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ABSTRACT

As part of a far-reaching research project on educational needs of the rural disadvantaged, this phase of the Rural Education Disadvantaged Youth Project (Project REDY) dealt with the development and evaluation of a vocationally-oriented family-centered educational program. The model program, which was field-tested at a single site, focused upon: (1) youth and their career choices, (2) family financial management, and (3) improvement of family income. The research design employed was a pre- and posttest control group design with two control groups. Information was gathered by means of standardized instruments tested in a pilot study earlier in Project REDY, a Family Data Record, a School Data Record Form, and interview schedules. Conclusions regarding the sample were stated in terms of: (1) family residence, (2) farm business, (3) financial assistance, (4) race and nationality, and (5) geographic mobility. Conclusions concerning the program evaluation cover such points as: (1) community variables, (2) morale variables, (3) social class, (4) deprivation, (5) leisure time activities, and (6) parental desires for their children. Related documents are available as ED 041 663, and VT 014 786 in this issue. (JS)

EDUCATIONAL PROGRAM DEVELOPMENT FOR THE RURAL DISADVANTAGED

by

Hollie B. Thomas
Lloyd J. Phipps
David L. Williams

Research Report

July 1970

Agricultural Education Division
Vocational and Technical Education Department
College of Education
University of Illinois at Urbana-Champaign
Urbana, Illinois

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with the assistance of
Ali Ammadi, Daniel Vogler, H. Eugene Craig,
Linda Byler and Bennie Byler

The research reported herein was performed as Project No. 5-0125 under the title "Development of Human Resources Through a Vocationally Oriented Educational Program for Disadvantaged Families in Depressed Rural Areas" pursuant to Contract No. OEG-09-585041-0773 (085) with the Office of Education, U. S. Department of Health, Education, and Welfare.

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PREFACE

This publication is one in a series of publications resulting from a comprehensive research project conducted by the Agricultural Education Division, University of Illinois at Urbana-Champaign. The research project, commonly referred to as Project REDY (Rural Education Disadvantaged Youth), included an in-depth study of the characteristics of disadvantaged families residing in depressed rural areas, and the development and evaluation of a vocationally oriented, family centered educational program that may be used by educators in helping the disadvantaged populace of their communities.

To facilitate dissemination of the findings of Project REDY, publications were prepared which focused on selected areas which were investigated. Publications resulting from this research project, including this research report, were:

1. An Overview of Project REDY, Interim Report No. 1.
2. Social Class Stratification of Families in an Economically Depressed Rural Area, Interim Report No. 2.
3. Degree to Which Families are Satisfied with Selected Aspects of Family Life in an Economically Depressed Rural Area, Interim Report No. 3.
4. Community Social Behavior of Families in an Economically Depressed Rural Area, Interim Report No. 4.
5. Leisure Time Activities of Families in an Economically Depressed Rural Area, Interim Report No. 5.
6. Morale of Families in an Economically Depressed Rural Area, Interim Report No. 6.
7. A Family Centered Vocationally Oriented Educational Program for the Rural Disadvantaged, Interim Report No. 7.
8. Development of Human Resources Through a Vocationally Oriented Educational Program for Disadvantaged Families in Depressed Rural Areas, Final Report.
9. Characteristics of Disadvantaged Families Residing in a Depressed Rural Area, A Research Report.
10. Socioeconomic Aspects of Family Life in a Depressed Rural Area, A Research Report.
11. Educational Program Development for the Rural Disadvantaged, A Research Report.
12. Evaluation of an Educational Program for the Rural Disadvantaged, A Research Report.
13. Education for the Rural Disadvantaged: Summary of Findings and Conclusions of an Experimental Study, A Research Report.

Lloyd J. Phipps
Project Director

ACKNOWLEDGMENTS

The Project REDY staff wishes to acknowledge the assistance of the many residents of rural areas who participated in the study. Without their interest and cooperation the project could not have been a success. Special recognition goes to the administrators of schools and other public agencies in the rural communities for their support, encouragement and cooperation during the project.

SPECIAL RECOGNITION IS GIVEN TO DR. GERALD R. FULLER WHO ASSISTED IN INITIATING AND PLANNING THE PROJECT AND WHO SERVED AS ASSOCIATE DIRECTOR OF PROJECT REDY FOR THREE YEARS.

A number of other individuals have been closely identified with the project. Among them are Don Brockett, Paul Brown, H. C. Hendren, Sam Jones, Steve Pollock, Keith Romack, Jack Shetler, Clifford Sichta and Robert Wheeler. These men served as consultants and local coordinators for the project. Sincere thanks are extended to Mrs. Julia D. Flewelling for her tireless efforts in providing typing and clerical assistance.

Many research units, offices and individual staff members of the University of Illinois have provided special services and advice essential to the success of the project. The Center on Instructional Research and Curriculum Evaluation (CIRCE) and the Office of Instructional Resources made easier many of the problems faced by the project staff through the expert advice and services they provided. The timely assistance from colleagues in the Department of Vocational and Technical Education was appreciated.

A host of people serving as assistants, clerical workers, key-punch operators or computer-programers have faithfully assisted in one or more phases of Project REDY. The contribution of the following individuals insured the success of the project:

John Adams
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Roger Landon
Jasper Lee
Martin McMillion
Douglas Patterson
Vicente Quiton
Sonny Tucker
John Roth
Dan Vogler
Norman Wetzel
David Whitson

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INTRODUCTION

Recently more attention has been focused on the need for the amelioration of the condition of the people whose needs are not being met adequately due to their disadvantaged position in the socio-economic structure of society. Education is considered one of the possible means by which such amelioration may be initiated. Thus, "education for the disadvantaged," "compensatory education," and "education for the culturally deprived," have become by-words in the educational circles. This research project has been initiated for the purpose of development and evaluation of methods and techniques that may be useful in dealing with the special needs and problems of disadvantaged persons.

Purpose of the Research

The purpose of this phase of the research was to design and evaluate a vocationally oriented educational program that was designed to bring about the full utilization of the potential capabilities of rural youth who are economically and socially disadvantaged. The general objectives of Project REDY were:

1. To study in depth a selected depressed rural area to identify the anthropological, economic, psychological and sociological conditions and trends that typify the area.

2. To develop and conduct a model preparatory and supplemental vocationally oriented education program, specifically designed for members of disadvantaged rural families, which will lead to the gainful employment of youth.

3. To evaluate through an experimental treatment the model program in terms of the processes used and the results obtained.

To help accomplish these objectives, this phase of Project REDY (Phase III) dealt with the development of a model educational program, the application of this model program to an on-site situation, and the evaluation and revision of the model educational program into a form which would be tested in the exemplary phase of Project REDY (Phase IV).

This model program focused upon (1) youth and their career choices, (2) family financial management, and (3) improvement of family income. Methods and materials were developed for initiating the model educational program. An on-site trained coordinator conducted the model educational program and tried out the procedures and materials and assisted the researchers in evaluating the methods and materials used in the program.

Research Population

A rural southern Illinois county identified earlier in Project REDY as being economically depressed was the geographic area in which this phase of the project was conducted. Of the 2073 families residing in the study area, 238 were identified as being severely disadvantaged both socially and economically. Severely socially and economically disadvantaged families were considered to be those families who had an average annual income of less than $3000, or who were considered to be socially or economically disadvantaged by officials of state and county agencies. From this population of families with special needs, 60 families were randomly selected to be interviewed. These families were located geographically with the assistance of the local coordinator for Project REDY. Each of the families selected was visited one or more times by a research staff member to develop rapport and to collect data through personal interview. On the basis of the data collected, the sample was delimited to include only the families meeting the following criteria:

1. The head of the household was 55 years of age or younger.

2. Family members included one or more children of school or pre-school age.

The 35 families meeting the criteria established in the proposal for Project REDY were randomly assigned to an experimental group and two control groups. However, only 28 of these families remained in the treatment groups until completion of the study. Ten families, including 85 family members, received the model vocationally oriented educational program conducted by the educational program coordinator. The control groups, including all individuals in 18 families, received no special treatment, but had available to them the regular educational opportunities afforded to all citizens in the area in which they lived.

This section reports the procedure followed in developing and conducting the tentative model educational program, evaluation of the model program in terms of the processes used and the results obtained, and recommendations for revisions of the model educational program prior to being used in the exemplary phase of Project REDY.

Data and Instrumentation

Five standardized instruments which were tried out in a pilot study earlier in Project REDY were used to collect psychological and sociological data to help the researchers evaluate the success of the model educational program. The standardized instruments used and a description of each are as follows:

1. Community Solidarity Index Schedule by Donald R. Fessler (2). The mean of the total score is considered as the index of a person's opinion of the quality of the community. The scores represent the consensus of opinion between individuals living in a community regarding certain selected aspects of their community.

2. Minnesota Survey of Opinion (Short Form) by E. A. Rundquist and R. F. Sletto (6). The scores obtained from this instrument provide an indication of a person's morale and general adjustment in terms of his or her present way of life in American society.

3. Sims SCI Occupational Rating Scale by Verner M. Sims (7). The score obtained from the scale reveals the level in the social structure of American society with which a person identifies. The scale also yields a measure of "occupational," or "social class" tolerance.

4. Wants and Satisfaction Scale by Edgar C. McVoy (4). The scale measures the wants, or wishes and interests, of individuals and the degree to which the people feel their wants are being satisfied.

5. Your Leisure Time Activities by C. R. Pace (5). The instrument measures the degree to which people use and enjoy their leisure time in terms of customary leisure time activities.

The criteria for the selection of these standardized instruments were their applicability to Project REDY, their validity, reliability, and their ease of administration. In order to keep the amount of time required to administer the battery of five instruments within reason, the standardized instruments were assigned at random to the random sample of severely disadvantaged families in the study area so that each family responded to a maximum of three different standardized instruments.

A Family Data Record form was developed for use in this research to assess family income, condition of residence, education of family members, and other family characteristics as a pretest measure.

Interview schedules designed to collect information about the situation and goals of the families were developed and used as a posttest measure. These schedules were:

1. Schedule I - Parental Desires for Their Children

2. Schedule II - Parents' Wishes and Desires for Themselves and Inventory of Experiences

3. Schedule III - Inventory of Children's Desires and Experiences for Children Age Twelve and Over Living at Home

4. Schedule IV - Financial Informatior

5. Schedule V - The Farm Business

6. Schedule VI - The Home and Its Surroundings

These schedules were revised utilizing the experiences gained by the research staff in interviewing and analyzing this phase, Phase III, and used in Phase IV.

The data reported in this section are based upon the findings obtained from an interview with the head of each family. Pretest data were collected by trained interviewers using the appropriate standardized instruments and the Family Data Record form. All pretest data were collected prior to randomly assigning families to the experimental and the control groups.

Approximately 18 months after collection of all pretest data and after experimental treatment, posttest data were collected from the treatment groups. To aid in evaluation of the tentative model educational program, subjects in the experimental and control group responded to the same standardized instruments during pretest and posttest data collection. The Family Data Record was used only for pretest data collection. The interview schedules were used only for the posttest.

The data collected by interview with the sample families were supplemented by school data available for children of school age. Pretest and posttest school data were collected which would exemplify attendance patterns and performance of children in school.

The instruments were selected or developed, officially cleared and tried out in a pilot study during Phase I of Project REDY.

Treatment

The model program, defined as a vocationally oriented, family centered educational program designed to be used by educators in helping severely disadvantaged families overcome social, economic and psychological pressures which inhibit their advancement, served as the treatment for the experimental group. The model educational program was tentatively divided into six stages: (1) "attention-getting," (2) "motivation," (3) "goal definition," (4) "decision making," (5) "action," and (6) "evaluation." Source units were developed for each stage of the program to provide the on-site coordinator with suggested methods and procedures to use in completing each stage. The source units included suggested teaching plans for both group and individual instruction as well as suggested instructional materials. The control groups received no treatment other than that normally available to them in the community.

Statistical Analyses

Appropriate statistical analyses depending on the type of data were employed to determine if the experimental group differed from the control groups. The chi square statistic was employed when the data were reported in frequencies or where data which were originally collected in a continuum could best be described in terms of a frequency distribution.

Computation of the chi square values followed the formula:

$$\chi^2 = \Sigma \frac{(O-E)^2}{E}$$

Where O represents the observed frequencies and E represents the expected frequencies, as explained by Lathrop (3). Expected values for a given cell were computed using the formula:

$$E_{r,c} = \frac{\Sigma r \quad \Sigma c}{N}$$

where:

r = row
c = column
E r,c = expected cell frequency at the intercept of row r and column c
N = total number of observations
Σr = observed frequency for row r
Σc = observed frequency for column c

The chi square statistic was used both for descriptive purposes with regard to pretest data and to determine if there were significant differences among the experimental and control groups on various environmental and sociological variables at the outset of the experimental study, and to compare the experimental and control groups to determine whether or not the response classifications were a function of the treatment groups on the posttest. Yates' Correction for Continuity (1) was applied to chi square computations with one degree of freedom.

In order to determine the treatment effect of the vocationally oriented educational program, analysis of covariance (8) was employed. The pretest scores on selected standardized instruments were used as the covariate for the posttest scores. Kewman-Keuls tests, as explained by Winer (8) were run to test the significance between means if significant F ratios were obtained when comparing three or more means simultaneously.

The design for Phase III may be described as a pretest posttest control group design and may b schematically diagrammed as follows:

Selection Process	Group	Pretest	Treatment	Posttest
Random	Experimental	O	X	O
Random	Control 1	O		O
Random	Control 2	O		O

As stated earlier, sixty severely disadvantaged families were randomly selected to be possible participants in the treatment groups. The thirty-five families who met the criteria established for the age of the head of the household, annual family income, and having children of school or pre-school age, were randomly assigned to treatment groups.

RESULTS

The results of Phase III, the model educational program, will be presented in three main sections: (1) description of the sample of severely disadvantaged families using chi square to compare the treatment groups; (2) analysis of covariance on the posttest data for each standardized instrument using the pretest data from the corresponding instrument as the covariate, (3) chi square analysis on posttest data obtained from interview schedules.

Description of the Sample

For the purpose of establishing the degree of similarity of the experimental and control groups the data from the Family Data Record collected as part of Phase II were compared for the experimental and control groups. These data were primarily frequency data; thus, chi square was the appropriate statistic. Yates' Correction (1) was employed for chi square analysis with one degree of freedom. For purposes of comparison, it was necessary to combine the two control groups in order to increase expected cell frequencies. This combined group included eighteen families.

A comprehensive analysis of the Family Data Record was presented as part of the report regarding Phase II. Thus, only an overview of these data will be presented in this section in order to establish the environmental conditions of the severely disadvantaged families involved in Phase III.

In addition to the Family Data Record, interview schedules were constructed to assist the coordinators of the educational

program in obtaining information in order to become acquainted with each family's situation in regard to topics that were included in the educational program. Similar data were collected from the control groups. The sketchiness of the data obtained on the pretest administration of the interview schedules precluded analysis. Thus, changes were made in the format of the schedules and in the procedures of administration to enable the interviewers to obtain more complete data on the posttest.

Family residence. The treatment group was not found to be a function of any of the variables related to the residence, indicating that the experimental and control groups had similar environments with regard to their residence. All families involved in Phase III lived in a single occupancy house which had electricity.

Tables I and II present the data regarding the location of the residence. The data in Table V-1 show that 80.00 percent of the experimental group and 61.11 percent of the control group lived on farms. Only one family, a member of the control group, lived in a corporated area. Families who did not live on farms or in a corporated town lived in rural areas on small acreage or in a rented farm house.

A majority of the families, 70.00 percent of the experimental and 72.22 percent of the control groups, lived in houses that were rated as being in fair or poor condition. These data are presented in Table V-2.

Table V-1. Frequency of Location of Residence by Treatment Group

	Location of Residence			
Group	Farm	Rural	Village	Chi Square
Experimental	8	2	0	1.29
Control	11	6	1	

Table V-2. Frequency of the Various Conditions of the Residences by Treatment Group

	Condition of Residence			
Group	Good	Fair	Poor	Chi Square
Experimental	3	4	3	.65
Control	5	5	8	

Contrary to the expectations of the researchers, most of the severely disadvantaged families, 90.00 percent of the experimental group, and 83.33 percent of the control group, owned their homes. The few families who did not own their home either rented for a cash rent, were tenants on the land with the house included, or lived in a house without cost.

Table V-3 presents the data concerning the presence or absence of an indoor bathroom in the family residen s. Nearly equal proportions of the experimental and control groups had indoor bathrooms. In each treatment group four-fifths or more of the families had no indoor bathroom, giving some indication of the standard of living.

Table V-3. Frequency of the Presence or Absence of Indoor Bathroom in the Residences of the Families by Treatment Group

Group	Indoor Bathroom		Corrected Chi Square
	Absent	Present	
Experimental	6	4	0.12
Control	11	7	

Table V-4 includes the data concerning the presence or absence of a telephone in the family residences in the two treatment groups. The chi square value obtained indicates that the presence or absence of a telephone is not a function of the treatment group. It was observed that a slightly higher proportion of the experimental group families had telephones than did the control group families. These proportions were 70.00 percent and 50.00 percent respectively.

Table V-4. Frequency of the Presence or Absence of a Telephone in the Residences by Treatment Group

Group	Telephone in Residence		Corrected Chi Square
	Absent	Present	
Experimental	3	7	0.39
Control	9	9	

Table V-5 includes the data concerning the resale value of the residences of the disadvantaged families in the experimental and control groups. Although this value included the value of the land and buildings owned by the families, only 40.00 percent of the experimental group and 33.33 percent of the control group reported the value of their residence as being more than $6000. The

non-significant chi square value indicates that the resale value of the participants' residences was not a function of the treatment group.

Table V-5. Frequency of the Value of the Residences by Treatment Group

Group	Value of Residence in Dollars			
	None or No Response	0-$6000	Over $6000	Chi Square
Experimental	1	5	4	.28
Control	3	9	6	

Farm Business. The aspects of the farm business including the presence or absence of the farm business, portion of income from the farm business, size of the farm business, and the major enterprises in the farm business will be presented in turn. The treatment group was not found to be a function of any of the variables related to the farm business.

Although the families lived in rural areas, not all families operated a farm business. Table V-6 includes the data concerning the presence or absence of the farm business. Eighty percent of the experimental families and 72.22 percent of the control families had some type of farm business. These proportions do not deviate significantly from the expected proportions.

Table V-7 presents the data regarding the frequencies of families in the treatment groups that received one-half or more of their income from the farm business. All of the control group families and 80.00 percent of the experimental group families received less than one-half of their income from a farm business. One experimental family failed to report the percentage of income derived from their farm business. Because of the low expected frequencies in four of the six cells in the chi square table, results of the chi square test can not be considered as conclusive. The chi square value obtained was not significant, however.

Table V-6. Frequency of Family Ownership of Farm Businesses by Treatment Group

Group	Farm Business		Corrected Chi Square
	Yes	No	
Experimental	8	2	0.00
Control	13	5	

Table V-7. Frequency of Family Who Received Half or More of their Income from the Farm Business by Treatment Group

Group	One Half or More Income from Farm			Chi Square
	No Response	Yes	No	
Experimental	1	1	8	3.88
Control	0	0	18	

Table V-8 presents the data regarding the size of farm business that families in the treatment groups operated. Although some deviations were observed in the proportions of families who did not operate a farm business, operated a farm of 80 acres or less or operated a farm business of more than 80 acres, the chi square value indicated that these proportions did not differ significantly from those expected. It was noted that a higher percentage of the control group were in the classifications of having no farm business and having a farm business of over 80 acres than did the experimental group.

Table V-8. Frequency of the Acres in Farm Business by Treatment Group

Group	Size of Farm Business in Acres			Chi Square
	0	10-80	Over 80	
Experimental	2	7	1	4.79
Control	5	6	7	

For the purposes of determining the nature of the farm businesses the families operated, data were collected regarding the presence or absence of certain enterprises. Table V-9 includes the data concerning the presence or absence of livestock in the farm business. Fifty percent of the experimental group and 44.44 percent of the control group had some type of livestock as part of a farm business. The chi square value was not significant.

Table V-10 presents the data regarding the presence or absence of crops in the farm business. Forty percent of the experimental group and 33.33 percent of the control group had some type of crops as part of a farm business. The chi square value obtained indicates that these proportions did not deviate significantly from those expected.

Included in Table V-11 are the data regarding the presence or absence of vegetable production for consumption by the families in

the treatment groups. Only one family in each treatment group reported raising some vegetables for their own consumption, thus the expected values in two cells of the chi square were too low for the chi square test to be considered conclusive. The chi square value obtained was not significant.

None of the families in the treatment groups raised fruit for their own consumption.

Table V-9. Frequency of Family Who Produced Livestock as an Enterprise in the Farm Business by Treatment Group

Group	Livestock in Farm Business		Corrected Chi Square
	Yes	No	
Experimental	5	5	0.01
Control	8	10	

Table V-10. Frequency of Families Who Produced Crops as an Enterprise in the Farm Business by Treatment Group

Group	Crops in the Farm Business		Corrected Chi Square
	Yes	No	
Experimental	4	6	0.00
Control	6	12	

Table V-11. Frequency of Families Who Produced Vegetables for Their Own Consumption by Treatment Group

Group	Produced Vegetables		Corrected Chi Square
	Yes	No	
Experimental	1	9	0.11
Control	1	17	

Financial assistance. Knowledge of the presence and sources of income not derived from business or labor was considered to be important when working with severely disadvantaged families in a vocationally oriented educational program. Table V-12 includes a summary of the sources of financial assistance that the families in the treatment groups were receiving.

Table V-12. Sources from Which Families Received Financial Assistance and Frequency of Families Receiving Financial Assistance from Each Source by Treatment Group

Source	Group	
	Experimental	Control
Pension	1	0
Social Security	1	2
Aid for Dependent Children	1	0
Unemployment	0	1
Disability Payments	2	1
Other Financial Assistance	0	2

A total of four experimental group and five control group families had one or more source of financial assistance. The percentages were 40.00 and 27.78 respectively. One family in each treatment group had two sources of financial assistance. Chi square values were computed for each type of financial assistance to determine if the treatment group was a function of the sources of financial assistance. None of the chi square values were significant at the .05 level.

Race and nationality. Data regarding the race, recent immigration of husband's and wife's ancestors and foreign languages spoken in the home were collected. The families in the treatment groups were found to be Caucasians who had not recently immigrated to this country and spoke no foreign languages.

Geographic mobility. The geographic mobility of the severely disadvantaged families was determined by collecting data regarding the husband's and wife's place of birth and previous address of the family.

Table V-13 includes the data concerning the place of birth of the husbands of the families. Most of the husbands of the socio-economically depressed families were born in the same geographic area in which they were residing at the time of the study. Seventy-five percent were born in the same county and an additional 14.29 percent were born in the county adjoining the one in which they resided. The chi square value indicated that the place of birth of the husband was not a function of the treatment group. Wives in severely disadvantaged families were slightly more mobile than their husbands, but nearly two-thirds (64.28 percent) of the wives

were born in the same county or a county adjoining the one in which they resided at the time of the study, as shown by the data in Table V-14. Those born out of state accounted for 21.43 percent.

The chi square table was constructed to show mobility and thus, due to low cell frequencies, precluding a conclusive statement that the mobility of wives was not a function of the treatment groups. The chi square value obtained was not significant, however.

Table V-13. Frequency of Various Places of Birth of the Husbands of Disadvantaged Families by Treatment Group

	Place of Birth			
Group	Out of State	In Same County	In Adjoining County	Chi Square
Experimental	1	8	1	0.26
Control	2	13	3	

Table V-14. Frequency of Various Places of Birth of the Wives of Severely Disadvantaged Families by Treatment Group

	Place of Birth					
Group	No Response	Out of State	In Same County	In Adjoining County	In Another County	Chi Square
Experimental	0	1	3	5	1	2.12
Control	1	5	4	6	2	

Table V-15 includes the data regarding the geographic area in which the severely disadvantaged families had lived prior to moving to the location where they resided at the time of the study. Over three-fourths (75.57 percent) of the families had moved within the same county. The next largest group were those who had moved from out of state, accounting for 14.28 percent. Again, the low frequencies prevent making conclusions regarding whether or not the geographic mobility of the families was a function of the treatment group. The chi square value was not significant.

Table V-15. Frequency of Geographic Areas Where Severely Disadvantaged Families Had Lived Previous to the Location at the Time of Study by Treatment Group

	Geographic Area				
Group	Out of State	In Same County	In An Adjoining County	In Another State	Chi Square
Experimental	1	8	0	1	2.60
Control	0	14	1	3	

The Effect of the Educational Program.

The primary purposes of this phase of Project REDY were to determine the feasibility of involving severely disadvantaged rural families in a model vocationally oriented educational program, to evaluate the model educational program, and to revise the model prior to implementing the exemplary phase. This section deals with the analysis of data which served to evaluate the model educational program. The evaluation is limited by the low number of families that could be involved in this phase of the program.

As stated earlier, the families were randomly selected from a population of severely disadvantaged families and were randomly assigned to the treatment groups which included an experimental group and two control groups.

Analysis of standardized instrument data. Analysis of covariance was employed to analyze the data collected by the five standardized instruments described earlier. These instruments which yielded interval data were administered as a pretest and posttest. To keep the administration of the various instruments down to a reasonable time length, it was decided that no one family should be given more than three standardized instruments, thus severely limiting the degrees of freedom for the F test. Instruments were randomly assigned to families and were administered to each family on both the pretest and posttest. The pretest score on each scale of each instrument served as the covariate for its corresponding score on the posttest.

Community solidarity variables. The Community Solidarity Index Schedule by Fessler (2) was used to ascertain an index of the participants' opinions on the quality of the community. The instrument provided measures of community solidarity on eight scales and a total score. The scales measured attitudes toward community spirit, interpersonal relations, family responsibility toward the community, schools, churches, economic behavior, local government, and tension areas. Table V-16 includes the analysis of covariance summary tables for each of the eight scales and the total score, a score obtained by summing the scores on each of seven scales. The non-significant F ratios indicate that there was no significant difference among the adjusted treatment means for the nine variables. By inspecting Table V-17, it was observed that the adjusted means for the experimental group were most favorable on the scales that measured attitudes toward community spirit, interpersonal relations, schools, economic behavior, local government, and tension areas, as well as the total score for all scales. Control Group 1 had the most favorable attitude as indicated by the adjusted mean on the remaining two scales, family responsibility toward the community and churches followed by the experimental group. Control Group 2 had the least favorable attitude on six of the eight scales as well as the total score.

Means that vary as much as observed here may have been significantly different if a larger sample size had been feasible.

Table V-16. One-way Analysis of Covariance Summaries Comparing the Experimental Group and Control Groups on Community Solidarity Variables

Source of Variation	Degrees of Freedom	Adjusted Sums of Squares	Adjusted Mean Squares	F Ratio
	Scale 1	Community Spirit		
Between Cells	2	.613	.307	.054
Within Cells	10	56.299	5.630	
	Scale 2	Interpersonal Relations		
Between Cells	2	20.625	10.313	1.745
Within Cells	10	59.102	5.910	
	Scale 3	Family Responsibility Toward the Community		
Between Cells	2	8.729	4.364	.889
Within Cells	10	49.058	4.906	
	Scale 4	Schools		
Between Cells	2	.365	.183	.036
Within Cells	10	50.310	5.031	
	Scale 5	Churches		
Between Cells	2	25.291	12.645	3.72
Within Cells	10	33.984	3.398	
	Scale 6	Economic Behavior		
Between Cells	2	10.167	5.083	1.639
Within Cells	10	31.019	3.102	
	Scale 7	Local Government		
Between Cells	2	23.396	11.698	1.932
Within Cells	10	60.533	6.053	
	Scale 8	Tension Area		
Between Cells	2	29.685	14.843	8.748
Within Cells	10	16.967	1.697	
	Scale 9	Total Score		
Between Cells	2	523.451	261.725	2.386
Within Cells	10	1096.748	109.675	

Table V-17. Adjusted Means for Community Solidarity Variables by Treatment Groups

Variable	Adjusted Means*		
	Experimental	Control 1	Control 2
Community Spirit	18.512	18.045	18.057
Interpersonal Relations	18.843	17.837	13.922
Family Responsibility Toward the Community	17.840	18.336	16.260
Schools	18.153	17.796	17.820
Churches	17.499	17.847	13.140
Economic Behavior	17.360	16.675	14.051
Local Government	16.071	13.223	12.769
Tension Areas	19.277	18.420	15.365
Total Score	143.532	137.806	122.169

* High score is the most favorable attitude.

Morale of family members. The Minnesota Survey of Opinion (6) was employed to obtain two measures of morale, a general adjustment score and a total morale score. Table V-18 includes the analysis of covariance summary tables for these morale variables. Although the main effect due to treatment was not significant for either morale variable, it was noted from Table V-19 that the experimental group had a slightly higher morale than either of the control groups for both the total morale score and the general adjustment score. Thus, if a larger sample had been involved in the vocationally oriented educational program, it seems reasonable to conclude that a significant treatment effect would have been obtained on the morale variables.

Social Class of families. The Sims SCI Occupational Rating Scale (7) was employed to obtain a pretest and posttest rating of the families perceived social class. The analysis of covariance summary table included in Table V-20 shows that the difference among adjusted treatment means were not significant when compared by analysis of covariance. Adjusted mean valves in Table V-21 show the experimental group rated themselves as middle class while control group 1 rated themselves as being in the upper working class and the control group 2 rated themselves as being in the working class. Thus, indicating that the educational program tended to improve, although not significantly, the severely disadvantaged families perception of their station on the social class scale.

Deprivation of families. Eleven deprivation scores and a total deprivation score were obtained from the pretest and posttest administration of McVoy's Wants and Satisfaction Scale (4). The eleven deprivation scales included house and yard, household conveniences, food, clothing, education, health, recreation, participation, working conditions, transportation, and security.

The analysis of covariance summary tables presented in Table V-22 shows that the F ratio obtained for the Household Convenience Deprivation scale was significant at the .05 level indicating that there was a significance among the three treatment means. Table V-23 includes the Newman-Keuls test (8) of ordered means which shows that the experimental group scored significantly lower at the .05 level than control group 2. This lower deprivation score indicates that the families felt they had more adequate household conveniences than did the families in control group 2 when the pretest scores were used as a covariate.

Table V-18. One-Way Analysis of Covariance Summaries Comparing the Experimental and Control Groups on Morale Variables

Source of Variation	Degrees of Freedom	Adjusted Sums of Squares	Adjusted Mean Squares	F ratio
Scale 1		Total Morale		
Between Cells	2	48.712	24.356	.747
Within Cells	9	293.585	32.621	
Scale 2		General Adjustment		
Between Cells	2	17.988	8.994	.409
Within Cells	9	197.824	21.980	

Table V-19. Adjusted Means for the Experimental and Control Groups on Morale Variables

Variable	Adjusted Means* Experimental	Control 1	Control 2
Total Morale	63.171	67.750	64.991
General Adjustment	54.071	56.879	56.352

* Low score indicates high morale

Table V-20. One-Way Analysis of Covariance Comparison of Experimental and Control Groups on Perceived Social Class

Source of Variation	Degrees of Freedom	Adjusted Sums of Squares	Mean Squares	F Ratio
Between Cells	2	108.078	54.039	1.637
Within Cells	7	231.014	33.002	

Table V-21. Adjusted Means for Perceived Social Class Variable by Treatment Group

Variable	Adjusted Means * Experimental	Control 1	Control 2
Perceived Social Class	14.094	8.853	6.517

* Higher scores indicate higher social class

Table V-22. One-way Analysis of Covariance Summaries Comparing the Experimental and Control Groups on Deprivation Variables

Source of Variation	Degrees of Freedom	Adjusted Sums of Squares	Adjusted Mean Squares	F Ratio
Scale 1 House and Yard				
Between Cells	2	2.073	1.037	.070
Within Cells	11	163.611	14.874	
Scale 2 Household Conveniences				
Between Cells	2	40.970	20.485	5.430*
Within Cells	11	41.478	3.771	
Scale 3 Food				
Between Cells	2	12.785	6.392	1.472
Within Cells	11	47.780	4.344	
Scale 4 Clothing				
Between Cells	2	.047	.024	.013
Within Cells	11	19.390	1.763	
Scale 5 Education				
Between Cells	2	6.850	3.425	.652
Within Cells	11	57.739	5.249	
Scale 6 Health				
Between Cells	2	46.099	23.050	2.597
Within Cells	11	97.617	8.874	
Scale 7 Recreation				
Between Cells	2	78.363	39.181	3.008
Within Cells	11	143.283	13.026	
Scale 8 Participation				
Between Cells	2	12.880	6.440	1.576
Within Cells	11	44.941	4.086	

Table V-22 - continued

Source of Variation	Degrees of Freedom	Adjusted Sums of Squares	Adjusted Mean Squares	F Ratio
Scale 9 Work Conditions				
Between Cells	2	.296	.148	.494
Within Cells	11	3.299	.299	
Scale 10 Transportation				
Between Cells	2	.305	.152	.428
Within Cells	11	3.914	.356	
Scale 11 Security				
Between Cells	2	13.048	6.524	.714
Within Cells	11	100.572	9.143	
Scale 12 Total Deprivation Score				
Between Cells	2	1144.774	572.387	1.967
Within Cells	11	3201.238	291.022	

* Significant at the .05 level

Table V-23. Newman-Keuls Test for Ordered Pairs of Treatment Means for the Household Convenience Deprivation Scale

Order	1	2	3
Treatments	Experimental	Control 1	Control 2
Adjusted Means	4.950	7.600	9.521

	1	2	3
1	--	2.650	4.571
2		--	1.921
3			

Truncated range r	2	3
q.95 (r,11)	3.11	3.82
$q.95\sqrt{\frac{MS\ error}{n_h}}$	2.81	3.45

	1	2	3
1			*
2			
3			

* Significant at the .05 level

Table V-24 includes the adjusted means for the eleven deprivation scales and the total deprivation score. These adjusted means show a trend toward the decreasing of the deprivation of families who were involved in the vocationally oriented educational program. The experimental treatment group had lower adjusted mean deprivation scores on ten of the eleven deprivation scores and the total deprivation score. The differences as large as those observed here could have easily been significant if a larger sample had been available. On the Work Conditions deprivation scale, the experimental group had an adjusted mean score equal to control group 1 but slightly higher than control group 2.

Table V-24. Adjusted Means for the Experimental and Control Groups on Deprivation Variables

Variable	Adjusted Means*		
	Experimental	Control 1	Control 2
House and Yard	8.253	9.022	9.172
Household Conveniences	4.950	7.600	9.521
Food	2.157	2.637	4.511
Clothing	1.499	1.589	1.694
Education	4.009	5.040	5.944
Health	2.820	5.487	7.560
Recreation	4.047	9.228	9.288
Participation	2.197	4.453	3.099
Work Conditions	.500	.500	.200
Automobiles	.840	1.199	1.089
Security	5.938	8.036	8.207
Total Deprivation Score	37.205	54.918	60.135

*High score indicates high deprivation

Leisure time of family members. The results of the analysis of covariance on the posttest scores of the leisure time variables are given in Table V-25. The data for this analysis was obtained by employing Your Leisure Time Activities instrument (5) which measured two variables, the amount of participation in common leisure time activities and the amount of enjoyment derived from the

participation. No significant difference was observed among the treatment means on either of the leisure time scales. A trend was impossible to identify because the experimental group adjusted means on the leisure time scales fell between those for the control groups. One control group had the highest adjusted mean leisure time score while the other control group had the lowest score. Table V-26 presents the adjusted means for the leisure time variables.

Table V-25. One-way Analysis of Covariance Summaries Comparing the Experimental and Control Groups on Leisure Time Variables

Source of Variation	Degree of Freedom	Adjusted Sums of Squares	Adjusted Mean Squares	F ratio
Scale 1 Leisure Time Participation				
Between Cells	2	1023.697	511.849	1.562
Within Cells	8	2621.908	327.738	
Scale 2 Leisure Time Enjoyment				
Between Cells	2	2889.422	1444.711	1.346
Within Cells	8	8586.938	1073.367	

Table V-26. Adjusted Means for the Experimental and Control Groups on Leisure Time Variables

Variable	Adjusted Means		
	Experimental	Control 1	Control 2
Leisure Time Participation	98.987	90.935	114.460
Leisure Time Enjoyment	101.002	72.887	109.186

School Data. Table V-27 includes the analysis of covariance summaries for school data of children who were 12 years of age or older, and were living at home. The variates were the grades and attendance for the year during the educational program while the covariates were the same data for the year prior to the beginning of the educational program. The treatment effect was not significant for the variables of academic grades, total grades, or days of absence. Total grades included all grades earned by students for both academic and vocational subjects. Vocational grades, contrasted to academic grades, were considered to be grades for courses designed to prepare a student for a particular occupation. Insufficient numbers of students, five in the experimental group and one in each of the control groups, had complete data for an analysis of the vocational grades to be computed.

Table V-28 presents the adjusted means for the school data variables. All of the experimental group adjusted means were higher, although not significantly so, than either of the control groups. Grades were averaged using the scale of A+=13, A=12, A-=11, B+=10, B=9, B-=8, C+=7, C=6, C-=5, D+=4, D=3, D-=2, and F=1. A trend for attendance, calculated by summing the total number of days each student was absent from school, to be better for the children in the experimental group was observed.

Table V-27. One-Way Analysis of Covariance Summaries Comparing School Data of Children Twelve Years of Age or Older

Source of Variation	Degrees of Freedom	Adjusted Sums of Squares	Adjusted Mean Squares	F Ratio
		Academic Grades		
Between	2	.655	.327	.092
Within	28	99.923	3.569	
		Total Grades		
Between	2	5.050	2.525	.654
Within	28	108.097	3.861	
		Attendance		
Between	2	29.086	14.543	.190
Within	28	2141.112	76.469	

Table V-28. Adjusted Means for School Data of the Children Twelve Years of Age or Older by Treatment Group

Variable	Adjusted Means		
	Experimental	Control 1	Control 2
Academic Grades	7.046	6.716	6.735
Total Grades	7.386	7.128	6.427
Attendance	6.276	8.664	7.641

Analysis of Data from Interview Schedules

Chi-square analysis was employed to analyze the nominal type data collected by employing the six interview schedules developed.

These instruments were designed to accompany various stages of the experimental treatment and were administered to each family in both the experimental and control groups as a posttest. Due to the low number of frequencies, the two control groups were collapsed for this analysis. The combined group totaled 18 families.

Parental wishes and desires for their children. Schedule One was designed to obtain information regarding the parental wishes for children who were at least 12 years of age and were living at home at the time of the posttest.

As a preliminary step, the frequencies of children in age ranges 12 through 14, 15 through 17, and 18 or over were tabulated by treatment group to determine whether or not the ages of children were a function of the treatment group to which their families were assigned. Table V-29 presents the frequencies and chi square value for the ages of children. The chi square value was not significant, indicating that the ages of children were not a function of the treatment group. It was noted that 82.63 percent of the children who resided at home and were over 12 years of age were less than 18 years of age.

Table V-29. Frequencies of Various Age Groups of Children by Treatment Group

Group	Ages of Children			Chi Square
	12-14	15-17	18 or Over	
Experimental	6	7	4	1.07
Control	17	13	5	

Table V-30 includes the data concerning the level of education parents desired for their oldest child living at home, provided the child was 12 years of age or older. The chi square value obtained indicated that the level of education parents desired for their oldest child was not a function of the treatment group. Although the variance from expected frequencies was not significant, it was noted that the higher percentage of the experimental group wanted their children to obtain some type of college education. All of the experimental group and 82.35 percent of the control group had some definite desire for the level of education which they wanted their children to attain.

Table V-31 presents the data for the levels of education parents desired for their next to the oldest child living at home. Children must have been 12 years of age or older to be included. As indicated by the non-significant chi-square value, very little deviation from expected values was observed.

Insufficient numbers of second from the oldest children who were 12 years of age or older living at home were available for an analysis to be made.

Table V-30. Frequency of Levels of Education Parents Desired for Their Oldest Child Living at Home by Treatment Group

	Education Desired			
Group	Elementary and High School	Junior College or Four-Year College	No Response	Chi Square
Experimental	3	6	0	2.01
Control	6	8	3	

Table V-31. Frequency of Levels of Education Parents Desired for Their Next to the Oldest Child Living at Home by Treatment Group

	Education Desired		
Group	Elementary and High School	Junior College or Four-Year College	Corrected Chi Square
Experimental	2	5	.12
Control	3	6	

Table V-32 presents the frequencies and chi square value for the data concerning parental knowledge of the cost of post-secondary education. The chi square value was not significant. A higher percentage of parents in the experimental group had some idea of the cost of post-secondary education than did the parents in the control group. These percentages were 63.63 and 31.25 respectively.

Table V-32. Frequency of the Parental Knowledge of the Cost of Post-Secondary Education by Treatment Group

	Cost of Education		Corrected
Group	Had Some Idea	Did Not Know	Chi Square
Experimental	7	4	1.61
Control	5	11	

Table V-33 includes the chi square table for the amount of financial assistance parents thought they could give to their children

for post-secondary education. The chi square value was not significant. at the .05 level. Thus the response of the participants to the percentage of financial assistance available for post-secondary education from the families was not a function of the treatment group. Inspection of these data indicated that a higher percentage of the experimental group, as compared to the control group, felt they could supply some, but less than 50 percent, of the educational expenses of their children beyond the secondary level. These percentages were 60.00 and 23.52 respectively. A higher percentage of the control group did not know or had no response to the question of the percentage of financial support they could provide for their children's post-secondary education than did the experimental group. These percentages were 20.00 and 58.82 respectively.

Table V-33. Amount of Assistance Parents Could Provide for Their Children's Post-secondary Education By Treatment Group

	Percentage of Educational Expenses			
Group	Less than 50	More than 50	No response	Chi Square
Experimental	6	2	2	4.39
Control	4	3	10	

The observed frequencies of occupational aspirations parents had for their oldest child living at home is included in Table V-34. Only those children who were 12 years of age or older were considered. The chi square value obtained was significant at the .05 level. Thus, the occupational aspirations of the parents for their oldest child living at home was a function of the treatment group. Nearly one-half (47.06 percent) of the control group did not have any idea what type of occupation they wanted their oldest child to enter while none of the experimental group responded thus. Over one-half (55.56 percent) of the parents in the experimental group had a specific occupation that they wanted their oldest child who lived at home to enter. This may be compared to approximately one-sixth of the control group parents.

Table V-34. Frequency of Occupation Aspirations Parents Had for Their Oldest Child Living at Home by Treatment Group

	Occupational Aspiration			
Group	None	Up to Child	Specific Occupation	Chi Square
Experimental	0	4	5	7.11*
Control	8	6	3	

* Significant at the .05 level.

Table V-35 presents the data regarding the occupation aspirations parents had for their next to the oldest child who was living at home and was at least 12 years of age. The chi square value was not significant. However, deviations from equal proportions were observed in the classifications of "Do Not Know" and "Up to Child." These percentages for the experimental and control groups were 0.00 and 44.44 respectively for the response classification "Do Not Know," and 62.50 and 22.22 respectively for the classification of "Up to Child."

Insufficient numbers of children who were in second from the oldest or younger were available for an analysis to be made.

Table V-35. Frequency of Occupational Aspirations Parents Had For Their Next to the Oldest Child Living at Home by Treatment Group

Group	Occupational Aspiration			
	Do Not Know	Up to Child	Specific Occupation Specified	Chi Square
Experimental	0	5	3	5.25
Control	4	2	3	

The frequencies of the income level parents desired for their oldest child living at home when the child is an adult is presented in Table V-36. The significant chi square value indicated that the level of income desired was a function of the treatment group. Deviations from equal percentages between the experimental and control groups were observed in the "Do Not Know" and "$5000 to $9999" classifications. These percentages were 82.35 and 50.00 respectively for the "Do Not Know" classification while those for the "$5000 to $9999" classification were 30.00 and 0.00 respectively.

Table V-36. Frequency of the Income Level Parents Desired for Their Oldest Child Living at Home by Treatment Group

Group	Income Desired			
	Do Not Know	$5,000-9,999	$10,000-15,000	Chi Square
Experimental	5	3	2	6.06*
Control	14	0	3	

*Significant at the .05 level.

Presented in Table V-37 are the data concerning the level of income parents desired for their next to the oldest child living at home. Again, children under 12 years of age were not included in the analysis. The significant chi square value obtained indicates that the income classification was a function of the treatment group. Deviations between the experimental and control group were observed in the "Do Not Know" and "$5000 to $9999" classifications. The percentages were 16.67 and 66.67 respectively for the "Do Not Know" classification while those for the $5000 to $9999 classification were 50.00 and 0.00 respectively. Low cell frequencies preclude making conclusions for these data.

Table V-37. Frequency of the Income Levels Parents Desired for Their Next to the Oldest Child Living at Home by Treatment Group

	Income Desired			
Group	Do Not Know	$5,000-10,000	$10,000-15,000	Chi Square
Experimental	1	3	2	6.43*
Control	6	0	3	

*Significant at the .05 level

Table V-38 includes the chi square table for the area of residence parents desired for their children when the children became adults. The chi square value was not significant. Thus, the area in which parents wanted their children to live when they became adults was not a function of the treatment group. Most parents (81.82 percent) wanted their children to live in the same township or county as they did.

Table V-38. Frequencies of the Area of Residence Parents Desired for Their Children by Treatment Group

	Area of Residence Desired		
Group	Same Township or County	Another County or State	Corrected Chi Square
Experimental	5	3	1.44
Control	13	1	

Table V-39 contains the frequencies and chi square value for the location of the residence that parents desired for their children when they became adults with regard to a rural or urban location. The chi square value was not signficant. Thus, the treatment did not have a significant effect on where the parents wanted their their children to live when they became adults with respect to

living in rural or urban areas. Slightly more parents in the control group as compared to the experimental group wanted their children to live in rural areas. These percentages were 76.92 and 50.00 respectively.

Table V-39. Frequency of the Location of Residence Parents Desired for Their Children by Treatment Group

Group	Location of Residence		Corrected Chi Square
	Rural	Urban	
Experimental	4	4	.63
Control	10	3	

Parental experiences and desires for themselves. Schedule Two was designed to obtain information regarding parents' desires for themselves and to determine what educational and social experiences the parents had had during the year prior to the posttest.

Table V-40 presents the information regarding the occupation of the head of the household at the time of the posttest. The chi square value was not significant. It was noted that a higher percentage of the heads of households in the experimental group (54.54 percent) were involved in agricultural occupations than were the control group (33.33 percent), while the control group had a higher percentage involved in home economics and health occupations. One of the experimental group respondents was unemployed.

Table V-40. Frequency of Types of Occupations Held by the Head of the Household by Treatment Group

Group	Present Occupation					Chi Square
	None	Agricultural	Business and Industrial	Home Economics and Health	Other	
Experimental	1	6	3	1	0	4.46
Control	0	7	8	4	2	

Table V-41 includes the chi square table for the person by whom the head of the household was employed. Nearly equal percentages of the experimental and control group heads of the households were self-employed, employed by someone other than self, and both self-employed and employed by someone other than self.

Table V-41. Frequency of the Type of Employer by Whom the Head of the Household Was Employed by Treatment Group

Group	Employed By: Self	Someone Other than Self	Both Self and Other	Chi Square
Experimental	4	3	2	.68
Control	8	8	2	

Table V-42 presents the data regarding the degree to which the heads of the households were satisfied with their jobs. Most of the heads of the households, 83.33 percent of the experimental group and 81.81 percent of the control group, classified themselves as being "much" or "very much" satisfied with the job they held. The chi square value was not significant.

Table V-42. Frequency of the Various Degrees of Job Satisfaction Expressed by the Head of the Household by Treatment Group

Group	Satisfaction with Job: Very Little to Little	Much to Very Much	Corrected Chi Square
Experimental	1	5	.20
Control	2	9	

Table V-43 includes the data regarding the frequencies of the job advancements received by the participants of the treatment group. The corrected chi square value was not significant. Here a majority of the experimental and control group participants, 80.00 percent and 76.47 percent respectively, had not received a job advancement during the year preceding the posttest. None of the participants received a promotion or addition in fringe benefits.

Table V-43. Frequency of Job Advancements Received by the Head of the Household by Treatment Group

Group	Job Advancements: None	None but Salary Increased	Corrected Chi Square
Experimental	8	2	.07
Control	13	4	

Data regarding the number of heads of the household who acquired new skills during the year preceding the posttest are included in Table V-44. The corrected chi square value for the frequencies of participants who had acquired new skills was not significant. It was noted that a higher percentage of the experimental group participants obtained new skills than did the control group participants. These percentages were 30.00 percent and 11.11 percent, respectively.

Table V-44. Frequency of New Skills Acquired by the Head of the Household by Treatment Group

Group	New Skills Acquired		Corrected Chi Square
	Yes	No	
Experimental	3	7	.54
Control	2	16	

Table V-45 includes the data regarding the number of head of the household who changed jobs during the year prior to the posttest. Only one participant, a member of the control group, changed jobs. Thus, even though the chi square value was not significant, it cannot be considered conclusive due to the low expected cell frequencies. It is apparent, however, that the treatment had little if any effect on the number of participants who changed jobs.

Table V-45. Frequency of the Head of the Household Who Changed Jobs by Treatment Group

Group	Change Jobs		Corrected Chi Square
	Yes	No	
Experimental	0	10	.09
Control	1	17	

The data regarding the number of head of the household who wanted a job change are reported in Table V-46. The chi square value was not significant. It was noted that a higher percentage of the control group participants wanted a job change than did the experimental group participants. These percentages were 38.88 and 10.00 respectively.

Table V-46. Frequency of Head of the Household Who Desired to Change Jobs by Treatment Group

Group	Desired a Job Change		Corrected Chi Square
	Yes	No	
Experimental	1	9	1.40
Control	7	11	

The data regarding the amount of income that the head of the household desired to have in order to meet family needs is included in Table V-47. The chi square value was not significant. The number of participants did not allow for adequate frequencies in each range of salary, thus necessitating the collapsing of some salary ranges. Very little variance was observed between the percentage of the experimental and control group participants who desired each salary range. It was noted that over one-fifth, 20.06 percent of the experimental group and 23.52 percent of the control group, reported that the family needs could be met with $1000 to $5000. About one-half, 50.00 percent of the experimental group and 47.05 percent of the control group reported that $5,000 to $7,000 would be necessary to meet the family needs.

Table V-47. Amount of Income the Head of the Household Desired in Order to Meet Family Needs by Treatment Group

Group	Desired Net Income in Dollars				Chi Square
	1000-4999	5000-6999	7000-15,000	Don't Know	
Experimental	2	5	2	1	.30
Control	4	8	3	2	

Table V-48 includes the chi square table for the presence and absence of the desire for more education on the part of the head of the household. The chi square value was not significant. Nearly equal percentages of the experimental and control group reported having a desire for more education. These percentages were 50.00 and 44.44 respectively.

Table V-48. Desire for More Education by the Head of the Household by Treatment Group

Group	Desire More Education		Corrected Chi Square
	Yes	No	
Experimental	5	5	0.01
Control	8	10	

Table V-49 presents the data concerning the type of education, academic or vocational, that the heads of households who indicated wanting additional education desired. The chi square value was not significant. It was noted that all of the experimental group wanted some type of vocational training while less than one-half (42.85 percent) of the control had the same desire.

Table V-49. Frequency of the Type of Education Desired by the Head of the Household by Treatment Group

Group	Type of Education		Corrected Chi Square
	Academic	Vocational	
Experimental	0	5	2.10
Control	4	3	

Data regarding the number of family heads who attended some type of education in the year prior to the posttest along with the chi square value are included in Table V-50. The chi square value was not significant. It was observed that 40.00 percent of the experimental group reported that they attended some type of educational program while 5.55 percent of the control group had obtained some type of organized educational activity.

Table V-50. Frequency of the Head of the Household Who Attended Educational Activities by Treatment Group

Group	Obtained Education		Corrected Chi Square
	Yes	No	
Experimental	4	6	3.12
Control	1	17	

Table V-51 includes the chi square value and frequencies of the number of families whose head of the household were members of community organizations during the year preceding the posttest. The chi square value was not significant. A low percentage of each of the treatment groups had been members of any club or organization, these percentages were 20.00 for the experimental group and 11.11 for the control group. None of the heads of households had been officers in community organizations or had been on a committee in a community organization.

Table V-51. Frequency of Membership of the Head of the Household in Community Organizations by Treatment Groups

Group	Member of Organization		Corrected Chi Square
	Yes	No	
Experimental	2	8	0.01
Control	2	16	

Table V-52 presents the data concerning the condition of health of the head of the household. The chi square value was not significant. Very little variation existed between the experimental and control groups with regard to the percentage of heads of the households who were classified as being in the health classifications of fair, good, and very good.

Table V-52. Frequency of the Condition of Health of the Head of the Household by Treatment Group

Group	Condition of Health			Chi Square
	Fair	Good	Very Good	
Experimental	3	5	2	0.09
Control	5	10	3	

Data regarding the number who had changed residence are included in Table V-53. The chi square value was not significant. One control group family had changed the place in which they resided in the year prior to the posttest while none of the experimental group had moved to a different residence.

Table V-53. Frequency of Change in Residence Location by Treatment Group

Group	Changed Residence		Corrected Chi Square
	Yes	No	
Experimental	0	10	0 .09
Control	1	17	

Table V-54 includes the data and chi square value for the number of families in the treatment groups who desired a change in location of residence. The chi square value was not significant. It was

observed, however, that nearly two-fifths (38.88 percent) of the control group wanted to change the location of their residence while only one-tenth (10.00 percent) of the experimental group wanted to change locations of residence.

Table V-54. Frequency of Families Who Wanted to Make a Change in Location of Residence by Treatment Group

Group	Desire Residence Change		Corrected Chi Square
	Yes	No	
Experimental	1	9	1.40
Control	7	11	

Desires and experiences of Children. Schedule Three was designed to be used to obtain data concerning the educational and social desires and experiences that children living at home who were 12 years of age or older had had both prior to and during the year preceding the posttest.

Table V-55 includes the data concerning the number of years of formal education children 12 years of age and older had had at the time of the posttest. The chi square value obtained was not significant. The proportion of students who were in the grade classifications of sixth through ninth grade and tenth through twelfth grade were nearly equal for the treatment groups. Thus the treatment groups appeared to have about the same composition with regard to the number of years of school the children living at home and who were 12 years of age or older had completed.

Table V-55. Frequency of Years of Formal Schooling Completed by Children Living at Home Who Were Twelve Years of Age or Older by Treatment Group

Group	Years of Formal Education		Corrected Chi Square
	6 through 9	10 through 12	
Experimental	4	2	0.00
Control	10	8	

Table V-56 presents the data regarding whether or not the children who were living at home and were 12 years of age or older were in school. The non-significant chi square value indicates that the classification of being in or out of school was not a function of the treatment group. It was noted that all of the children in experimental group and nearly three-fourths (72.22 percent)

of the children in control group were in school at the time of the survey, and that five children of the control group were 18 years of age or over.

Table V-56. Frequency of Children Twelve Years of Age or More and Living at Home Who Were Enrolled in School by Treatment Group

Group	Enrolled in School		Corrected Chi Square
	Yes	No	
Experimental	7	0	1.00
Control	13	5	

Table V-57 presents the data for the level of education desired by children who were twelve years of age or more and living at home. The chi square value was not significant. Percentages for the high school and college classifications deviated very little between the experimental and control group. One child, a member of the experimental group, wanted vocational training beyond high school. Three children, all from the control group did not know what level of education they wished to attain.

Table V-57. Frequency of Education Desired by Children Who Were Twelve Years of Age or More and Living at Home by Treatment Group

Group	Desired Education				Chi Square
	High School	College	Vocational	Do Not Know	
Experimental	3	3	1	0	3.59
Control	9	6	0	3	

Table V-58 includes the data for the field of study that children who were twelve years of age or older and living at home desired to study at the highest level of education they wished to attain. The chi square value was not significant. It was noted that one-half of the children who responded in both treatment groups indicated that they desired agriculture as the field of study at the highest level of education they wished to attain.

Table V-58. Frequency of Field of Study Desired by Children Who Were Twelve Years of Age or More and Living at Home by Treatment Group

Group	Field of Study				Chi Square
	Agriculture	Business and Industry	Other	No Response	
Experimental	4	3	1	0	0.02
Control	7	5	2	4	

Table V-59 presents the data for the availability of financial support from the family for the education of children who were twelve years of age or older and living at home. The chi square value was not significant. The percentage of observed frequencies for the classification of financial support being available for education was slightly higher for the experimental group than the control group. These percentages were 57.14 and 40.00 respectively. Two children, both from the control group, did not know whether or not the family would support the education they desired to attain.

Table V-59. Frequency of Availability of Financial Support From the Family for Education of Children Who Were Twelve Years of Age or Older and Living at Home by Treatment Group

	Family Support for Education			
Group	Yes	No	Do Not Know	Chi Square
Experimental	4	3	0	1.26
Control	6	7	2	

The strongest desires of the children who were 12 years of age or older and living at home for the year following the posttest are presented in Table V-60. The desires expressed by the children were categorized into four classifications which were: (1) do not know, (2) occupational, (3) educational, and (4) material or other. The non-significant chi square value indicated that the response to these classifications was not a function of the treatment group. Inspection of the data revealed a trend for the experimental group to express desires in the occupational and educational classifications and not to express desires in the material or other classification.

Table V-60. Frequency of Strongest Desires for One Year from Time of Posttest Expressed by Children Who Were Twelve Years of Age or Older and Living at Home by Treatment Group

	Strongest Desire for One Year from Now				
Group	No not Know	Occupational	Educational	Material or Other	Chi Square
Experimental	2	2	3	0	4.95
Control	6	1	5	6	

Table V-61 presents the frequencies of the desires for the second year following the posttest of children who were twelve years of age or older and living at home. The non-signficant

chi square value indicated that the responses of the children were not a function of the treatment group. As compared to the students' desires for the year following the posttest, more children did not know what their strongest desire was. Nearly equal proportions were observed for the "do not know" classification for the experimental and control group. These percentages were 42.85 and 44.44 respectively. A higher percentage of the experimental group (42.85 percent) than the control group (27.77 percent) verbalized their strongest desire as some kind of education.

Table V-61. Frequency of Strongest Desires for Two Years from Time of Posttest Expressed by Children Who Were Twelve Years of Age or Older and Living at Home by Treatment Group

	Strongest Desires for Two Years From Now				
Group	Do Not Know	Occupational	Educational	Material or Other	Chi Square
Experimental	3	1	3	0	1.57
Control	8	2	5	3	

Table V-62 presents the information regarding the strongest desires that children had for five years after the posttest. Responses verbalized by the children were categorized into the classifications of (1) do not know, (2) occupational (3) educational, and (4) material or other. The chi square value calculated for the frequency of response to these classifications was not significant. Observable differences appeared between the experimental and control group for the two response classifications of "educational" and "material or other." The percentage of responses for the "educational" classification was 42.85 for the experimental group and 5.55 for the control group. The percentages of responses for the "material or other" classification was 0.00 for the experimental group and 22.22 for the control group.

Table V-62. Frequency of Strongest Desires for Five Years from Time of Posttest Expressed by Children Who Were Twelve Years of Age or Older and Living at Home by Treatment Group

	Strongest Desire for Five Years from Now				
Group	Do Not Know	Occupational	Educational	Material or Other	Chi Square
Experimental	2	2	3	0	6.12
Control	6	7	1	4	

Table V-63 includes the data regarding the place of residence which children who were 12 years of age or older and living at home wished to live when they became adults. The chi square value was not significant indicating that the place of residence desired by these children was not a function of the treatment group. A predominence of the children in the experimental and control groups desired to reside in the same county in which they were residing. These percentages were 57.14 for the experimental group and 76.47 for the control group. These percentages seem to indicate a trend for the experimental group to want to move to a different location than the one in which they resided.

Table V-63. Frequency of Place of Residence Desired by Children Twelve Years of Age or Older Who Were Living at Home by Treatment Group

Group	Place of Residence		Corrected Chi Square
	Same County	Different County	
Experimental	4	3	.20
Control	13	4	

Table V-64 includes the data regarding the location of residence that children who were 12 years of age or older and living at home desired when they became adults. The non-significant chi square value indicates that the location of residence desired is not a function of the treatment group. Approximately three-fourths of the children, 71.42 percent of the experimental group and 82.35 percent of the control group, wished to reside in a rural area when they became adults.

Table V-64. Frequency of Location of Residence Desired by Children Who Were Twelve Years of Age or Older and Living at Home by Treatment Group

Group	Location for Residence Desired			Chi Square
	Rural	Small Town	City	
Experimental	5	0	2	2.94
Control	14	2	1	

Family financial information. Schedule Four was designed to obtain information regarding the financial situation of each family for the year preceding the posttest which was the year during which the educational program was conducted in the experimental communities.

Information regarding the frequency of various levels of gross farm income is reported by families in Table V-65. Although the chi square value was not significant, deviations from equal percentages occurred in all classifications. In general, a higher percentage of the control group had no farm income or did not know how much income was received, from the farm, while a higher percentage of the participating families in the experimental group reported gross farm income for the classifications of "less than $3000" and "$3001 to $6000." It was noted that two experimental and five control families did not have a farm business.

Table V-65. Frequency of Gross Farm Income Reported by Families by Treatment Group

	Gross Farm Income				
Group	None or Do Not Know	$1-2999	$3000-5999	$6000 or more	Chi Square
Experimental	5	3	1	1	1.96
Control	13	2	1	2	

Thus 30.00 percent of the experimental families and 38.99 percent of the control families did not know the amount of gross farm income they had received.

Presented in Table V-66 are the data regarding the frequency of families that reported receiving nonfarm income in the classifications of (1) none or do not know, (2) $1 to $2999, (3) $3000 to $5999, and (4) $6000 or more. The chi square value was not significant. The largest deviation in percentages of frequencies occurred for the response classification of "$1 to 2999" with 60.00 percent of the experimental group and 33.33 percent of the control group indicating that their income was within this range.

Table V-66. Frequency of Nonfarm Income Reported by Families by Treatment Group

	Nonfarm Income				
Group	None or Do Not Know	$1-2999	$3000-6000	$6000 or more	Chi Square
Experimental	1	6	3	0	2.73
Control	4	6	6	2	

The amount of living expenses reported by the families was categorized into the classifications of (1) none reported (2) $1-1999, (3) $2000-$3999, and (4) $4000 or more. The chi square

value which appears in Table V-67 computed for these frequencies was significant. Thus, the income classification was a function of the treatment group. Inspection of the frequencies for the treatment groups revealed that the greatest deviation from equal percentages of treatment group frequencies occurred for the classifications of "none reported" and "$1-1,999." The classification of "none reported" included 10.00 percent of the experimental group responses and 44.00 percent of the control group responses. Seventy percent of the families in the experimental group reported that their living expenses were in the range of $1-1999 while 11.11 percent of the control group reported having living expenses in the same range.

Table V-67. Frequency of Living Expenses Reported by Families by Treatment Group

	Living Expenses				
Group	None Reported	$1-1999	$2000-3999	$4000 or More	Chi Square
Experimental	1	7	1	1	10.38*
Control	8	2	4	4	

*Significant at the .05 level.

The farm business. Inadequate data were available regarding the farm businesses operated by the disadvantaged families for analysis by chi square. Efficiency measures such as yields of crops, birth rate of livestock, weaning rate of livestock, and cost of production were available from only a few families.

The home and surroundings. Schedule six, a data collection instrument was designed to enable the interviewer to record his evaluation of the condition of the home and surroundings. The results of the interviewers' evaluation are reported in this section.

The interviewers' evaluations of the conditions of the participants' houses were tabulated and reported in Table V-68. The chi square value was not significant. Inspection of the frequencies indicated a trend for fewer houses in the experimental group than the control group to be rated very poor. These percentages were 10.00 and 22.22 respectively. However, a higher percentage of the experimental group than the control group had houses that were rated fair; the percentage being 40.00 and 27.78 respectively.

Table V-68. Frequency of Condition of Residence of Participating Families by Treatment Group

	Condition of Residence				
Group	Very Poor	Fair	Average	Above Average	Chi Square
Experimental	1	4	2	3	1.24
Control	4	5	5	4	

Frequency of the interviewers' evaluation of the condition of the furniture of participating families are reported in Table V-69. The chi square value computed for these frequencies was not significant. It was noted, however, that 30.00 percent of the experimental group as compared to 16.67 percent of the control group had above average or better furniture.

Table V-69. Frequency of Condition of Furniture of Participating Families by Treatment Group

	Condition of Furniture					
Group	Very Poor	Fair	Average	Above Average	Excellent	Chi Square
Experimental	2	2	3	2	1	2.74
Control	2	6	7	3	0	

Included in Table V-70 are the data concerning the condition of the lawn and grounds of participating families as evaluated by the interviewers. The chi square computed for the frequencies of the various categories of the condition of the lawn and grounds was not significant, indicating that the condition of the lawn and grounds was not a function of the treatment group. It was noted that the experimental group had a higher percentage of families whose lawn and grounds were rated as above average than did the control group. These percentages were 30.00 and 11.11 respectively. Conversely, the control group families had a higher percentage of lawns and grounds rated as average than did the experimental group, the percentages being 22.22 and 0.00 respectively.

Table V-70. Frequency of Condition of Lawn and Grounds of Participating Families by Treatment Group

	Condition of Lawn and Grounds				
Group	Very Poor	Fair	Average	Above Average	Chi Square
Experimental	2	5	0	3	3.55
Control	3	9	4	2	

Table V-71 presents the data for the cleanliness and tidiness of the home and surroundings of the participating families as evaluated by the interviewer. The chi square value computed for the frequencies of the classification of cleanliness and tidiness by treatment group was not significant. It was noted that a slightly higher percentage of the control group families' surroundings were rated as poor, fair, average and above average. The experimental group had a

higher percentage of families whose surroundings were rated as being excellent with regard to cleanliness and tidiness as compared to the control group. These percentages were 20.00 and 0.00 respectively.

Table V-71. Frequency of Cleanliness and Tidiness of the Home and Surroundings of Participating Families by Treatment Group

	Condition of Home and Surroundings					
Group	Poor	Fair	Average	Above Average	Excellent	Chi Square
Experimental	2	3	2	1	2	3.97
Control	4	7	4	3	0	

SUMMARY AND CONCLUSIONS

This section presents a summary of the study, reports findings, and presents conclusions that the authors made from the research findings.

Summary

The primary purpose of this phase of Project REDY (Rural Education-Disadvantaged Youth) was to develop and evaluate a vocationally oriented educational program designed to develop the present and potential capabilities of socioeconomically disadvantaged youth. A model educational program was designed and tried out in a single community. The teacher of agriculture in the local school served as the local coordinator for the project.

Research Sample of Disadvantaged Families

Severely disadvantaged families were considered to be those families who had a net annual income of $3000 or less or were considered to be socially or economically disadvantaged by officials in state and local agencies. By these procedures 238 severely disadvantaged families were identified from the total county population of 2073 families. A random sample of 60 families was drawn from the population of disadvantaged families. This sample was delimited to include only those families that had children of school or pre-school age and whose head of the household was 55 years of age or younger. The thirty-five families, remaining after this delimitation, were randomly assigned to an experimental and two control groups. Twenty-eight of these families were remaining in the treatment groups at the completion of the study.

Treatment

The model vocationally oriented educational program conducted by the local teacher of agriculture served as the treatment for the experimental families. The control groups were not involved in an educational program designed for the disadvantaged, but did have available the normal educational facilities of the community.

Data Collected

Standardized instruments, a Family Data Record, a School Data Form, and a series of Interview Schedules were employed to collect economic, sociological and psychological data. Pretest data were collected utilizing standardized instruments, the Family Data Record, and School Data Form. Posttest data were collected employing the standardized instruments, School Data Form and the Interview Schedules.

Statistical Design and Analyses

The research design employed was a pretest and posttest control group design with two control groups. Chi square analysis was employed both to describe the samples on the basis of the pretest and to ascertain the effect of the education program on the basis of posttest data which were grouped or nominal. Analysis of covariance was employed to analyze interval data. Here the pretest served as the covariate while the posttest served as the variate.

Conclusions

The conclusions of this study, based on the findings of the study, include a description of the families in the treatment groups and the evaluation of the educational program.

Description of the Sample

In order to establish the environmental conditions of the severely disadvantaged families and the equality of the treatment groups, comparisons of pretest data were made between the treatment groups. Major areas for which comparisons were made were (1) the family residence, (2) the farm business, (3) financial assistance, (4) race and nationality and (5) geographic mobility.

The residence. The residence in which the severely disadvantaged rural families lived may be described as a single occupancy house of fair or poor condition. The dilapidated condition of the residence was exemplified by the low resale value estimated by the families which was less than $6000 for over one-half of the families. Many of the residences did not have some of the household conveniences, such as telephone and indoor bathroom, that most American families usually possess.

The treatment groups were not statistically different on any of the variables related to the condition of the residence.

Farm business. A majority of the participating families owned some type of farm business, but received less than one-half of the income from the farm business. On their small farms, which were mostly less than 80 acres in size, families produced some type of livestock and/or crops. Very few families produced vegetables or fruits for their own consumption. Thus, supporting the interviewers' reports of dietary habits and improper money management. These meager farm businesses were supplemented by part-time or regular jobs. Possessing little or no technical skills, the family breadwinner usually obtained low-paying jobs.

Financial assistance. Sources of financial assistance received by one or more families in the treatment groups were pension, social security, aid to dependent children, unemployment and disability payments.

The apparent underemployment of the breadwinner of the family appeared to necessitate a source of financial assistance to enable the family to survive. The treatment groups did not differ statistically in the proportion of families who received financial assistance from the various sources.

Race and nationality. All families in the treatment groups were Caucasians whose parents had not immigrated to this country.

Geographic mobility. Most of the parents in the disadvantaged families resided in the same geographic area in which they were born and grew to adulthood. The wives appeared to be slightly more mobile prior to marriage than their husbands. Additional evidence of the lack of mobility was given by the fact that over three-fourths of the families had lived in another location in the county before moving to the residence in which they resided. This lack of mobility was not viewed as being bad, rather as being a sign that these people did not wish or were afraid to leave the geographic area with which they were acquainted. Had they moved to the city, many would have found worse conditions in which to live and work.

The treatment groups thus compared were of similar composition with respect to variables relating to residence, farm business, financial assistance, geographic mobility, race, and nationality.

Evaluation of the Educational Program

In order to evaluate the educational program, posttest data were collected employing a battery of standardized instruments and interview schedules. These data were analyzed using the statistical procedures of analysis of covariance and chi square. Variables

included on the standardized instruments were related to the community, morale, perceived social class, deprivation, and leisure time. These variables were analyzed by analysis of covariance with the pretest data serving as the covariate for the corresponding data on the posttest. Interview schedules included variables related to parental desires for their children, parents' experiences and desires for themselves, financial information, farm businesses, and the home and its surroundings. These data were analyzed using the chi square technique.

Community variables. The Community Solidarity Index Schedule (2) was employed to ascertain an index of the participants on the quality of the community with regard to community spirit, interpersonal relations, family responsibility toward the community, schools, churches, economic behavior, local government and tension areas. Although no significant differences were observed among adjusted treatment means for any of the community variables, it was noted that the experimental group had the highest adjusted treatment mean on six of the nine variables. Thus, with larger groups differences as large as those observed here may be significant. Additional emphasis on this area of instruction in Phase IV would seem to be logical.

Morale variables. The morale variables of general adjustment and total morale were measured by employing the Minnesota Survey of Opinion (6). The fact that disadvantaged families have a lower morale and poor adjustment was pointed out in an earlier phase of Project REDY. Thus, this is a viable area in which to work toward a better adjustment and attitude toward the family, self concept and community. Here, as with the community variables, no significant differences were obtained between the treatment group adjusted means. However, the adjusted means indicated a trend for the experimental group to have a better general adjustment and higher morale. The experimental group had higher morale and better general adjustment than either of the two control groups, with only a short duration of the experimental treatment.

Social class. The socioeconomic class to which an individual perceives that he belongs appears to be related to his feelings of worth. To the disadvantaged person it may indicate an "acceptance" of one's position in life. Due to the large amount of within cell variance a significant F value was not obtained in the analysis of covariance. The fact that the experimental group adjusted means for perceived social class was in the middle class while the control groups' was in the upper working and working classes should not be overlooked.

Deprivation. Although it was recognized that an educational program could not solve all of the ills of a socioeconomic disadvantaged family, much progress was apparent. Perhaps this was due to the

follow-up visits made by the coordinator to the home of each of the experimental families following each group meeting. The experimental group had the lowest deprivation score on 11 of the 12 deprivation scales included on the Wants and Satisfaction Scale (4). For household conveniences, the experimental group adjusted treatment mean was significantly lower than one of the control groups. This fact supports the statement of the educational program coordinator regarding the attempts families involved in the educational program were making to improve their households.

Leisure time activities. The results of the data on participation in leisure time activities and leisure time enjoyment were inconclusive. Here it would seem that two possible conclusions could be made: (1) either the lack of money and time were available for such activities, or (2) the educational program was ineffective with regard to improving those leisure time activities included on the instrument.

School data. Grades in academic and vocational courses as well as attendance in school are to some extent measures of the effectiveness of an educational program which focuses on the development of the potential capabilities of youth. These measures were taken for the year immediately preceding the treatment and one year during the educational program. The variate, which was considered to be the year during the educational program, did not receive the full effect of the program since the grades students earned during the early part of the year were during the early phases of the educational program. The experimental group had a higher adjusted mean for both total and academic grades and lower adjusted mean for days absence from school than either of the control groups. Statistical significance was not achieved on these variables, however.

Parental desires for their children. Data concerning parental desires for their children's education, occupation, income, and area of residence were obtained by employing Interview Schedule One.

The establishment of realistic educational goals was one of the objectives of the educational treatment. It was ascertained that parents who were involved in the educational program had some definite aspiration as to the level of education they wished their children would attain and a higher percentage had some idea of the cost of post-secondary education.

The percentage of financial support that parents thought they could provide was a function of the treatment group as indicated by the significant chi square value. Here, a larger proportion of the experimental group indicated they could support some, but less than 50.00 percent, of their childrens' post-secondary education than did the control group. The educational program apparently had some effect on the experimental group families' financial planning

and their goal definitions. A greater proportion of the control group than the experimental group failed to respond to the amount of financial help they could provide for their children.

Occupational aspirations of the parents for their oldest child living at home was found to be a function of the treatment group. The parents in the experimental group either had a specific occupation in mind for their oldest child or wanted the child to formulate his own occupational objective. Nearly one-half of the control group families declined to establish any type of occupational objective for their oldest child. Parental aspirations for the next to the oldest child living at home were similar to the oldest; however, the occupational aspiration classification was not found to be a function of the treatment group.

The income level parents desired for their oldest and next oldest child living at home was found to be a function of the treatment group. Here, as with the level of education parents desired for their children, a higher percentage of the control group than the experimental group did not know what level of income they wanted their children to earn as adults. Thus, the goal definition unit in the educational program appeared to have performed the function for which it was designed.

Parental desires for themselves. It was anticipated by the researchers that the situation and desires of parents would be more difficult to influence than would the parents' desires for their children. Analysis of the posttest data supported this research hypothesis. No statistically significant difference was observed between the heads of the households in the experimental and control groups on the variables of job advancements, new skills acquired, changes of job, desire for job change, income desired, education desired, education obtained, membership in community organizations, or condition of health. It was noted, however, that a considerably higher percentage of the control group heads of the households wanted to change jobs and desired academic rather than vocational education, while a higher percentage of the experimental group reported attending some type of educational function during the year prior to the posttest.

Although the educational program was focused on disadvantaged youth, changes in adult members were also sought in order that the entire family could be brought back into the mainstream of community life. Additional emphasis on this aspect of the educational program appears to be necessary.

Some progress toward improving the families' attitude toward their place of residence appeared to have been made as reflected by the lower percentage of the experimental group who wanted to change their location of residence. The desire to do something about their situation rather than just wanting to get out of their situation seems to have been cultivated.

Desires and experiences of children. Inherent to any program which purports to develop the capabilities of youth through a vocationally oriented educational program is the establishment of realistic educational goals and defined aspirations that will enable individuals to pursue feasible objectives.

The establishment of realistic goals, however, is not easy to measure. An attempt was made to establish whether or not the children in disadvantaged families had established some type of goal. All of the children in the experimental group and five-sixths of the children in the control group had established the educational level they wished to obtain. Also a similar response was noted for the field of study students wished to pursue at their highest level of education where all of the experimental and seven-ninths of the control group designated a specific field of study.

A trend was observed for the children in the experimental group to express occupational or educational desires when asked what their strongest desires were for one, two and five years from the posttest date. The control group children tended to indicate more materialistic goals.

Data regarding the place of residence in which the children who were twelve years of age or older seem to indicate that a higher percentage of the experimental group children desired to live in an urban area or in a different county than the one in which they lived. This was contrary to the expectations of the researchers.

From these results, it was recommended that more emphasis be placed on goal definition and occupational planning as a part of the vocationally oriented, family centered educational program in which the children were involved.

Financial information. Valid financial information was extremely difficult to obtain from disadvantaged families. Many families did not know their gross farm income, and only guessed at their living expenses. Many factors preclude making conclusive statements regarding the effect of the educational program concerning the financial situations of the family. Among these factors are (1) the low observed frequencies in income classifications, and (2) absence of valid data.

The experimental group families appeared to know more about their financial situation than did the control group families. This is substantiated by the fact that the experimental group included a lower percentage of families who had no record of their gross farm income and a high percentage of families who knew what their living expenses were for the year prior to the posttest than did the control group. The larger percentage of experimental group families who reported having living expenses of less than $2000 was probably due to the increased number of families who were cognizant of their living cost.

The farm business. Inadequate data were available about the farm businesses operated by the disadvantaged families with respect to production efficiency such as yields of crops, cost of production, birth of livestock, weaning rate of livestock for analysis by chi square. Instruments used to collect data related to the farm business should be revised to measure efficiency and to reflect improvements a family may make.

The home and surroundings. Pride of ownership seemed to emerge as the educational program coordinator worked with the families through group meetings and visits. The effect, although not statistically significant, was that many families cleaned up surroundings, remodeled parts of the house, and purchased new furniture. Hints of this imporvement may be observed in the facts that (1) a lower percentage of the experimental group residences were rated very poor, (2) a higher percentage of experimental group families' furniture was rated above average or better, (3) a higher percentage of the experimental families' lawns and grounds were rated above average or better, and (4) a higher percentage of the experimental families' surroundings were rated as excellent with regard to cleanliness and tidiness as compared to the control group.

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