completion.² Percentage of agreement was calculated for each pair of judges.

Categories of story completion and intervals of achievement were compared by means of Pearson's Chi-Square Test of Association to determine whether possible relationships existed between modes of response and achievement.

Limitations of the Study

The present study contains several limitations. Any generalization which can be made from the study is limited to the population from which the sample was taken: Mexican-American migrant children between the ages of seven and 13 whose parents send them to summer school. The value which

¹Wallach and Kogan, op. cit.

²Dr. Rachel Inselberg, Dr. Elizabeth Johnson, and Mrs. Joan Madden, for whose time and patience the writer is deeply grateful.

these parents put on school attendance, although it may be assumed to differ within the sample, is reflected in the special effort and sacrifice which a migrant parent must make in order for children to attend a summer school program. Migrant children from Appalachian white or southern Negro families represent separate cultures and the findings of the present study cannot justifiably be generalized to these groups.

All instruments used in this study were administered in English. The greatest limitation of the study is the achievement measure, which tested the child's ability to perform school-related tasks in a foreign language. In other measures, every attempt was made to simplify vocabulary and to use concepts within the realm of these children's understanding. However, some of the error of each analysis must be assumed to be due to the use of a second language.

The use of English and of standard achievement tests is justified, according to the assumptions of this study, if the educator's concern is with helping migrants to develop abilities which will enable them to leave the migrant stream. This accomplishment demands that migrants learn to succeed in the ways and with the language of a culture which is relatively strange to them. The achievement test is one way of gaining some measure of how far migrant children have progressed in the direction of this success. The standard achievement scores obtained in this study must not, however, be construed as an indication

of how well these subjects might perform under other circumstances or on other measures, but only as an indication of how well they did perform on limited achievement measures expressed in the English language.

Use of the parent-child relationships questionnaire presents a limited amount of information. A detailed, lengthy interview or series of interviews and observations with parents might, had they been possible, have yielded more information regarding parental attitudes and child-rearing practices than did the questionnaire.

It may be argued that the child's responses to problems of frustration or failure do not necessarily represent what he would do in these situations. An assumption of this study is that since the migrant child is limited by the little he knows of the middle-class, English-speaking culture, in his attempt to produce the "best" solution he can, in his own terms, he will use whatever resources he can summon. It is the assumption of this investigation that subjects' modes of response to problems, therefore, reflect what their families and their culture have taught them about problem-solving.

In summary, this study is limited by the nature of the sample studied, by the use of English-language instruments, and by the assumptions underlying a projective story device.

CHAPTER II
REVIEW OF RELATED LITERATURE AND HYPOTHESES
TO BE TESTED

Age as a Factor in Retardation or Achievement

Little is known about the cognitive abilities or disabilities of migrant children, except that they are retarded in achievement. Many believe that this retardation is due solely to infrequent school attendance.

"The cause of retardation--sixty-seven percent in our Colorado migrants--is centered in lack of school attendance," states Alfred M. Potts of the Colorado State Department of Education. "It definitely is not due to lack of scholastic ability. Studies show these children to have about the same ratio of slow learners, average-intelligence groups, and potentially superior children as other population groups."¹

We may assume that achievement of Mexican-American children will continue to decrease relative to their age peers as these children grow older. In a study of 1709 children from 665 migrant families, Greene² showed the increase in school retardation as children progressed in age. In the first year of school, no children were regarded as retarded. However, the percentage of retardation

¹Shotwell, op. cit., 163-4.

²Greene, Shirley E., The Education of Migrant Children. Washington, D.C.: The Department of Rural Education, NEA, 1954.

increased progressively from the second year of school (35.5% retarded) to the twelfth (75.0% retarded). The degree of school retardation likewise increased, from one year in the second grade to from one to more than five years by the sixth grade.¹ In 1935, Johnson² found retardation of migrant children in school to accumulate with each added year of age, and the same sort of evidence has appeared in subsequent studies conducted between 1939 and 1950.³ Frost found that, among 32 children enrolled in a summer school, the average degree of retardation was three years.⁴ Murray, studying Mexican-American children in San Antonio, found that while six per cent had completed high school, thirty per cent of the children had a maximum of three years in one school.⁵

¹Greene, loc. cit., 77.

²Johnson, Elizabeth S., Welfare of Families of Sugar-Beet Workers. Washington, D.C.: Children's Bureau Publication No. 247, U.S. Department of Labor, 1935.

³Greene, op. cit. 83.

⁴Frost, Joe E., "School and the Migrant Child." Childhood Education, 41 (1964), 129-32.

⁵Murray, Sister Mary John, "A Socio-Cultural Study of 118 Mexican Families Living in a Low-Rent-Public Housing Project in San Antonio, Texas." Studies in Sociology, 38, p. 84. Cited in The Disadvantaged: Challenge to Education, edited by Mario D. Fantini and Gerald Weinstein. New York: Harper and Row, 1968, p. 28.

The factor of mobility is also cited as a cause of school retardation. Continual mobility and instability of school life are a prevailing part of a migrant child's existence.

Coles and Huge provide a poignant report of the migrant child's enforced mobility:

How did school go for him this year: "Well, I didn't get there much. We moved from place to place, and I helped with the picking a lot, and the schools, when you go to them, they don't seem to want you, and they'll say that you're only going to be there for a few weeks anyway, so what's the use." What does he want to do when he gets older?: "I don't know. I'd like to stay someplace, I guess, and never have to leave there for the rest of my life, that's what."¹

Manis found that:

. . . both the number of moves made each year as well as the total number of years in migrancy persistently, though irregularly, increases the degree of retardation.²

The mobility of the migrant child, however, may not be the sole or even a determining cause in the retardation of migrant children. Americans live in a mobile society. Approximately one in five Americans moves each year.³

¹Coles, Robert, and Huge, Harry, "Peonage in Florida." The New Republic, 161 (July 26, 1969), 17-21, p. 19.

²Manis, Jerome G., A Study of Migrant Education: Survey of Findings in Van Buren County, Michigan, 1957. Kalamazoo, Michigan: Western Michigan University Press, 1958, p. 11.

³National Education Association, "America on the Move." NEA Research Bulletin, 36 (December, 1958), 99-102.

Downie found that children who had moved made scores on the Otis Self-Administering Test of Mental Abilities which were comparable to those made by children who did not move.¹ Similarly, Bollenbacher found no difference in median reading level between mobile and non-mobile school children,² while Evans found that mobile fifth- and sixth-graders were slightly better in reading and in science than their non-mobile peers.³ However, in studying the possible effects of mobility on the achievement of disadvantaged children, Justman found that both IQ and reading scores decreased with the number of moves a child had made from school to school.⁴

¹Downie, N. M., "A Comparison Between Children Who Have Moved from School to School with Those Who Have Been in Continuous Residence on Various Factors of Adjustment." Journal of Educational Psychology, 44 (January, 1953), 50-53.

²Bollenbacher, Joan, "A Study of the Effect of Mobility on Reading Achievement." The Reading Teacher, 15 (March, 1962), 356-60.

³Evans, John W., Jr., "The Effect of Pupil Mobility on Reading Achievement." National Elementary Principal, 45 (April, 1966), 18-22.

⁴Justman, Joseph, "Academic Aptitude and Reading Test Scores of Disadvantaged Children Showing Varying Degrees of Mobility." Journal of Educational Measurement, 2 (December, 1965), 151-5.

Apparently, mobility is a factor whose effects are mediated by social class or by cultural differences. It may be an oversimplification, then, to say that migrant children are retarded because of the mobility of their lives. Other factors in the child's culture or socioeconomic situation are probably operating to make his mobility an additional disadvantage with respect to his school achievement. In studies made up to the present time, these factors appear to have cumulative effects with the age of the child.

During recent years, greater Federal resources have been devoted to special educational projects for migrant children. As this is written, the Michigan State Department of Education is embarking on a state-wide migrant education project for the third consecutive summer.

Other states with heavy migrant populations are also making special efforts to improve the achievement of migrant children. However, no control can be exercised over the regular attendance of migrant children in summer schools, where attendance is voluntary, and none of these programs have been in effect for very long.

Given the additional fact that the older the Mexican-American migrant child, the less likely he is to be enrolled in school,¹ this study would expect to find

¹Greene, op. cit., 83.

cumulative retardation as the migrant child grows older. The evidence leads to the hypothesis that standardized scores for both reading achievement and for arithmetic achievement will decrease as age increases.

As is the case with other groups of children who have recently been labelled "educationally disadvantaged," however, greater school attendance will not necessarily improve performance if other retarding factors are operating, and if the school program does not take these factors into account.

Sex as a Factor in School Achievement

Girls often receive higher school grades than boys.¹ Whether this fact reflects actual differences in overall achievement is doubtful. As Anastasi notes:

. . . girls were found to excel in school grades, when compared with boys receiving the same achievement test scores. Thus the grades showed a far greater female superiority than seemed to be warranted by performance on objective achievement tests.²

The better school grades received by girls is more likely

¹Anastasi, Anne, Differential Psychology. Third edition. New York: The MacMillan Co., 1958. p. 492. Italics are those of the author cited.

²loc. cit., 493.

attributable to their greater quietness and tractability and to their relative lack of aggression--characteristics which are often prized by teachers and which might be reflected in the teacher expectancy which Rosenthal and Jacobson¹ have discussed. These authors did not find significant differences in gains due to higher teacher expectancy between the boys and the girls of their study. The exception to this finding occurred when boys' achievement gains were correlated with the degree of "Mexican-ness" of their faces, when the boys who looked most "Mexican" benefited most from their teachers' higher expectancies, but girls' achievement was not affected by this factor.² Such a finding, particularly considering the limitations of the study in question, may or may not indicate original teacher prejudice in favor of girls.

In an examination of factors affecting A and B grades assigned by teachers in reading, Wilson found that belonging to the female sex had a positive effect, while being male had a negative effect. Wilson remarks, "Girls

¹Rosenthal, Robert, and Jacobson, Lenore, Pygmalion in the Classroom. New York: Holt, Rinehart and Winston, Inc., 1968. p. 176.

²loc. cit., 177.

also . . . are perceived as better students than their test performances would warrant."¹

Although teacher expectations appear, at least in some cases, to differ with the sex of the student, there is less evidence that parent expectations differ, at least among lower-class children. For example, Cloward and Jones² found no difference in the percentage of poor parents who mentioned education in connection with their expectations for a "good life" for their boys or girls. Nor did Greene³ find a significant difference in migrant families' educational aspirations for boys or for girls of the same family. (Rather, educational aspirations for children appeared to be a factor of the parents' own educational attainment.)

The families of Spanish-speaking migrants are categorized as patriarchal⁴ and traditional.⁵ Pressures for adult

¹Wilson, Alan B., "Social Stratification and Academic Achievement." In Education in Depressed Areas, edited by A. Harry Passow. New York: Bureau of Publications, Teachers College, 1963. pp. 229, 231.

²Cloward, Richard A., and Jones, James A., "Social Class: Educational Attitudes and Participation." In Education in Depressed Areas, op. cit., 203-4.

³Greene, op. cit., 115.

⁴Reul, op. cit.

⁵Burma, J. H., Spanish-Speaking Groups in the United States. Durham, North Carolina: Duke University Press, 1954.

sex-roles come strong and early.¹ Boys go to work in fields and orchards as soon as they are physically able. Nine and ten-year-old girls are expected to care for "the little ones" (often several younger children, including a baby) for the entire day, while their parents and older children work.

The present study asks whether there is reason to expect that sex-role pressures and related cultural characteristics have a differential effect on school achievement. From what is known about the patriarchal organization of Mexican-American migrant families and their traditional sex roles, we might expect that boys would have learned stronger achievement motivation than girls. On the other hand, because girls are expected to behave in more modest and submissive fashion, one might also hypothesize that girls, given greater rewards and approval by teachers, would have higher achievement than boys. Further study beyond the scope of this paper would be required for knowledge of the mechanisms producing sex differences in achievement. The present study looks first for the existence of such differences.

Parent-Child Relationships and Child-Rearing
Practices as Factors in School Achievement

Child-rearing practices and parent-child relationships have been shown to be important factors mediating between

¹Sutton, op. cit., 19-20; Moore, op. cit., 52-65.

the family's cultural values and the child's achievement motivation or achievement in school.

When cultural values, or attitudes toward school, are not appropriate to the middle-class school's concept of achievement, the child's school performance suffers. Davis,¹ Davis and Havighurst,² and Douvan³ have provided illustrations of the ways in which middle-class schools put lower-class children at a disadvantage, so that, given the child-rearing practices and the circumstances of their culture, it is nearly impossible for children who are culturally different to achieve to a degree commensurate with the achievement of middle-class children.

The need to achieve in school appears to be strongly connected with a middle-class socialization process. Finney⁴ found that achievement need was the strongest correlate of parents' status and education, but also that the need to achieve was a product of maternal warmth and

¹Davis, Allison, Social Class Influences upon Learning. Cambridge: Harvard University Press, 1946.

²Davis, Allison, and Havighurst, Robert J., Father of the Man. Boston: Houghton Mifflin Co., 1947.

³Douvan, Elizabeth, "Social Status and Success Striving." Journal of Abnormal and Social Psychology, 52 (1956), 291-323.

⁴Finney, Joseph Claude, "Some Maternal Influences on Children's Personality and Character." Genetic Psychology Monographs, 63 (1961), 199-278.

nurturance. Separate studies by Douvan,¹ Hoffman,² and Watson³ arrived at the same conclusions: in special task situations, middle-class children work to achieve, to do a job well, while the performance of lower-class children is improved by the offer of extrinsic rewards. Lower-class children, unable for whatever reasons to perceive the rewards of academic industriousness, are not motivated to achieve in school, according to these studies.

Rosen and D'Andrade⁴ found that mothers and fathers of high-achieving boys set high but reasonable standards for their sons. This conclusion would confirm the findings of Baldwin and others;⁵ careless, overly-casual, indulgent, or permissive parents do not create in their children a significant desire to achieve. However, fathers of high-achieving boys made significantly fewer decisions for their sons, and gave them fewer directions. In a comparison of parental behaviors, Baldwin found that "democratic" homes

¹Douvan, op. cit.

²Hoffman, Martin L., et al, "Achievement Striving, Social Class, and Test Anxiety." Journal of Abnormal and Social Psychology, 56 (1958), 401-3.

³Watson, Goodwin, "Some Personality Differences in Children Related to Strict or Permissive Parental Discipline." Journal of Psychology, 44 (1957), 227-49.

⁴Rosen, B. C., and D'Andrade, R. G., "The Psychosocial Origins of Achievement Motivation." American Sociological Review, 22 (1959), 185-218.

⁵Baldwin, Alfred L., et al, "Patterns of Parent Behavior." Psychological Monographs, 58 (1945), No. 3.

(homes in which authoritarian methods and punitive measures were not evident) produced the greatest intellectual development, and that children from these homes were "significantly high on the variables of originality, planfulness, patience, curiosity, and fancifulness."¹

Miles² showed that parents of the children who use their capacities as leaders in school do not overprotect their children, nor do they shield them from normal responsibilities. Instead, they allow independence and encourage children to experiment and to make decisions. Crandall and others³ connected children's achievement behavior with their mothers' reward for independence.

A synthesis of studies of the child-rearing antecedents of achievement-oriented behavior leads to the conclusion that either highly authoritarian or highly permissive practices discourage children's achievement. Fathers' heavy-handed insistence on excellent performance destroys achievement, but so does a careless lack of standards. McClelland resolves some confusion by exposing child-rearing patterns most likely to produce successful achievement:

¹Baldwin, Alfred L., et al, op. cit., 66.

²Miles, K. A., "Relationship between Certain Factors in the Home Background and the Quality of Leadership Shown by Children." Unpublished doctoral dissertation, University of Minnesota, 1945.

³Crandall, Vaughn J., et al, "Maternal Reactions and the Development of Independence and Achievement Behavior in Young Children." Child Development, 30 (June, 1960), 243-51.

What lies in the middle of all these extremes is reasonably high standards of excellence imposed at a time when the son can attain them, a willingness to let him attain them without interference, and real emotional pleasure in his achievements short of overprotection and indulgence.¹

High achievement need may be created by stimulation for mastery, provided this stimulation is neither restricting, nor authoritarian, nor rejecting.²

Child-rearing practices of a number of populations have been studied, often in relationship to social class.³ If any generalizations can be made from a variety of populations and methodologies, it is probably that lower-class parents tend to be authoritarian and to use physical punishment, while more middle-class parents are either permissive or truly democratic, and are more likely to use love-withdrawal techniques in the process of socialization.

¹McClelland, David C., The Achieving Society. Princeton: D. Van Nostrand Co., Inc., 1961. p. 356.

²loc. cit., 345.

³The following studies are among those which point to the same general conclusions: Anders, Sarah F., "New Dimensions in Ethnicity and Child Rearing Attitudes." American Journal of Mental Deficiency, 73 (November, 1968). 505-8. Bronfenbrenner, Urie, "Socialization and Social Class through Time and Space." In Readings in Social Psychology, edited by Eleanor E. Maccoby, et al. New York: Henry Holt and Co., 1958. pp. 400-425. Bronfenbrenner, Urie, "The Changing American Child--A Speculative Analysis." Journal of Social Issues, 17 (1961), 6-18. Green, Arnold W., "The Middle Class Male Child and Neurosis." American Sociological Review, 11 (February, 1946), 31-71. Hoffman, Martin L., "Power Assertion by the Parent and its Impact on the Child." Child Development, 31 (March, 1960), 129-43. Medinnus, Gene R., ed., Readings in the Psychology of Parent-Child Relations. New York: John Wiley and Sons, Inc., 1967. Riessman, Frank, The Culturally Deprived Child. New York: Harper and Row, 1962, pp. 38-48.

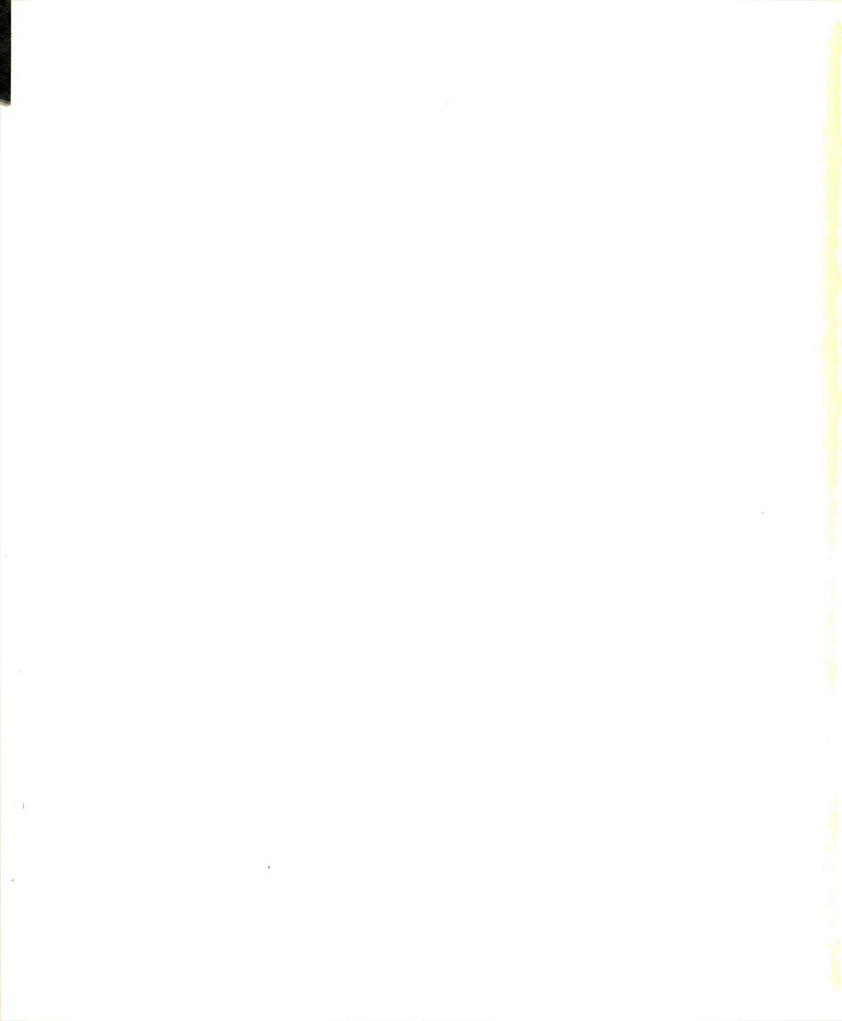
However, other factors influencing achievement motivation have been found within the same social class. Herriot suggests that socioeconomic status is not so relevant to the student's educational plans as are the expectations of the parents as perceived by the students.¹ Joiner and others² demonstrated that the student's perception of parent-child interactions had a greater effect on his educational ambitions than did his social status, and concluded, ". . . these findings imply that more attention might profitably be given to the study of differences in interactions and norms within the social structure."³

Any attempt to predict from previous studies migrant parents' child-rearing practices and their effects on children's achievement results in a number of alternatives. Mexican-American fathers are reputed to be the authoritarian leaders of patriarchal families--a fact which may not bode well for their children's achievement. However, Mexican-American parents are also said to be warm, nurturant, and caring. Yet migrant families lack democratic organization. Certainly, the contingencies of their existence bring about

¹Herriot, R. E., "Some Special Determinants of Educational Aspirations." Harvard Educational Review, 33 (1963), 153-77.

²Joiner, Lee M., Erickson, Edsel L., and Brookover, Wilbur, B., "Socioeconomic Status and Perceived Expectations as Measures of Family Influence." Personnel and Guidance Journal, 47 (March, 1969), 655-9.

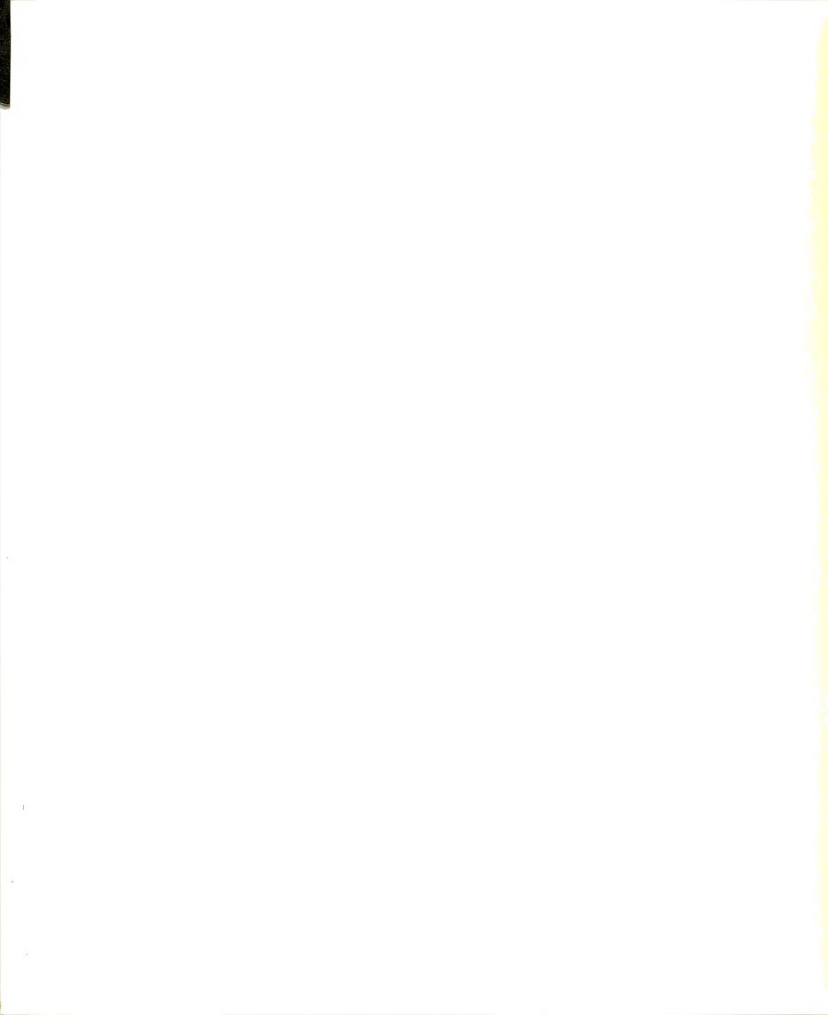
³loc. cit., 659.



children's independence and responsibility. In some ways, those same contingencies promote indulgence and somewhat careless lack of supervision of children's activities. It is impossible, then, to predict with any degree of certainty the parent-child relationships and resulting achievement of Mexican-American families and their children.

From descriptions and personal observation of Mexican-American migrant families, one might expect these children to perceive their parents as often loving and casual but seldom rejecting. If, as is supposed, mothers play a more important role in child-rearing than do fathers, then we would expect mothers to receive higher scores on significant child-rearing dimensions. If, however, sex roles are taught in part through differential treatment of boys and girls on the part of different parents, it is reasonable to suppose that mothers may play a more important role to girls, while fathers may play a more important role to their sons. It remains for this study to categorize the child-rearing practices of the Mexican-American family.

Research concerning child-rearing practices indicates that those families whose child-rearing practices are perceived as less authoritarian but still reasonably high in expectation will produce children who achieve. In terms of the child-rearing dimensions measured by the Roe-Siegelman PCR, we might expect that Mexican-American migrant children whose parents are perceived as more loving, casual, and rewarding, and less demanding, protective, neglecting, rejecting, indulgent, and punitive would show higher



achievement. This study investigates the predictive value of the child-rearing practices for school achievement.

School Achievement and Modes of Response to Problems

This section of the study is based on several assumptions which are, in turn, grounded upon research with "disadvantaged" populations and on clinical observations of society's institutions in interaction with the poor.

We assume, first of all, that behaviors and attitudes often associated with the need for achievement are also linked to success in a typical American school. The student who succeeds holds aspirations toward goals approved by the middle-class culture. He is able to defer gratification, and to sacrifice immediate reward in order to reach his goals. He values the possibilities inherent in long-range planning. He possesses some model of successful achievement with whom he can identify and after whom he can pattern his behavior.

Such attitudes are also assumed to be at work as he solves the problems with which life confronts him, and to influence the choices he makes as he attempts to reach his personal goals.

Strauss¹ found that a deferred-gratification pattern was independent of social class but associated with the

¹Strauss, Murray, A., "Deferred Gratification, Social Class, and the Achievement Syndrome." American Sociological Review, 27 (June, 1962). 326-35.

need for achievement. Strodbeck¹ found that adolescent boys of the middle class believe that planning for the future was a good idea, while lower-class boys (quite possibly because of their concrete experience with the world and its rejection of them) felt that the future was unpredictable and planning, a waste of time.

When long-range planning, deferred gratification, and goal orientation are valued, achievement is supported. But here the marked disparity between the culture of the school and the cultures of the poor function to put poor children at a disadvantage. For these children, goals have rarely been attainable, basic needs are so great that gratification can not be deferred, and long-range planning has no payoff. The child of the fields, like the child of the streets, has little or no opportunity to learn these values. Indeed, given the conditions of his existence, they are not valuable for him.

The patterns of physical growth and maturation and the system of formal education in the public schools are roughly the same for middle- and lower-class children; yet they grow up in different worlds from a psychological point of view.²

The public school gives little recognition to these "different worlds," unless it is to condemn the difference. The predominant values of family and subculture which each child internalizes may or may not be appropriate

¹Strodbeck, F. L., "Family Interaction, Values and Achievement." In Talent and Society, D. C. McClelland et al. Princeton: D. Van Nostrand Co., Inc., 1958. pp. 135-94.

²Kluckhohn, Clyde, Culture and Behavior. New York: The Free Press, 1962, p. 325

for school success, when success is limited and restricted by teacher values, and reinforced by a predominantly middle-class community.

. . . it seems probable from life histories that lower-class children remain "unsocialized" and "unmotivated" (from the view-point of middle-class culture) because (1) they are humiliated and punished too severely in the school for having the lower-class culture which their own mothers, fathers, and siblings approve, and (2) because the most powerful reinforcements in learning, namely those of emotional and social reward, are systematically denied to the lower-class child by the systems of privilege existing in the school and in the larger society.¹

It is the school's tacit or stated expectation that children will have a desire for academic achievement and values approved by the middle class. Therefore, the migrant child may be expected to play the game without knowing the rules. He is ignorant of methods by which he might improve his station in life.

To the degree that the Mexican-American migrant child has opportunity to learn "the rules," or feels support and reward from his family for adopting ways which bring school success, his achievement may excel that of his peers. Such opportunities, however, are limited by the very nature of the migrant workers' existence.

Like any other child the child from a lower-class family views society within the limits of his immediate family and neighborhood. But often behavior which is sanctioned at home is seen as inappropriate by the middle-class school society.

¹Davis, Allison, "American Status Systems and the Socialization of the Child." American Sociological Review, 6 (1941), 345-54.

. . . A family attempting to keep a roof over its head and enough food on the table to sustain life has little time or incentive to encourage and foster inquisitiveness, experimentation, and evaluation.¹

Fewer job opportunities make it extremely difficult for the migrant child, or even for his parents, to perceive the connection between education and new types of employment. Separation from the mainstream of American culture and the depression, degradation, and exhaustion which accompany the migrant life make such perceptions well-nigh impossible:

What does he want to do when he gets older?
 "I don't know, I'd like to stay someplace, I guess, and never have to leave there for the rest of my life, that's what. I could have a job--maybe it would be where they make cars and trucks and planes. I could make plenty of money, and bring it home, and we'd all live on it, my brothers and my sister. But my mother says someone has to pick the crops, and we don't know what else there is to do, and they'll come and beat you and throw you in the canal, the crew leaders, if you cross them; and then you'd be dead in one minute. So, we'd better stay with the crops; because my mother is probably right."²

When asked "Do you think going to school does your children any good?" 93% of one group of migrant workers responded, "A great deal." Yet 73% of these same parents thought that their children have "just the right amount" of schooling.³ As is the case with children of the urban

¹Pease, Damaris, "Family Forces Influence Child Behavior." In The Disadvantaged Child: Issues and Innovations, edited by Joe L. Frost and Glenn R. Hawkes. Boston: Houghton Mifflin Co., 1966; 382-9, p. 385.

²Coles and Huges, op. cit., 19.

³Manis, op. cit., 15-16.

poor, migrant parents may state high expectations for their children's futures, without knowing or being able to communicate to their children how to reach these expectations:

The high percentage expected to achieve the high status business, managerial and professional vocations is in sharp contrast to the small numbers achieved by older children. This high level of expectation exceeds the proportion in the general population and reflects "The American Dream" of education as a means to occupational mobility.¹

We may conclude that the opportunities which education presents for the solution of life's problems and for the improvement of one's condition is often perceived by migrant workers. But the intervening steps which carry one through successful school experiences to the desired vocation are unknown. In fact, the very process of a continuum through time, during which one moves through a series of steps toward a specific goal, is a process unavailable to most of the poor in America. Certainly the child whose life moves only from central Michigan "in the strawberries," to the west coast of the state "in the cherries," to Indiana, "to the tomatoes" encounters a deadening repetition which leaves the middle-class stepping-stone process shrouded in mystery. The limitations of a life in the fields make it impossible for most migrant children to fulfill the dreams of their parents. As Taba puts it, "The greater the variety of reality situations

¹Manis, op. cit., 18.

with which the child has coped, the greater his ability to cope with new stimuli."¹ Migrant life offers the child little variety, and little opportunity to develop skill in coping with a variety of life situations.

The ability to deal with life situations successfully is also mediated by the behavior of adults with their children. Hess and Shipman² have clearly demonstrated the difference in this mediation between middle-class and lower-class mothers with their children. When young children, accompanied by their mothers, were given cognitive tasks, such as puzzle-solving, to perform, differences in children's performance depended on the mother's verbal and cognitive emphasis. The language of mothers of the lower socioeconomic group was more vague, less discriminating, less relevant to the task, and generally less helpful.

Differences in the kinds of language used with children in the middle and lower classes show that the middle-class child, given an "elaborated" language which provides him with a knowledge of structure of objects, a knowledge of interrelationships, a means of thinking deductively and inductively,

¹Taba, Hilda, and Elkins, Deborah, Teaching Strategies for the Culturally Disadvantaged. Chicago: Rand McNally and Co., 1966, p. 7

²Hess, Robert D., and Shipman, Virginia C., "Early Experience and the Socialization of Cognitive Modes in Children." Child Development, 36 (December, 1965), 869-86.



and an ability to perceive things and events in a matrix of time and circumstance, is far better able to cope with life's events than is the lower-class child who learn only a "restricted" language.¹ We must surmise, then, that the conditions of migrant life make it more difficult for migrant parents to understand or to communicate to their children the attitudes which would enable them to use school experiences productively, and that these conditions would also be reflected in the migrant child's approach to real-life problems.

Other factors in migrant life are assumed to affect the attitudes and values of migrant children and their resulting approaches to the solutions of the problems of living. Having little or no economic or political power, and therefore less control over their own destinies, the poor may well see life as happening to them, rather than seeing themselves as having some control over or responsibility for the course of their existence. Mexican-American migrants are accustomed to having decisions about their existence come from an "authority" such as the government, the crew leader, the grower, the priest, or "fate." Such

¹Bernstein, Basil "Social Class and Linguistic Development: A Theory of Social Learning." In Education, Economy and Society, edited by A. H. Halsey, J. Gloud, and C. A. Anderson. New York: The Free Press, 1961. See also Gordon, John E., and Haywood, H. Carl, "Input Deficit in Cultural-Familial Retardates: Effect of Stimulus Enrichment." American Journal of Mental Deficiency, 73 (January, 1969), 604-10.

dependence may have considerable effect on school achievement and success. In a summary of cognitive functions of disadvantaged children, gathered from a review of the literature, Clift¹ notes that these children are generally perceived as having little persistence in problem-solving, dependent on external control, and passive in problem situations. Other writers have described this attitude, which would seem to be an inevitable accompaniment to the condition of being poor. As Riessman describes it:

Frequently, the deprived individual feels alienated, not fully a part of society, left out, frustrated in what he can do. . . . He holds the world, rather than himself, responsible for his misfortunes. . . . he sees problems as being caused externally rather than internally. . . .²

Such an attitude may be labeled "irresponsibility" and condemned by school teachers and other critics of the poor. It should be remembered, however, that the poor really are alienated, left out, and frustrated, and that society and the school really have not given the poor an opportunity to better or to control their own destinies. The result of being poor, which is fostered by the general society, is recourse to authority, to fantasy, or to a kind of submissive withdrawal from what the middle class would see as the major issues of their existence. Coles provides a sensitive report of the prevailing attitudes of many poor

¹Clift, Virgil A., "Curriculum Strategy Based on the Personality Characteristics of Disadvantaged Youth." Journal of Negro Education, 39 (Spring, 1969), 94-104.

²Riessman, Frank op. cit., 27.

people whom he has interviewed:

For them it is a matter--to use the words I hear again and again--of "prayer," of "waiting and hoping," of "seeing what will happen," or "relying on the next day when it will get better" or alternatively, of "preparing for tomorrow when the worst will come." In psychiatry we use the word "passive" to describe a certain psychological quality--to describe the kind of person who does not act, but is acted upon, who does not initiate things but rather waits for them to happen, who yields and submits and does the "taking" in the "give-and-take" of life.¹

The "Coleman Report" found this attitude to be an outstanding deterrent to school success:

Of all the variables measured in the survey, the attitudes of student interest in school, self-concept, and sense of environmental control show the strongest relation to achievement. . . . A pupil attitude factor which appears to have a stronger relationship to achievement than do all "school" factors together is the extent to which an individual feels that he has some control over his destiny.²

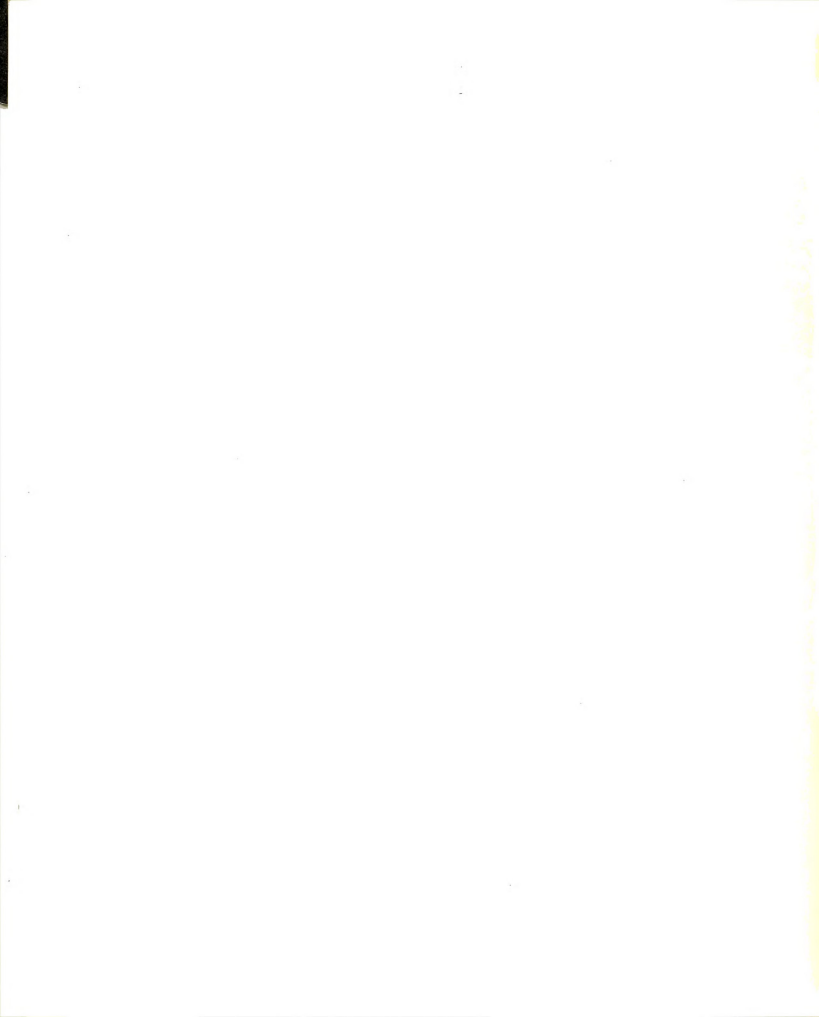
Lacking this control, the poor are often forced to find other ways of relieving frustration and enhancing self. If one cannot in reality produce solutions, one can dream them:

Casting out the poor and the Negro from white society has resulted in a social life so saturated by illusion that the fancy soon becomes the only possible achievement.³

¹Coles, Robert, and Clayton, Al, Still Hungry in America. New York: World Publishing Co., 1969, p. 35.

²U. S. Department of Health, Education and Welfare, Equality of Educational Opportunity. Washington, D. C.: Office of Education, 1966, pp. 319-23. Italics supplied.

³Henry, Jules, "White People's Time, Colored People's Time." Trans-Action, 2 (March-April, 1965), 31-4. p. 32.



Like the lower-class adolescents of Havighurst's¹ study, who chose the most prominent and glamorous persons with whom to identify, and like the Negro youths studied by Boyd² and by Antonovsky³, migrant children may well develop aspirations which, given the unjust conditions of their existence, are highly unrealistic and probably unattainable--aspirations which they have no knowledge of how to reach--in short, dreams.

In characterizing the stories of first-grade, urban, disadvantaged children, Taba adds evidence of withdrawal in response to frustration:

The stories that the same children dictated about their families included recurring examples of withdrawal, or "running away" in the face of a conflict of difficulty: when father gets mad he "goes away and stays all night"; when brother gets mad "he goes to a baseball game"; . . .⁴

One might expect, then, that customary responses of poor children to frustration or failure would be resignation, appeal to authority, fantasy, or withdrawal.

The values of the child's subculture, mediated by his parents in their relationships with him, are reflected in the way he attacks problems of daily living. The behavior

¹Havighurst, Robert J., et al, "The Development of the Ideal Self in Childhood and Adolescence." In The Self in Growth, Teaching, and Learning, edited by Don E. Hamachek. Englewood Cliffs: Prentice-Hall, Inc., 1965. 226-39.

²Boyd, George Felix, "The Levels of Aspiration of White and Negro Children in a Non-Segregated Elementary School." Journal of Social Psychology, 36 (1952), 191-6.

³Antonovsky, Aaron, and Learner, Melvin J., "Occupational Aspirations of Lower Class Negro and White Youth." Social Problems, 7 (Fall, 1959), 132-8.

⁴Taba and Elkins, op. cit., 5.

patterns which his family and his culture teach him, we assume, will be reflected in his typical responses to problems of frustration or failure. His success in a middle-class school and a middle-class world will depend, in part, upon whether he advances or retreats in the face of new tasks, whether he foresees and plans for the future or lives from day to day, whether he is resourceful in finding ways out of difficulties or resigns himself to be defeated by them, and whether he relies upon fantasy to escape from frustration or makes an intelligent attack upon his problems.

This study assumes that these behavior patterns will be reflected in school achievement, and that children whose modes of response to problems are typically withdrawal, fantasy, or appeal to authority, would be significantly poorer in school achievement than children in whom achievement-oriented, planful and resourceful responses predominate. If this should be the case, some of the mediating factors in school retardation or success, expressed in modes of response to problems, would be indicated. Such findings would provide clues to ways in which parents could be helped to provide a climate at home more conducive to school achievement, as well as ways in which the school could modify curriculum and instruction to promote achievement among children it has formerly "disadvantaged."

Summary

The present study investigated several traits in Mexican-American migrant children and the possible relationship

of each of these traits to school achievement. It was suggested that:

1. achievement in arithmetic and in reading would decrease with age
2. achievement would not be related to sex.
3. child-rearing practices would be perceived as predominantly loving and casual
4. certain child-rearing practices would produce greater reading and arithmetic achievement than other practices
5. modes of solving problems, as reflected in children's story completions, either would be goal-oriented and planful, or would seek escape from responsibility through withdrawal, fantasy, or appeals to authority
6. goal-oriented problem-solving would predominate in children of relatively high school achievement.

CHAPTER III

PROCEDURES AND RESULTS OF THE STUDY

Age and Relative Achievement

Standard achievement scores in reading and arithmetic, as measured by the Wide-Range Achievement Test,¹ were obtained by the school for 55 Mexican-American migrant children. Administration was more advantageous than normal, since tests were administered individually and were un-timed. Subjects ranged in age from eight to 13 years. Table I shows the mean achievement scores and the standard deviations for each age group in reading and in arithmetic.² (See Appendix D for standard score distribution.)

TABLE I
MEAN READING AND ARITHMETIC ACHIEVEMENT SCORES, BY AGE

Age	Reading			Arithmetic		
	N	M	s	N	M	s
8-0 to 9-0	11	79.09	12.21	10	90.00	7.11
9-0 to 10-0	11	90.09	12.28	11	91.00	7.11
10-0 to 11-0	17	82.00	9.31	18	84.78	6.86
11-0 to 12-0	11	84.09	17.08	11	84.27	5.71
12-0 to 13-0	5	73.00	9.82	5	75.60	10.20

¹Jastak, J. F., and Jastak, S. R., op. cit.

²In some cases, numbers in an age group differ between reading and arithmetic, owing to the fact that some children were not available for the completion of both reading and arithmetic tests. Standard scores on the WRAT have a mean of 100 and standard deviation of 15.

Figure 1., standard achievement scores for both reading and arithmetic reached a peak at the nine-year old level, and tended to decrease in subjects who were ten years old or older.

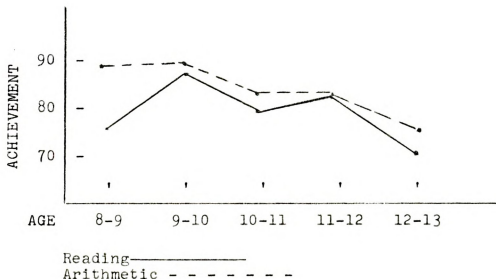


FIGURE 1. MEAN READING AND ARITHMETIC SCORES, BY AGE

In all age groups, mean arithmetic achievement equalled or excelled mean reading achievement.

A trend analysis¹ was employed to determine whether the change in mean achievement scores between age groups was significant. Tables II and III show this analysis for reading and arithmetic scores, respectively.

¹Coefficients for equal sample size were used to compute trend analyses, although there was some difference in sample size across groups.

TABLE II
TREND ANALYSIS OF READING SCORES BY AGE

Source of Variation	Sum of Squares	df	Mean Squares	F
Between groups				
Linear	81	1	81	.37
Quadratic	823	1	823	3.775
Remainder	704	2	352	
Within groups	10919	50	218	
Total	12527	54		

TABLE III
TREND ANALYSIS OF ARITHMETIC SCORES BY AGE

Source of variation	Sum of Squares	df	Mean Squares	F
Between groups				
Linear	888	1	888	16.15 **
Quadratic	106	1	106	1.93
Remainder	153933	2	76967	
Within groups	2766	50	55	
Total	157693	54		

**Significant at $<.01$ level.

The quadratic component for the relationship between mean reading score and age did not meet the required level of confidence. However, the linear relationship between mean arithmetic score and age was significant at less than the .01 level of confidence.

Sex and School Achievement

Table IV shows the mean achievement scores of boys and girls in reading and arithmetic.

TABLE IV
COMPARISON OF ACHIEVEMENT SCORES, BY SEX

Variable	Boys			Girls		
	N	M	s	N	M	s
Reading	30	82.5	12.37	28	85.0	15.52
Arithmetic	29	86.0	8.26	29	86.0	9.81

Since the number of cases in each age group ranged from 0 (for 12-year-old boys) to 10 (for 10-year-old boys), boys' and girls' achievement was not compared at each age level. As can be seen from Table IV, mean achievement in reading and in arithmetic did not differ significantly between sexes.

Patterns of Parent-Child Relationships

The Roe-Siegelman Parent-Child Relationships Questionnaire¹ was rewritten in simple language for administration to Mexican-American migrant children. (Appendix A contains samples of the Questionnaire for both mothers and fathers, as it was rewritten.) These instruments were administered to small groups of children. Each statement was read aloud to the children, to eliminate the effect of reading difficulties on children's scoring. Table V summarizes the mean scores for all children on each dimension included in the questionnaire, for each of four parent-child groups.

Table V reveals that despite differences across parent-child relationships, the perceptions of Mexican-American migrant boys and girls of the behavior of their mothers and fathers toward them follow a consistent pattern. Mexican-American parents from the migrant stream are perceived by both their sons and their daughters as more loving, protecting, demanding, and casual than as rejecting or neglecting. They are also perceived as more rewarding than punishing.

Despite this consistent trend, there are interesting differences among parents, children, and dimensions of parent-child relationships. Analysis of variance was employed to examine differences in

¹Roe and Siegelman, op. cit.

TABLE V

MEAN SCORES OF PARENT-CHILD RELATIONSHIPS AS PERCEIVED BY
MEXICAN-AMERICAN MIGRANT BOYS AND GIRLS

Dimension	Mothers		Fathers	
	Girls	Boys	Girls	Boys
Loving	50.25	50.23	50.70	53.50
Protecting	54.20	59.29	50.50	48.86
Demanding	53.35	56.86	44.00	51.43
Casual	49.90	52.29	43.80	48.86
Rejecting	40.35	47.86	38.10	44.07
Neglecting	44.20	46.00	34.75	44.64
S-L Reward	40.25	41.71	34.70	33.29
D-O Reward	39.60	35.00	34.40	34.29
All Reward	39.98	38.36	34.55	33.79
S-L Punishment	32.20	38.43	28.15	37.93
D-O Punishment	32.40	37.86	25.90	29.64
All Punishment	32.30	38.14	27.03	33.79
				30.41



perceived child-rearing practices. (For this portion of the study, subjects of each group numbered 13. To achieve samples of equal size, six girl subjects were randomly eliminated.) Table VI offers an example of the analyses of variance which were performed for each child-rearing variable.

TABLE VI
ANALYSIS OF VARIANCE OF PROTECTION FROM
MOTHERS AND FATHERS, AS PERCEIVED BY BOYS AND GIRLS
(An Example of Analyses Performed for all
Child-Rearing Dimensions)

Source of Variation	Sum of Squares	df	Mean Squares	F
<u>Between groups</u>	<u>3311.17</u>	<u>25</u>		
Boys and Girls	32.32	1	32.32	0.24
Same-sexed groups	3278.85	24	136.62	
<u>Within groups</u>	<u>2015.50</u>	<u>26</u>		
Between parents	575.55	1	575.55	9.62 **
Interaction	4.35	1	4.34	
Residual	1435.61	24	59.82	.07

** Significant at less than the .01 level.

An inspection of the means in Table V reveals the direction of perceived differences in child-rearing practices, while Table VII summarizes the nature and significance of these differences as revealed by analysis of variance.

To determine whether differences in ranks of child-rearing practices were significant, Friedman's test for analysis of variance of ranked data was

TABLE VII

SUMMARY OF PERCEIVED DIFFERENCES IN CHILD-REARING
PATTERNS, COMPUTED BY ANALYSIS OF VARIANCE

Dimension	Direction	p
Loving		n.s.
Protecting	Mothers more protecting than fathers.	< .01
Demanding	Mothers more demanding than fathers. Fathers are perceived as more demanding by boys than by girls, while girls perceive mothers as more demanding than fathers.	< .05 < .05
Casual	Girls see mothers as more casual than fathers, while fathers appear more casual to boys than to girls.	< .05
Neglecting		n.s.
Rejecting		n.s.

D-O Reward		n.s.
S-L Reward	Mothers use symbolic-love rewards more than fathers do.	< .01
D-O Punishment	Mothers use direct-object punishment more than fathers do.	< .01
S-L Punishment	Boys are punished more than girls. Mothers and fathers perceived as more punitive by boys than by girls.	< .05 < .01
All Reward	Mothers reward more than fathers.	< .05
All Punishment	Mothers punish more than fathers. Boys perceived mothers and fathers as more punitive than did girls.	< .01 < .05
Reward vs. Punishment	Mothers are seen as more rewarding than punishing.	= .05

performed for both mothers' and fathers child-rearing practices, as they were perceived by their children. Table VIII shows that there were significant differences in the ranking of child-rearing practices for both mothers and fathers.

TABLE VIII
ANALYSIS OF VARIANCE IN RANKS OF
CHILD-REARING PRACTICES

Parent	χ^2_r	p
Fathers	19.254	< .01
Mothers	43.113	< .001

The mean rank of each child-rearing dimension was then compared with the mean ranks of all other dimensions (using Friedman's test), for mothers' and for fathers' child-rearing practices, to determine which practices significantly exceeded others in children's perceptions. Table IX gives the chi-square values for the first significant difference in ranks of mothers' child-rearing practices, while Table X summarizes these comparisons for fathers. Child-rearing practices are arranged in the order of their rank totals, and chi-square values are given wherever one child-rearing dimension significantly exceeds a dimension of lesser rank. Obviously, the child-rearing practice of

greater prevalence will also exceed those of successively less important ranks. Thus, an inspection of Table IX reveals that mothers are perceived as significantly more loving than protecting, or than any other child-rearing dimension. Similarly, mothers are viewed as more protecting than demanding, casual, rejecting, or neglecting; and as more demanding and casual than they are rejecting or neglecting.

TABLE IX
COMPARISON OF MEAN RANKS OF
MOTHERS' CHILD-REARING PRACTICES *

Rank:	2.Pro	3.Dem	4.Cas	5.Neg	6.Rej
1. Loving	5.13	30.63			
2. Protecting		23.63			
3. Demanding			n.s.	37.13	
4. Casual				33.63	
5. Neglecting					n.s.
6. Rejecting					

* All chi-square values are significant at less than the .001 level.

TABLE X
COMPARISON OF MEAN RANKS
OF FATHERS' CHILD-REARING PRACTICES *

Rank:	2.Pro	3.Dem	4.Cas	5.Rej	6.Neg
1. Loving	10.63				
2. Protecting		14.13			
3. Demanding			n.s.	11.13	
4. Casual				7.13	
5. Rejecting					15.63
6. Neglecting					

* All chi-square values are significant at less than the .001 level.

Comparison of Tables IX and X shows that mean ranks of child-rearing dimensions are somewhat different between mothers and fathers. Nevertheless, roughly the same trends in differences between mean ranks of child-rearing practices are seen in fathers as are shown in mothers. According to this comparison, fathers are perceived as more loving than protecting or any other relationship with their children. Fathers are also seen as more protecting than demanding, casual, rejecting, or neglecting; as more demanding and casual than rejecting or neglecting; and as more rejecting than neglecting.

From the rank analysis of variance among child-rearing practices, it is clear that the Mexican-American migrant parent is seen by his children as a loving and protecting parent. Parents are also, but to a lesser extent, perceived as demanding acceptable performance and as being casual about children's behavior. Love, rather than things, is the dominant element in the socialization process of these families. Rejecting and neglect were the least typical of all child-rearing practices. Both of these practices appeared significantly less than all others in mothers and in fathers, and fathers were also seen as significantly less neglecting than rejecting. Despite the hardships of migration and life in the fields, the children of this study appeared to enjoy relationships with their parents which were consistent with today's accepted child-rearing practices. In this respect, the Mexican-American migrant family bears a notable resemblance to the middle-class democratic families described in the literature cited earlier.

Despite the stereotype of the Mexican-American migrant family as a patriarchy dominated by an influential father, it is apparent from the summary of Table VII that children perceived their mothers as being more protecting, more demanding, and more casual. The system of rewards and punishments would also appear to be administered more by mothers than by

fathers. These significant differences tend to bear out the contention made earlier in this paper that the patriarchal family may give the father greater dominance and influence in external affairs, while allowing the mother to play a dominant role in internal affairs such as child-rearing. Evidently, mothers were perceived as highly important figures to the children of this study.

Consistent with the love and protection which these subjects perceived in their parents is the perception that the children are more rewarded than punished by their mothers. Symbolic-Love techniques of reward and punishment are used significantly more than the granting or removal of direct objects, as might be expected in families with meager financial resources for buying rewards which can be removed or withheld as punishment.

Parent-Child Relationships and Achievement

It was assumed on the basis of previous research that particular child-rearing practices would be significantly related to subjects' achievement. To test this hypothesis, a step-wise multiple regression analysis was computed for each set of parents, for reading and for arithmetic achievement of thirty children. Tables XI and XII show the correlations among eight child-rearing practices and the dependent variables of reading and arithmetic achievement.

TABLE XI
CORRELATION AMONG MOTHERS' CHILD-REARING PRACTICES
AND THEIR CHILDREN'S READING AND ARITHMETIC ACHIEVEMENT

	Pro.	Dem.	Cas.	Neg.	Ref.	Pun.	Rew.	Read.	Arith.
Lov.	.313*	.251	.369*	-.083	-.188	-.112	.609**	.126	.077
Pro.	.592**	.351*	.261	.261	.440**	.434**	.117	.016	-.086
Dem.		.447**	.314*	.314*	.381*	.396*	.170	-.114	.017
Cas.			.421*	.421*	.505**	.037	-.583**	.333	-.312*
Neg.					.703**	.419*	.067	-.519**	-.424**
Ref.						.614**	.056	-.477**	.513**
Pun.							.009	-.139	-.077
Rew.								-.113	.012
Read.									.705**

* Significant at less than the .05 level.

** Significant at less than the .01 level.

TABLE XII
CORRELATION AMONG FATHER'S CHILD-REARING PRACTICES
AND THEIR CHILDREN'S READING AND ARITHMETIC ACHIEVEMENT

	Pro.	Dem.	Cas.	Neg.	Rej.	Pun.	Rew.	Head.	Arith.
Lov.	.493**	.503**	.254	-.191	-.117	.003	.776**	.302	.340*
Pro.		.431**	.479**	.169	.199	.277	.697**	.035	-.060
Dem.			.603**	.326*	.428**	.392*	.399*	-.088	.116
Cas.				.420*	.461**	.335*	.265	-.333*	-.277
Neg.					.769**	.437**	-.169	-.250	-.303
Rej.						.650**	-.080	-.194	-.139
Pun.							.154	-.128	.010
Rew.								.180	.144
Read.								.662**	

* Significant at less than the .05 level.

** Significant at less than the .01 level.

From Tables XI and XII it can be seen that mothers' rejecting, neglecting, and casualness were negatively and significantly correlated with their children's achievement scores in reading and in arithmetic. Fathers' loving was positively correlated with higher arithmetic performance, while their casualness was negatively correlated with reading performance.

As examination of the step-wise multiple regression analysis (regression coefficients are given in Appendix E) reveals that the combined child-rearing practices of mothers which had the greatest effect on their children's reading achievement were neglecting and rejecting, both of which bore a negative relationship to achievement; and protection and punishment, which were positively related. (The multiple correlation coefficient for these factors in relation to reading was .607.) Factors in mothers' behavior contributing most to children's arithmetic achievement were rejecting and neglecting (negatively related), and punishing and demanding (positively related). (The multiple correlation coefficient for these factors and arithmetic was .627.)

Among fathers, casualness was negatively related to children's reading achievement, while loving bore a positive relationship to reading performance. (The multiple correlation coefficient between these factors and reading was .520. Other child-rearing dimensions, considered individually, did not greatly increase this

coefficient.) Fathers' loving, demanding, and rewarding behavior was positively related to children's arithmetic achievement, while fathers' casualness bore a negative relationship to performance in arithmetic. (Multiple correlation for these factors and arithmetic achievement was .555.)

Mothers' and fathers' child-rearing practices appeared to have somewhat different effects on children's performance. Children appeared to respond most to their mothers' demands, protection, and punishment, while performing more poorly when they perceived their mothers as neglecting and rejecting. The subjects responded positively to fathers' loving, demanding, and rewarding behavior, and negatively to their fathers' casualness.

Modes of Response to Frustration and Failure

Five unfinished stories concerning migrant children in situations of frustration and failure were constructed. Separate forms were prepared for boys and for girls. Each set of stories contained the following problems:

1. school frustration and failure
2. frustration regarding a future career
3. frustration regarding material possessions
4. failure to live up to parental expectations
5. rejection by peers because of inappropriate dress

Stories were revised upon consultation with former

migrants and experts in the teaching of Mexican-American migrant children. (Appendix B contains final forms of boys' and girls' stories.)

Children were tested individually in quiet surroundings. An initial sample story was told to each child, and his completion was recorded on tape. This assured that the child understood the process of story completion and that he was somewhat accustomed to speaking into the tape recorder. Each child then completed a set of five stories.

Theoretically, it was assumed that children's story completions would fall into five categories:

1. goal-oriented, gratification-deferring,
and problem-solving solutions (PS)
2. reactions of withdrawal or resignation (W)
3. solutions relying upon authority (A)
- 4 solutions relying upon fantasy (F)
5. reactions of anti-social aggression or
hostility (AS)

Three judges were given identical instructions for categorizing story completions. (Instructions for Judges are to be found in Appendix C.) Only those stories on which the judges reached a unanimous or a majority opinion were used in the study. Inter-judge reliability was calculated by chi-square analysis. All ratings were used in the estimation of reliability coefficients. Table XIII summarizes interjudge

reliability for each story.

TABLE XIII
INTERJUDGE RELIABILITY FOR FIVE STORY COMPLETIONS

Judges	Story				
	I	II	III	IV	V
1 and 2	.51*	.55*	.80*	.55*	.63*
1 and 3	.56*	.56*	.71*	.35	.57*
2 and 3	.57*	.69*	.75*	.41*	.53*

* Reliability significant at less than the .01 level

Fifty-five children completed the stories. (One subject completed only the first two stories.) Of these, 41 were available to complete achievement tests. Table XIV shows the distribution of categories of responses for all story completions upon which judges agreed. When all three judges did not agree, the majority position was used. When there was no agreement, the child's story completion was not used.

TABLE XIV
MODES OF STORY COMPLETION OF MEXICAN-AMERICAN MIGRANT CHILDREN

Completion	Total									
	I		II		III		IV		V	
	N	%	N	%	N	%	N	%	N	%
PS	20	44	20	45	21	48	14	35	12	28
W	17	36	12	27	12	27	20	50	13	32
A	3	7	3	7	7	16	3	7.5	11	27
F	5	11	9	21	1	2	3	7.5	4	10
AS	0	0	0	0	3	7	0	0	1	2
Total	45	100	44	100	44	100	40	100	41	100

As can be seen from Table XIV, problem-solving and withdrawal were the dominant modes of response to problems of frustration and failure employed by Mexican-American migrant children. Together, these two modes comprised 75 per cent of all responses. Appeals to authority were the third most common way in which these children solved problems contained in the stories, although these solutions amounted to only 13 per cent of all responses. As modes of problem-solving, fantasy and anti-social aggression made up only 12 per cent of the total responses. Anti-social aggression occurred in only four, or two per cent, of the responses.

No particular story appeared to call forth a unique set of responses. Although responses to Story III and Story V, for example, show some differences, chi-square analysis of the responses to these two stories showed no significant difference.

Clearly, the Mexican-American migrant children of this study tended to respond to problems in stories in gratification-deferring, goal-oriented ways (the ways which generally are attributed to the middle class), or by withdrawal and resignation. The acting out of hostile feelings through anti-social aggression was rarely chosen by these children as a way of solving problems.

Modes of Problem-Solving and Achievement

Pearson's Chi-Square Test of Association was employed to discover whether certain modes of response to problems of frustration or failure were related to reading and arithmetic achievement scores. Cases falling in the upper and lower thirds of the achievement scores (14 cases in each third) were analyzed in relation to methods of solving problems. Table XV reveals the results of this analysis.

TABLE XV

CHI-SQUARES INDICATING RELATIONSHIP OF
PROBLEM-SOLVING MODES TO READING AND ARITHMETIC ACHIEVEMENT

Achievement	Story				
	I	II	III	IV	V
Reading	3.86	6.14	1.54	2.28	4.42
Arithmetic	0.20	1.38	2.08	2.34	6.66

Critical values of chi-square with: 3 df ($\alpha = .05$) 7.81
4 df ($\alpha = .05$) 9.48

None of the chi-square values given in Table XV reached the required level of significance. Whether the student's mode of problem-solving was a "middle-class" strategy of goal-oriented, gratification-deferring

behavior, whether he withdrew from the problem, appealed to authority to solve the problem for him, whether he fantasized or acted out the hostility occasioned by his frustration, his modes of problem-solving, as expressed in completions of stories of frustration and failure, bore no significant relationship to his school achievement in reading or arithmetic.

Summary of Research Findings

With regard to age and relative achievement, both reading and arithmetic achievement reached a peak at the nine-year-old level. A quadratic relationship between reading scores and age proved not to be significant, while a linear relationship between arithmetic scores and age was significant at less than the .01 level of confidence. Thus, the null hypothesis that there was no significant linear decrease in achievement scores cannot be rejected for reading, but must be rejected in the case of arithmetic.

With regard to school achievement and the sex of the subject, no significant difference was discerned, and the null hypothesis that there is no difference between the reading and arithmetic achievement of boys and of girls cannot be rejected.

Prevalent child-rearing practices of Mexican-American migrant parents showed a systematic pattern: these parents loved, protected, demanded, and were casual (in that order) more than they rejected or

neglected. They were seen as more rewarding than punishing, and used symbolic-love techniques more than they used direct-object techniques.

However, differences between parents and in interactions among parents and children also occurred. Mothers were seen as more protecting, more demanding, more rewarding, and more punishing than fathers. Fathers demanded more of their sons, and mothers demanded more of girls than did fathers. Girls saw mothers as more casual than fathers, while fathers appeared more casual to boys. Boys were more often punished than girls, and fathers punished their sons more than their daughters.

Some dimensions on the Parent-Child Relationships Questionnaire were shown to be significantly related to school achievement. Relatively lower reading and arithmetic scores were significantly related to mothers' rejection, neglect, and casualness. Fathers' love was positively related to arithmetic achievement, while their casualness was negatively correlated with reading performance.

Mexican-American migrant children's modes of response to problems of frustration and failure, as expressed in story completions, were predominantly those of goal-oriented problem-solving, or of withdrawal from the problem. Other modes of response (appeal to authority, fantasy, and anti-social

aggression) comprised only 25 per cent of all responses.

Analysis of a possible relationship between modes of problem-solving and school achievement revealed no significant effects. From this study, we cannot reject the null hypothesis that there is no relationship between the way in which these children solve their day-to-day problems and the degree to which they achieve in reading and in arithmetic.

Interpretations of these findings in the light of other research and from the point of view of the experimental hypotheses of this study, will be presented in Chapter IV.

CHAPTER IV

INTERPRETATION OF THE RESULTS

Analysis of the data of this study provides opportunity for a number of interpretations.

Age and Achievement

Previous studies showed an increase in school retardation as migrant children grew older. "Retardation" in these studies was measured by percentage of retarded children, or by the average number of years of retardation. The present study measured retardation in terms of standard scores. The latter were considered a more meaningful measure, since grade placement of children on the move is often a matter of arbitrary administrative decision, and since records of previous school placement are seldom available.

Unlike the samples of earlier studies, the children of the present study did not show an increase in arithmetic retardation, on the average, until they had reached the age of ten, and average reading scores actually increased between ages eight and nine. While standard scores in arithmetic showed a significant linear and negative relationship with age, a quadratic relationship between reading scores and age was not significant at the desired level of confidence. Several considerations may, in theory, help to explain these discrepancies.

The children of this study came from families

whose parents were willing to make the considerable effort involved in sending them to a non-compulsory summer-school program. In many cases, these parents also gave up the incomes which their children could have produced by remaining in the fields and orchards. These facts may indicate that the families of the present sample hold somewhat different values than do the families of other studies. Parents who make sacrifices in behalf of their children's schooling clearly reveal to their children that they place a relatively high value on education. Children of such families are also likely to receive more support for school achievement than children who are sent to school only when it is convenient for their parents. Such values and support may be reflected in higher achievement (or less retardation) in reading and arithmetic.

However, regardless of possible family support for school achievement, only eight children out of the total group of 58 tested (or 13.8%) attained standard scores at or better than the mean in reading, while only five of this group (or 8.6%) received a score of 100 or better in arithmetic achievement. The great majority of the subjects of this study were educationally retarded.

In every age group studied, standard scores in arithmetic achievement equalled or excelled standard reading scores. Such a finding may reflect the

contribution which concrete experience makes to the achievement of the child. While the Mexican-American migrant child has little opportunity to observe the reading process, and little acquaintance with the English language until he reaches school, his experience with arithmetic computations is considerable. For example, he must be able to count how many lugs of tomatoes he has filled during a day, and to calculate the amount he will be paid for his work. He needs to know for how long he must pick cherries or "chop pickles" before he can earn enough money for a pair of shoes. Indeed, the Mexican-American children enrolled in this summer school program frequently made simple and practical arithmetic computations with ease. Difficulties arose when problems become more abstract, or when their solution depended upon independence in reading.

The younger children's improvement in reading may indicate that recent efforts to improve instruction for Spanish-speaking children have borne fruit. Improved achievement in the primary grades provides some evidence that these children are capable of making reading gains, and that subsequent retardation must be caused by factors other than lack of ability. Such tentative conclusions, however, must be tempered by the small sample size of this study and by the fact that the study was cross-sectional rather than longitudinal.

Sex and School Achievement

The boys and girls of this study did not differ significantly in reading or arithmetic achievement. This finding is consistent with evidence cited earlier¹ that, while the grades which teachers allot may favor the female sex, there is no difference in actual achievement between males and females.

Patterns of Parent-Child Relationships

Definite patterns of parent-child relationships were perceived by the Mexican-American migrant children of this study. Among the dimensions measured by the Roe-Siegelman PCR, these children saw their parents as significantly more loving than in any other relationship. Following "loving" in rank was "protecting," which children saw as significantly exceeding all other relationships except "loving." To a lesser degree, Mexican-American parents were perceived as "demanding" and "casual". Rejection and neglect figured least in these children's perceptions of their parents' relationships with them, and scores for these two types of relationships were significantly less than for any other relationship measured by the questionnaire.

It is clear that warmth, nurturance, and concern play a most important part in the parent-child relationships of this select population of migrant families,

¹Anastasi, op. cit., 492-3.

and that the children of our study felt loved, protected, and generally accepted by their mothers and fathers. Such parent-child relationships do not conform to certain stereotypic ideas concerning "disadvantaged" populations. These Mexican-American children are certainly not "disadvantaged" by virtue of the relationships in which they engage with their parents. The problems of poverty and a migratory existence do not disturb the predominantly concerned and loving relationships found within their family circle, and school failure cannot be excused by reference to a "regrettable home-life." If the Mexican-American child of this study is "disadvantaged" his problems must proceed from some source other than his parents.

The Mexican-American migrant family is reputed to be strongly patriarchal, following the traditions of Latin families everywhere. However, differences in parent-child relationships between mothers and fathers reveal that the mother is a strong and important figure within these families. Both boys and girls perceived their mothers as significantly more protecting, more demanding, more rewarding, and more punitive than their fathers. Achievement was affected by more of the child-rearing practices of the mothers than of the fathers of our study.

From such evidence, it might be inferred that the reputation of the Mexican-American family is an

erroneous one, and that the power wielded by the father is insufficient for him to deserve the label of patriarch. However, clinical experience with Mexican-American migrant families points to the conclusion that the father plays a decisive and responsible role in family life. It is the father who decides which crew to join. He takes responsibility for contracting for other members of the family; he represents the family to the crew leader, field boss, and grower. When a decision is made to leave the migrant stream, it is the father who makes this decision. Older males become patriarchs in an almost Biblical sense when they hire out the labor of an extended family--which may consist of several married sons and their wives and children, as well as younger brothers and their families--and become crew chiefs in their own right.

An alternative interpretation of the importance of mothers in the array of parent-child relationships appears to this writer to be more appropriate. A "patriarchy" is generally defined as "a form of social organization in which the father or the eldest male is recognized as the head of the family or tribe, descent or kinship being traced through the male line."¹ While this definition must be held to be accurate, it may not be sufficiently inclusive to reveal the structure

¹Webster's New World Dictionary of the American Language. College Edition. Cleveland: The World Publishing Co., 1964.

or function of complementary relationships within the patriarchal family.

It should be noted that a patriarch maintains his dominant role in the family structure through the support, the tacit cooperation, or the submission of the woman of the family. His role as the authority figure of the household is interpreted to the children and reinforced by their mothers. Perceptions of the role of patriarch are likely to include responsibility for the provision of necessities and comforts for the family, protection from danger, and representation of the family in the forming of social contracts. Child-rearing, however, is likely to be viewed as a function of the female. Although the male retains his position of authority in the world outside the family, the female gains much power within the family structure by virtue of her management of internal matters. It is this structure which appears to operate among the Mexican-American migrant families of our study. While the father is granted his superior position by woman and children alike, the mother also occupies a position of strength and influence through her important child-rearing and home maintenance

functions.¹ It may be that Mexican-American fathers, like the working-class fathers studied by Kohn and Carroll,² define child-rearing as "women's work" and thereby diminish their own influence over their children.

It is clear that mothers of Mexican-American migrant families have a greater part in the punishment-reward system than do fathers. The data of this study tend to support the notion that these mothers occupy a position of influence with their children.

We must notice too, that the fathers and mothers of these families do not perform identical functions with their sons and their daughters. Identification with, or heightened awareness of, the parent of like sex is apparent in these children's perceptions of their relationships with their parents. Fathers demand more of boys than of girls, while mothers demand more of girls than fathers do. Girls see mothers as the more casual parents, while fathers appear more casual to boys than to girls. Boys see themselves as more punished by both mothers and fathers than do girls.

¹Stolz cites a study by Hoffman which points out that as the family moves from a relatively authoritarian structure to a structure of shared responsibility, in which fathers take over more of the child-rearing functions, mothers lose power in the eyes of their children. Stolz, Lois Meek, "Effects of Maternal Employment on Children." Child Development, 31 (1960), 749-82.

²Kohn, Melvin L., and Carroll, Eleanor E., "Social Class and the Allocation of Parental Responsibilities." Sociometry, 23 (December, 1960), 372-92.

On casual and demanding child-rearing dimensions, then, there is a correspondence of sex between parent and child. Expectations communicated to children may be connected with sex roles, so that fathers concentrate their efforts on what they expect their sons to become, while mothers emphasize the behavior they consider appropriate for daughters. Such a correspondence would explain why children perceive the parent of the same sex as more demanding. It appears incongruous, however, that these children also see the like-sexed parent as more casual. This perception may, however, reflect the expectations of the children themselves, with daughters expecting more attention from mothers and sons expecting more from fathers. In comparison with the children's expectations, then, like-sexed parents' behavior might appear to be more casual. On the other hand, high scores on the casual dimension may reflect the parents' press for independence and initiative from children of their own sex. The data of our study do not provide sufficient evidence on which to base more than a tentative and theoretical analysis of these findings.

The perception on the part of boys that they are more punished than girls quite possibly reflects a sex-role difference in the Mexican-American migrant family. Since boys are expected to be responsible, income-producing family members at an early age, pressures

on them to conform to adult needs and desires may very easily be greater than similar pressures on girls. If boys are punished more, this fact may also be due to their greater adventurousness and rougher play, which parents (especially mothers, who are seen as punishing more) may feel a greater need to curb through punishment.

Parent-Child Relationships and Achievement

Research cited in Chapter II points out that certain child-rearing practices lead to greater school achievement than do others. A synthesis of available evidence leads to the conclusion that the families of high achievers are democratic, with reasonable but high expectations for their children. The parents of such families avoid an excess of interference in their children's activities, provide warmth and nurturance, and communicate through parent-child interactions a faith in the child's ability and an expectation that he will achieve.

Certain findings of the present study were consistent with previous research. Children's achievement is diminished to the degree that they perceive their mothers as "neglecting," "rejecting," or "casual." Neglect undoubtedly communicates to the child that he is unworthy of attention from his parents. If this is his perception, the child may well be unable to perceive himself as competent. In like manner, rejection

signifies to the child that he is not an approved family member and that his mother does not expect him to meet reasonably high standards. Children with relatively high scores on the "neglecting" and "rejecting" dimensions are less likely to feel warmth, nurturance, or support from their mothers. These children are deprived of factors in achievement which are available to other Mexican-American migrant children. "Casualness" may represent to the child a lack of concern about his achievement, or an absence of high expectations for him.

The casualness of fathers was also negatively correlated with children's reading achievement, once again indicating, from the point of view of school achievement, that the "casual" dimension on the PCR Questionnaire represents an overly permissive or careless parent-child relationship. The "loving" behavior of fathers, as perceived by their children, was the only parent-child relationship positively correlated with achievement. Fathers' loving behavior was found to correlate significantly with children's arithmetic performance. This positive effect of parental support and approval is consistent with the findings of previous research.

When parent-child relationships are analysed in a step-wise fashion in relation to achievement, mothers' protection and punishment made the greatest positive

contributions to reading performance, while their neglect and rejection bore a negative relationship to this achievement. Mothers' punishment and demanding made large and positive contributions to arithmetic achievement, while neglect and rejection once again were negatively related.

We may conclude that neglect, rejection, or casualness from Mexican-American migrant mothers has a significantly undesirable effect on their children's achievement, while such mother-child relationships as demanding or punishing, which communicate higher standards and defined expectations for behavior, contribute significantly to school achievement.

The multiple regression analysis showed fathers' loving to make a great contribution to their children's achievement, while fathers' casualness was significantly and negatively related to school performance. It would appear that, to achieve relatively well in school, the Mexican-American migrant child responds positively to his father's approval and concern regarding his success. Mexican-American fathers who do not make their approval clear, or who do not communicate their high expectations to their children, do not produce children who achieve well in school in relation to other Mexican-American migrant children.

While differences in parent-child relationships among Mexican-American migrant families have effects

upon achievement which correspond to those found in the families of other populations, the data of this portion of the study leave unanswered a cluster of interesting questions. Why are there so few positive relationships between parent-child interactions and school achievement? Since "loving" is the relationship perceived significantly more than all others, why does it bear a positive and significant relationship to achievement only in the case of fathers and arithmetic? Why do these children respond significantly to punishment, but not to reward?

In so far as the results of this limited study may be valid, it appears that relatively favorable perceived parent-child relationships are not sufficient of themselves to produce high achievement in school. Additional factors such as social class, economic condition, mobility, school conditions, teacher expectations, or language factors may, separately or in combination, create disadvantages which even advantageous parent-child relationships cannot overcome. For despite the generally loving, caring families perceived by the children of our particular sample, their achievement, as a group, was not distinguished. Since the prevailing perceived parent-child relationships of Mexican-American families who are willing to send their children to summer school are essentially healthy and conducive to achievement, further research is necessary

to determine possible correlates of high and low school achievement.

Modes of Response to Frustration and Failure

When Mexican-American migrant children completed stories in which they were asked to solve problems of frustration or failure, 41% of their solutions were categorized as goal-oriented and gratification-deferring. That is, these were typically "middle-class" solutions. Solutions of withdrawal appeared in 34% of the responses, appeals to authority made up 13% of the solutions, a solution was found in fantasy in 10% of the responses, and 2% of the solutions relied upon anti-social aggression.

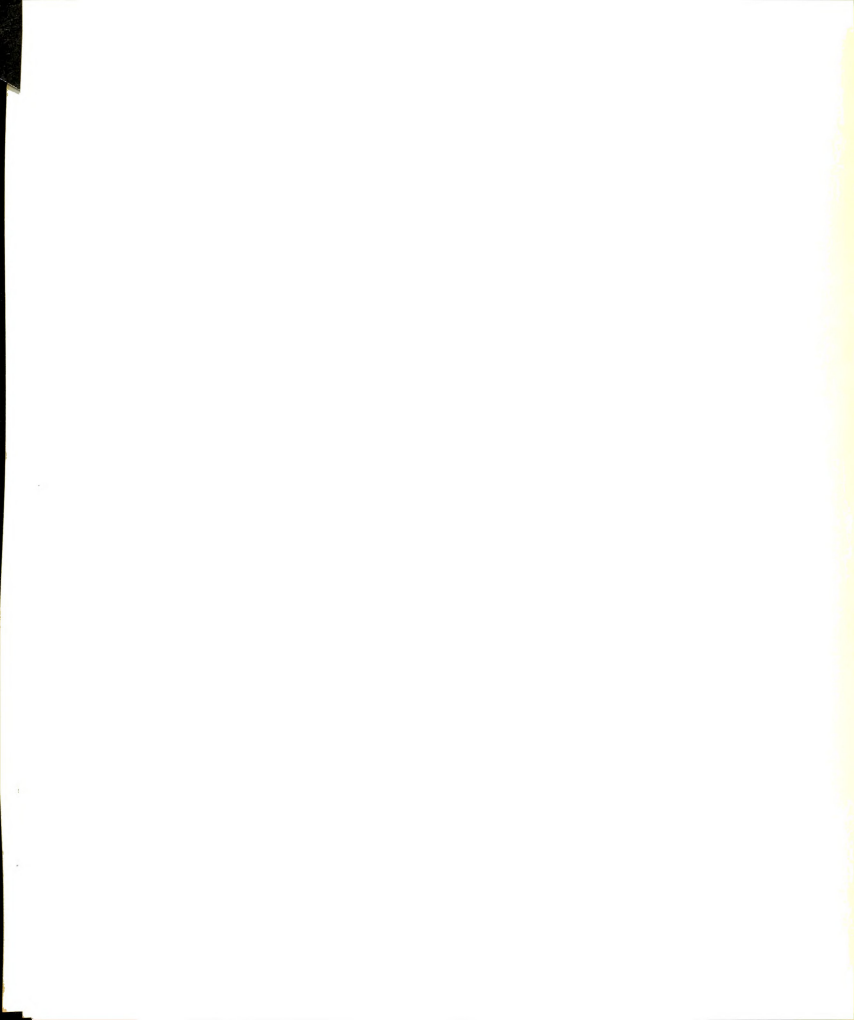
The high percentage of "problem-solving" solutions could not be predicted from the general literature concerning the disadvantaged. One of the distinct differences frequently cited between middle- and lower-class cultures is the ability of the former to defer gratification and to plan for goals in the future. Within the limitations of the assumptions underlying the projective technique of story completion, the children of this study may differ from the children of other poverty populations in the frequency with which they are able to produce solutions which employ realistic self-determination and planning for the future. Nevertheless, nearly as many solutions involved withdrawal, or a fatalistic "giving up," in the face of problems. Such solutions may be indicative of the defeat and helplessness which

these children may experience in their daily lives.

Appeals to authority as solutions to problems appeared less than might have been predicted from published descriptions of the Mexican-American society. Although their culture is reputed to be authoritarian, the Mexican-American children of this study used authority in only 13% of their responses, showing a much greater inclination to solve their own problems when a self-determining solution appeared available to them.

Although some members of disadvantaged populations may escape the dreariness and despair of poverty through fantasy, the Mexican-American children studied here typically used realistic solutions far more than they resorted to fantasy. The prevalence of "problem-solving" solutions and the relatively few "fantasy" solutions may well indicate that, although these children may lack information concerning the mainstream culture, they are capable of a realistic approach to life.

It is interesting to note that anti-social aggression was almost never used to complete the problem stories. Despite the growing popularity of militant "brown power," more aggressive tactics had not become a possibility for the majority of our young subjects--or else they responded to a wish to please the examiner and other authority figures and therefore inhibited "disapproved" responses. Their responses, however appeared generally open, spontaneous, and uninhibited.



In general, children's solutions to problems of frustration and failure were not as might have been predicted on the basis of many descriptions of the Mexican-American migrant culture. These children were more goal-oriented, more self-determining, less authoritarian, less fanciful, and more realistic than might have been expected.

Modes of Problem-Solving and Achievement

Because the public schools reflect a middle-class milieu and tend to reward those who hold middle-class values, it was predicted that children whose completions of problem stories were typically goal-oriented and self-determining would be relatively high achievers in reading and arithmetic. Our findings, however, did not confirm this prediction. Chi-square analysis revealed no significant relationship between any type of story completion and achievement in reading or arithmetic. Practical use of middle-class values (which are generally thought to give children greater advantages for school achievement) has no effect on the reading or arithmetic performance of the children of our study.

These results, it must be cautioned, are only valid to the degree to which children's story completions reflect their actual values and modes of solving problems. If, however, children's responses to problems reveal their approach to problems which they might encounter in classrooms, with adults, and with

the institution of the school, then some Mexican-American migrant children do not profit from advantages which apparently work to the benefit of middle-class children in the same situations. Educators often contend that disadvantaged children would encounter greater school success if they were acquainted with middle-class values. From the findings of this study, however, this thesis cannot be defended. Other factors may be operating to prevent the school achievement of Mexican-American migrant children, even when they espouse the prevailing values of the school.

Summary of Discussion

A number of the findings of this study, insofar as they are valid, tend to destroy some of the myths and stereotypes which prevail concerning the Mexican-American migrant child. Others provide implications for instruction or research which will be discussed in Chapter V.

1. Academic retardation among the subjects of this study was not so great as that of previous studies. This may be due to a special value placed on education among families of our sample, or to improved instruction over a period of time.

2. Arithmetic achievement at all ages equalled or excelled reading achievement, probably reflecting the influence which the migrant child's experience has

on his school performance.

3. Boys and girls did not differ significantly in achievement.

4. The present study revealed a definite pattern of parent-child relationships among Mexican-American migrant families. Children perceived their interactions with their parents in the following order: loving, protecting, demanding, casual, rejecting, and neglecting. They also saw themselves as more rewarded than punished. Although "disadvantaged" in other ways, Mexican-American migrant parents and children appeared to have warm, nurturant, caring, rewarding relationships.

5. Mothers of this study were perceived as more important than fathers on the protecting, demanding, punishing, and rewarding dimensions. More of mothers' behaviors than fathers' were significantly correlated with school achievement. Despite the reputed patriarchal organization of the Mexican-American migrant family, mothers of this study appeared to possess strength and influence in the eyes of their children.

6. Some sex-role divisions among parent-child relationships were observed. Parents of either sex were perceived by like-sexed children only as being more demanding and more casual. It was speculated that these findings might reflect tasks of child-rearing associated with the sex-role of parents and

children, with parents demanding more from children of their own sex, and children expecting more attention than they received from like-sexed parents.

7. Differences in sex-roles also appeared in the finding that boys see themselves as more punished than girls do.

8. Neglect and rejection were the two interaction dimensions which most consistently influenced school achievement, the relationship being a negative one. Casualness also was associated with relatively low achievement. Fathers' loving and mothers' demanding and punishment had significant and positive effects on achievement. Despite low scores on neglect and rejection, high scores on the loving dimension, the relatively high scores for "demanding," the children of our study were still largely underachievers. It was tentatively concluded that factors other than parent-child interactions were interfering with the Mexican-American migrant child's school performance.

9. When completing stories of frustration and failure, Mexican-American migrant children used "middle-class," gratification-deferring, goal-oriented solutions more often than could have been predicted from the literature concerning disadvantaged children. Their solutions were also less authoritarian than expected.

10. Children who produced "middle-class"

solutions achieved no better in reading or arithmetic than children who produced other types of solutions. The notion that an orientation to "middle-class" values produces greater school success was not substantiated by this study of Mexican-American migrant children. As in the case of desirable parent-child relationships, other factors may be working to mitigate any advantage which a particular value system might give to these children.

CHAPTER V

IMPLICATIONS FOR INSTRUCTION AND RESEARCH

The consistent underachievement of the Mexican-American migrant child points to the need for further attempts to improve the quality of his education. Like the child of the ghetto, the Mexican-American child, by his brightness, his spontaneity, and his curiosity, becomes a living indictment of the school, which is presently unable to eradicate his failures. While this study did not concern itself with curriculum or instruction, several results may point to clues for the improvement of the instruction of migrant children.

Since the arithmetic achievement of the children of the present study was always equal to or better than their reading achievement, we may speculate that a greater relationship between curriculum and the child's practical experience might lead to greater achievement. Certainly there is nothing innovative about this conclusion, since cries for a more relevant curriculum are today heard on every side, from students as well as from educators. The results of this study merely add another voice to the general plea that children be educated in a context which is related to their lives.

The reading retardation of the Mexican-American migrant child is indicative of the difficulties encountered by children who are expected to learn to read a language or dialect which differs from the one they

speak. Several solutions may be offered for the improvement of the migrant child's achievement. He could, as he is in some schools, be taught by Spanish-speaking teachers, dealing with most subject matter in his native tongue and learning English as a foreign language. Expectations for reading in English could be delayed until the child speaks the language fluently. Greater emphasis could be placed on the systematic "de-coding" of printed and written words. Or the child could first learn to read in Spanish. Unfortunately for the Spanish-speaking child, however, English is the language of the prevailing American culture, and English is the language in which he must learn to read and write if he is to enjoy his share of America's affluence. Obviously, public schools are not yet employing adequate means for teaching the Mexican-American migrant child what he needs to know to become a productive and comfortable member of his society.

In so far as the results of this study are valid, parent-child relationships which contribute to children's achievement may offer valuable clues for parents from poverty populations. If child-rearing practices can be assumed to effect school achievement (an assumption implied by some studies previously cited), adult education programs can teach parents how to encourage their children's success. Alternative interpretations of the data, however, present the possibility that

child-rearing and achievement are both caused by a third factor not considered in this study, or that school success itself stimulates more satisfactory parent-child relationships.

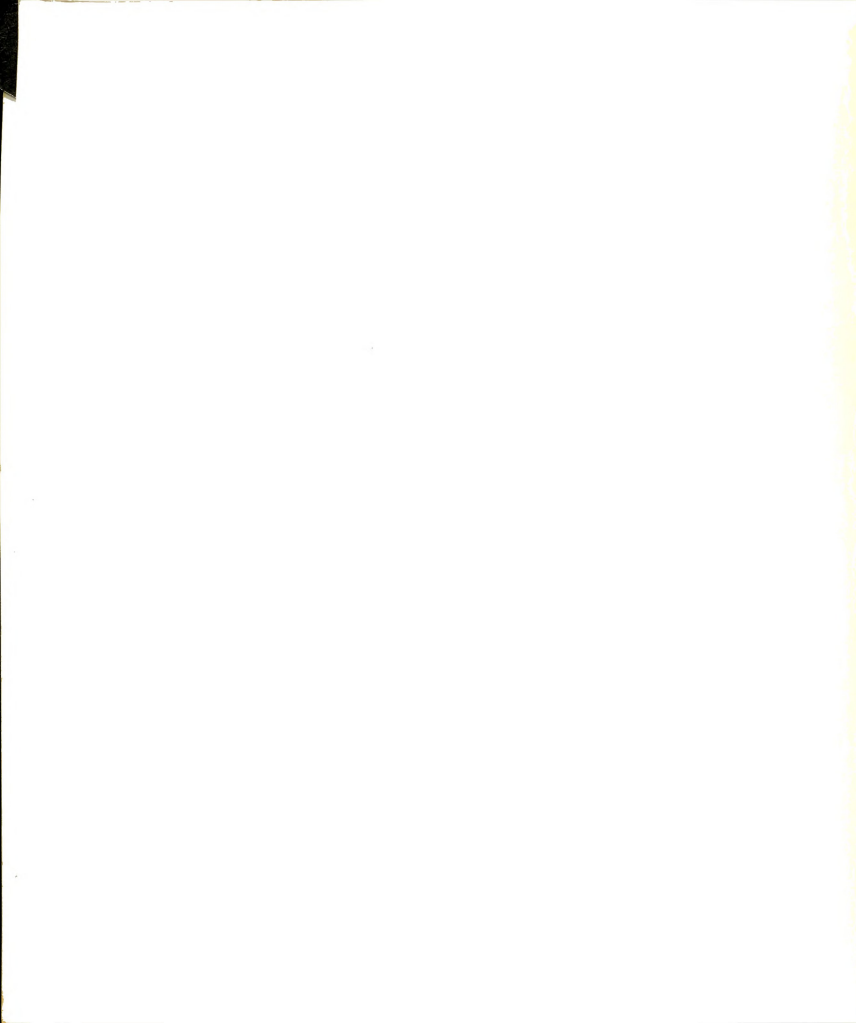
Further investigation of parent-child relationships, using the Roe-Siegelman PCR, could profitably be made with the children of other "disadvantaged" groups. Evidence that Mexican-American migrant families provide desirable parent-child relationships would tend to dispel the myth that "poor homelife" is the cause of children's failure in school. The parent-child relationships of families of the urban ghetto, the Indian reservation, the Appalachian hillside, or the Eskimo village, might yield interesting answers to similar questions concerning these populations. Present-day research concerning the children of the poor could profitably focus upon the factor of human relationships in the home. Where good relationships exist, the school can no longer use "undesirable home life" as an excuse for children's academic failure. Certainly the concern for children's education recently expressed in the drive for community control of ghetto schools and in parent participation in Head Start and similar programs, indicates that here, too, parents care about their children. Judging from

the results of this study, when parent-child interactions are of a desirable nature, responsibility for satisfactory academic achievement must be sought in some other, or additional, quarter.

Prejudices of teachers may constitute another factor which may operate to deny the Mexican-American migrant child the educational opportunities he deserves. Human relationships laboratories and similar attempts to help teachers accept, understand, and appreciate children who are culturally or racially "different" may be a most important step toward the improvement of instruction.

While interesting, the method used here for investigating "problem-solving" has decided limitations. It reveals only whether the child already has information, or can invent methods, which will lead him to a particular goal. However, it does not investigate the thought processes involved in problem-solving. As a simulation technique, the story-completion method is also limited by the assumption that techniques used in the child's story will also be employed in his daily life.

Other means of investigating children's problem-solving techniques in relation to their achievement make a fruitful field for further research. The teaching of problem-solving processes such as gathering data, constructing and evaluating hypotheses, categorizing ideas, and producing alternative solutions, ought,



in theory, to reduce children's predilection for responses of withdrawal or fantasy, and appeals to authority. The real-life problems confronting the migrant child, and related problems in the sciences and social sciences, should provide the material for a problem-solving curriculum. An increase in problem-solving ability, in a school where such ability is valued and rewarded, should be reflected in higher achievement. Where, as in the case of the present study, problem-solving and achievement are unrelated, one might conclude that the school does not reward the problem-solving process, or that other factors inhibit the Mexican-American child's capacity for self-determination, and that changes in curriculum and instruction are sorely needed. Providing that a knowledge of problem-solving processes can be made to transfer to the student's daily life, improved problem-solving might greatly enhance the quality of the migrant child's existence. In the opinion of this writer, the school is obligated to provide the migrant child with the tools for removing himself from the migrant stream if he wishes to do so. Hence, a curriculum which helps him to apply problem-solving processes to the problems of his own existence is highly desirable. This curriculum could center around such questions as:

1. How does one use effort economically?
2. How does one use time economically?

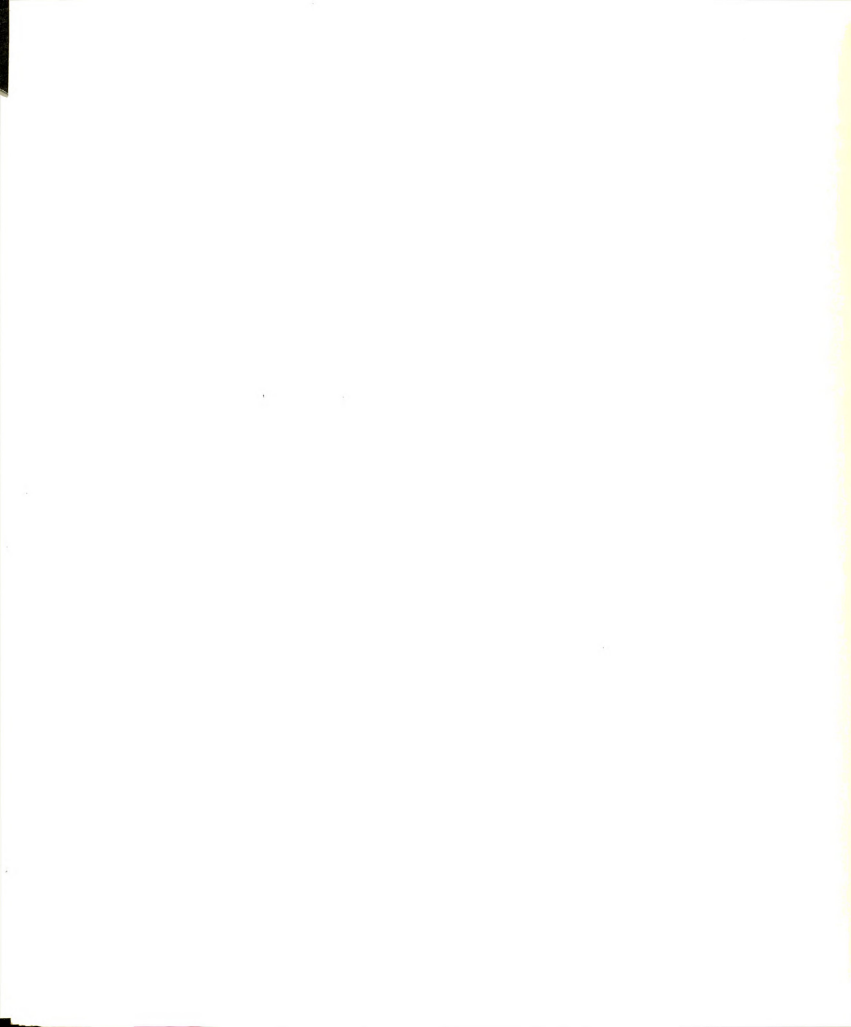
3. What is the nature of prejudice?
4. How can prejudice be overcome?
5. What are the problems involved in finishing high school, and how can they be solved?
6. What are some of the ways in which students with low incomes can get to college?
7. What is the effect of automation on man's physical labor?
8. What are some other human resources besides labor?
9. What are various ways of calculating a man's "worth"?
10. What plans could we develop for providing a quart of milk a day for all the children in our camp?

Only 41 per cent of the responses of children in the present study involved planning for a goal or predicting what might happen in the future. While this is a greater number of responses of this type than was predicted, the advantages of planfulness which have been rewarding to the successful middle class in America, are still a mystery to many Mexican-American migrant children. Research which centers around problem-solving methods and attitudes, and the actual problems of the migrant child's existence and future, might constitute a valuable contribution to the lives of these children.

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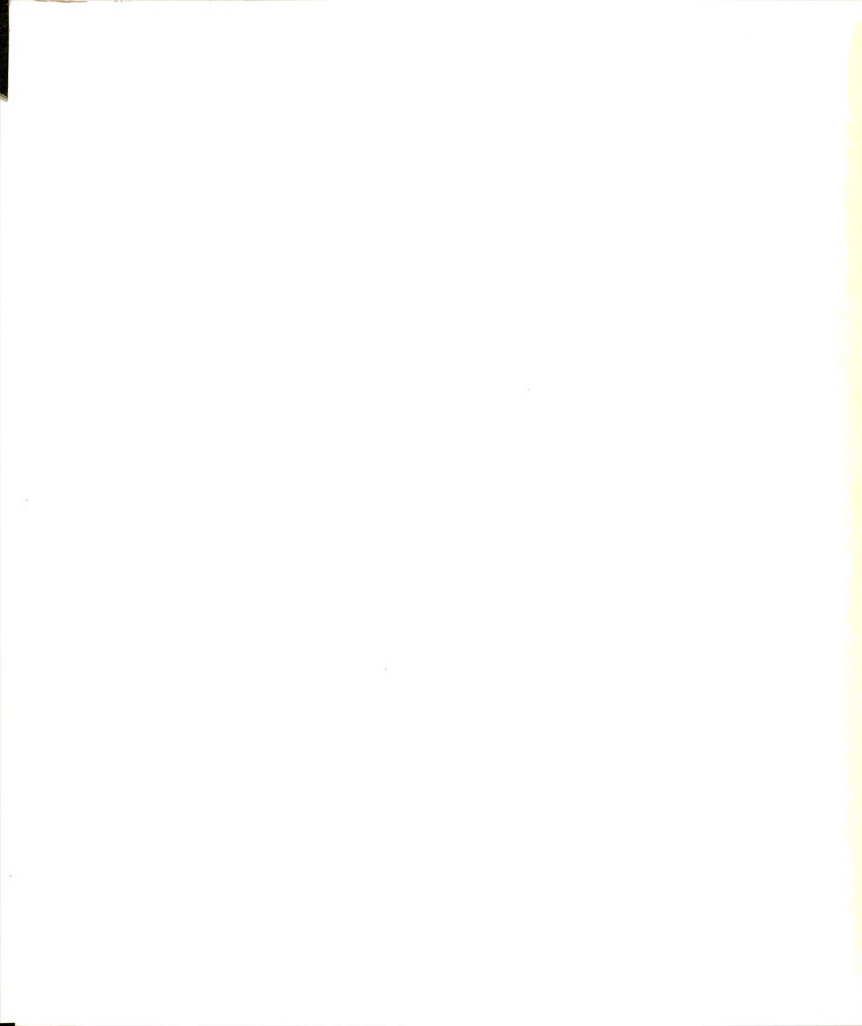
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APPENDICES



APPENDIX A

PCR QUESTIONNAIRE - MOTHERS

Roe-Siegelman

Let's practice marking one of these questions. Put an X on the line that fits you best. If none of the lines seem quite right, you may put the X between the lines.

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
--------------	-----------------	-------------------	----------------

My Mother

- | | | | | |
|---|---|---|---|---|
| — | — | — | — | 1. Objects when I am late for meals. |
| — | — | — | — | 2. tries to get me everything I want. |
| — | — | — | — | 3. complains about me to others when I do not listen to her. |
| — | — | — | — | 4. pays no attention to how old I am when she asks me to do things. |
| — | — | — | — | 5. lets me spend my money any way I like. |
| — | — | — | — | 6. tells me what is good about what I do. |
| — | — | — | — | 7. punishes me hard enough when I misbehave to make sure I won't do it again. |
| — | — | — | — | 8. takes away my playthings when I am naughty. |
| — | — | — | — | 9. is really interested in my life. |
| — | — | — | — | 10. keeps forgetting things she is supposed to do for me. |
| — | — | — | — | 11. takes me places (trips, shows, etc.) for being good. |
| — | — | — | — | 12. spoils me. |

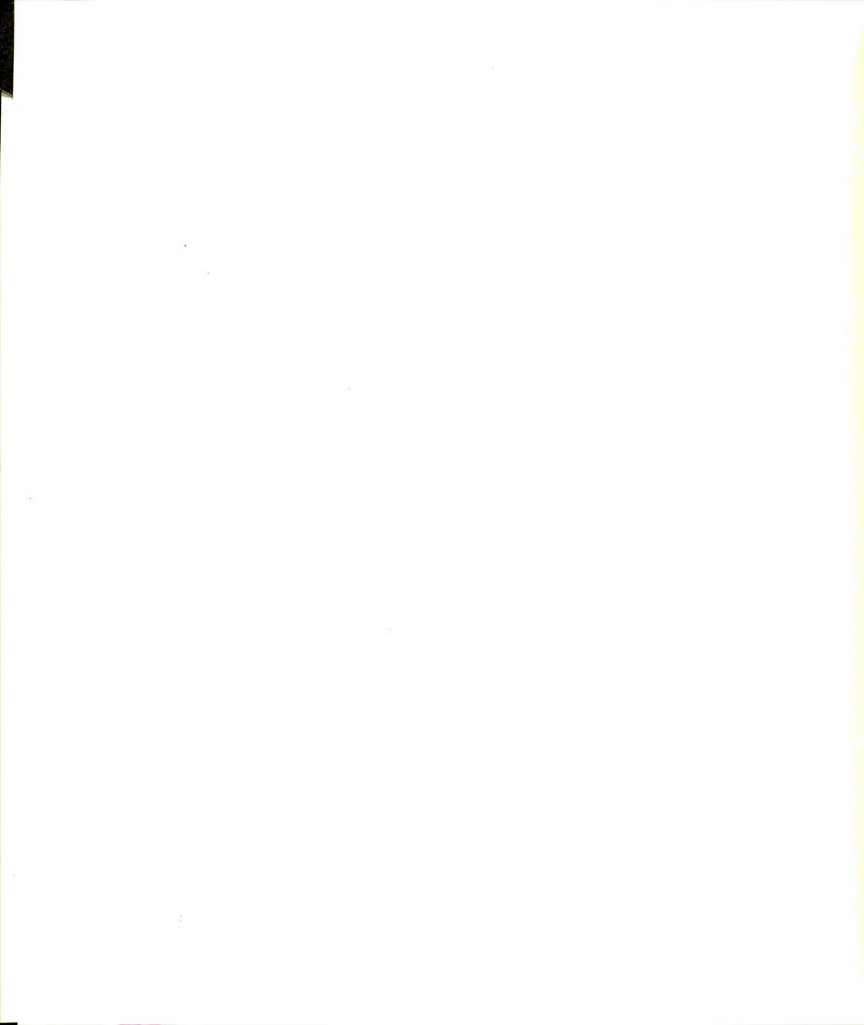
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PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
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My Mother

- | | | | | |
|-----|-----|-----|-----|--|
| ___ | ___ | ___ | ___ | 13. makes me feel ashamed when I do things that are wrong. |
| ___ | ___ | ___ | ___ | 14. lets me know I'm not wanted |
| ___ | ___ | ___ | ___ | 15. makes very few rules for me. |
| ___ | ___ | ___ | ___ | 16. tells me I am better than other children when I do well. |
| ___ | ___ | ___ | ___ | 17. makes it clear that she is boss. |
| ___ | ___ | ___ | ___ | 18. slaps or hits me when I do something wrong. |
| ___ | ___ | ___ | ___ | 19. makes me feel wanted and needed. |
| ___ | ___ | ___ | ___ | 20. is too busy to answer my questions. |
| ___ | ___ | ___ | ___ | 21. doesn't make me follow rules when I am good. |
| ___ | ___ | ___ | ___ | 22. is very careful about protecting me from accidents. |
| ___ | ___ | ___ | ___ | 23. nags or scolds me when I am bad. |
| ___ | ___ | ___ | ___ | 24. thinks it is my own fault if I get into trouble. |
| ___ | ___ | ___ | ___ | 25. lets me dress any way I please |
| ___ | ___ | ___ | ___ | 26. tells me how proud she is of me when I am good. |
| ___ | ___ | ___ | ___ | 27. thinks I should always be busy. |
| ___ | ___ | ___ | ___ | 28. takes away some money when she wants to punish me. |
| ___ | ___ | ___ | ___ | 29. makes me feel what I do is important. |
| ___ | ___ | ___ | ___ | 30. doesn't care if I get into trouble.. |



PCR QUESTIONNAIRE

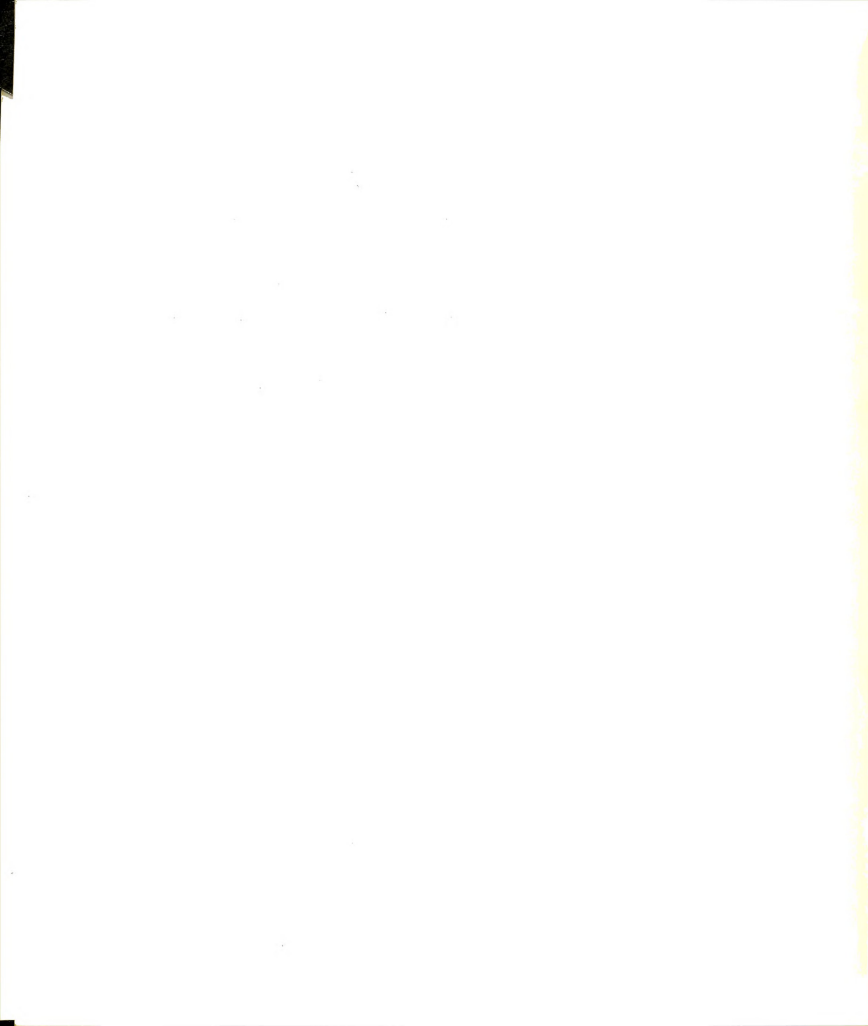
VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE	
				My Mother
_____	_____	_____	_____	31. gives me new books or records when I am good.
_____	_____	_____	_____	32. can't stand to punish me
_____	_____	_____	_____	33. punishes me by leaving me alone.
_____	_____	_____	_____	34. doesn't spend any more time with me than she has to.
_____	_____	_____	_____	35. lets me off easy when I do something wrong.
_____	_____	_____	_____	36. treats me more like a grown-up when I behave well.
_____	_____	_____	_____	37. pushes me to be very good in everything I do.
_____	_____	_____	_____	38. won't let me play with other children when I am bad.
_____	_____	_____	_____	39. wants me to do things on my own.
_____	_____	_____	_____	40. pays no attention to what I am doing in school.
_____	_____	_____	_____	41. lets me stay up longer when I have been good.
_____	_____	_____	_____	42. keeps protecting me from teasing or bullying by other children.
_____	_____	_____	_____	43. makes me feel she doesn't love me if I misbehave.
_____	_____	_____	_____	44. doesn't want me to bring friends home.
_____	_____	_____	_____	45. gives me the choice of what to do whenever she can.
_____	_____	_____	_____	46. praises me in front of playmates.
_____	_____	_____	_____	47. tells me how to spend my free time.
_____	_____	_____	_____	48. spansks me as punishment.

PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
--------------	-----------------	-------------------	----------------

My Mother

- | | | | | |
|-----|-----|-----|-----|---|
| ___ | ___ | ___ | ___ | 49. talks to me in a warm and loving way. |
| ___ | ___ | ___ | ___ | 50. doesn't think about me when making plans. |
| ___ | ___ | ___ | ___ | 51. lets me off some regular jobs when I have been good. |
| ___ | ___ | ___ | ___ | 52. doesn't want me to play rough outdoor games for fear I might be hurt. |
| ___ | ___ | ___ | ___ | 53. shames me before my playmates when I misbehave. |
| ___ | ___ | ___ | ___ | 54. doesn't like my friends. |
| ___ | ___ | ___ | ___ | 55. lets me eat what I want to. |
| ___ | ___ | ___ | ___ | 56. shows more love for me when I am good. |
| ___ | ___ | ___ | ___ | 57. punishes me quickly when I misbehave. |
| ___ | ___ | ___ | ___ | 58. gives me extra jobs as a punishment. |
| ___ | ___ | ___ | ___ | 59. tries to help me when I am scared or upset. |
| ___ | ___ | ___ | ___ | 60. doesn't care whether I get the right kind of food. |
| ___ | ___ | ___ | ___ | 61. gives me candy or ice cream or fixes my favorite food for me when I am very good. |
| ___ | ___ | ___ | ___ | 62. teaches me not to fight at any time. |
| ___ | ___ | ___ | ___ | 63. frightens me when I do wrong. |
| ___ | ___ | ___ | ___ | 64. goes out of the way to hurt my feelings. |
| ___ | ___ | ___ | ___ | 65. lets me do as I like with my time after school. |



PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
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My Mother

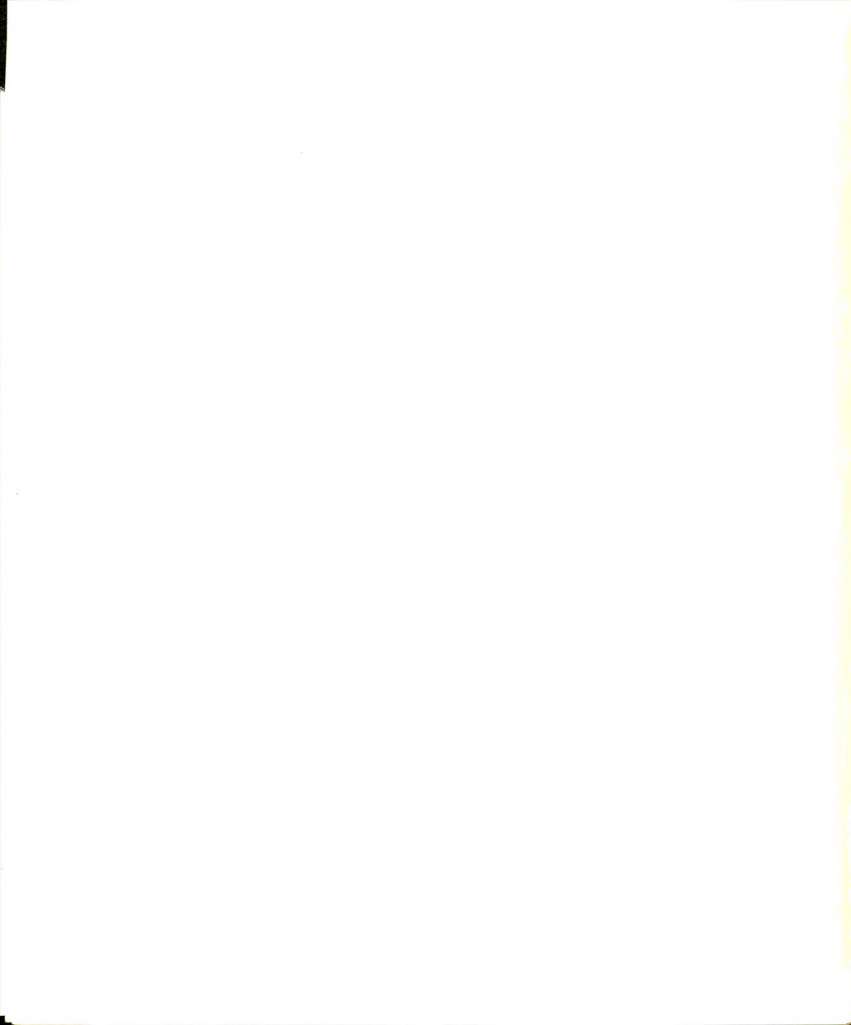
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|---|---|---|---|---|
| — | — | — | — | 66. pays special attention to me when I have been good. |
| — | — | — | — | 67. makes me respect and mind her without asking questions. |
| — | — | — | — | 68. punishes me by sending me out of the room or to bed. |
| — | — | — | — | 69. doesn't try to tell me everything, but wants me to find things out for myself. |
| — | — | — | — | 70. lets somebody else take care of me. |
| — | — | — | — | 71. lets me go to parties or play with others more than usual when I have been very good. |
| — | — | — | — | 72. teaches me to go for help to my parents or teacher rather than to fight. |
| — | — | — | — | 73. tells me how ashamed she is when I misbehave. |
| — | — | — | — | 74. makes fun of me. |
| — | — | — | — | 75. lets me choose my own friends |
| — | — | — | — | 76. praises me when I deserve it. |
| — | — | — | — | 77. always tells me exactly how to do my work. |
| — | — | — | — | 78. takes away my things as a punishment |
| — | — | — | — | 79. thinks my ideas are important and wants me to talk about them. |
| — | — | — | — | 80. acts as if I don't exist. |
| — | — | — | — | 81. gives me more money when I am good. |
| — | — | — | — | 82. wants to have me play at home rather than to visit other children. |

PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
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My Mother

- | | | | | |
|---|---|---|---|---|
| — | — | — | — | 83. says other children are better than I am when I have done something wrong. |
| — | — | — | — | 84. complains about me. |
| — | — | — | — | 85. lets me work by myself |
| — | — | — | — | 86. makes me feel proud when I do well. |
| — | — | — | — | 87. pushes me to do well in school |
| — | — | — | — | 88. punishes me by being more strict about rules. |
| — | — | — | — | 89. lets me do things I think are important, even if it causes her some trouble. |
| — | — | — | — | 90. pays no attention to me. |
| — | — | — | — | 91. hugs me, kisses me, pets me when I am good. |
| — | — | — | — | 92. doesn't let me go places because something might happen to me. |
| — | — | — | — | 93. explains why I shouldn't do wrong things. |
| — | — | — | — | 94. says other children are better than I am, no matter what I do. |
| — | — | — | — | 95. doesn't care if I loaf or day-dream. |
| — | — | — | — | 96. praises me to others. |
| — | — | — | — | 97. won't let me argue with her ideas. |
| — | — | — | — | 98. punishes me by not taking me on trips or visits etc. that I have been promised. |
| — | — | — | — | 99. tries to help me learn to live happily. |
| — | — | — | — | 100. ignores me as long as I don't do anything to bother her. |



PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
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My Mother

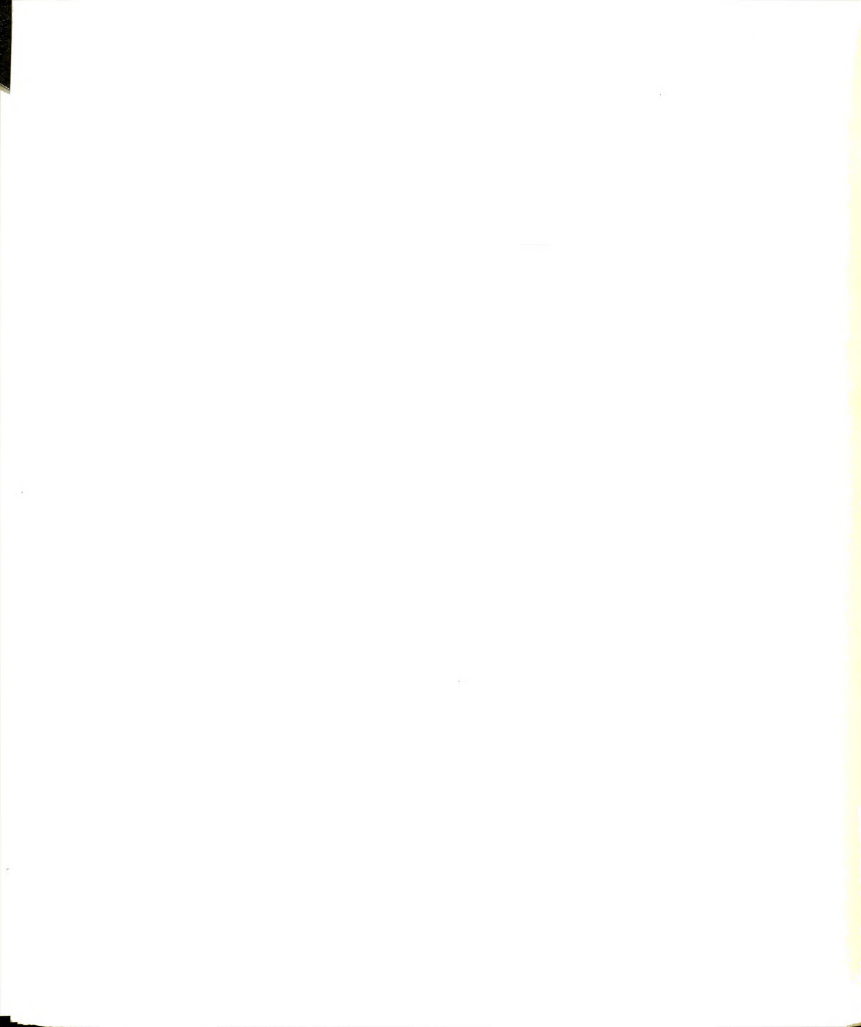
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|---|---|---|---|---|
| — | — | — | — | 101. gives me new things as a reward, such as toys. |
| — | — | — | — | 102. hates to refuse me anything. |
| — | — | — | — | 103. thinks it's bad for a child to be given love and tenderness |
| — | — | — | — | 104. doesn't tell me what time to be home when I go out. |
| — | — | — | — | 105. wants to have complete control over my actions. |
| — | — | — | — | 106. will talk about rules with me, and listens to my ideas about them. |
| — | — | — | — | 107. doesn't care who my friends are. |
| — | — | — | — | 108. worries about me when I am away. |
| — | — | — | — | 109. doesn't want me around at all when she has company. |
| — | — | — | — | 110. doesn't care when I am late for meals. |
| — | — | — | — | 111. teaches me that she knows best and that I must agree with her decisions. |
| — | — | — | — | 112. wants me to bring friends home, and tries to make things nice for them. |
| — | — | — | — | 113. leaves me alone when I am upset. |
| — | — | — | — | 114. won't let me try things if there is any chance I will make a mistake or not do well. |
| — | — | — | — | 115. expects children to be bad if they are not watched. |
| — | — | — | — | 116. is easy with me. |
| — | — | — | — | 117. expects me to mind her quickly without asking any questions. |

PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
--------------	-----------------	-------------------	----------------

My Mother

- | | | | | |
|-----|-----|-----|-----|--|
| --- | --- | --- | --- | 118. teaches me what I want to learn. |
| --- | --- | --- | --- | 119. doesn't try to help me learn things. |
| --- | --- | --- | --- | 120. wants to know all about everything I do. |
| --- | --- | --- | --- | 121. believes a child should be seen and not heard. |
| --- | --- | --- | --- | 122. doesn't bother much about rules. |
| --- | --- | --- | --- | 123. keeps the house nice by having a lot of rules for me. |
| --- | --- | --- | --- | 124. makes it easy for me to tell her how I feel and what I do. |
| --- | --- | --- | --- | 125. forgets my birthday. |
| --- | --- | --- | --- | 126. doesn't want me to grow up. |
| --- | --- | --- | --- | 127. keeps away from me. |
| --- | --- | --- | --- | 128. doesn't check up on whether I do my homework. |
| --- | --- | --- | --- | 129. lets me decide only about things that aren't important |
| --- | --- | --- | --- | 130. says nice things about me. |
| --- | --- | --- | --- | 131. doesn't care whether I have the same kind of clothes as the other children. |



PCR QUESTIONNAIRE - FATHERS

Roe-Siegelman

Let's practice marking one of these questions. Put an X on the line that fits best for you. If none of the lines seem quite right, you may put the X between the lines.

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
--------------	-----------------	-------------------	----------------

My Father

- | | | | | |
|-------|-------|-------|-------|--|
| _____ | _____ | _____ | _____ | 1. never lets me off easy when I do something wrong. |
| _____ | _____ | _____ | _____ | 2. tries to get me everything I want. |
| _____ | _____ | _____ | _____ | 3. complains about me to others when I do not listen to him. |
| _____ | _____ | _____ | _____ | 4. pays no attention to how old I am when he asks me to do things. |
| _____ | _____ | _____ | _____ | 5. lets me spend my money any way I like. |
| _____ | _____ | _____ | _____ | 6. tells me what is good about what I do. |
| _____ | _____ | _____ | _____ | 7. punishes me hard enough when I misbehave to make sure that I won't do it again. |
| _____ | _____ | _____ | _____ | 8. takes away my playthings when I am bad. |
| _____ | _____ | _____ | _____ | 9. is really interested in my life. |
| _____ | _____ | _____ | _____ | 10. keeps forgetting things he is supposed to do for me. |
| _____ | _____ | _____ | _____ | 11. takes me places (trips, shows, etc.) when I have been good. |
| _____ | _____ | _____ | _____ | 12. spoils me. |
| _____ | _____ | _____ | _____ | 13. makes me feel ashamed when I misbehave. |

PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
--------------	-----------------	-------------------	----------------

My Father

- | | | | | |
|-----|-----|-----|-----|--|
| --- | --- | --- | --- | 14. lets me know I'm not wanted. |
| --- | --- | --- | --- | 15. sets very few rules for me. |
| --- | --- | --- | --- | 16. says I am better than other children when I do well. |
| --- | --- | --- | --- | 17. makes it clear that he is boss. |
| --- | --- | --- | --- | 18. slaps me when I do wrong things. |
| --- | --- | --- | --- | 19. makes me feel wanted and needed. |
| --- | --- | --- | --- | 20. is too busy to answer my questions. |
| --- | --- | --- | --- | 21. doesn't make me follow rules when I am good. |
| --- | --- | --- | --- | 22. is very careful about protecting me from accidents. |
| --- | --- | --- | --- | 23. nags or scolds me when I am bad. |
| --- | --- | --- | --- | 24. thinks it is my own fault if I get into trouble. |
| --- | --- | --- | --- | 25. gives me as much freedom as I want. |
| --- | --- | --- | --- | 26. tells me how proud he is of me when I am good. |
| --- | --- | --- | --- | 27. never lets me get away with breaking a rule. |
| --- | --- | --- | --- | 28. takes away some money as a punishment. |
| --- | --- | --- | --- | 29. makes me feel what I do is important. |
| --- | --- | --- | --- | 30. doesn't care if I get into trouble. |

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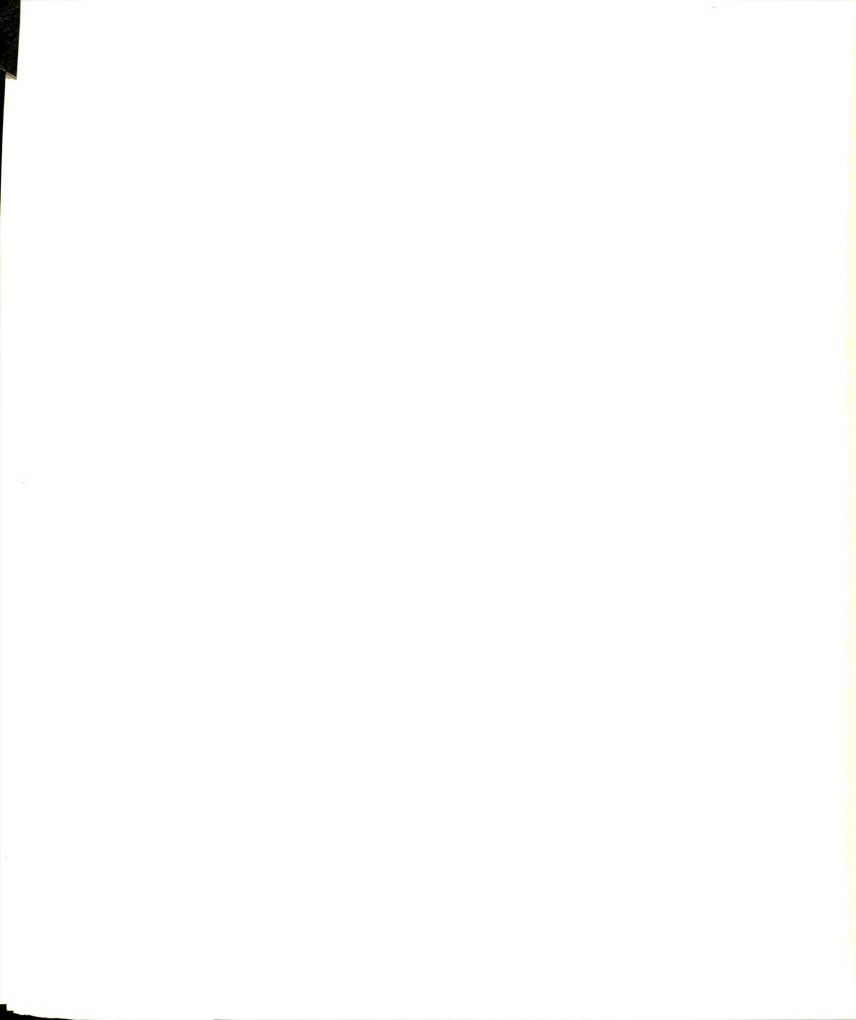
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PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
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My Father

- | | | | | |
|-------|-------|-------|-------|---|
| _____ | _____ | _____ | _____ | 31. gives me new books or records when I am good. |
| _____ | _____ | _____ | _____ | 32. believes I should have no secrets from my parents. |
| _____ | _____ | _____ | _____ | 33. punishes me by leaving me alone. |
| _____ | _____ | _____ | _____ | 34. doesn't spend any more time with me than he has to. |
| _____ | _____ | _____ | _____ | 35. lets me off easy when I do something wrong. |
| _____ | _____ | _____ | _____ | 36. treats me more like a grown-up when I behave well. |
| _____ | _____ | _____ | _____ | 37. pushes me to be very good in everything I do. |
| _____ | _____ | _____ | _____ | 38. won't let me play with other children when I am bad. |
| _____ | _____ | _____ | _____ | 39. wants me to do things on my own. |
| _____ | _____ | _____ | _____ | 40. pays no attention to what I am doing in school. |
| _____ | _____ | _____ | _____ | 41. lets me stay up longer as a reward. |
| _____ | _____ | _____ | _____ | 42. protects me from teasing or bullying by other children. |
| _____ | _____ | _____ | _____ | 43. makes me feel I am not loved any more if I misbehave. |
| _____ | _____ | _____ | _____ | 44. doesn't want me to bring friends home. |
| _____ | _____ | _____ | _____ | 45. gives me the choice of what to do whenever he can. |
| _____ | _____ | _____ | _____ | 46. praises me in front of my play mates. |
| _____ | _____ | _____ | _____ | 47. tells me how to spend my free time. |



PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
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My Father

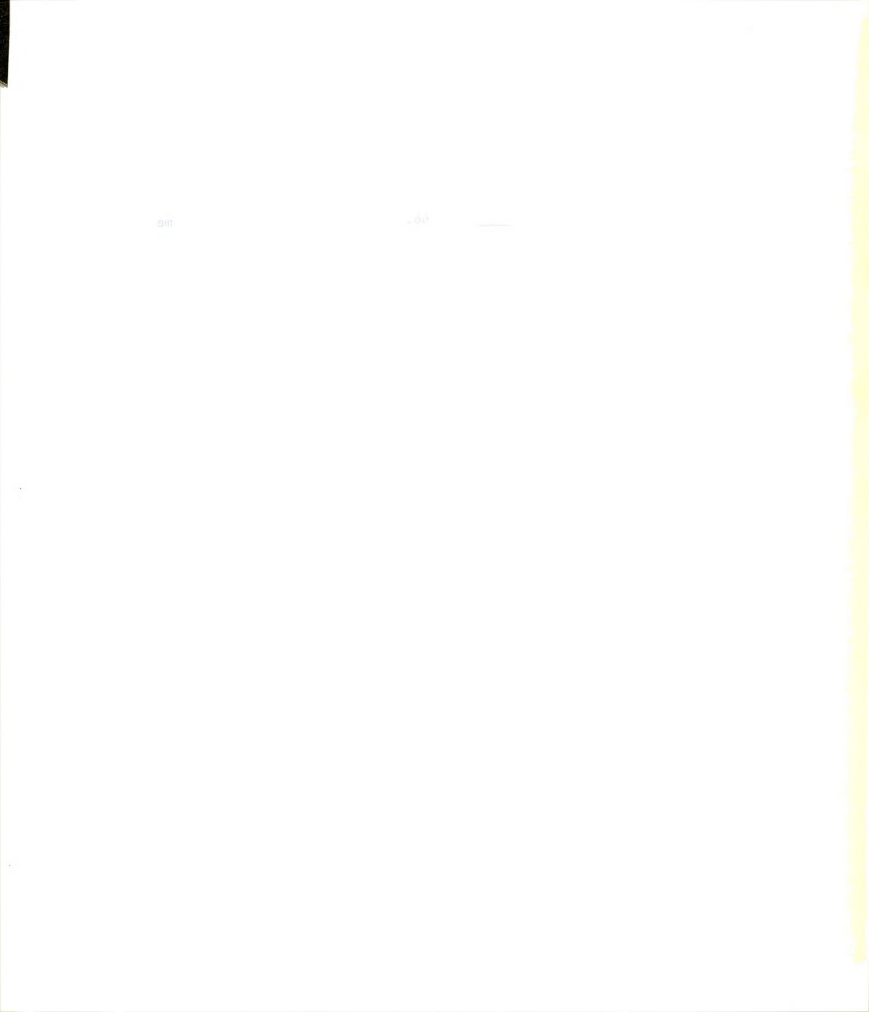
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|---|---|---|---|--|
| — | — | — | — | 48. spans me as punishment. |
| — | — | — | — | 49. talks to me in a warm and loving way. |
| — | — | — | — | 50. doesn't think about me when he makes plans. |
| — | — | — | — | 51. lets me out of some jobs when I am very good. |
| — | — | — | — | 52. doesn't want me to play rough outdoor games for fear I might be hurt. |
| — | — | — | — | 53. shames me before my playmates when I misbehave. |
| — | — | — | — | 54. doesn't like my friends. |
| — | — | — | — | 55. wants me to take everyday disappointments. |
| — | — | — | — | 56. shows more love for me when I am good. |
| — | — | — | — | 57. punishes me quickly when I do something wrong. |
| — | — | — | — | 58. gives me extra jobs as punishment. |
| — | — | — | — | 59. tries to help me when I am scared or upset. |
| — | — | — | — | 60. doesn't care whether I get the right kind of food. |
| — | — | — | — | 61. gives me candy or ice cream or fixes my favorite food for me when I am good. |
| — | — | — | — | 62. makes others give in to me. |
| — | — | — | — | 63. frightens me when I do wrong. |
| — | — | — | — | 64. goes out of the way to hurt my feelings. |

PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
--------------	-----------------	-------------------	----------------

My Father

- | | | | | |
|-------|-------|-------|-------|--|
| _____ | _____ | _____ | _____ | 65. lets me stay up as late as I like. |
| _____ | _____ | _____ | _____ | 66. pays special attention to me when I have been good. |
| _____ | _____ | _____ | _____ | 67. expects me always to mind him without asking questions. |
| _____ | _____ | _____ | _____ | 68. punishes me by sending me out of the room or to bed. |
| _____ | _____ | _____ | _____ | 69. doesn't try to tell me everything, but wants me to find things out for myself. |
| _____ | _____ | _____ | _____ | 70. leaves me for somebody else to take care of. |
| _____ | _____ | _____ | _____ | 71. lets me go to parties or play with others more than usual as a reward. |
| _____ | _____ | _____ | _____ | 72. teaches me to go for help to my parents or teacher rather than to fight. |
| _____ | _____ | _____ | _____ | 73. tells me how ashamed he is when I misbehave. |
| _____ | _____ | _____ | _____ | 74. makes fun of me. |
| _____ | _____ | _____ | _____ | 75. lets me do pretty much what I want to do. |
| _____ | _____ | _____ | _____ | 76. praises me when I deserve it. |
| _____ | _____ | _____ | _____ | 77. always tells me exactly how to do my work. |
| _____ | _____ | _____ | _____ | 78. takes away my things a punishment. |
| _____ | _____ | _____ | _____ | 79. thinks my ideas are important and wants me to talk about them. |
| _____ | _____ | _____ | _____ | 80. acts as if I don't exist. |
| _____ | _____ | _____ | _____ | 81. rewards me by giving me money. |

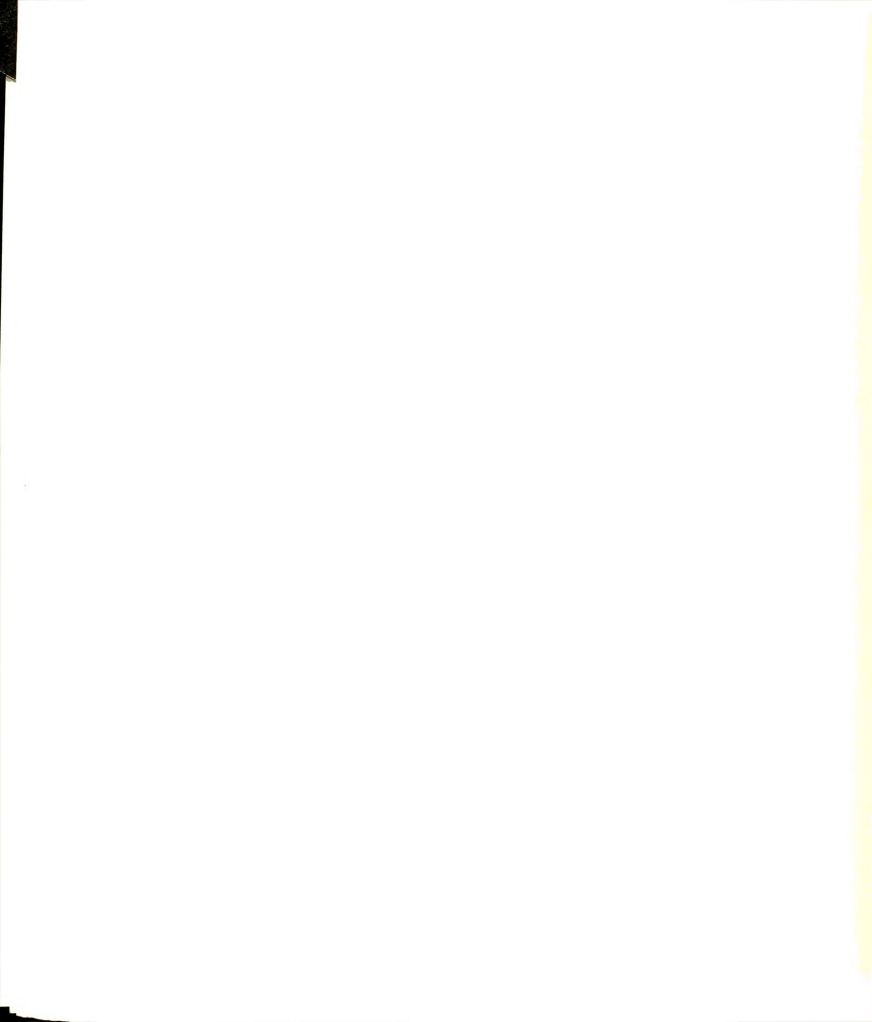


PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
--------------	-----------------	-------------------	----------------

My Father

- | | | | | |
|-------|-------|-------|-------|---|
| _____ | _____ | _____ | _____ | 82. wants me to have at least as much money as my friends. |
| _____ | _____ | _____ | _____ | 83. says other children are better than I am when I do wrong things. |
| _____ | _____ | _____ | _____ | 84. complains about me. |
| _____ | _____ | _____ | _____ | 85. lets me work by myself. |
| _____ | _____ | _____ | _____ | 86. makes me feel proud when I do well. |
| _____ | _____ | _____ | _____ | 87. pushes me to do well in school. |
| _____ | _____ | _____ | _____ | 88. punishes me by being more strict about rules. |
| _____ | _____ | _____ | _____ | 89. lets me do things I think are important, even if it causes him some trouble. |
| _____ | _____ | _____ | _____ | 90. pays no attention to me. |
| _____ | _____ | _____ | _____ | 91. hugs me, kisses me, pets me when I am good. |
| _____ | _____ | _____ | _____ | 92. tries to keep me out of things that might be unpleasant and embarrassing or make me feel bad. |
| _____ | _____ | _____ | _____ | 93. explains what might happen if I do the wrong things. |
| _____ | _____ | _____ | _____ | 94. says other children are better than I am, no matter what I do. |
| _____ | _____ | _____ | _____ | 95. doesn't object when I loaf or day-dream. |
| _____ | _____ | _____ | _____ | 96. praises me to others. |
| _____ | _____ | _____ | _____ | 97. won't let me argue with his ideas. |
| _____ | _____ | _____ | _____ | 98. punishes me by not talking me on trips, visits, etc. that I have been promised. |



PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE
--------------	-----------------	-------------------	----------------

My Father

- | | | | | |
|-------|-------|-------|-------|--|
| _____ | _____ | _____ | _____ | 99. tries to help me learn to live happily. |
| _____ | _____ | _____ | _____ | 100. ignores me as long as I do not do anything to bother him. |
| _____ | _____ | _____ | _____ | 101. gives me new things as a reward, such as toys. |
| _____ | _____ | _____ | _____ | 102. hates to refuse me anything. |
| _____ | _____ | _____ | _____ | 103. thinks it is bad for a child to be given love and tenderness. |
| _____ | _____ | _____ | _____ | 104. doesn't tell me what time to be home when I go out. |
| _____ | _____ | _____ | _____ | 105. wants to have complete control over everything I do. |
| _____ | _____ | _____ | _____ | 106. will talk about rules with me, and uses my ideas when he makes rules. |
| _____ | _____ | _____ | _____ | 107. doesn't care who my friends are. |
| _____ | _____ | _____ | _____ | 108. worries about me when I am away. |
| _____ | _____ | _____ | _____ | 109. doesn't want me around at all when he has company. |
| _____ | _____ | _____ | _____ | 110. doesn't care when I am late for meals. |
| _____ | _____ | _____ | _____ | 111. teaches me that he knows best and that I must follow everything he decides. |
| _____ | _____ | _____ | _____ | 112. wants me to bring friends home, and tries to make things nice for them. |
| _____ | _____ | _____ | _____ | 113. leaves me alone when I am upset. |
| _____ | _____ | _____ | _____ | 114. worries a great deal about my health. |
| _____ | _____ | _____ | _____ | 115. thinks children will be bad if they are not watched. |

PCR QUESTIONNAIRE

VERY TRUE	SORT OF TRUE	SORT OF UNTRUE	VERY UNTRUE	
				My Father
_____	_____	_____	_____	116. is easy with me.
_____	_____	_____	_____	117. expects me to mind quickly without asking questions.
_____	_____	_____	_____	118. teaches me what I want to learn.
_____	_____	_____	_____	119. doesn't try to help me learn things.
_____	_____	_____	_____	120. wants to know all about every- thing I do.
_____	_____	_____	_____	121. believes a child should be seen and not heard.
_____	_____	_____	_____	122. doesn't bother much about enforc- ing rules.
_____	_____	_____	_____	123. is always giving me advice about everything I do.
_____	_____	_____	_____	124. makes it easy for me to tell him how I feel and what I think.
_____	_____	_____	_____	125. forgets my birthday
_____	_____	_____	_____	126. doesn't want me to grow up.
_____	_____	_____	_____	127. stays away from me.
_____	_____	_____	_____	128. doesn't check up on whether I do my homework.
_____	_____	_____	_____	129. only lets me decide about things that are unimportant.
_____	_____	_____	_____	130. says nice things about me.
_____	_____	_____	_____	131. doesn't care whether I have the same kind of clothes as other children.

APPENDIX B

UNFINISHED STORIES

Girls' Form

1. Rosa had not been able to go to school very much. She had not been able to learn to read like some other children at school. When the teacher called on her in class, her heart would beat faster, and she couldn't remember the answers that she once knew. Then the other children laughed at her.

Rosa knew she could learn to read if she had the books and some help. Her teacher let her take books home and she practices reading to her family in the evening. Rosa was really beginning to learn how to read well.

One day, the teacher brought some new books to the school. She asked who would like to read one of them to the whole class. Rosa was sure she could do it. She raised her hand and the teacher called on her. Rosa took the book and stood in front of the whole class. Suddenly, her mouth became so dry she could hardly open her lips. When she looked at the page, the words began to blur and jiggle before her eyes. She was so scared she could not read. She opened her mouth to say something, but all that came out was a squeak. The children were giggling at Rosa. Then they began to laugh. Rosa put the book down and went back to her seat. Nobody believed she could read. All the children in the room were laughing at her.

2. Josefina is eleven years old. She has traveled around the country nearly all of her life. Sometimes the places she lives in are pretty good, and sometimes they are not so good. For a long time, Josefina had been looking at the houses people live in when they do not travel to work in the fields. She had decided that when she grew up she wanted to stop traveling and live in a nice house. She thought about it and thought about it. She told her friends what she wanted to do. But they all laughed at her. "How will you ever get one of those houses?" they asked. "Where will you get the money to buy a house?" Josefina wondered what she could do to earn enough money to buy a fine, large house for herself and all of her family.

One day a teacher came to the camp. She came to teach the children who had not gone to school very much. She helped the children learn, and she made the mothers and fathers proud. "That's it!" Josefina said to her friends; "I am going to be a teacher. I will be able to buy a house, and I will be able to help children learn."

Josefina's friends laughed so hard they fell down and rolled on the ground. "You!" they shouted. "You can never be a teacher. Teachers have to go to school for years and years. Teachers have

2. to know everything." Josefina wanted so badly to become some-thing, and she was very hurt by the other girls' teasing. She was about ready to turn and run away so they wouldn't see her tears.

3. In Rita's life there had never been anything more beautiful than the red sweater she had seen in a store window in Michigan. The sweater was soft and warm, and white flowers were stitched here and there on it to make it even more beautiful. It had taken much courage for Rita to go into the fancy store to look at the red sweater. She told the woman in the store that she wanted to see the sweater that was in the window. The woman let her look at it, but Rita was afraid to ask to try it on, because she knew she had no money to buy it with. But she could tell when she touched it with her fingers how soft and warm it was.

Rita thought and thought about the red sweater. She thought about how warm it would be on cold Michigan nights. She thought about how warm it would keep her when riding in the back of the truck. She told her mother how much she wanted the sweater, but her mother scolded her for dreaming about things that the family didn't have enough money to buy. She told her best friend, Alicia, about the sweater. Alicia laughed and laughed. "You're crazy to think about such things," Alicia said. "Where would you even get enough money to buy such a sweater?" But Rita kept on thinking about it. She wanted that sweater more than anything.

4. Linda could hardly wait to be old enough to work in the fields and help her family. But Linda is what her family calls a clumsy ox. She was always forgetting things, or dropping things, or breaking things, or bumping into things. Everybody said, "That's always the way with you, Linda; you are the world's greatest clumsy ox." Linda pretended to laugh as though she didn't care when people said these things. But she really cared very much. She wanted her family to be proud of her. She wanted her mother to say to the other women, "My daughter, Linda, is a good girl."

One day there were many tomatoes to pick. The farmer wanted everyone who could, to pick tomatoes. Linda knew she could do well and that this was her chance to make her father proud of her. She begged and begged to be allowed to pick tomatoes. Finally, her father said that she could, but warned her to be careful, and not to be a clumsy ox.

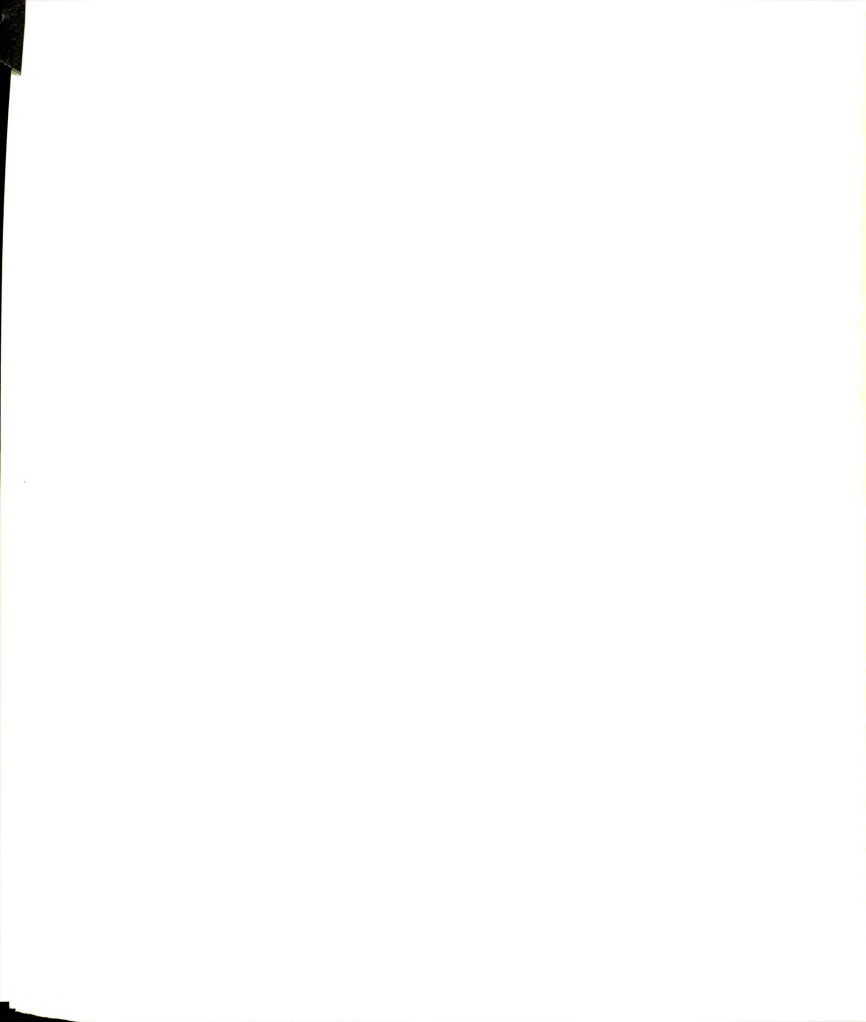
At first, everything went well. Linda learned to look under the vines to get the tomatoes that might rot on the ground. She learned to tell when the tomatoes were just red enough to pick. Linda picked two baskets of tomatoes. She was hot, but happy. From the next row, her mother and father smiled at her. Linda began to pick faster and faster. She picked so fast she picked some tomatoes that were too green. "Look out!" her father shouted. Linda jumped, stumbled, and fell--right into the lugs

4. of tomatoes! Nearly all the tomatoes were squashed, and Linda was covered with red juice and tomatoes and seeds. Linda's father was very angry. Linda's mother looked cross. The farmer was very angry. He said Linda's father would have to pay for the tomatoes Linda had ruined. Linda was very unhappy.
5. Maria and her mother were anxious to get her ready for her first day at a new school. They thought it was important how Maria looked at school. It was important that her family be proud of her. Maria and her mother had saved for a long time. They saved enough money to buy the cloth for a beautiful red dress. Maria and her mother could sew well. They worked late at night to make her dress. All the family was proud of how beautiful Maria looked as she started off on the bus for school.

But when Maria got to school, things didn't turn out right at all. None of the other girls was wearing a dress like Maria's. They thought she looked funny. The skirt of her dress was very full, while theirs were more straight. All the girls were laughing at Maria. Her best dress was no good. Maria had to walk all the way down the long hall to class, while all the girls looked at her and giggled and whispered about her. When she got to her room, she was ready to burst into tears.

Boys' Form

1. Story is identical to (1) of the Girls' Form, except the hero is called Luis.
2. Identical to (2) of the Girls' Form, except the hero is Juan, and the teacher is male.
3. Story is essentially the same as (3) of the Girls' Form. The hero is called Pablo, and his best friend is Ernesto. Pablo is interested in a beautiful black jacket, which was warm and soft inside and had big shiny zippers on all the pockets.
4. The same as story (4) of the Girls' Form. This story is about Ramon, who wanted his father to say to the other men, "My son, Ramon, is a real boy."
5. Except that this story is about Miguel, whose mother made him baggy pants and a funny-looking shirt, this story is the same as (5) of the Girls' Form.



APPENDIX C

INSTRUCTIONS FOR JUDGES

Attached you will find five stories (forms for boys and girls are given) and the completions provided for them by Mexican-American migrant children. You are asked to sort the story completions into five categories, using this system:

1. Use one of the enclosed index cards for each child.
2. Put the child's name on the card, and mark the first story completion with the symbol which represents the category you think is appropriate. For example, suppose you think a child's completion to story 1 uses more fantasy than anything else. You will mark the card like this:

José Rodriguez

1 - F

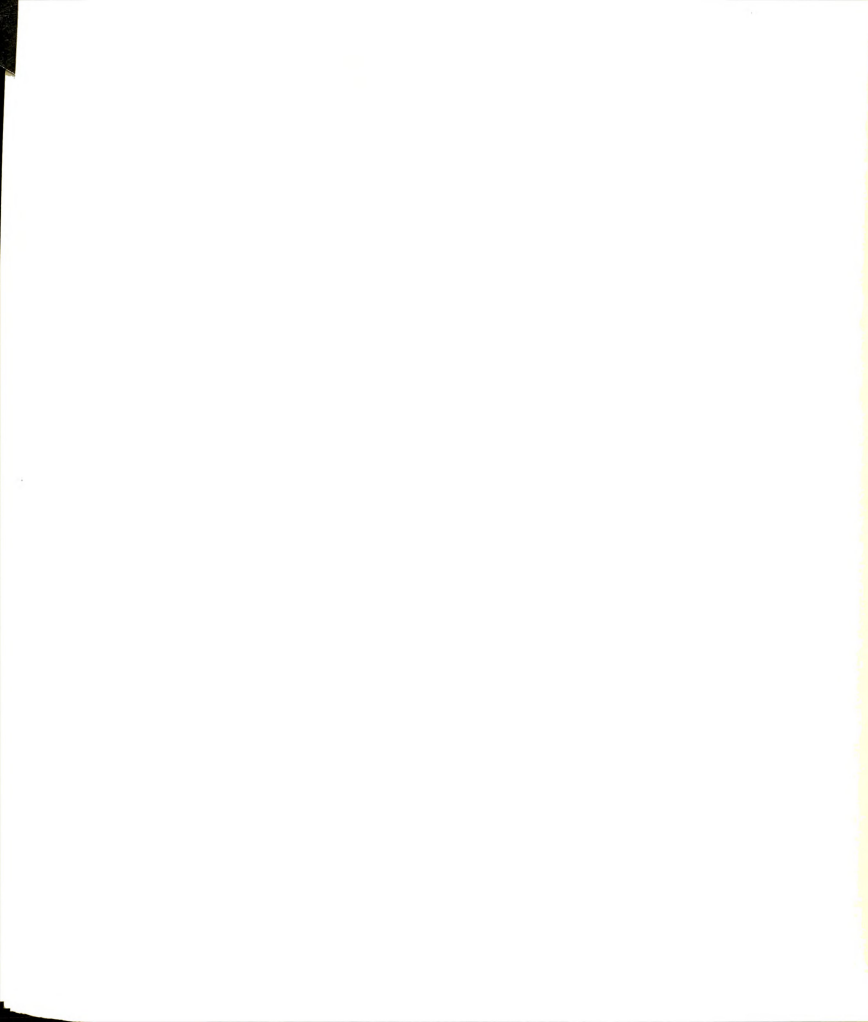
2 -

3. Judge all the completions to Story 1, then all the completions to Story 2, and so on.
4. If you are puzzled about the category in which to place a particular story completion, it may help you to leave that completion for a while and return to it after you have categorized several others.
5. In some cases a particular completion may appear to contain elements of more than one category. To pick the category that is most influential, look for the way in which the child tries to solve the problem or reach the goal. Settle on the behavior that has the most influence in resolving the problem.

The Categories

1. "Withdrawal," or "resignation," Mark with the symbol, W.

Use this category when the child's story contains no real solution to the problem. Here, the child gives up, resigns himself to Fate, or replies as though saying, "That's just the way life is." He may think about his goal, but he never finds a way to attain it.



2. "Appeal to Authority." Mark with the symbol, A.

Use this category when the child does not solve the problem himself, but relies upon or asks an authority figure to take care of the problem for him. Examples of authority figures would be teachers, parents, or older brothers or sisters.

3. "Fantasy." Mark with an F.

Use this category when the child resolves the problem by inventing a highly improbable or unlikely "solution." For example, he might meet a man on the street who gave him a hundred dollars, or a person of influence might suddenly undergo a change of personality. Fantasy answers have the quality of day-dreams, or of magic.

4. "Anti-Social Aggression, Hostility." Mark AS.

Put stories in this category when the child strikes back, takes revenge, or commits some other anti-social act in order to reach his goal. Examples would be stealing or the use of illegal force to attain what the child wants.

5. "Problem-Solving." Mark PS.

Use this category when the child presents the goal as reached by reasonable means which involve any or all of these behaviors:

- a. deferring gratification
- b. aiming toward long-range goals and taking realistic steps to get there.
- c. assuming responsibility for his own actions.
- d. effecting change through his own efforts, but not through authorities or anti-social aggression.

APPENDIX D

THE WIDE-RANGE ACHIEVEMENT TEST DATA

The Wide-Range Achievement Test contains two levels, with three subtests (reading, spelling, and arithmetic) in each level. Measures on the reading and arithmetic subtests of Level I were obtained by the schools for the children of the present study. Administration favored these subjects, since tests were administered individually and time limits were not observed.

The normative population for Level I of the revised WRAT consisted of 5868 children and adults from seven states. Children were selected from schools of known socio-economic levels, and a representative distribution of IQ's was attained in the samplings of each normative age group. Split-half reliability for the reading subtest ranges from .986 to .990. Reliability coefficients for the arithmetic subtest range from .942 to .966. No other reliability coefficients are given in the 1965 Manual of Instructions, although the authors cite one study¹ which showed only small and statistically insignificant variations in scores of the same individuals over five successive administrations of the WRAT.

Standard scores (with a mean of 100 and a standard deviation of 15) and percentile scores are given for age and grade. The children of this study attained standard scores on the arithmetic subtest ranging from 65 to 106. The mean of the distribution of arithmetic scores was 86 and the standard deviation, 8.92. Standard scores on the reading subtest ranged from 60 to 128, with a mean of 84 and a standard deviation of 13.89. Table XVI shows the distribution of standard scores obtained by the subjects of the present study.

¹DeLong, A. R., "The Limits of Accuracy of the Test Scores of Educable Mentally Retarded Individuals." Journal of the Association for Research in Growth Relationships, 3 (1962), 26-44. Cited in Jastak and Jastak, op. cit., 14-15.

TABLE XVI

FREQUENCY DISTRIBUTION OF STANDARD ACHIEVEMENT SCORES
ATTAINED ON THE WRAT BY MEXICAN-AMERICAN MIGRANT CHILDREN

Standard Scores	Reading	Arithmetic
60 - 69	9	3
70 - 79	13	7
80 - 89	23	29
90 - 99	5	14
100 - 109	5	5
110 - 119	1	0
120 - 129	2	0



APPENDIX E

RESULTS OF THE STEP-WISE MULTIPLE REGRESSION ANALYSIS

TABLE XVII

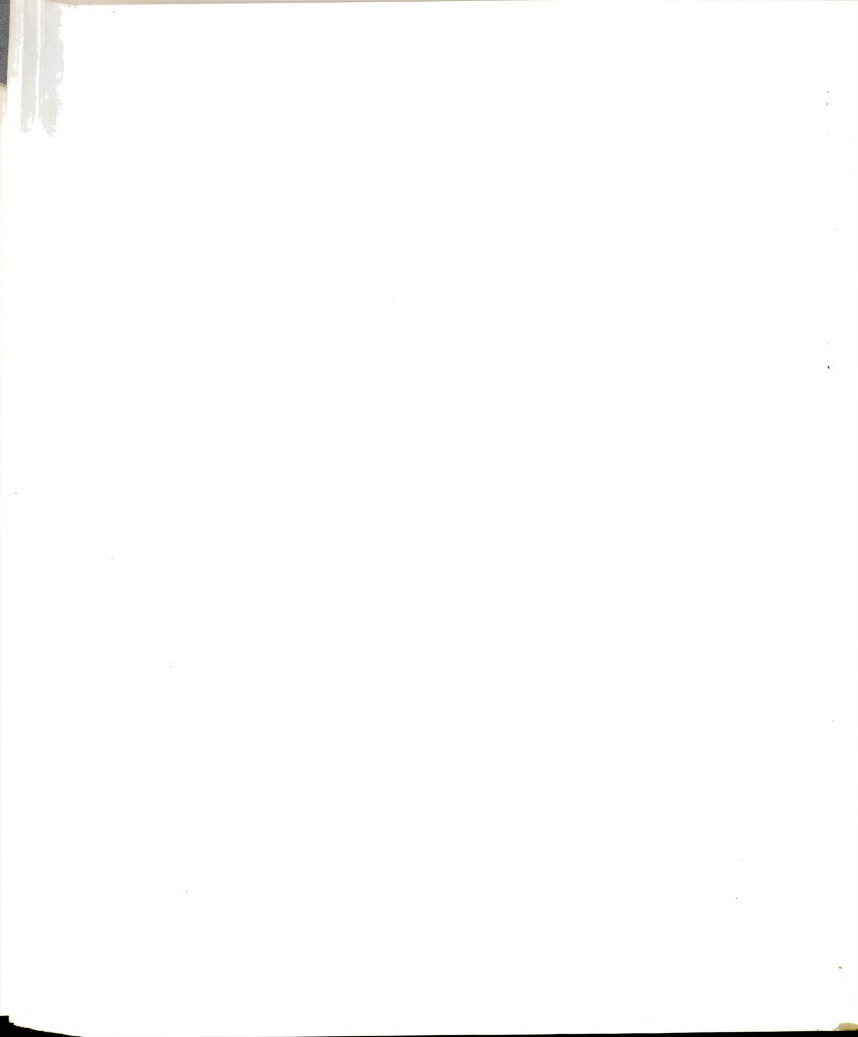
MULTIPLE CORRELATION COEFFICIENTS AND REGRESSION COEFFICIENTS
FOR PERCEIVED PARENT-CHILD RELATIONS AND ACHIEVEMENT

Variables	Dimensions	Mult Cor Coef	Reg Coef
Mothers' perceived parent-child rela- tions and reading achievement	Neglecting	.519	-.546
	Rejecting	.542	-.644
	Protecting	.590	.439
	Punishing	.607	.390
	Rewarding	.612	-.202
	Demanding	.613	-.080
	Loving	.613	.049
	Casual	.613	-.036

Mothers' perceived parent-child rela- tions and arithme- tic achievement	Rejecting	.513	-.684
	Punishing	.595	.464
	Demanding	.619	.205
	Neglecting	.627	-.111
	Loving	.633	-.264
	Rewarding	.642	.246
	Protecting	.644	.075
	Casual	.644	-.007

Fathers' perceived parent-child rela- tions and reading achievement	Casual	.333	-.749
	Loving	.520	.596
	Rejecting	.524	.306
	Punishing	.530	-.224
	Demanding	.535	-.147
	Protecting	.538	.222
	Rewarding	.541	-.218
	Neglecting	.544	-.132

Fathers' perceived parent-child rela- tions and arithme- tic achievement	Loving	.339	.323
	Casual	.506	-.421
	Demanding	.537	.186
	Rewarding	.555	-.237
	Neglecting	.572	-.249
	Rejecting	.596	.165
	Punishing	.597	.074
	Protecting	.597	-.021





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