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(REV)

EDUCATIONAL ASPIRATIONS OF FARM BOYS AND GIRLS.

SLOCUM, WALTER L.

XLO79703 WASHINGTON STATE UNIV., COLL. OF AG., PULLMAN

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*ASPIRATION, *RURAL URBAN DIFFERENCES, *RURAL YOUTH,
*OCCUPATIONAL CHOICE, QUESTIONNAIRES, PARENTAL ASPIRATION,
INTERVIEWS, *HIGH SCHOOL STUDENTS, PULLMAN, WASHINGTON

THE EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS OF RURAL HIGH SCHOOL STUDENTS WERE STUDIED IN RELATION TO SOCIAL, CULTURAL, AND ECONOMIC FACTORS. QUESTIONNAIRES WERE ADMINISTERED TO AND COMPLETED BY 3,535 RURAL HIGH SCHOOL STUDENTS. SUPPLEMENTAL INFORMATION WAS GATHERED BY PERSONAL INTERVIEWS WITH 992 STUDENTS. COUNSELORS, ADMINISTRATORS, AND TEACHERS RATED A SAMPLE OF 400 STUDENTS ON ACADEMIC ABILITY AND OCCUPATIONAL SUITABILITY. PARENTS PROVIDED INFORMATION ON INCOME, EDUCATIONAL VALUES, AND ASPIRATIONS. CONTRARY TO EXPECTATION, THE STUDY DID NOT CONFIRM PREVIOUS FINDINGS CONCERNING THE ASPIRATIONS OF FARM BOYS AND GIRLS. MORE FARM BOYS THAN NONFARM BOYS ASPIRE TO ATTEND COLLEGE, BUT THE ASPIRATIONS ARE UNREALISTIC IN THE LIGHT OF COLLEGE EXPENSE AND THE INFLUENCE OF HIGH SCHOOL GRADES ON COLLEGE SUCCESS. (RS)

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EDUCATIONAL ASPIRATIONS OF FARM BOYS AND GIRLS FEDERAL REPORT

**Cooperative Research Project No. 2055
Contract No. OE 4-10-036**

**Walter L. Slocum
October 1966**

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

**Department of Rural Sociology
Research Center
College of Agriculture
Washington State University
Pullman, Washington**

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U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education

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Final Report

Cooperative Research Project No. 2055 5-0376
Contract No. OE 4-10-036

**EDUCATIONAL ASPIRATIONS
OF FARM BOYS AND GIRLS**

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October 1966

U. S. Department of
Health, Education, and Welfare
Office of Education
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INTRODUCTION

This report presents information obtained from students who were enrolled in 1964-65 as sophomores, juniors and seniors in a random sample of 30 rural Washington high schools. The basic source of information was a questionnaire administered to more than 3,600 students. Supplementary information was obtained from nearly a thousand students by means of personal interviews. In addition, some information about most of those who were interviewed was obtained from counselors and parents.

The study was focused on factors associated with the level of educational aspirations and expectations of farm boys and girls.

BACKGROUND

It is well known that we live in a period of rapid change, but it is less well known that the labor requirements of American agriculture have been transformed over the past half century, especially since World War II. The number of farmers and farm laborers declined from a peak of 10.3 million in 1910 to an estimated 4.9 million in 1963. The exodus from farms continues. Preliminary reports for 1966 indicate a 20 per cent decline since 1959 in the number of farms. It appears that further migration from farms is in prospect. Walter R. Butcher has said that elimination of underemployment among farm workers and full

adoption of presently available technology would reduce full-time farm employment needs to about one million.¹

Most of those who have left agricultural employment have sought to enter nonfarm occupations. Many have moved to cities, while others have remained in rural areas. The farm-to-city migrants have tended to enter the urban labor force near the bottom of the occupational status ladder and to rise little, if any.

One of the principal barriers to successful occupational mobility confronting many migrants from farms has been their substandard educational achievements; nearly all well-paid urban occupations now require a high level of education both for entry and for promotion.

The employment outlook in agricultural occupations is such that most farm boys and girls will have to migrate from their farm homes and communities when they reach maturity. It is clear that the chances of farm-to-city migrants for successful occupational careers would be enhanced by a high level of educational achievements. Even those who remain in farming will need a great deal of technical and business education if they are to succeed in the competitive commercial agriculture of tomorrow.

1. Walter R. Butcher, "Productivity, Technology and Employment in Agriculture" (an unpublished background paper prepared for the National Commission on Technology, Automation and Economic Progress, 1965) pp. 28-29.

THE PROBLEM

Although it seems clear that there is urgent need for a very substantial increase in the educational accomplishments of farm-reared youths, evidence from many studies, some of which are cited below, indicates that the educational aspirations of farm boys and girls usually tend to be relatively low when compared to those of nonfarm boys and girls.

To say that this phenomenon is explained by residence on farms is not very helpful to teachers, counselors or others who may be interested in attempting to raise the level of the educational aspirations of students who live on farms. Consequently, the research problem is to identify other explanatory factors related to the low educational aspirations of farm youths. It is hoped that such information may provide a more useful basis for social action by persons and agencies interested in raising levels of aspiration and subsequent achievement.

THEORETICAL FRAME OF REFERENCE

The approach to the problem has been largely determined by the theoretical orientation of the principal investigator. The frame of reference is sociological. The student is viewed as a decision-maker who is a member of a number of social systems, some of which are of sufficient importance so that their values and norms may influence his preferences and behavior. These reference groups include his family, his friends, and his school.

It is also postulated that the decisions of a student may be influenced by acceptance of particular persons as role models, and that he may also be influenced by overt recognition of his achievements and potential by parents, teachers and other persons who are significant to him.

The decisions of a student are also conceptualized as potentially influenced by his self-concept. This, in turn, is a product of his experiences, including his evaluation of the esteem with which significant others regard him.

Finally, educational and occupational decisions are considered to be influenced by perceptions of external circumstances such as the occupational opportunity structure and the availability of financial support for education.

REVIEW OF RELATED RESEARCH

Educational Aspirations

There have been a great many studies since 1950 of the factors associated with educational aspirations. A bibliography published in November, 1965, lists 124 titles of journal articles, books and other relevant publications. A considerable portion

1. William P. Kuvlesky and G. W. Ohlendorf, A Bibliography of Educational Orientations of Youth (Department of Agricultural Economics and Sociology, Texas A & M University, College Station, Texas) November, 1965.

of this literature has been reviewed elsewhere by the principal investigator.¹ It is clear from these studies that the level of the educational aspirations of high school students is rising.

Rising aspiration levels are, of course, related to the record of outstanding educational progress in the United States, especially that which has accompanied the spectacular industrial developments and urban growth of the past quarter of a century. Scientific and technological developments require new and more sophisticated occupational skills. These are more easily learned by well educated workers. Consequently, educational requirements for entry into many occupations are rising sharply.

Furthermore, preference for promotions tends to be given to better educated workers.

The relationship of educational achievements to chances for occupational success has been communicated to the American people in many ways. There is convincing evidence that the message has been widely heard and understood. In fact, Angus Campbell and W. E. Eckerman report, on the basis of data from a nationwide survey, that many parents regard a college education as "the birthright of every American boy and girl."²

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1. Walter L. Slocum, Occupational Careers: A Sociological Perspective (Chicago: Aldine) (in press) Chapter 11, "Educational and Occupational Aspirations and Decisions."
 2. Angus Campbell and W. E. Eckerman, "What People Think About College," American Education, Vol. 1, No. 2 (February, 1965) p. 30.

College and university enrollments are increasing very rapidly. In 1965 more than 5.4 million students were enrolled in college. This can be contrasted to 3,610,000 in 1960 and 2,659,000 in 1950. Much of the current trend is due to rising expectations rather than to population increase alone, although college enrollments are greatly affected by the fact that the products of the post World War II "Baby Boom" are now reaching college age.

There are indications that this trend will continue to grow, encompassing an even larger proportion of the population of college age. In a 1954-55 study of Washington high school seniors, 38 per cent of the boys and 35 per cent of the girls intended to enroll at a college or university the next fall.¹ In 1960, a nationwide study of nearly a half million high school students (Project Talent) reported that 53 per cent of the senior boys and 46 per cent of the senior girls in their sample planned to enter college immediately after graduation. However, 73 per cent and 58 per cent, respectively, planned to attend college eventually, though only 53 per cent of the boys and 33 per cent of the girls expected to graduate from college.²

-
1. W. L. Slocum, Occupational and Educational Plans of High School Seniors From Farm and Non-Farm Homes (Pullman, Wash.: Washington Agricultural Experiment Stations Bulletin 564, February, 1956).
 2. John C. Flanagan, et. al., The American High School Student (Pittsburgh, Pa.: Project Talent Office, University of Pittsburgh, 1964).

These figures refer to high school students as a whole.

How do rural and urban youth compare?

Since a college education is becoming a prerequisite for more and more occupational careers, desire to attend such an institution seems the best criterion for measuring high educational aspirations. Thus, while there are other educational possibilities beyond high school, most of the studies examined were concerned only with the college-bound as opposed to those who intended to immediately enter the labor market, marry, or join the armed forces.

In the 1954-55 Washington study already cited, it was found that more senior farm than nonfarm students planned post high school enrollment in schools other than a college, more farm students planned to work and more were uncertain about future plans. ¹ A comparison made by Donald J. Bogue of the ranked median years of education of major occupational categories in 1950 clearly indicates that farm managers, owners and laborers were very close to the bottom with an average of less than nine years. ² Lower educational aspirations appear to be reflected in the high dropout rates among youth with fathers in these occupations. Of the 350,000 young people over age 16 who left elementary or

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1. Slocum, Occupational and Educational Plans of High School Seniors from Farm and Non-Farm Homes, op. cit.
 2. Donald J. Bogue, The Population of the United States (New York: The Free Press of Glencoe, 1959) Chapter 17 "Occupational Composition and Occupational Trends"

high school before graduation between January and October of 1961, a larger proportion were from rural than from urban¹ areas.

In the 1954-55 Washington study previously cited, 29 per cent of the farm boys planned to enroll in college immediately, while 40 per cent of their nonfarm classmates had similar plans. For girls the discrepancy was not so great, being 35 per cent² for farm girls and 36 per cent for nonfarm girls.

A special nationwide sample survey made by the USDA and the Census Bureau reported "About half of all nonfarm high school seniors, but only one-third of farm seniors in October, 1959, reported definite plans to attend college in 1960."³

A study in 1962 among juniors and seniors in 24 rural Illinois high schools showed that differences existed between farm and nonfarm students in rural communities.⁴ Lindstrom found that 42.6 per cent of farm boys planned to go to college, while 48.2 per cent of the nonfarm boys reported college plans.

-
1. Jacob Schiffman, "Employment of High School Graduates and Dropouts in 1961," Monthly Labor Review (May, 1962) 502-509.
 2. Slocum, Occupational and Educational Plans of High School Seniors from Farm and Non-Farm Homes, op. cit.
 3. James D. Cowhig and Charles B. Nam, Educational Status, College Plans, and Occupational Status of Farm and Non-Farm Youths, October, 1959, Census Series-ERS, No. 30, August, 1961.
 4. D. E. Lindstrom, "Educational and Vocational Needs of Rural Youth: A Pilot Study," Illinois Agricultural Economics, Vol. 4, No. 2 (July, 1964).

Of the girls, 30.6 per cent farm and 34.9 per cent nonfarm were college-bound.

Haller and Sewell, Burchinal, and Grigg¹ and Middleton have all reported lower educational aspirations among farm boys than among urban boys. The relationship between educational plans and actual college enrollment displays even sharper rural-urban differences.

A nationwide study by Nam and Cowhig in 1959-60 found that roughly twice as many 1960 high school graduates from families headed by white-collar workers (63 per cent) as from families headed by farmers or farm laborers (28 per cent) were enrolled in college in 1960.²

A review of a number of studies led A. O. Haller to make the following statement about the influence of plans to farm:

"Once formed, the plan regarding farming appears to have important consequences for the rest of the boy's career.

Plans to farm greatly influence the process of seeking

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1. A. O. Haller and W. H. Sewell, "Farm Residence and Levels of Educational and Occupational Aspiration," American Journal of Sociology, 62 (January, 1957) pp. 407-411; Russell Middleton and Charles Grigg, "Rural-Urban Differences in Aspirations," Rural Sociology 24 (December, 1959) pp. 347-354; and Lee Burchinal, "Differences in Educational and Occupational Aspirations of Farm, Small Town and City Boys," Rural Sociology 26 (June, 1961) pp. 107-121.
 2. Cowhig and Nam, Educational Status, College Plans and Occupational Status of Farm and Non-Farm Youths, op. cit.

information about nonfarm occupations, levels of nonfarm occupational aspirations, and post high school educational plans.Evidence for this is quite conclusive. In all studies in which the hypothesis has been tested, boys who plan to farm had much lower levels of educational aspirations than farm-reared boys who planned nonfarm careers."¹

Occupational Aspirations and Expectations

Most high school students have relatively high occupational aspirations.² Expectations tend to be somewhat lower and accomplishments lower still. For instance, of all high school seniors participating in a nationwide survey made in 1960 (Project Talent) 62 per cent of the boys and 52 per cent of the girls hoped to enter a professional or technical occupation.³ However, Census data show that only about 15 per cent of employed males and 15 per cent of employed females between the ages of 25 and 29 are in professional and technical occupations. Thus, if hopes are not to be dashed for many young people who hope to pursue careers in a professional or technical occupation, the number of such jobs will have to increase tremendously.

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1. A. O. Haller, "Educational and Occupational Choices of Farm Youth" paper presented at the National Conference on Problems of Rural Youth, Oklahoma State University, Stillwater, September, 1963, pp. 9-10.
 2. Flanagan, et. al., The American High School Student, op. cit.
 3. Ibid.

In Project Talent, the most popular field among boys was engineering, with 18 per cent expressing a desire to enter this occupation. Among seniors headed for college this rose to 23 per cent, with business and commerce following at 14 per cent.

Asked to name both their expected field of work and their preferred field, about the same percentage of senior boys in Project Talent reported engineering for both. About seven per cent planned to be skilled workers and about six per cent preferred such an occupation. Another six per cent expected to be school teachers but only five per cent preferred it. Approximately four per cent planned to be officers in the military service; five per cent expressed preference for this career. Not quite four per cent wanted to farm; slightly over four per cent expected to do so.

Careers appealing to the most girls in Project Talent included secretary, office clerk or typist, which together were chosen by 23 per cent of the female respondents. Teaching ranked second (14.6 per cent) and nursing third (11.2 per cent) with homemaking fourth (9.6 per cent). In naming their expectations, secretary, office clerk or typist were occupations which 30.3 per cent of the girls actually expected to attain. Nearly 17 per cent expected to teach in either elementary or secondary schools, while nursing lost a few with only 10.1 per cent expecting to enter this profession. Expectations were also greater than aspirations for homemaking (10.4 compared to 9.6). Among senior

girls planning to attend college, education was the most frequently named field of study (20 per cent) while business and commerce came second (16.9 per cent) and health professions third (16.1 per cent).

The 1954-55 Washington study of high school seniors previously cited reported that 37 per cent of all students in the sample wished to enter a professional occupation, while another 14.4 per cent desired semi-professional or managerial jobs. There were 19.5 per cent who hoped to have clerical work. Thus, close to three-fourths wanted occupations classified in the upper half of the occupational status hierarchy. Only 5.8 per cent aspired to a career in agriculture and 7.6 per cent wished to become skilled craftsmen or foremen.

About 37 per cent of the 1954-55 Washington respondents expected to enter an occupation other than the one they preferred. Seniors planning to attend schools below the college level were most likely to feel sure of achieving their occupational aspirations while the college-bound ranked second in degree of certainty. The greatest gap between occupational aspirations and expectations occurred among those who were uncertain about their plans and those who planned immediate marriage. The expected careers of the latter categories ranked slightly lower in the prestige

1. Slocum. Occupational and Educational Plans of High School Seniors From Farm and Non-Farm Homes, op. cit. p. 25.

scale, but approximately two-thirds of both sexes expected to pursue relatively high status occupations.¹ The author noted that the choices of the girls were mostly the middle status occupations while boys checked careers which extend over the entire range of occupational prestige. Very few girls aspired to professional occupations other than teaching.

But what about farm youth? Do their occupational aspirations and expectations differ from this pronounced trend toward professionalism? There appears to be two main lines of thought about this. Haller has reported, after a review of the literature, that occupational aspirations, expectations and attainments² are all lower for rural-farm than for urban youth. On the other hand, Kuvlesky takes issue with this viewpoint and argues that farm youths do not have lower occupational aspirations if farming is classified as a high status occupation, which he feels is defensible in view of the relative difficulty of getting established in farming.³

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1. Slocum, Occupational and Educational Plans of High School Seniors From Farm and Non-Farm Homes, op. cit., p. 29
 2. A. O. Haller, "Educational and Occupational Choices of Farm Youth," op. cit., p. 4.
 3. William P. Kuvlesky, "Occupational Aspirations and Expectations of Rural Youth: Some Suggestions for Action Programs," unpublished paper presented at the ASAW meeting, Jackson, Mississippi, February, 1963, pp. 7, 10.

Several studies have shown that people reared on farms are much less likely to be successful in urban occupations than are those reared in cities. ¹ One of these studies, reported by Freedman and Freedman in 1956, showed that the farm-reared workers in urban areas were more highly concentrated in the manual labor jobs and much less so in professional and technical occupations ² than were the urban-reared people.

Conclusions From the Research Reviewed

With the exception of the views expressed by Kuvlesky, there appears to be a high degree of consensus among investigators that relatively low educational aspirations and expectations are characteristic of rural students, particularly those who live on farms and among them especially farm boys who plan to farm. Furthermore, it appears that low occupational achievements have been characteristic of most farm boys who have entered the urban labor force.

1. Howard W. Beers and Catherine Heflin, Rural People in the City: A Study of the Socio-Economic Status of 297 Families in Lexington, Kentucky (Lexington: Kentucky Agricultural Experiment Station Bulletin 478, July, 1945); Lee Burchinal and Perry Jacobson, Migration and Adjustment of Farm and Non-Farm Families and Adolescents in Cedar Rapids, Iowa (Ames: Iowa Agricultural and Home Economics Experiment Station, Research Bulletin 516, July, 1963); Ronald and Deborah Freedman, "Farm-Reared Elements in the Non-Farm Population," Rural Sociology, 21 (March, 1956) pp. 50-61; Howard Beers and Catherine Heflin, Urban Adjustment of Rural Migrants: A Study of 297 Families in Lexington, Kentucky. (Lexington: Kentucky Agricultural Experiment Station Bulletin 487, June, 1947); Seymour M. Lipset, "Social Mobility and Urbanization," Rural Sociology, 20 (September-December, 1955), pp. 220-228.
2. Freedman and Freedman, Ibid.

OBJECTIVES

The principal objective of the study was to ascertain the nature and extent of influence of school factors on educational aspirations and expectations of farm boys and girls. The study was focused on factors over which the school has some control. However, it was recognized at the outset that it would be essential to appraise the extent to which friendships and selected aspects of the family life of farm youths tend to reinforce or negate school influences. The research was designed to permit farm vs. rural nonfarm comparisons with respect to the influences of the foregoing factors.

Because of the close relationship between occupational choice and educational aspirations and expectations, a supplementary objective of the study was to ascertain whether farm vs. rural nonfarm differences exist in selected aspects of the processes of occupational planning which might help to explain farm vs. rural nonfarm differences in educational aspirations and expectations.

HYPOTHESES

The hypotheses which guided the formulation of specific questions were drawn from the theoretical frame of reference specified above and from the findings of previous research at Washington State University and elsewhere. Some of the following

hypotheses were included in the project proposal while others were developed during the first year of the study:

Educational Aspirations and Expectations

Hypotheses relating to the influence on educational aspirations and expectations of reference group norms, interpersonal relationships, and self-concept follow:

Family Circumstances and Norms

1. The educational aspirations and expectations of students will tend to be positively related to the economic and social status of their parents, e.g., those from wealthy families will tend to have higher aspirations and expectations than those from poor families.
2. Students from farm families tend to place less importance than nonfarm students on the academic aspects of education and more importance on the vocational aspects.
3. The educational aspirations and expectations of farm students will tend to be inversely related to degree of dependence of the parental family on agriculture, e.g., those from full-time farms will tend to have lower aspirations than those from part-time farms.
4. Students from families with an "intellectual tradition" will tend to have higher educational aspirations and expectations than other students.

The expectations of many students were different from their preferences. However, almost half of the respondents (46.3 per cent of the boys and 47.0 per cent of the girls) indicated that they thought they would "probably" or "certainly" be in the occupation listed when they are 30. Residential differences in certainty of occupational expectations were slight.

Many youths enter the world of work as full-time workers in occupations that are different from those they would prefer as their first choice. To find out what entry occupations were anticipated, we asked the students "What is the job that you think you will actually have when you start to work full-time?" The pattern of responses indicates that many fewer students expect to start out as professional or technical workers. A rather large proportion (44.1 per cent of the boys and 32.7 per cent of the girls) failed to name a specific entry occupation. (See Table 4.)

Among those who named an entry occupation, 46.7 per cent of the boys and 40.7 per cent of the girls named a professional or technical occupation. Residential differences in the proportions choosing a professional or technical occupation were not statistically significant for girls and the differences for the boys were chiefly due to the relatively high proportion (22.9 per cent) of the farm boys who expected to enter farming.

Socio-economic Status of Family

Previous studies by sociologists have found socio-economic status to be associated with aspirations. To provide a basis

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Table 4. Expected Entry Occupations of Rural High School Students by Sex and Residence

Occupation	Boys			Girls		
	Total	Farm	Non-farm	Total	Farm	Non-farm
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Professional or Technical.....	46.9	41.2	50.5	41.0	41.6	40.0
Pilot.....	1.3	.9	1.6	.....^a	.....^a	.....^a
Architect.....	1.3	.3	1.9	.1	.....^a	.1
Artist.....	.9	.6	1.1	.9	.5	1.1
College Professor..	.4	.3	.2	.4	.3	.5
Engineer.....	9.3	7.6	10.6	.2	.5	.....^a
Forester.....	5.5	5.6	5.3	.....^a	.....^a	.....^a
Lawyer.....	2.4	2.5	2.6	.3	.....^a	.1
Musician.....	.5	.3	.6	.6	.5	.5
Natural Scientist..	1.3	1.4 ^a	1.1	.1	.....^a	.1
Nurse.....	.....^a	.....	.....^a	10.4	11.4	9.6
Physician or Surgeon.....	1.5	1.1 ^a	1.8	.8	.3	1.1
Social Worker.....	.3	.....	.3	1.3	1.9 ^a	.9
Social Scientist...	.4	.3	.5	.3	.....^a	.4
Teacher.....	10.6	10.7	11.0	17.6	18.3	17.3
Veterinarian.....	1.3	2.3	.6	.6	.3	.8
Other.....	9.9	7.3	11.3	7.4	7.6	7.5
Farmer or Farm Manager.....	10.1	21.7	3.2	.1	.3	.....^a
Manager, Official or Proprietor.....	3.5	2.5	4.0	1.1	1.1	1.1
Clerical.....	2.0	1.1	2.4	29.5	27.3	30.7
Sales Worker.....	1.1	.3	1.6	2.1	1.6	2.4
Craftsman or Foreman.	19.3	18.9	19.6	.9	.8	.9
Factory Machine Tender or Operative..	4.5	2.8	5.3	.2	.3	.1
Housewife.....	.....^b	.....^b	.....^b	8.8	11.4	7.5

Table 4. Expected Entry Occupations of Rural High School Students by Sex and Residence

Occupation	Boys			Girls		
	Total	Farm	Non-farm	Total	Farm	Non-farm
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Professional or Technical.....	46.9	41.2	50.5	41.0 ^a	41.6 ^a	40.0 ^a
Pilot.....	1.3	.9	1.6	.....^a	.....^a	.....^a
Architect.....	1.3	.3	1.9	.1	.....^a	.1
Artist.....	.9	.6	1.1	.9	.5	1.1
College Professor..	.4	.3	.2	.4	.3	.5
Engineer.....	9.3	7.6	10.6	.2	.5 ^a	.....^a
Forester.....	5.5	5.6	5.3	.....^a	.....^a	.....^a
Lawyer.....	2.4	2.5	2.6	.3	.....^a	.1
Musician.....	.5	.3	.6	.6	.5 ^a	.5
Natural Scientist..	1.3	1.4 ^a	1.1	.1	.....^a	.1
Nurse.....	.....^a	.....^a	.....^a	10.4	11.4	9.6
Physician or Surgeon.....	1.5	1.1 ^a	1.8	.8	.3	1.1
Social Worker.....	.3	.....^a	.3	1.3	1.9 ^a	.9
Social Scientist...	.4	.3	.5	.3	.....^a	.4
Teacher.....	10.6	10.7	11.0	17.6	18.3	17.3
Veterinarian.....	1.3	2.3	.6	.6	.3	.8
Other.....	9.9	7.3	11.3	7.4	7.6	7.5
Farmer or Farm Manager.....	10.1	21.7	3.2	.1	.3	.....^a
Manager, Official or Proprietor.....	3.5	2.5	4.0	1.1	1.1	1.1
Clerical.....	2.0	1.1	2.4	29.5	27.3	30.7
Sales Worker.....	1.1	.3	1.6	2.1	1.6	2.4
Craftsman or Foreman.	19.3	18.9	19.6	.9	.8	.9
Factory Machine Tender or Operative..	4.5	2.8	5.3	.2	.3	.1
Housewife.....	.....^b	.....^b	.....^b	8.8	11.4	7.5

Table 4.--Continued

Occupation	Boys			Girls		
	Total	Farm	Non-farm	Total	Farm	Non-farm
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Service Worker.....	2.4	2.8	2.3	16.2	15.0	17.0
Laborer--Farm.....	.9	1.7	.3	....^a	....^a	....^a
Laborer--Nonfarm.....	9.4	7.0	10.8	.3	.5	.1
Total Respondents						
Per Cent ^c	100.1	100.0	100.0	100.2	99.9	99.8
Number.....	1038	355	618	1169	367	757
Per Cent Not Responding.....						
	44.2	38.9	45.9	32.8	30.1	33.5

^aLess than .1 per cent.

^bNot applicable.

^cDue to problems of rounding, totals do not add to exactly 100.0 per cent for all columns.

Table 4.--Continued

Occupation	Boys			Girls		
	Total	Farm	Non-farm	Total	Farm	Non-farm
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Service Worker.....	2.4	2.8	2.3	16.2	15.0	17.0
Laborer--Farm.....	.9	1.7	.3	.....^a	.....^a	.....^a
Laborer--Nonfarm.....	9.4	7.0	10.8	.3	.5	.1
Total Respondents						
Per Cent ^c	100.1	100.0	100.0	100.2	99.9	99.8
Number.....	1038	355	618	1169	367	757
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	44.2	38.9	45.9	32.8	30.1	33.5

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for evaluating this factor, students were asked for their perceptions of family income or wealth and parents of students in the interview sample were asked to report the level of their 1964 incomes.

As we said, students were asked to report their perception of family income or wealth. Table 5 shows the distribution of responses.

TABLE 5. Perceived Level of Family Income by Sex and Residence

Perceived Level of Income	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
Above Average	31.9	32.5	31.5	25.8	27.2	25.2
Average	59.6	58.3	60.3	65.1	66.0	64.7
Below Average	8.5	9.2	8.1	9.1	6.8	10.1
Total Per Cent	100.0	100.0	99.9	100.0	100.0	100.0
Number	1640	544	1096	1622	515	1107

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	3.31	5.09
d. f.	4	4
P	>.50	>.20

Differences between farm and nonfarm students were negligible. It is interesting to note, however, that somewhat higher proportion of the boys than of the girls considered their family's economic status to be above the community average.

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The perceptions of the students were consistent with the reports of parents of interviewees concerning 1964 incomes (Table 6).

TABLE 6. Family Incomes in 1964 Reported by Parents of Interviewees by Sex and Residence of Students

Incomes	Boys		Girls	
	Total	Farm	Total	Farm
Under \$4,000	11.3	15.2	11.5	11.7
\$4,000 - 4,999	6.6	9.8	11.5	8.7
\$5,000 - 5,999	11.3	6.5	14.7	12.6
\$6,000 - 7,499	23.7	20.7	19.9	22.3
\$7,500 - 9,999	24.5	25.0	20.3	21.4
\$10,000 or over	22.6	22.8	22.0	23.3
Total Per Cent	100.0	100.0	100.0	100.0
Total n	274	92	286	103
Median	\$6,600	\$6,600	\$6,150	\$6,450

The median incomes of families of boys who were interviewed were \$6,600 compared to \$6,150 for families of girls. Median incomes of families of farm boys were the same as those of families of all boys while the median incomes of farm girls were higher (although not at a statistically significant level) than family incomes of all girls.

Intellectual Orientation of Family

A number of indices of the intellectual orientation of students' families were examined. These included reported

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\$6,000 - 7,499	23.7	20.7	19.9	22.3
\$7,500 - 9,999	24.5	25.0	20.3	21.4
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Intellectual Orientation of Family

A number of indices of the intellectual orientation of students' families were examined. These included reported

values and some information about education of brothers and sisters.

Table 7 shows that fathers of farm boys and girls tended to be somewhat less well educated than parents of nonfarm boys and girls ($P < .001$). However, we should not overlook the fact that the level of educational achievements of fathers of farm students was quite high. In fact, 54.5 per cent of the fathers of the farm girls and 60.9 per cent of the fathers of the nonfarm girls had at least a high school education. The comparable percentages for fathers of farm boys and nonfarm boys were 58.2 per cent and 63 per cent, respectively.

TABLE 7. Father's Education by Sex and Residence of Student

No of Years of School Completed by Father	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
College-5 or more yrs.	5.5	2.7	6.9	4.1	1.8	5.2
College-4 yrs.	5.1	5.1	5.0	4.3	5.0	4.0
College-1 to 3 yrs.	11.8	15.6	9.9	11.2	13.1	10.3
High School Graduate	37.5	39.6	36.4	37.0	41.0	35.0
High School -1 to 3 yrs.	14.2	11.6	15.5	17.4	11.9	20.0
Grade School Graduate	20.0	20.6	19.8	20.3	23.0	19.1
Grade School-1 to 7 yrs.	5.9	4.8	6.4	5.7	4.4	6.4
Total Per Cent	100.0	100.0	99.9	100.0	100.2	100.0
Number	1582	525	1057	1548	505	1043

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	27.5	34.1
d. f.	6	6
P	< .001	< .001

education of father and mother, a scale of family educational values and some information about education of brothers and sisters.

Table 7 shows that fathers of farm boys and girls tended to be somewhat less well educated than parents of nonfarm boys and girls ($P < .001$). However, we should not overlook the fact that the level of educational achievements of fathers of farm students was quite high. In fact, 54.5 per cent of the fathers of the farm girls and 60.9 per cent of the fathers of the nonfarm girls had at least a high school education. The comparable percentages for fathers of farm boys and nonfarm boys were 58.2 per cent and 63 per cent, respectively.

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College-4 yrs.	5.1	5.1	5.0	4.3	5.0	4.0
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High School Graduate	37.5	39.6	36.4	37.0	41.0	35.0
High School -1 to 3 yrs.	14.2	11.6	15.5	17.4	11.9	20.0
Grade School Graduate	20.0	20.6	19.8	20.3	23.0	19.1
Grade School-1 to 7 yrs.	5.9	4.8	6.4	5.7	4.4	6.4
Total Per Cent	100.0	100.0	99.9	100.0	100.2	100.0
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Statistical Test of Farm vs. Nonfarm Differences		
	Boys	Girls
Chi-square	27.5	34.1
d. f.	6	6
P	< .001	< .001

Mothers tended to have more education than fathers, a finding that is consistent with census data. As in the case of education of fathers, most of the mothers of farm boys and girls were quite well educated but like their husbands they tended to have less education than the mothers of nonfarm boys and girls (Table 8).

TABLE 8. Mother's Education by Sex and Residence of Student

No. of Years of School Completed by Mother	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
College-5 or more yrs.	3.7	3.6	3.7	2.5	2.8	2.3
College-4 yrs.	6.3	8.0	5.5	4.9	5.8	4.5
College-1 to 3 yrs.	12.8	13.7	12.4	12.8	14.7	12.0
High School Graduate	48.5	48.4	48.5	46.5	48.0	45.8
High School-1 to 3 yrs.	15.8	15.0	16.2	19.6	17.3	20.7
Grade School Graduate	10.4	10.3	10.4	11.3	10.1	11.8
Grade School-1 to 7 yrs.	2.5	1.0	3.3	2.4	1.4	2.9
Total Per Cent	100.0	100.0	100.0	100.0	100.1	100.0
Number	1584	525	1059	1572	504	1068

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	12.05	9.83
d. f.	6	6
P	>.05	>.10

The percentages with at least a high school education were 70.1 per cent and 64.6 per cent, respectively, for farm boys and girls

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College-4 yrs.	6.3	8.0	5.5	4.9	5.8	4.5
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High School Graduate	48.5	48.4	48.5	46.5	48.0	45.8
High School-1 to 3 yrs.	15.8	15.0	16.2	19.6	17.3	20.7
Grade School Graduate	10.4	10.3	10.4	11.3	10.1	11.8
Grade School-1 to 7 yrs.	2.5	1.0	3.3	2.4	1.4	2.9
Total Per Cent	100.0	100.0	100.0	100.0	100.1	100.0
Number	1584	525	1059	1572	504	1068

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	Boys	Girls
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P	>.05	>.10

The percentages with at least a high school education were 70.1 per cent and 64.6 per cent, respectively, for farm boys and girls

and 73.7 per cent and 71.3 per cent, respectively, for nonfarm boys and girls. (These differences were not statistically significant at the .05 level).

A Guttman-type scale was developed to reflect the student's perceptions of the educational values of his family. Slightly higher proportions of farm boys than of nonfarm boys and of farm girls than of nonfarm girls were classified as having high educational values (Table 9), but the differences were not statistically significant at the .05 level.

TABLE 9. Family Educational Orientation by Sex and Residence

Educational Orientation	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
Low	18.0	17.3	18.3	17.8	16.0	18.6
Medium	44.2	43.0	44.7	40.2	38.6	41.0
High	37.8	39.6	36.9	42.0	45.4	40.5
Total Per Cent	100.0	99.9	99.9	100.0	100.0	100.1
Number	1373	462	911	1373	450	923

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	5.58	6.52
d. f.	6	6
P	>.30	>.30

and 73.7 per cent and 71.3 per cent, respectively, for nonfarm boys and girls. (These differences were not statistically significant at the .05 level).

A Guttman-type scale was developed to reflect the student's perceptions of the educational values of his family. Slightly higher proportions of farm boys than of nonfarm boys and of farm girls than of nonfarm girls were classified as having high educational values (Table 9), but the differences were not statistically significant at the .05 level.

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High	37.8	39.6	36.9	42.0	45.4	40.5
Total Per Cent	100.0	99.9	99.9	100.0	100.0	100.1
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Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	5.58	6.52
d. f.	6	6
P	>.30	>.30

Almost 15 per cent of the boys and 18.3 per cent of the girls reported that one or more of their brothers or sisters had dropped out of school before graduating from high school (see Table 10). Nonfarm boys and girls were somewhat more likely than farm boys and girls to report that one or more siblings had dropped out of school. (These differences were not statistically significant for either sex.)

TABLE 10. Number of Brothers and Sisters Who Dropped Out of School by Sex and Residence

Number	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
None	85.2	85.7	84.9	81.7	86.7	79.4
1	8.5	9.0	8.2	11.2	9.3	12.1
2 or more	6.4	5.4	7.0	6.9	4.0	8.5
Total Per Cent	100.1	100.1	100.1	99.8	100.0	100.0
Number	1523	502	1021	1529	482	1047

Statistical Test of Farm vs Nonfarm Differences

	Boys	Girls
Chi-square	11.3	12.1
d. f.	9	9
P	>.20	>.20

About a third of the students reported that one or more of their older brothers or sisters had attended college (Table 11). Slightly higher proportions of farm boys than of nonfarm boys

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1	8.5	9.0	8.2	11.2	9.3	12.1
2 or more	6.4	5.4	7.0	6.9	4.0	8.5
Total Per Cent	100.1	100.1	100.1	99.8	100.0	100.0
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About a third of the students reported that one or more of their older brothers or sisters had attended college (Table 11). Slightly higher proportions of farm boys than of nonfarm boys

made this report. Nonfarm girls were a little more likely than farm girls to have collegiate siblings. (Farm vs. nonfarm differences were not statistically significant at the .05 level for either boys or girls.)

TABLE 11. Number of Brothers and Sisters Who Had Attended College by Sex and Residence

Number	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
None	66.9	64.2	68.3	68.1	63.2	70.4
1	22.0	22.8	21.5	22.4	25.2	21.1
2 or more	11.1	13.0	10.2	9.7	11.6	8.5
Total Per Cent	100.0	100.0	100.0	100.2	100.0	100.0
Number	1534	508	1026	1531	484	1047

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	8.99	12.14
d.f.	9	9
P	>.30	>.20

Discussions of Plans With Teachers and Counselors

Slightly less than half of the students acknowledged that they had discussed their educational and occupational plans with one or more teachers (Table 12). Residential differences between girls were negligible. However, a somewhat higher proportion of farm girls than of farm boys reported that they had discussed their plans with teachers. The difference, although small, was statistically significant ($P < .05$).

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Number	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
None	66.9	64.2	68.3	68.1	63.2	70.4
1	22.0	22.8	21.5	22.4	25.2	21.1
2 or more	11.1	13.0	10.2	9.7	11.6	8.5
Total Per Cent	100.0	100.0	100.0	100.2	100.0	100.0
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Statistical Test of Farm vs. Nonfarm Differences

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TABLE 12. Students' Reports of Discussions of Educational and Occupational Plans with Teachers by Sex and Residence

Extent of Discussion	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
None	51.8	48.3	53.5	51.3	51.0	51.4
Some	44.5	47.0	43.2	45.0	44.6	45.3
Very Much	3.7	4.7	3.3	3.7	4.5	3.3
Total Per Cent	100.0	100.0	100.0	100.0	100.1	100.0
Number	1661	555	1106	1625	516	1109

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	5.19	1.25
d.f.	2	2
P	>.05	>.50

A substantial number of students (17.7 per cent of the total) were in schools which did not have a counselor. Slightly less than half (48.5 per cent) of the boys and four out of ten (41.5 per cent) of the girls who had access to a counselor had discussed their plans with a counselor (Table 13). Slightly fewer of the farm boys but slightly more of the farm girls than of their non-farm counterparts had discussed their plans with a counselor. However, the differences were not statistically significant at the .05 level.

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Extent of Discussion	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
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Some	44.5	47.0	43.2	45.0	44.6	45.3
Very Much	3.7	4.7	3.3	3.7	4.5	3.3
Total Per Cent	100.0	100.0	100.0	100.0	100.1	100.0
Number	1661	555	1106	1625	516	1109

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	5.19	1.25
d.f.	2	2
P	>.05	>.50

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TABLE 13. Students' Reports of Discussion of Plans with a School Counselor by Sex and Residence

Extent of Discussion	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
None	51.5	54.9	49.9	59.5	57.8	60.2
Some	44.6	41.6	46.2	34.2	34.8	33.9
Very Much	3.8	3.5	3.9	6.4	7.4	5.9
Total Per Cent	99.9	100.0	100.0	100.1	100.0	100.0
Number	1364	452	912	1221	365	856

Statistical Test of Farm vs. Nonfarm Differences

	<u>Boys</u>	<u>Girls</u>
Chi-square	6.74	.97
d.f.	2	2
P	<.05	>.70

Reported Influence of Teachers and Counselors

Well over half of the students denied that teachers had influenced their educational or occupational plans.

Farm students of both sexes were somewhat more likely than their nonfarm counterparts to report that teachers had influenced their educational or occupational plans (Table 14). However, the residential differences were not statistically significant.

TABLE 13. Students' Reports of Discussion of Plans with a School Counselor by Sex and Residence

Extent of Discussion	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
None	51.5	54.9	49.9	59.5	57.8	60.2
Some	44.6	41.6	46.2	34.2	34.8	33.9
Very Much	3.8	3.5	3.9	6.4	7.4	5.9
Total Per Cent	99.9	100.0	100.0	100.1	100.0	100.0
Number	1364	452	912	1221	365	856

Statistical Test of Farm vs. Nonfarm Differences

	<u>Boys</u>	<u>Girls</u>
Chi-square	6.74	.97
d.f.	2	2
P	<.05	>.70

Reported Influence of Teachers and Counselors

Well over half of the students denied that teachers had influenced their educational or occupational plans.

Farm students of both sexes were somewhat more likely than their nonfarm counterparts to report that teachers had influenced their educational or occupational plans (Table 14). However, the residential differences were not statistically significant.

**TABLE 14. Students' Reports of Teachers' Influence
by Sex and Residence**

Influence	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
None	57.1	54.1	58.6	59.7	58.3	60.4
Some	35.3	38.5	33.8	32.2	33.3	31.7
Very Much	7.5	7.4	7.6	8.1	8.4	7.9
Total Per Cent	99.9	100.0	100.0	100.0	100.0	100.0
Number	1621	543	1078	1589	511	1078

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	3.6	.626
d.f.	2	2
P	>.20	>.70

In response to a question concerning teacher encouragement to go to college, a little over a third indicated that one or more teachers had encouraged them to go to college; more farm students than nonfarm students reported that teachers had encouraged them to go to college. These residential differences were statistically significant for boys but not for girls (Table 15).

TABLE 15. Students' Reports of Teachers' Encouragement To Go To College by Sex and Residence

Teacher Encouragement Regarding College	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
Encouraged	34.0	37.7	32.0	35.0	37.0	34.1
Discouraged	1.9	1.0	2.4	1.2	1.2	1.2
Had no effect	64.1	61.3	65.5	63.7	61.8	64.6
Total Per Cent	100.0	100.0	99.9	99.9	100.0	99.9
Number	1558	525	1033	1542	487	1055

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	8.15	1.19
d.f.	2	2
P	<.02	>.50

Among students in schools which provided counseling services, nearly six out of ten students denied that counselors had influenced their educational or occupational planning (Table 16). Residential differences were not definitive. A slightly higher proportion of farm than of nonfarm girls and a slightly higher proportion of nonfarm than of farm boys reported that their educational or occupational plans had been influenced by a school counselor. These residential differences are statistically significant for boys but not for girls.

**TABLE 16. Students' Reports of Counselor Influence
by Sex and Residence**

Influence	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
None	59.8	62.3	58.6	59.5	57.8	60.2
Some	33.5	31.0	34.7	34.2	34.8	33.9
Very Much	6.7	6.7	6.7	6.4	7.4	6.0
Total Per Cent	100.0	100.0	100.0	100.1	100.0	100.1
Number	1271	416	855	1221	365	856

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	1.79	1.13
d.f.	2	2
P	>.30	>.50

Peer Group Culture

The indicator of peer group culture was a Guttman-type scale of perceptions of respondents concerning agreement of friends with specific statements about education. The scale will be referred to in this report as the peer group educational orientation scale. Residential differences were not the same for boys and girls and the differences that were found were not statistically significant (Table 17).

TABLE 17. Perception of Peer Group Educational Orientation by Sex and Residence

Educational Orientation of Peers	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
Low	30.5	28.3	31.8	16.9	14.9	17.8
Medium	27.8	27.3	28.0	23.2	25.7	22.0
High	30.0	33.0	28.6	37.5	35.0	38.6
Very High	11.6	11.5	11.7	22.5	24.5	21.6
Total Per Cent	99.9	100.1	100.1	100.1	100.1	100.0
Number	1389	471	918	1415	461	954

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	4.90	7.26
d.f.	5	5
P	>.30	>.10

Scholastic Performance

The scholastic achievements of a student are a reflection of intelligence, interest, effort and social skill of the student. Grades represent a form of recognition of merit and probably serve an important motivating function. In this study, we asked each student to indicate the level of grades received on his or her last report card (Table 18).

1. In a few schools, we obtained information from school records concerning grades of students in the interview sample. This information has not yet been analyzed fully, but it appears that there is a fairly high degree of consistency between recorded and reported grades.

TABLE 18. Reported Grades by Sex and Residence

Grades	Boys			Girls		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm
A's	4.2	3.1	4.8	8.8	10.5	8.0
A's and B's	13.0	15.7	11.6	22.0	23.3	21.3
B's	13.1	13.7	12.9	17.6	19.4	16.8
B's and C's	28.5	29.5	28.0	26.0	24.3	26.8
C's	20.3	19.3	20.8	15.3	13.2	16.3
C's and D's	15.8	14.8	16.3	7.8	7.6	7.9
D's	3.3	2.5	3.7	1.8	1.6	1.9
D's and F's	1.8	1.4	2.0	.7	.2	1.0
Total Per Cent	100.0	100.0	100.1	100.0	100.1	100.0
Number	1660	555	1105	1621	515	1106

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	11.09	10.65
d.f.	7	7
P	>.10	>.10

On the basis of reported grades, the great bulk of the students appear to be reasonably successful. Only 10.3 per cent of the girls and 20.9 per cent of the boys reported grades below C. Similar differences between the sexes were found with respect to high grades. Among the girls 30.8 per cent reported that the grades on their last report card were mostly A's or A's and B's compared to 17.2 per cent of the boys. The finding that girls

tended to have higher grades than boys is consistent with the results of earlier studies by the principal investigator. Farm vs. nonfarm differences in the distribution of grades were not statistically significant at the .05 level.

Self-Appraisal of Academic Ability

A Guttman-type scale was constructed on the basis of self-appraisal of academic ability (question 83 of the classroom questionnaire) using the semantic differential technique.¹ The resulting scale will be called the academic self-concept scale.

Farm boys and girls were more likely than nonfarm boys and girls to appraise their academic abilities favorably (Table 19). However, the differences were not statistically significant at the .05 level.

TABLE 19. Self-Appraisal of Academic Ability by Sex and Residence

Self-Appraisal	Boys			Girls		
	Total ¹	Farm	Nonfarm	Total	Farm	Nonfarm
High	28.7	32.4	27.1	37.7	40.6	36.2
Medium	14.4	12.4	15.3	16.1	12.3	18.1
Low	56.9	55.2	57.6	46.2	47.1	45.8
Total Per Cent	100.0	100.0	100.0	100.0	100.0	100.1
Number	334	105	229	409	65	124

Statistical Test of Farm vs. Nonfarm Differences

	Boys	Girls
Chi-square	32.21	21.81
d.f.	24	18
P	>.10	>.70

1. Unfortunately, the semantic differential was near the end of the questionnaire and information was obtained from a relatively small proportion of the students.

SOCIAL AND CULTURAL FACTORS ASSOCIATED WITH EDUCATIONAL ASPIRATIONS AND EXPECTATIONS

As noted in the review of related research, other studies, including those of the principal investigator, have demonstrated that paramount among the many social and cultural factors that exert an influence on the level of educational aspirations of high school students are family circumstances and norms, peer group culture, various school experiences and personal factors, especially the student's self-concept. Most studies that have investigated the influence of farm residence have found that living on a farm tends to depress the level of educational aspirations. As we have already seen, this is not the case with the students in the current sample.

Because the weight of previous evidence emphasized the differential and depressing consequences of farm residence, our research design was set up so as to control for farm vs. nonfarm residence, thus giving us an opportunity to investigate the differential effect of selected social and cultural factors on farm vs. nonfarm high school students. In view of the fact that in our sample the traditional expectation with respect to the depressing affect of farm residence on the level of educational aspirations and expectations has been overturned, major attention in the analysis of the influence of social and cultural factors will be directed to the relationship between these factors and the dependent variables of educational aspirations and expectations.

The evidence relevant to the hypotheses concerning social and cultural factors is presented below under the following headings: family circumstances and norms, peer group norms, school experiences and activities and personal factors.

Family Circumstances and Norms

Hypothesis 1:

"The educational aspirations and expectations of students will tend to be positively related to the economic and social status of their parents, e.g., those from wealthy families will tend to have higher aspirations than those from poor families."

Relevant information was obtained from all students and from most parents of students in the interview sample.

The level of educational aspiration was quite high for all categories of perceived family income; the percentage of students who wished to go to college ranged from 70.8 per cent for those from homes with below average incomes to 83.4 per cent from homes with above average incomes (Appendix E, Table E-1).

Students who reported that they thought that the income or wealth of their family was above the community average tended to have higher educational aspirations than students who thought that their family incomes were average or below. The level of association was not high but it was statistically significant for the total of all respondents, for both sexes, and for farm students (Table 20). Substantially the same pattern of relationships was found for educational expectations.

TABLE 20. Association Between Educational Aspirations and Expectations and Students' Perceptions of Level of Family Income

Sex and Residence	* d.f.	2 X	P	C	Direction of C **
Aspirations of					
All Students	6	48.5	.001	.125	+
Boys	6	23.4	.001	.134	+
Girls	6	21.8	.002	.120	+
Farm Residents	6	13.2	.05	.113	+
Expectations of					
All Students	6	63.2	.001	.146	+
Boys	6	21.7	.002	.121	+
Girls	6	46.3	.001	.177	+
Farm Residents	6	19.5	.01	.141	+

Parents of students in the interview sample were requested to provide information concerning the level of their 1964 family income. Examination of the relationship between the educational aspirations and expectations of students and family income as reported by parents reveals the existence of a statistically significant and somewhat stronger positive relationship between the economic status of the family and the level of aspirations (Table 21). The relationship was least pronounced for the level of educational expectations of farm students.

* Degrees of freedom

**Direction was determined by inspection of substantive data presented in Appendix E.

**TABLE 21. Association Between Educational Aspirations
and Expectations and Parents' Reports of 1964
Family Income**

Sex and Residence	<u>d.f.</u>	<u>²X</u>	<u>P</u>	<u>C</u>	<u>Direction of C</u>
Aspirations of					
All Students	15	55.7	.001	.301	+
Boys	15	40.7	.001	.360	+
Girls	15	36.6	.004	.337	+
Farm Residents	15	33.2	.002	.381	+
Expectations of					
All Students	6	39.7	.001	.264	+
Boys	6	37.4	.001	.353	+
Girls	6	15.2	.02	.231	+
Farm Residents	6	9.9	.20	.226	+

Examination of substantive data presented in Appendix E, Table E-2 shows that among students whose parents reported that their 1964 family income was \$10,000 or more, only 11.2 per cent indicated that they would be content to terminate their formal education without going to college. This may be contrasted with 50 per cent of those whose parents reported incomes of less than \$4,000. Among the students from families with 1964 incomes of \$10,000 or over, 68 per cent aspired to a bachelor's degree or more and 54.3 per cent expected to attain their goal. In contrast, among those from families with incomes of less than \$4,000, 34.4

per cent aspired to one or more college degrees and 20.7 per cent expected to receive at least a bachelor's degree. Among farm students from families which reported 1964 incomes of less than \$4,000, the level of educational expectations was higher than for the total of all students; 29.1 per cent of the farm students from these homes expected to obtain at least a bachelor's degree, compared to 20.7 per cent of all students from families reporting less than \$4,000 of 1964 income.

On the basis of the data examined above, it may be concluded that there is support for the hypothesis under test; namely that students from wealthy families tend to have higher educational aspirations than those from poor families. The data indicate that the relationship exists for both boys and girls, although it is less pronounced for girls than for boys. The relationship also exists for both farm and nonfarm residents, although weaker for farm than for nonfarm residents. In the case of farm residents, the data suggest unrealistically high educational expectations on the part of some students.

Hypothesis 2:

"Students from farm families tend to place less importance than nonfarm students on the academic aspects of education and more importance on the vocational aspects."

This hypothesis was tested by an analysis of the association of the pattern of high school courses planned by the student and aspiration levels. Information on courses was obtained in response

to the question "Since completing the eighth grade, how many semesters will you have studied each of the following subjects by the end of high school?" The subjects listed were agriculture, algebra, art and music, biology, business, chemistry, English, foreign language, geometry, history, home economics, physical education, physics, shop, social studies and trigonometry.

The proportions of students taking specified semesters of elective courses in science, mathematics, and foreign language are shown in Appendix E, Tables E-3 and E-4. The proportions of students taking specified semester hours of elective vocational courses (vocational agriculture, business, home economics and shop) are presented in Appendix E, Tables E-5 and E-6.

The data presented in Table 22 show only slight differences between farm and nonfarm residents with respect to the average number of elective academic courses planned. The averages of farm and nonfarm girls were identical, while nonfarm boys had slightly higher averages than farm boys.

TABLE 22. Average Number of Vocational and Elective Academic Courses Planned by Sex and Residence

Sex and Residence	Vocational Courses		Academic Courses	
	Average	Standard Deviation	Average	Standard Deviation
All Students	4.9	2.6	4.2	2.8
Boys	5.5	2.8	4.4	3.1
Girls	4.3	2.2	4.0	2.5
Farm	5.4	2.7	4.1	2.7
Boys	6.3	2.9	4.2	3.0
Girls	4.4	2.2	4.0	2.5
Nonfarm	4.7	2.5	4.2	2.8
Boys	5.1	2.7	4.5	3.1
Girls	4.2	2.2	4.0	2.5

The situation was somewhat different with respect to the plans of students with respect to vocational courses. Farm boys planned to take significantly more vocational courses, which is probably due chiefly to the fact that many farm boys, but few nonfarm boys, elected to take vocational agriculture which was available in about half of the 30 schools. Farm girls planned to take slightly more vocational courses than nonfarm girls, but the differences were not statistically significant.

On the basis of this evidence, we may conclude that the hypothesis is only partially supported and requires restatement to remove the indication of a nonacademic orientation on the part of Washington farm students.

Hypothesis 3:

"The educational aspirations and expectations of farm students will tend to be inversely related to dependence of the parental family on agriculture, e.g., those from full-time farms will tend to have lower aspirations than those from part-time farms."

Parents of students from farms in the interview sample were asked to indicate whether they were full-time or part-time farmers and if they were part-time farmers they were also asked to indicate whether most of their income was derived from farm or nonfarm sources.

Students from farm families whose income was reported by parents to be mostly from farm sources had higher levels of educational aspirations than those from farm families whose incomes came mostly from nonfarm sources. Differences were especially marked with respect to educational expectations; 86.9 per cent of the farm students from full-time farms aspired to go to college, compared to 81.5 per cent of those from families whose incomes were mostly from nonfarm sources. College expectations were expressed by 90 per cent of the students from full-time farms and by only 66.3 per cent of those whose families' incomes were mostly from nonfarm sources (further details are presented in Appendix E, Table E-7).

Thus, it appears that the results do not support the hypothesis.

The level of association shown in Table 23 is not high but it is statistically significant.

TABLE 23. Association Between Educational Aspirations and Expectations and Student Reports of Degree of Dependence on Farming

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Farm Students	3	13.4	.01	.115	+
Farm Boys	3	12.7	.01	.153	+
Farm Girls	3	5.7	.02	.109	+
Expectations of					
All Farm Students	3	30.7	.001	.177	+
Farm Boys	3	19.9	.001	.196	+
Farm Girls	3	12.1	.01	.162	+

Hypothesis 4:

"Students from families with an 'intellectual tradition' will tend to have higher educational aspirations and expectations than other students."

One indicator of the intellectual tradition or orientation of the family is the education of the father. Examination of the relationship between educational aspirations and expectations and education of the student's father revealed a positive association which was stronger for expectations than for

aspirations. For both the relationship was significant at the .001 level of significance (see Table 24).

TABLE 24. Association Between Educational Aspirations and Expectations and Education of Father

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	12	225.6	.001	.267	+
Boys	12	136.1	.001	.288	+
Girls	12	103.7	.001	.260	+
Farm Residents	18	78.6	.001	.272	+
Expectations of					
All Students	12	295.8	.001	.309	+
Boys	12	154.	.001	.312	+
Girls	12	144.9	.001	.309	+
Farm Residents	18	87.8	.001	.293	+

The differences in aspiration levels between students with highly educated fathers (4 or more years of college) and those with fathers having only an elementary education were quite dramatic. All but 6 per cent of the former aspired to go to college compared with 64.5 per cent of the latter, and the difference was even more pronounced for expectations; 92.9 per cent of students with higher educated fathers expected to go to college

compared to only 55.3 per cent of those whose fathers had only an elementary education (further details are presented in Appendix E, Tables E-8 and E-9).

Another indicator is the level of mother's education. As in the case of father's education, there was a positive association (Table 25) which was about the same strength for aspirations but was weaker than association with father's education insofar as educational expectations are concerned. Data concerning the percentages of students aspiring to various levels of education according to the various categories of mother's education is presented in Appendix E, Tables E-10 and E-11.

TABLE 25. Association Between Educational Aspirations and Expectations and Education of Mother

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	12	221.4	.001	.264	+
Boys	12	106.5	.001	.257	+
Girls	12	122.3	.001	.278	+
Farm Residents	18	75.9	.001	.268	+
Expectations of					
All Students	12	223.9	.001	.272	+
Boys	12	92.6	.001	.247	+
Girls	12	134.4	.001	.297	+
Farm Residents	18	83.9	.001	.287	+

Another indicator of family intellectual traditions is whether older brothers and sisters have attended college. It is evident from data presented in Table 26 that there is a small positive statistically significant association between both educational aspirations and educational expectations and whether one or more brothers and sisters have attended colleges. Percentages are shown in Appendix E, Table E-12.

TABLE 26. Association Between Educational Aspirations and Expectations and Number of Brothers and Sisters Who Attended College

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	6	74.8	.001	.159	+
Boys	6	41.4	.001	.166	+
Girls	6	39.1	.001	.164	+
Farm Residents	12	29.9	.01	.175	+
Expectations of					
All Students	6	74.8	.001	.159	+
Boys	6	41.4	.001	.166	+
Girls	6	39.1	.001	.164	+
Farm Residents	12	30.7	.01	.81	+

A negative indicator of the intellectual tradition of the family is the number of children who have dropped out of school

Before completing high school. As expected, there was a negative association (see Table 27) between siblings who dropped out of school and educational aspirations and expectations. Percentages presented in Appendix E, Table E-13 indicate an especially pronounced effect on the level of educational expectations of girls. Only 52 per cent of the girls who reported that one or more brothers or sisters had dropped out of school aspired to college, compared to 76.5 per cent of girls with no brothers or sisters who had dropped out of school.

TABLE 27. Association Between Educational Aspirations and Expectations and Number of Brothers and Sisters Who Were Dropouts

Sex and Residence	d.f.	² K	P	C	Direction of C
Aspirations of					
All Students	3	157.4	.001	.228	-
Boys	3	80.0	.001	.229	-
Girls	3	72.9	.001	.221	-
Farm Residents	6	58.5	.001	.242	-
Expectations of					
All Students	3	169.7	.001	.243	-
Boys	3	62.9	.001	.210	-
Girls	3	96.5	.001	.259	-
Farm Residents	12	83.3	.001	.291	-

As noted earlier, a Guttman-type scale of perceived family attitudes toward education was constructed as a measure of family intellectual orientation. As in the case of other indicators of family intellectual traditions, the analysis revealed positive and statistically significant relationships between scores on the scale and levels of educational aspirations and expectations (Table 28).

TABLE 28. Association Between Educational Aspirations and Expectations and Score on Scale of Family Orientation Toward Education

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	18	149.0	.001	.227	+
Boys	18	101.1	.001	.262	+
Girls	18	68.5	.001	.218	+
Farm Residents	18	71.4	.001	.269	+
Expectations of					
All Students	18	114.4	.001	.205	+
Boys	18	65.2	.001	.218	+
Girls	18	70.0	.001	.225	+
Farm Residents	18	28.7	.05	.179	+

Considering the data provided by the several indicators presented above, it may be concluded that substantial support exists for the hypothesis. It appears that the intellectual tradition

of a family does have a substantial influence on the level of educational aspirations and expectations.

Peer Group Culture

Hypothesis 5:

"Students who belong to and identify themselves with specific peer groups will tend to have similar educational aspirations and expectations, e.g., farm students who associate chiefly with other farm students in school related groups and activities will tend to have lower educational aspirations and expectations than other farm students."

As a means of testing the second part of this hypothesis, students were asked to indicate what proportion of their friends were from farms. The data presented in Table 29 and Appendix E, Table E-14 reveal a small but statistically significant positive relationship between the level of educational aspirations and educational expectations and the proportion of friends who are from farms. It appears that students who report that many of their friends are from farms (even though they themselves are not from farms) tend to have higher aspirations and expectations.

TABLE 29. Association Between Educational Aspirations and Expectations and Proportion of Friends From Farms

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	6	48.5	.001	.127	+
Boys	6	30.5	.001	.142	+
Girls	6	28.7	.001	.139	+
Farm Residents	6	22.2	.001	.149	+
Expectations of					
All Students	6	37.1	.001	.114	+
Boys	6	20.2	.001	.119	+
Girls	6	20.2	.001	.120	+
Farm Residents	6	25.5	.001	.163	+

Another test of peer group influence was obtained by cross-tabulating educational aspirations and expectations by responses to a question asking what proportion of the friends of the students were leaders in school activities. As may be seen from Table 30 (and Appendix E, Table E-15) there was a positive association between the proportion of friends who were leaders and the level of educational aspirations and expectations.

TABLE 30. Association Between Educational Aspirations and Expectations and Proportion of Friends Who Are Leaders in School

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	6	154.0	.001	.223	+
Boys	6	94.4	.001	.245	+
Girls	6	91.6	.001	.243	+
Farm Residents	6	52.0	.001	.226	+
Expectations of					
All Students	6	155.2	.001	.230	+
Boys	6	99.9	.001	.258	+
Girls	6	89.0	.001	.245	+
Farm Residents	6	44.7	.001	.215	+

A third test of peer group influence was obtained by analyzing the relationship between the levels of educational aspirations and expectations and scores on the Guttman-type scale of perceived educational values of friends. As may be seen from Table 31, there was a positive and statistically significant relationship.

TABLE 31. Association Between Educational Aspirations and Expectations and Score on Scale of Peer Group Orientation Toward Education

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	15	144.3	.001	.221	+
Boys	15	103.0	.001	.263	+
Girls	15	88.7	.001	.243	+
Farm Residents	15	51.2	.001	.228	+
Expectations of					
All Students	15	137.1	.001	.221	+
Boys	15	103.7	.001	.270	+
Girls	15	93.6	.001	.255	+
Farm Residents	15	42.2	.001	.212	+

The data presented above provide support for the first part of the hypothesis but make it necessary to reject the second part of the hypothesis since the data show that the actual relationship is the reverse of what had been hypothesized.

School Experiences and Contacts

In a country as devoted to education as the United States, it is reasonable to believe that educational aspirations of teenagers are greatly influenced by their school experiences and contacts. It is, of course, necessary to acknowledge that by the

time a boy or girl reaches high school, he or she has already participated in the school system for at least 8 years and has been molded by countless experiences, many of which have been incorporated into the self-concept to such an extent that their sources are no longer identifiable. In this inquiry we have attempted to investigate the strength of some high school influences.

Hypothesis 6:

"Students who have discussed educational or occupational plans with teachers and/or counselors will tend to have higher educational aspirations and expectations than other students."

The analysis revealed small but statistically significant positive associations between the level of discussion and the levels of educational aspirations and of educational expectations (Table 32). Students who reported that they had discussed their educational or occupational plans with one or more teachers were more likely to aspire to and to expect to go to college and this was especially true for those who reported having discussed their plans "very much" with teachers. In fact, 87.3 per cent of those reporting "very much" discussion with teachers aspired to go to college compared to 80.9 per cent for those reporting "some" discussion and 69.6 per cent of those reporting no discussion. Expectations to go to college were similar but somewhat lower (see Appendix B, Table B-16 for further details).

TABLE 32. Association Between Educational Aspirations and Expectations and Students' Reports of Discussion of Plans With Teachers

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	3	82.0	.001	.161	+
Boys	3	42.0	.001	.161	+
Girls	3	42.1	.001	.165	+
Farm Residents	6	17.6	.01	.130	+
Expectations of					
All Students	3	89.9	.001	.173	+
Boys	3	54.2	.001	.187	+
Girls	3	37.7	.001	.160	+
Farm Residents	6	48.3	.001	.217	+

The level of association between aspirations and expectations of students and their reports of discussion of plans with a school counselor was also positive, but the association was less pronounced than that with teachers (Table 33 and Appendix E, Table E-17).

These data support the hypothesis stated above.

TABLE 33. Association Between Educational Aspirations and Expectations and Students' Reports of Discussion of Plans with School Counselors

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	6	27.2	.01	.103	+
Boys	6	19.6	.02	.122	+
Farm Residents	6	4.8	.40	.076	0
Expectations of					
All Students	3	23.0	.001	.098	+
Boys	3	12.9	.01	.102	+
Girls	3	16.0	.001	.116	+
Farm Residents	6	2.8	.90	.061	0

Hypothesis 7:

"Students who have received special recognition and/or encouragement from at least one teacher will tend to have higher educational aspirations and expectations than other students."

Students were asked if they had been influenced by discussion of their educational or occupational plans with one or more teachers. If we can assume that students were more likely to report favorable than unfavorable influence, the results can be interpreted as

providing support for the hypothesis. There was a statistically significant positive association between students' reports of teacher influence and levels of educational aspirations and expectations. (Table 34 and Appendix E, Table E-18).

TABLE 34. Association Between Educational Aspirations and Expectations and Students' Reports of Teacher Influence on Educational or Occupational Planning

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	6	96.02	.001	.176	+
Boys	6	51.24	.001	.180	+
Girls	6	54.57	.001	.189	+
Farm Residents	6	25.08	.001	.156	+
Expectations of					
All Students	6	94.93	.001	.179	+
Boys	6	57.83	.001	.195	+
Girls	6	42.56	.001	.172	+
Farm Residents	6	31.83	.001	.179	+

As another means of testing this hypothesis, a question concerning teacher encouragement to go to college was included in the classroom questionnaire:

"My teachers in high school have: (a) encouraged me to go college (b) discouraged me from going to college (c) had no effect on my decision."

Students who reported having been encouraged by one or more teachers to go to college were somewhat more likely than students who did not report such encouragement to aspire to and expect to go to college. Table 35 shows a small but statistically significant association for both aspirations and expectations. The substantive data show that 89 per cent of those who had been encouraged to go to college compared to 59.1 per cent of others aspired to go to college and 86.1 per cent of the former as compared to 62.8 per cent of the latter expected to go to college. Further details are presented in Appendix C, Table E-19.

TABLE 35. Association Between Educational Aspirations and Expectations and Students' Reports of Teacher Encouragement To Go To College

Sex and Residence	d.f.	2		C	Direction of C
		X	P		
Aspirations of					
All Students	3	199.9	.001	.254	+
Boys	3	105.4	.001	.258	+
Girls	3	106.1	.001	.263	+
Farm Residents	6	38.8	.001	.254	+
Expectations of					
All Students	3	204.0	.001	.262	+
Boys	3	113.9	.001	.274	+
Girls	3	111.1	.001	.274	+
Farm Residents	6	45.8	.001	.295	+

We may conclude that the data support the hypothesis.

Hypothesis 8:

"Students who acknowledge that a school counselor has influenced their plans will tend to have higher educational aspirations and expectations than other students."

An indirect indication of the influence of counselors has already been presented. In addition, all students were asked how much the school counselor had influenced their plans. Analysis of the relationship presented in Table 36 shows a small but statistically significant positive association between students' reports of how much they had been influenced by the counselor and the level of their educational aspirations and expectations. Substantive information is presented in Appendix B, Table B-20.

TABLE 36. Association Between Educational Aspirations and Expectations and Students' Report of Counselor Influence*

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	6	41.8	.001	.133	+
Boys	6	30.3	.001	.157	+
Girls	6	17.8	.01	.124	+
Farm Residents	6	15.9	.02	.144	+
Expectations of					
All Students	3	24.7	.001	.105	+
Boys	3	9.8	.01	.093	+
Girls	3	20.9	.001	.138	+
Farm Residents	6	3.9	.70	.074	+

*Students who reported that their school had no counselor were excluded from this comparison.

In an effort to get additional information on the influence of school personnel, counselors, administrators, and teachers who evaluated students were asked to indicate whether they had encouraged specific students to go to college. This information was cross-tabulated with information concerning aspirations and expectation levels of the students. Table 37 shows that there was a fairly strong and positive statistically significant association between such encouragement and the aspirations of students to go to college. The same was true for college expectations. The association was somewhat stronger for boys than for girls.

TABLE 37. Association Between Educational Aspirations and Expectations and Counselor's Report of Encouragement To Go To College

Sex and Residence	d.f.	² <u>X</u>	<u>P</u>	<u>C</u>	Direction of C
Aspirations of					
All Students	9	83.1	.001	.396	+
Boys	9	50.7	.001	.429	+
Girls	9	37.7	.001	.382	+
Farm Residents	12	31.7	.01	.417	+
Expectations of					
All Students	9	63.2	.001	.359	+
Boys	9	43.1	.001	.409	+
Girls	9	28.2	.001	.343	+
Farm Residents	12	19.2	.15	.339	+

Of the boys who, according to the counselors' reports, had been encouraged to go to college, 93 per cent reported college aspirations and 89.4 per cent expected to go to college. Among the girls 86 per cent of those who had been encouraged to go to college aspired to do so and 81.3 per cent expected to go to college. Further details are presented in Appendix E, Tables E-21 and E-22.

Hypothesis 9:

"The pattern of school subjects chosen by a student affects his educational expectations. Students who have taken many college preparatory courses will be more likely than others to have college expectations."

To test this hypothesis, students were classified in accordance with the number of semester hours of elective academic courses that they planned to complete by the end of high school. These data were then cross-classified with educational aspirations and expectations. Table 38 indicates that there is a fairly strong and statistically significant positive association with levels of aspiration and expectation. That is, the higher the number of elective academic courses planned, the more likely the student is to have college aspirations and expectations. (See Appendix E, Tables E-3 and E-4.)

This finding supports the hypothesis.

TABLE 38. Association Between Educational Aspirations and Expectations and Planned Number of Semester Hours of Elective Academic Courses

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	12	750.7	.001	.441	+
Boys	12	445.1	.001	.467	+
Girls	12	299.9	.001	.407	+
Farm Residents	12	241.9	.001	.435	+
Expectations of					
All Students	12	677.3	.001	.432	+
Boys	12	341.5	.001	.430	+
Girls	12	326.4	.001	.430	+
Farm Residents	12	206.4	.001	.417	+

The relationship between the pattern of vocational courses taken and educational aspirations and expectations was also analyzed. It may be seen from Table 39 that there was a small but negative association between the number of semester hours of vocational courses planned and both educational aspirations and expectations. This relationship was weakest for farm residents; for the farm residents the relationship was not statistically significant.

TABLE 39. Association Between Educational Aspirations and Expectations and Planned Number of Semester Hours of Vocational Courses

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	12	50.7	.001	.127	-
Boys	12	73.0	.001	.209	-
Girls	12	30.3	.002	.140	-
Farm Residents	12	15.2	.20	.120	0
Expectations of					
All Students	12	48.8	.001	.128	-
Boys	12	35.6	.001	.152	-
Girls	12	45.3	.001	.175	-
Farm Residents	12	7.6	.90	.088	0

Substantive data are presented in Appendix E, Tables E-5 and E-6.

The data support the hypothesis concerning the relationship of academic courses to collegiate aspirations and expectations.

Hypothesis 10:

"Participation in vocational agriculture courses in high school tends to be associated with low educational aspirations and expectations on the part of boys."

To test this hypothesis we made a special analysis of the relationship between extent of participation in the vocational agriculture programs and the levels of educational aspirations and expectations of boys in the 16 high schools which offered vocational agriculture. Boys who indicated that they would have 4 or more semesters of vocational agriculture by the time they finished high school were classified as full participants. Boys who indicated that they would have studied vocational agriculture for 1, 2 or 3 semesters were classified as partial participants. The remainder of the boys were classified as nonparticipants.

The data indicate that, in the schools where vocational agriculture was available, there was a tendency for boys with no vocational agriculture to have somewhat higher educational aspirations and expectations (Table 40). However, the full participants tended to have higher aspirations and expectations than the partial participants. The differences were not statistically significant but they were all in the same direction. Consequently, we cannot completely reject the hypothesis.

**TABBE 40. Educational Aspirations and Expectations
of Boys by Extent of Participation in
Vocational Agriculture Courses**

Highest Level of Education	Aspirations			
	Total Per Cent	Vo. Agr. Participation		
		Full	Part	None
High School	8.3	6.6	11.5	8.1
Business or Technical School	15.4	18.8	18.9	11.4
Attend College	17.9	19.3	21.3	15.4
Bachelor's Degree	28.9	26.9	24.6	32.4
Master's Degree	17.4	17.3	13.1	19.5
Doctorate	12.0	11.2	10.7	13.2
Total Per Cent	99.9	100.1	100.1	100.0
Number	591	197	122	272
Highest Level of Education	Expectations			
	Total Per Cent	Vo. Agr. Participation		
		Full	Part	None
High School	13.7	13.7	15.7	12.6
Business or Technical School	14.4	14.3	18.2	12.6
Attend College	23.8	24.9	23.1	23.4
Bachelor's Degree	31.0	30.2	25.6	34.1
Master's Degree	9.8	9.5	9.1	10.3
Doctorate	7.4	7.4	8.3	6.9
Total Per Cent	100.1	100.0	100.0	99.9
Number	571	189	121	261
Statistical Test of Farm vs. Nonfarm Differences				
		<u>Boys</u>	<u>Girls</u>	
Chi-square		16.9	11.3	
d.f.		16	16	
P		>.30	>.80	

Hypothesis 11:

"The limited educational resources of the small rural high school tend to be associated with low educational aspirations and expectations of students attending these high schools."

To test this hypothesis, the percentages of students aspiring to different levels of education were tabulated according to size of school. This was also done for educational expectations. With one exception, the results were inconclusive for both boys and girls for all levels of educational aspirations and expectations. The exception is that a fairly strong negative product-moment correlation ($r = -.447$) was found between size of school and the expectations of boys to obtain a bachelor's degree. In view of the lack of association for all of the other relationships, further data would be required before this finding could be accepted as a basis for expecting a negative relationship elsewhere.

It must be concluded that the data fail to provide support for the hypothesis. At the same time sufficient information is not available to formulate an alternative hypothesis of a negative relationship.

Personal Factors

A number of personal factors may influence educational aspirations. From a sociological point of view, the two aspects of primary concern are intelligence and self-evaluation of ability.

We have relied on self-reported grades as an indicator of intelligence. It is, of course, true that grades depend on attitudes and effort to a very appreciable extent, yet grades also reflect effective intelligence if not the basic potential of a student.

Hypothesis 12:

"Students with high school grades will have higher educational aspirations than students with lower school grades."

As may be seen from Table 41, there was a fairly strong and statistically significant positive association between the level of students' reports of their grades and the level of their educational aspirations and expectations. This was true for the total, for boys and for girls and for farm residents as well as for others. The strength of the association was stronger for boys than for girls.

Among the top students, those who reported having received mostly A's or mostly A's and B's (presumably also the most highly intelligent students) 97.9 per cent of the boys and 85.5 per cent of the girls aspired to go to college and 96.8 per cent of the boys and 79.6 per cent of the girls expected to go. Among the poor students, those who received mostly C's and D's, D's, or D's and F's, there was little difference between the sexes. Slightly more than half aspired to go to college and a slightly higher percentage expected to go to college.

TABLE 41. Association Between Educational Aspirations and Expectations and Students' Reports of Grades on Last Report Card

Sex and Residence	d.f.	² X	P	C	Direction of C
Aspirations of					
All Students	6	401.4	.001	.340	+
Boys	6	364.9	.001	.433	+
Girls	6	141.2	.001	.293	+
Farm Residents	6	120.2	.001	.324	+
Expectations of					
All Students	6	314.8	.001	.312	+
Boys	6	285.9	.001	.401	+
Girls	6	129.2	.001	.288	+
Farm Residents	6	99.2	.001	.304	+

Further details are presented in Appendix E, Table E-23.

These data provide support for the hypothesis that students with higher reported grades are likely to have higher levels of educational aspirations and expectations.

Hypothesis 13:

"Among students with high school grades, those from farms will tend to have lower educational aspirations and expectations than others."

There was little difference between farm and nonfarm students with high grades insofar as the levels of educational aspirations

and expectations were concerned (Appendix E, Table E-23). These data do not support the hypothesis.

It should be noted that among the farm students with low grades, 30.6 per cent, compared to 19.4 per cent of the nonfarm students, aspired to at least a college degree. Not only did a substantial minority of farm students with low high school grades aspire to high educational goals, but many of them expected to attain these goals. 23.8 per cent of the farm students with low grades expected to obtain a bachelor's degree compared to 18.1 per cent of the nonfarm students; farm boys had higher levels of educational aspirations and expectations than farm girls.

Hypothesis 14:

"Students with a high self-evaluation of academic ability will tend to have higher educational aspirations and expectations than other students."

Analysis of the relationship between the levels of educational aspirations and expectations of a student and his or her score on the academic self-concept scale indicates that the higher the academic self-concept, the higher the level of aspirations and expectations (Table 42). The relationship was stronger for boys than for girls and for nonfarm than for farm students.

TABLE 42. Association Between Educational Aspirations and Expectations and Score on Academic Self-Concept Scale

Sex and Residence	d.f.	\bar{X}	P	C	Direction of C
Aspirations of					
All Students	18	36.7	.01	.222	+
Boys	18	43.9	.001	.347	+
Girls	18	19.9	.40	.222	0
Farm Residents	18	14.9	.70	.243	0
Expectations of					
All Students	18	48.7	.001	.261	+
Boys	18	51.3	.001	.380	+
Girls	18	30.2	.05	.278	+
Farm Residents	18	21.6	.30	.296	0

These data provide support for the hypothesis insofar as nonfarm residents are concerned. The results for farm residents are inconclusive.

OCCUPATIONAL CHOICE

In contemporary America, there is a close relationship between educational and occupational attainments. It is well known that entrance into and successful careers in the elite occupations requires a high level of education. Much less attention has been given to the influence of occupational preferences and choices on educational aspirations and expectations.

Yet there is little doubt that the development of a sense of identification with an occupation tends to affect the attitudes

of a person toward related matters, especially toward education. It seems reasonable to expect that students who have made firm occupational choices will plan to obtain the type and level of education required for entrance and successful performance in the occupation.

It is acknowledged that evidence from many studies indicates that the occupational choices reported by a substantial proportion of high school students are tentative and subject to change. Nevertheless, there is a possibility that even tentative occupational plans may influence occupational aspirations and expectations.

The results of tests of hypotheses relating to occupational choice follow:

Career Commitments of Farm Boys to Farming

Hypothesis 15:

"Farm boys who are planning to farm tend to have lower educational aspirations and expectations than other farm youths."

To test this hypothesis, farm boys were classified as planning to farm if their answer to Question 28, "What occupation do you think you would like best when you are 30 years old?" was farmer or farm manager and if, in addition, they indicated in response to Question 30 on the classroom questionnaire that they thought that the chances were at least 50/50 that they would actually be farmers or farm managers when they reached age 30. Farm boys not meeting these rather stringent requirements were classified as not planning to farm.

Contrary to expectations, we found that 80.1 per cent of those not planning to farm and 81 per cent of those who were planning to farm aspired to go to college. (These percentages include the first three rows in Table 43.) With respect to aspirations to obtain at least a bachelor's degree, 57 per cent of the farm boys not planning to farm and 57.5 per cent of the farm boys planning to farm had such aspirations. There was a difference with respect to aspirations for graduate work; 29.2 per cent of the farm boys with nonfarm job plans aspired to take graduate work compared to only 10.7 per cent of the farm boys who were planning to farm. Data concerning expectations followed a similar pattern although expectations were somewhat lower than aspirations.

TABLE 43. Commitment to Farming as a Career and Educational Aspirations and Expectations of Farm Boys

Highest Level of Education	Aspirations by Plans to Farm		Expectations by Plans to Farm	
	No	Yes	No	Yes
	Per Cent		Per Cent	
Graduate Work	29.2	10.7	16.6	6.7
Bachelor's Degree	27.8	46.8	29.2	37.8
Some College	23.1	23.5	29.8	28.8
High School Only	19.9	19.2	24.5	26.6
Number of Respondents	503	47	483	45

It appears that there is some support for the hypothesis but only if graduate level education is taken into account.

Hypothesis 16:

"Farm boys who plan to farm place less importance than farm boys who do not plan to farm on the academic aspects of education."

To test this hypothesis a comparison of farm boys planning to farm and not planning to farm was made with respect to the number of semester hours of elective academic courses planned.

Results of this comparison showed that farm boys who planned to farm reported plans to take an average of 4.3 elective academic courses by the end of their high school experience, compared to 3.2 hours for farm boys who did not plan to farm. The difference was in the opposite direction to that expected, but it was not statistically significant. Thus, it appears that the data do not support the hypothesis.

Hypothesis 17:

"Farm boys who do not plan to farm compare about equally with nonfarm boys in importance placed on academic and vocational subjects."

To test this hypothesis a comparison was made of the plans for taking the academic and vocational courses of farm boys who do not plan to farm and nonfarm boys.

The data presented in Table 44 show that there was practically no difference between farm boys not planning to farm and nonfarm boys with respect to the average number of elective

academic hours planned. However, there was a statistically significant difference with respect to the average number of vocational hours planned; farm boys not planning to farm plan to take an average of 6.5 hours compared to 5.2 for the nonfarm boys. This difference was significant at the .001 level. Consequently, it appears that the hypothesis was supported with respect to academic courses but not with respect to vocational courses.

TABLE 44. Academic and Vocational Courses of Nonfarm Boys and Farm Boys Who Do Not Plan to Farm

Item	Farm (hours)	Nonfarm (hours)	2 X	d.f.	.P
Average Elective Academic Hours	4.3	4.2	10.3	14	>.70
Standard Deviation	3.0	3.0			
Average Vocational Hours	6.5	5.2	58.1	4	<.001
Standard Deviation	2.9	2.7			

Work Plans of Farm Girls

Hypothesis 18:

"Farm girls who are planning careers in addition to or instead of homemaking will place as much importance on academic and vocational subjects as do nonfarm girls."

To test this hypothesis, a comparison was made between nonfarm girls and farm girls who gave an affirmative response to

the question "Do you plan to work after finishing your education?" The data presented in Table 45 show that there was very little difference between the average number of elective hours of academic courses planned by farm and nonfarm girls who planned to work after finishing their education. This was also true with respect to the average number of vocational hours planned by these girls.

The data support the hypothesis.

TABLE 45. Academic and Vocational Courses Planned by Farm and Nonfarm Girls Who Planned To Work After Finishing Their Education

Item	Farm (hours)	Nonfarm (hours)	Z	p
Average Elective Academic Hours	3.8	3.6	.36	>.05
Standard Deviation	2.2	2.2		
Average Elective Vocational Hours	4.4	4.3	.11	>.05
Standard Deviation	2.4	2.8		

Farm Residence and Occupational Choice

Hypothesis 19:

"Compared to their rural nonfarm peers, farm students tend to be retarded in stage of occupational choice attained, e.g., relatively fewer of the farm students will have made a definite occupational choice."

Data concerning the proportions of farm and nonfarm students who specified a career choice do not support the hypothesis. More farm (81.4 per cent) than nonfarm (77.5 per cent) boys named a career choice and the differences between farm and nonfarm girls were negligible (Table 3).

Data concerning entry occupations do not support the hypothesis either; more farm than nonfarm students of both sexes named an entry occupation (Table 4).

Hypothesis 20:

"Farm students are less likely than rural nonfarm students to have made a realistic appraisal of the possibility of attaining declared occupational objectives, e.g., those who indicate preference for a high status occupation tend to be less aware of the requirements for entry such as educational preparation,"

To test this hypothesis we analyzed the relationship between a student's preference for professional or technical occupations at age 30 and the levels of his or her educational aspirations and expectations.

As anticipated, there was a fairly strong positive relationship (Table 46). At the same time, it appears that a substantial number of students who would like to have professional careers do not plan to obtain the necessary education.

**TABLE 46. Association Between Educational Aspirations
and Expectations and Preference for a
Professional Career**

Sex and Residence	<u>d.f.</u>	² <u>X</u>	<u>P</u>	<u>C</u>	<u>Direction of C</u>
Educational Aspirations of					
All Students.	3	690.4	.001	.461	+
Boys	3	288.7	.001	.432	+
Girls	3	385.7	.001	.478	+
Farm Residents	3	221.5	.001	.452	+
Educational Expectations of					
All Students	3	468.0	.001	.40	+
Boys	3	170.7	.001	.354	+
Girls	3	277.9	.001	.427	+
Farm Residents	3	143.5	.001	.385	+

So far as residential differences are concerned, the evidence is inconclusive. Slightly fewer of the farm boys (57.9 per cent) than of the nonfarm boys (59.9 per cent) who had professional or technical career aspirations expected to graduate from college. Among the girls the residential differences were reversed, with 55.4 per cent of the farm girls and 51.2 per cent of the nonfarm girls who aspired to a professional or technical occupation expecting to graduate from college. None of these residential differences were statistically significant at the .05 level. Consequently, it is not possible either to reject or confirm the hypothesis.

Parental vs. School Assistance in Occupational Planning

Hypothesis 21:

"Students (both farm and nonfarm) who receive little help from their parents in occupational planning will turn to school sources for assistance."

Parents were identified as helpful sources of occupational information more frequently than any of the other sources listed in the questionnaire. To test the hypothesis, the responses of students who named parents as a source were compared to the responses of those who did not, to see if there were any differences in the proportions naming teachers or counselors as sources (Table 47). For all sex and residential categories students who named parents as a source of occupational information were more likely than those who did not name parents to report that teachers had been a source. The tendency was especially pronounced among students from farms.

The same pattern of responses was found with respect to students' reports that counselors had been helpful sources of occupational information. However, it should be noted that the proportions of students naming counselors were lower than the proportions naming teachers in every category of Table 47.

On the basis of the analysis, we may conclude that the hypothesis may be rejected. Support was found for an alternative

hypothesis that students who receive help from parents are more likely than other students to avail themselves of help from teachers and counselors.

TABLE 47. Teachers and Counselors as Sources of Occupational Information by Whether or Not Student Also Named Parents as a Source

Sex and Residence of Students	Parents Named as a Source	
	Yes Per Cent	No Per Cent
Teachers Named as Source By:		
Farm Boys	24.2	10.4
Nonfarm Boys	16.9	9.6
Farm Girls	22.7	11.7
Nonfarm Girls	18.4	14.1
Counselors Named as Source By:		
Farm Boys	6.6	4.2
Nonfarm Boys	11.5	4.8
Farm Girls	6.8	3.9
Nonfarm Girls	10.5	6.6

Hypothesis 22:

"Farm students tend to make less use of vocational guidance and counseling than rural nonfarm students."

Students were classified by sex and residence and the extent of discussion with a school counselor noted (Table 48). (Students who reported that their school had no counselor were excluded from this comparison.)

TABLE 48. Farm vs. Nonfarm Differences in Extent of Discussion with Counselor

Sex and Residence	Extent of Discussion with Counselor		
	None Per Cent	Some Per Cent	Very Much Per Cent
Farm Boys	54.9	41.6	3.5
Nonfarm Boys	49.9	46.2	4.0
Farm Girls	46.4	48.2	5.4
Nonfarm Girls	48.5	47.2	4.3

Statistical Test of Farm vs. Nonfarm Differences

	<u>Boys</u>	<u>Girls</u>
Chi-square	2.99	.97
d.f.	2	2
P	>.30	>.50

The data show that somewhat higher proportions of farm than of nonfarm boys and of nonfarm than of farm girls had discussed their educational and occupational plans with a school counselor. However, the residential differences were not statistically significant at the .05 level. Consequently, we may conclude that this hypothesis was not supported by the evidence.

DISCUSSION

Perhaps the most interesting finding of this study is that more of the farm boys than of the nonfarm boys in our sample had high educational aspirations and expectations and the companion finding that the differences between farm and nonfarm girls with respect to the levels of educational aspirations and expectations were negligible. As we noted earlier, this result represents a reversal of previous findings for farm and nonfarm boys.

There are a number of clues concerning possible reasons in our data. A partial explanation may be found in the fact that the economic circumstances of the families of the farm students in our study were better than those of many farm families in the United States as a whole. The median incomes of the farm students in our interview sample were very similar to those of the median incomes of the families of our nonfarm students. Recent national statistics indicate that the median 1964 incomes of all farm families in the United States (\$4,166) were only a little more than half as high as those of all U. S. civilian nonfarm families¹ (\$7,924).

But this is not a full explanation. As we noted earlier, we found somewhat higher educational aspirations and expectations among farm boys and girls than among nonfarm boys and girls from

1. Income in 1964 of Families and Persons in the U. S., U. S. Bureau of the Census, Series P-60, No. 47, September 24, 1965.

low income families. In view of the rising costs of post high school education, these differences suggest that more of the farm than of the nonfarm students may have unrealistic expectations.

Another farm vs. nonfarm difference that is difficult to explain is the finding that farm students with low grades tend to have higher educational aspirations and expectations than nonfarm students with low grades. Rising college and university entrance requirements evidently have not been taken into account by many poorer students, and this unrealistic appraisal is apparently more prevalent among students from farms than among other students.

When we consider the possible interpretation of the findings in relation to other information, we may perhaps be justified in making the inference that the message concerning the need to leave farming has been heard and understood by the large majority of farm boys and girls. Furthermore, the concept of a college education as the favored upward channel to occupational success has apparently reached rural students, both farm and nonfarm. The fact that many of the students (especially farm boys) are apparently unaware that high school grades and substantial financial support are both usually necessary to attain a college education appears to indicate that farm boys from economically and socially underprivileged homes tend to be less realistic than nonfarm boys from similar homes with respect to the barriers

that must be surmounted in order to attain desirable educational and occupational goals in contemporary American society.

The results of the analysis of the influence of the social, economic and cultural factors investigated were generally consistent with the hypotheses derived from the sociological frame of reference which was presented earlier. The results support the findings of earlier studies by the investigator and others, that many factors are influential in determining the levels of educational aspirations and expectations of high school students: We found clear evidence of parental influence. We found that a student's perceptions of the orientations of his peer group toward education have some influence on his aspirations and we found that self-conceptions of academic ability are important.

We did not find that the influence of any of these factors was so strong that the influence of the others can safely be ignored.

Students who said that most or all of their friends were from farms were more likely than other students to have high educational aspirations and expectations.

We may infer from the results that in the state of Washington the traditional conservative views of farmers toward high education are no longer dominant. The educational values of the farm population have changed and are not substantially different from those of other residential segments of the

population. We are not, of course, able to extrapolate our findings to other states, but it would be interesting to find out if similar developments have occurred elsewhere.

The differences observed between the sexes with respect to educational aspirations and expectations are similar to those found in previous studies by the investigator and by others. Girls tend to have higher school grades but they tend to have lower levels of educational and occupational aspirations and expectations than boys. In the opinion of the investigator, the explanation for this is primarily cultural. It is due to the expectation in contemporary American society that the man will be the main breadwinner, while the woman will give her main attention to the roles of wife-mother-homemaker. It is true, of course, that most American women do participate in paid employment at some time or other in their lives but, except for those who make career commitments to professional occupations, who constitute a small minority, work roles tend to be supplementary rather than primary. A typical pattern is employment during the period between leaving school and marriage, withdrawal from the labor force while the children are small, participation in part-time employment while the children are of school age, with the possibility of return to full-time employment after the children are grown.

The occupational expectations for females outlined above are evidently communicated to girls at an early age. They are reflected in the occupational preferences of girls which tend

to be almost exclusively for occupations which are considered as suitable for women and in the fact that relatively few girls aspire to graduate work.

As anticipated, there was a negative association between the number of semester hours of vocational courses and the level of educational aspirations and expectations. However, the association was not large; it was particularly weak for farm boys and girls. The failure of a pattern of vocational education in the high school to dampen the educational aspirations and expectations of many farm students is probably related to the generally high level of educational aspirations and expectations of farm students already noted.

The results failed to support the hypothesis that students in small schools would have lower educational aspirations and expectations than those in larger schools. The explanation for this, suggested by the investigator, is similar to that already suggested with respect to the relatively high educational aspirations of farm boys and girls. Small communities are no longer isolated from the main stream of American life. Radio, television, newspapers, periodicals, the automobile and other forms of modern transportation have largely destroyed the isolation of the small community and removed many though, of course, not all of its impediments. The school and its curriculum, particularly when considered over a long period of time, has certainly been one of the major influential factors in bringing

the farm population and others who reside in small communities into conformity with the dominant contemporary American values.

The fact that farm boys who are planning to farm have relatively high educational aspirations rather than conforming to the contrary expectations indicated by the researches of previous investigators, suggests a realization on the part of farm boys who plan to farm that success in modern commercial agriculture requires a substantial educational background in order to keep up with scientific and technological developments affecting agriculture.

Although the great majority of boys and girls named an occupation which they would prefer to have when they reach age 30, very substantial proportions (44.1 per cent of the boys and 32.7 per cent of the girls) failed to name a specific entry occupation in response to the question in the classroom questionnaire "What is the job that you think you will actually have when you start work full-time?" Since previous studies by the investigator in rural Washington have indicated that most rural boys and girls are aware that they will have to migrate from their homes and communities in order to obtain satisfactory employment, it seems likely that failure to indicate a specific entry occupation may reflect their lack of familiarity with the employment opportunities they are likely to find when they do move. To some extent, of course, it may also reflect the

generally unsatisfactory and imprecise state of knowledge of young people concerning the employment opportunity structure. Many boys and girls may be confused because of the lack of adequate information coupled with half truths concerning the probable impact of technological developments, especially automation, on employment opportunities for unskilled and semi-skilled workers.

The preferences for professional and technical occupations indicated by these rural high school students are quite similar to those found in the nationwide study, Project Talent, and in previous studies by the investigator and others. It is apparently normal for high school students in our society to aspire to high level occupations. When we asked students questions which required them to appraise their chances of attaining these high level occupations, we found that many had scaled their expectations downward, yet almost half of the boys and girls who aspired to a professional or technical occupation at age 30 indicated that they thought that they would probably or certainly attain their goal.

CONCLUSIONS AND IMPLICATIONS

Conclusions

The following conclusions appear to be justified for rural Washington students:

1. Educational aspirations and expectations are very high.

2. Traditional farm vs. nonfarm differences in levels of educational aspirations and expectations have disappeared for girls and have apparently been reversed for boys.
3. There is some evidence that there is less realism among farm than among nonfarm boys in appraising the requirements for attainment of high educational goals.
4. Educational aspiration and expectation levels are influenced by multiple social, cultural and economic factors. Among others these include family circumstances and norms, peer group culture, school experiences in the classroom and in extra-curricular activities, and self-appraisal of ability.
5. Teachers and counselors have considerable influence on the educational aspirations and expectations of a minority of students.

Implications

With respect to social trends, the study indicates clearly that time-honored values and traditions are subject to change. Rural sociologists have been saying for 30 years or more that farm residents are becoming more and more like other people. The findings of this study indicate that this trend has at last been consummated in the state of Washington with respect to the level of educational aspirations and expectations of farm boys and girls.

It is, of course, true that high aspirations, although essential for achievement, do not guarantee successful attainment of a desired goal. Rather than devoting further efforts to attempts to raise levels of aspirations, it would appear that emphasis in rural Washington might well be shifted to providing the quality of education necessary to permit rural boys and girls, farm and nonfarm alike, to attain their educational goals. Additional recognition and encouragement might motivate students to become better scholars.

Although this is primarily a task for the schools and although the study provides evidence that teachers and counselors sometimes do exercise great influence in connection with the occupational and educational plans of high school students, we should not overlook the contributions of families, peer groups, nor the personal experiences of students outside of school. Constructive efforts by school systems to improve the quality of educational experiences will be more likely to succeed if they receive the support of parents and of students. This is most likely to be obtained, in the opinion of the investigator, if parents understand the goals and approve the methods to be employed.

In this study, as in the 1960 nationwide study called "Project Talent," a high proportion of the students indicated preferences for professional and technical occupations. The authors of the report on "Project Talent" offered the opinion

that these aspirations are unrealistic because much smaller proportions of the current labor force were employed in these elite occupations. This is still true, but the number of professional and technical positions has been expanded many fold in the last quarter of a century and the prospects for the future, as outlined by the Bureau of Labor Statistics in the Occupational Outlook Handbook, indicate that further employment opportunities may be anticipated. Consequently, it may be premature to render a conclusive judgment that the occupational expectations of high school youth are generally unrealistic. It would appear that this judgment could only be made in individual cases and then only on the basis of whether or not the student has the ability to achieve his goal and is making educational plans which are consistent with his ability and his occupational objective.

The fact that relatively few of the students indicated that they had received very much assistance in occupational planning from school counselors indicates a need on the part of schools to provide more assistance to students along occupational lines. In the opinion of the investigator, the work of individual counselors in providing assistance to individual students would be strengthened and made more meaningful if students who come to them for guidance had taken one or more systematic courses which provided them with a framework with which to interpret information concerning the world of work.

So far as further research is concerned, there is a need for research in depth to ascertain whether students who do not do well in school can be rehabilitated as students or, as an alternative, induced to develop an interest in occupational roles which do not require high educational achievements. In the opinion of the investigator, inquiries should be longitudinal in nature and should begin with young children, perhaps even preschool children, since it is quite likely that failure to do well in the school setting is a reflection of defeat and discouragement encountered while the child is very young, perhaps even before he starts to school.

Another needed emphasis in research is to conduct longitudinal post high school studies to ascertain the extent to which educational and occupational achievements are influenced by high school plans and expectations, by family circumstances, by self-appraisal of ability, and by other factors found in this study to be related to levels of educational aspirations and expectations.

SUMMARY

This report presents an analysis of the relationship of selected social, cultural and economic factors to the levels of educational and occupational aspirations of rural high school students. Information for the study was obtained from and about students who were enrolled in 1964-65 as sophomores, juniors, and seniors in a random sample of 30 rural Washington high schools.

Problem

Previous studies had indicated that the educational aspirations of farm boys and girls usually tended to be relatively low when compared to those of nonfarm boys and girls. In view of the need for most farm boys and girls to leave farms and their local communities to obtain suitable employment when grown, low educational aspirations are dysfunctional. The chances of farm-to-city migrants for successful occupational careers would be enhanced by high level of educational achievements. Previous research has indicated that farm-to-city migrants have tended to enter the urban labor force near the bottom of the occupational status ladder and to rise little, if any, chiefly because of substandard educational achievements.

The research problem was to identify explanatory factors, other than residence, related to the lower educational aspirations

of farm youths which would provide a more adequate understanding of the factors, especially factors amenable to manipulation by the schools, which might form a basis for raising levels of aspiration and subsequent achievements.

Theoretical Frame of Reference

The frame of reference is sociological. A student is conceptualized as a decision-maker who as a member of a number of social systems is influenced by group values and norms, by role models, by his own self-appraisal, and by perceptions of external circumstances such as the occupational opportunity structure and the availability of financial support for education.

Objectives

The principal objective of the study was to ascertain the nature and extent of influence of school factors on educational aspirations and expectations. However, the research was designed to permit an appraisal of the extent to which friendships and selected aspects of the family life of rural farm and nonfarm boys and girls tend to reinforce or negate school influence.

Because of the close relationship between occupational choice and educational aspirations and expectations, a supplementary objective of the study was to ascertain whether farm vs. rural nonfarm differences exist in selected aspects of occupational planning which might help to explain farm vs. rural nonfarm differences in educational aspirations and expectations.

Methodology

The basic data for the study were obtained by means of questionnaires filled out in classrooms by 3,535 high school students. This information was supplemented by personal interviews with a sample of 992 students, 34 per cent of whom lived on farms. Counselors, administrators and teachers rated about 400 of the students in the interview sample with respect to scholastic ability and type of occupation best suited for. In addition, parents of most students in the interview sample provided information, in response to a mailed questionnaire, concerning their 1964 family incomes, their educational values and their aspirations for their children's education.

Special precautions were taken to insure confidentiality of names and other personal information.

Feedback of information to cooperating schools was accomplished by means of a mimeographed narrative report covering approximately one-fourth of the questions in the classroom questionnaires. Each participating high school principal was provided with confidential data concerning the responses made by students in his school.

RESULTS

Farm vs. Nonfarm Comparisons

Contrary to expectation, the study did not confirm previous findings concerning levels of educational aspirations of farm boys and girls. Significantly more farm boys (80.2 per cent)

than nonfarm boys (72.3 per cent) aspired to attend college. The proportions of farm and nonfarm girls with college aspirations were roughly equal.

The proportions of farm and nonfarm girls who aspired to professional and technical occupations were also roughly equal. Fewer farm than nonfarm boys had professional or technical occupational aspirations; the difference among the boys was due primarily to the fact that more farm than nonfarm boys named farming as a career goal (19 per cent vs. 3 per cent).

The results of the analysis suggest that a somewhat higher proportion of farm than of nonfarm boys have unrealistic perceptions of the educational and financial requirements for high educational and occupational achievements.

Relationship of Social, Cultural and Economic Factors to Levels of Educational Aspirations and Expectations

The analysis provides support for the following hypotheses:

Hypothesis 1: The educational aspirations and expectations of students tend to be positively related to the economic and social status of their parents.

Hypothesis 4: Students from families with an "intellectual tradition" do tend to have higher educational aspirations and expectations than other students.

Hypothesis 5: Students who belong to and identify themselves with a specific peer group do have similar educational aspirations and expectations. In this study, students

who associated chiefly with farm students tended to have higher educational aspirations and expectations than other students.

Hypothesis 6: Students who discussed educational or occupational plans with teachers and/or counselors do tend to have higher educational aspirations and expectations than other students.

Hypothesis 7: Students who have received recognition or encouragement from at least one teacher do tend to have higher educational aspirations and expectations than other students. However, many students who have not received special recognition or encouragement from teachers also have high educational aspirations and expectations.

Hypothesis 8: Students who acknowledge that a school counselor has influenced their plans do tend to have higher educational aspirations and expectations than other students. Again, however, as in the case of teachers' influence, many students who, according to their reports, have received no encouragement or have had no contact with counselors do have high educational aspirations and expectations.

Hypothesis 9: The pattern of school subjects chosen by a student does tend to affect his educational expectations. Specifically, students who have taken many college preparatory courses are more likely than others to have

college expectations. However, it should be noted that some students with a high concentration of vocational courses, particularly those from farms, do have college expectations.

Hypothesis 12: Students with high school grades do tend to have higher educational aspirations and expectations than students with lower school grades. However, a substantial number of students with relatively low grades aspired to attend college or even to take graduate work eventually. This was particularly true of farm boys.

Hypothesis 14: Nonfarm students with a high self-evaluation of academic ability did tend to have higher educational aspirations and expectations than other students.

However, this hypothesis was not confirmed for farm students, probably because many of the latter with a relatively low self-evaluation nevertheless had high educational aspirations and expectations.

Hypotheses relative to educational aspirations and expectations which were not supported by the analysis were as follows:

Hypothesis 2: Students from farm families do not (as hypothesized) tend to place less importance than nonfarm students on the academic aspects of education. However, there was evidence that farm students do tend to place more importance on vocational aspects.

Hypothesis 3: The educational aspirations and expectations of farm students do not tend to be inversely related to degree of dependence of the parental family on agriculture, as hypothesized. Instead, farm youths from full-time farms and from part-time farms on which most of the income was derived from farming tended to have higher aspirations than those from part-time farms.

Hypothesis 11: Students from small rural high schools did not tend to have lower educational aspirations and expectations than those attending larger schools, as hypothesized.

Hypothesis 13: Among students with high school grades, those from farms did not tend to have lower educational aspirations and expectations than others, as hypothesized. The influence of farm residence was evident among students with low high school grades, among whom students from farms, especially farm boys, were found to have higher educational aspirations and expectations than nonfarm boys.

Occupational Choice

The analysis provides support for the following hypotheses relating to occupational choice:

Hypothesis 17: Farm boys who do not plan to farm compare about equally with nonfarm boys in importance placed on academic subjects. However, farm boys do tend

to place more emphasis on vocational subjects than nonfarm boys.

Hypothesis 18: Farm girls who plan to work in addition to or instead of homemaking do place as much importance on academic and vocational subjects as do nonfarm girls who plan to work.

The following hypotheses pertaining to occupational choice were not supported:

Hypothesis 15: Farm boys who are planning to farm do not (as hypothesized) tend to have lower educational aspirations and expectations than other farm youths, if college attendance or attainment of a college degree are used as the criteria.

Hypothesis 16: Farm boys who plan to farm do not (as hypothesized) place less importance on the academic aspects of education than farm boys who do not plan to farm.

Hypothesis 19: Compared to their rural nonfarm peers, farm students do not (as hypothesized) tend to be retarded in stage of occupational choice attained.

Hypothesis 20: Farm students are not (as hypothesized) less likely than rural nonfarm students to have made a realistic appraisal of the possibility of obtaining declared occupational objectives. Those who indicated preference for a high status occupation appeared to be fully as aware of the educational requirements involved.

Hypothesis 21: Students (both farm and nonfarm) who received little help from their parents in occupational planning do not (as hypothesized) turn to school sources for assistance. In fact, the analysis indicates support for an alternative hypothesis that students who receive much help from their parents in occupational planning are more likely to turn to school sources for assistance than those who receive little help from their parents.

Hypothesis 22: Farm students do not (as hypothesized) tend to make less use of vocational counseling and guidance than rural nonfarm students.

Highlights of the Findings

Perhaps the most interesting finding of this study is that more of the farm boys than of the nonfarm boys in our sample had high educational aspirations and expectations and the companion finding that differences between farm and nonfarm girls with respect to the levels of educational aspirations and expectations were negligible. Significantly more farm boys (80.2 per cent) than nonfarm boys (72.3 per cent) aspired to attend college. The comparable proportions for farm and nonfarm girls were 67.2

per cent and 66.7 per cent, respectively. College expectations were also expressed more frequently by farm than by nonfarm students. More of the farm than of the nonfarm boys and girls expected to obtain a bachelor's degree. More of the nonfarm than of the farm students expected to take graduate work but the differences were slight.

These findings represent a reversal of previous findings by others, including the investigator, and suggest that the traditional antagonism of farmers toward education has largely disappeared in the state of Washington.

The analysis provides support for the expectations derived from the sociological frame of reference that the levels of educational aspirations and expectations of high school students are influenced by a number of social, cultural and economic factors. The fact that none of the factors examined exerted a really dominant influence suggests that programs of action designed to change the educational plans of high school students will be more successful if schools, parents and the student's peer group are all involved.

The study revealed that a minority of the students acknowledged that their educational or occupational plans had been influenced by teachers. Still fewer reported having been influenced by school counselors. This may indicate a need for greater effort by teachers and counselors to give recognition and encouragement to students.

Unrealistic educational expectations were reported by a substantial number of students (especially farm boys) with

poor grades. This may indicate a need for teachers and counselors to strive more vigorously to motivate students to become better scholars, and a need for increased emphasis on providing the quality of education necessary to permit rural boys and girls to attain their educational goals. The efforts of counselors to provide assistance to students might be strengthened by providing students with systematic courses which would provide them with a framework for interpreting information concerning the world of work.

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APPENDIX A.

Methodological Details

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Appendix A. METHODOLOGICAL DETAILS

Most of the information required for the study was obtained from 3,535 sophomores, juniors, and seniors by means of questionnaires administered in the classrooms of the 30 rural high schools. Additional information for a sample of 992 students was obtained through personal interviews with the students and counselors and teachers, and from parents by means of mailed questionnaires. Copies of the questionnaires and interview schedules, together with relevant instructions, appear in Appendix B.

A detailed discussion of the procedure follows:

Sample Design

The population of schools consisted of 224 rural Washington high schools. For the purposes of the study, a rural high school was defined as a high school located in the open country or in a town of less than 10,000 population outside the organized areas surrounding four metropolitan centers. The following four organized areas were excluded:

(1) part of Clark County, which is an organized area adjacent to Portland, Oregon; (2) parts of King and Snohomish Counties adjacent to Seattle; (3) part of Pierce County adjacent to Tacoma; and (4) part of Spokane County adjacent to the city of Spokane.

In addition to these areas, there were 17 other cities in the state with more than 10,000 population which were excluded from the population.

Through the use of a table of random numbers, each of the eligible rural high schools was assigned a number from 1 to 224; 35 numbers between 1 and 224 inclusive were then drawn from the table of random numbers and the schools which had been assigned these 35 numbers were selected for the sample.

A subsample of 352 farm students was selected from the completed questionnaires for interviewing. A control subsample of 692 nonfarm students was selected for comparative purposes. The two interview subsamples were statistically matched (in approximately the same proportions of each category of the control variables) with respect to sex, grade in school and level of scholastic performance. Thirty four per cent of the interview sample lived on farms, compared to 31.7 per cent of those who provided information concerning residence on the classroom questionnaire.

Construction of Questionnaires and Interview Schedules

1. The Classroom Questionnaire.

An initial draft of the classroom questionnaire was submitted with the project proposal. The proposal indicated that Guttman-type scales would be developed for certain complex variables, including orientation of the student's family and peers toward work and toward education. During the first year of the grant exploratory work was focused primarily on the construction of these instruments. A research assistant, John W. Willmarth, working under the direction of the principal investigator, actually conducted the operations. The procedure was as follows:

A list of items was constructed for each of the proposed scales. These were gleaned from the literature, from questionnaires used previously by the principal investigator and others from colleagues and through reflection. A class of approximately 50 college students evaluated the appropriateness of each question in relation to the concept involved. Next, high school sociology students were asked to assist in rating the appropriateness of the items and indicating whether the meaning was clear. On the basis of this pretest, which was done in the Clarkston, Washington high school, items were selected for inclusion in the scales that were incorporated in the questionnaire.

More questions were constructed than could possibly be administered in a 50-minute class period. To assist in the selection of items for retention in the final questionnaire, a table was constructed showing the relationship of questions to the central hypotheses listed in Appendix A of the contract.

Near final versions of the classroom questionnaire were discussed with Professor Gordon McCloskey of the WSU Education Department and with Dr. Ray Jongeward, Director of Research in the State Department of Public Instruction.

An estimate of time was obtained by having college undergraduates employed by the department fill out preliminary questionnaires.

A final pretest of the classroom questionnaire was made in the Moses Lake high school by a class of approximately 40. The primary purpose of the final pretest was to ascertain the approximate time required for administration, which turned out to be one 50-minute class period, and to ascertain whether there were any substantial objections on the part of students.

At the time the project proposal was submitted, it had been contemplated that a procedure called mark sensing would be employed. However, previous experience with this procedure by the principal investigator had revealed that it reduces the amount of data to about one-third of the amount that can be obtained by a standard structured questionnaire. In view of this prospective loss of data, it was decided to employ a procedure known as optical scanning. The IBM Corporation's local technical representative recommended that the questionnaires for this procedure be printed locally, using blank forms from the IBM Corporation. Accordingly, these were ordered. They were to have been delivered by air freight, but due to an error at the factory at Greencastle, Indiana, they were sent by truck freight and arrived approximately two weeks late.

The local printing department of the University tried very hard to meet the exacting specifications and a pretest indicated that the printed forms might be adequate. Unfortunately, the printing equipment used by the local printing department proved to be inadequate. When the completed questionnaires were received and an attempt made to process them through the IBM 1230 optical scanner, it was discovered that there was some data loss on about 25 per cent of the pages. This was an unacceptable rate of loss. Consequently, a decision was made to code and key punch the questionnaires. This, of course, greatly increased the cost.

There is little doubt in the mind of the principal investigator that optical scanning is a desirable procedure if there is sufficient lead time to permit the questionnaires to be printed by a printing plant which can meet the technical specifications. Local printing would be preferable since there is an obvious advantage to be gained by close communication with the printer during the set-up phase. Assuming that all technical difficulties can be overcome, the procedure appears to offer great advantages both in terms of cost and in terms of time. At Washington State University, key punch operators are difficult to find and retain. Coded questionnaires were delivered to the Computing Center starting in February, 1965, but the job of key punching and verifying was not completed until after June 30, 1965.

2. Student Interview Schedules (Exhibit 2, Appendix B)

The principal purpose of the student interviews was to collect sociometric information concerning the peer groups of the respondents selected for interview. However, supplementary information was also obtained concerning educational and occupational aspirations and plans and self-concept as reflected by questions based on the "semantic differential."¹

1. Charles E. Osgood, George J. Suci and Percy H. Tannenbaum, The Measurement of Meaning, Urbana: University of Illinois Press, 1957.

The student interview schedules were constructed during the winter of 1964-65. Initial versions of the schedules submitted with the project proposal were revised in accordance with changed requirements visualized by the project staff.

The self-concept questions (semantic differential) incorporated in the interviews made in the first 11 schools were identical in format to those used in the classroom questionnaire. However, these questions asked for the ideal rather than the perceived self-concept. After completion of interviewing in these schools, sufficient data were considered to be available for evaluating the degree of correspondence between ideal and perceived self-concept.

Professor Athol Congalton had asked permission to incorporate some questions on nursing in order to extend an interest which he had pursued in Australia. Since it was now possible to accommodate his material, the semantic differential questions on self-concept were dropped and Professor Congalton's questions incorporated. However, after using the questions in 5 schools, he found it necessary to make a change and the final version of his questions was used in 14 schools. Consequently, there were three versions of the latter part of the interview schedule. (See Exhibit 2, Appendix B.)

3. Teachers, Counselors and Administrators' Questionnaire
(Exhibit 3, Appendix B)

This questionnaire was designed to obtain information concerning evaluations of intellectual ability of students, nature of interaction between respondent and student and respondent's opinion concerning suitability of student for broad occupational categories. It was not pretested.

4. Parents' Questionnaires (Exhibit 4, Appendix B)

The basic purpose of the parents' questionnaires was to provide comparative information concerning selected values and to ascertain the nature of parental aspirations for the education of their teenage children. The questions on selected values closely resembled those in the classroom questionnaire.

Because previous research by the principal investigator had indicated that spouses do not always agree completely on values, separate questionnaires were developed for mothers and fathers. The mothers' questionnaire was printed on green paper. A one-page general information questionnaire was developed which could be filled out by either parent.

A few adults with children of high school age were asked to fill out the questionnaires as a pretest.

Obtaining the Cooperation of the Sample Schools

A form letter was sent to the superintendent of each of the sample schools requesting cooperation. The letter explained the objectives of the study and the procedures to be followed in the administration of the questionnaire, including precautions to be taken to insure confidentiality of information. The letter suggested that it might be desirable to contact the board of directors of the school. Near final copies of the student questionnaires and preliminary interview questions were enclosed. A copy of the letter appears as Exhibit 1, Appendix C.

Twelve schools accepted immediately. After a lapse of approximately two weeks, a follow-up form letter was sent to the superintendents who had not yet replied. A copy of the follow-up letter appears as Exhibit 2, Appendix C. Responses to this letter raised the number of acceptances to 27. Three additional schools responded after personal letters to the superintendents, raising the final total to 30.

The experience with one of the latter three may be of interest to the reader. The principal investigator called the superintendent on the telephone. The superintendent said he was concerned about the possibility of unfavorable community reactions by parents to some of the questions in the questionnaire which dealt with family values. He said he planned to take the matter up with the board of directors at their meeting the following week. The principal investigator asked how many copies of the questionnaire he would like for this purpose and supplied this number. In addition, the principal investigator wrote a letter explaining in further detail the objectives and potential benefits of the study. A copy of this letter appears as Exhibit 3, Appendix C. The response of the school directors was favorable.

On December 8, 1964, a form letter reporting a delay in printing of the questionnaires was sent to each person designated by the superintendent to be in charge of the study. The letter also asked each of the schools to accept the responsibility for explaining the questionnaire to the classroom teachers who would actually administer it. In addition, it informed the local representative of the school that a token payment of \$10 could be made to the person designated to explain the questionnaire to the classroom teachers and to send the completed questionnaires to Washington State University. A copy of the letter appears as Exhibit 4, Appendix C. All but one school accepted the responsibility of explaining the study.

Due to the delay in obtaining final responses from the five schools which for one reason or another declined to participate, the earlier plan to substitute additional schools was abandoned, since it was considered desirable to have the classroom questionnaires administered within a relatively short period of time.

Administration of the Classroom Questionnaires

About the 15th of December, 1964, the classroom questionnaires for each school were sent to the principal or his designated representative by special fourth class mail. To insure careful handling, the questionnaires were insured for \$10, the minimum rate. The school official in charge of the administration was notified by means of a letter sent under separate cover that the questionnaires had been sent. A copy of the letter appears as Exhibit 5, Appendix C.

Enclosed with the questionnaire were a number of copies of a statement entitled "Instructions for Classroom Administration of Educational and Occupational Questionnaire." This was given by the official in charge of the study to each classroom teacher whose students participated in the study. A copy of the instructions appears in Appendix D as Exhibit 1.

The instructions emphasized the fact that participation was voluntary, that names of students would be obtained, but that the name cards would be immediately sealed in an envelope which would be sent unopened to Washington State University.

To minimize the possible effect of intervention by classroom teachers, each questionnaire was accompanied by a letter to the student explaining the purposes of the study. Furthermore, the teachers who administered the questionnaires were requested not to attempt to interpret any question; instead they were instructed to tell the students to circle any questions that they did not understand.

As noted earlier, in every school except one a local official took the responsibility of explaining the study to the classroom teachers. A representative of the Department of Rural Sociology was sent to the school which did not wish to accept this responsibility and he explained the study to the classroom teachers.

No unusual problems were reported by the participating schools during the administration of the questionnaires or subsequently. No protests by parents or other members of the 30 communities were reported.

The completed questionnaires were returned by special fourth class mail - collect. Packages of completed questionnaires were insured for \$10.

Upon receipt of the completed questionnaires, acknowledgment was made by letter and arrangements for payment of the honorarium were carried out. A copy of the acknowledgment letter appears in Appendix C as Exhibit 6.

Student Interviews

After receipt of the completed questionnaires, the field work supervisor, Thomas Rolfs, selected a sample of students in each school for interview. The selection procedure was as follows:

As explained earlier, the sample design required a sub-sample of students matched with respect to sex, grade in school and academic achievement, varying principally with respect to farm vs. nonfarm residence. The questionnaires were therefore sorted by farm and nonfarm residence, then by sex, and then the seniors, juniors and sophomores were separately identified. Within each of these sub-categories, three categories of scholastic achievement were identified on the basis of reported grades: high (mostly A's and B's) medium (mostly C's) and low (mostly D's or less). Where there was an excess in the farm or nonfarm category, the excess was removed by means of random numbers.

The interviewing staff consisted of 17 graduate students, one Junior Rural Sociologist, the principal investigator, and Professor Athol A. Congalton, a visiting sociologist from the University of New South Wales in Australia.

A training session was conducted prior to actual interviewing. Prior to the meeting, each interviewer was given a copy of the project proposal and a written set of instructions and suggestions. A copy of these instructions appears in Appendix D as Exhibit 2. The principal investigator and the Junior Rural Sociologist explained the interview procedures and a practice interview was conducted by each interviewer.

Each participating school was sent a form letter stating that a sample of students had been selected for interview and asking for an indication of what dates would be best from the point of view of the school. Each school was also asked how many interviewers could be accommodated. An addressed postal card was enclosed for the use of the school representative in responding. A copy of the letter appears in Appendix C as Exhibit 7.

After receipt of the communications from the schools concerning dates, interview routes were planned and teams of three to five interviewers, each with a leader, were formed. Confirmation of final arrangements was made by telephone. Travel was by automobile.

Prior to the arrival of the interviewers, a list of students to be interviewed was sent to each of the 30 participating schools.

When an interview team arrived at a school, the team leader contacted the principal or other person designated to handle the study. Arrangements were made to conduct the interviews. School authorities in all schools cooperated fully and made office space available in which the interviewers could sit while conducting the interviews. The school authorities also assisted with the scheduling of the interviews.

Students were informed that participation in the interviews was voluntary but few refused to cooperate. Of the 1,044 selected for interview 992 or 95 per cent cooperated. Most of those who were not interviewed were not in school when the interviewers were present.

At the conclusion of the interview, each student was informed that information was desired from parents concerning their attitudes toward education and other topics covered during the course of the student questionnaire and interview. Each student was then asked if he or she would have any objection if such a questionnaire was sent to his or her mother and father. If the response was favorable, which was almost invariably the case, the student was asked for his father's name and mailing address. The student was then thanked for his cooperation.

School Grades

The leader of the interview team was instructed to make arrangements for obtaining information concerning the recorded grades (GPA where available) of the students who were interviewed. This was not done at every school, but only at selected schools. Information was copied from the school records either by a member of the interview team or by an employee of the school.

Narrative Reports

The team leaders were requested to write a brief descriptive report about each school visited. The report was to include such information as the strength of the PTA, the local tradition with respect to college attendance, a brief description of the

school buildings and other facilities and impressions concerning the faculty and students. It was hoped that this information might be helpful in explaining some of the differences between schools. However, the information actually obtained turned out to be rather superficial and highly subjective in character. It appears that if adequate information of this nature is to be obtained, a systematic set of instructions must be prepared in order to establish expectations for uniform reporting.

Before leaving the school, the leader of the interviewing team thanked the principal and his representative for their cooperation.

Interviews with Counselors, Teachers and Administrators

Not all of the schools which participated had a formal counselor. However, in most cases a principal, coach, or other teacher had been designated as a part-time counselor. This individual was asked to answer a series of questions about each student if he felt that he knew the student well enough to answer the questions. A copy of the questionnaire appears in Appendix B as Exhibit 3. In addition to asking for this information from counselors, some teachers and administrators were asked to rate students. Teachers who were reported by students as having influenced their educational or occupational plans were identified during the course of student interviews.

The interviewers pooled information concerning names of teachers and those who were mentioned by several respondents during the course of the interviews were asked to fill out a questionnaire about the students they knew well enough to evaluate. It was originally contemplated that the counselors and teachers would be interviewed with respect to each student. However, this proved to be an inefficient procedure and after experience in a few schools, the counselors and teachers were given a list of students together with blank copies of the rating questionnaire. In a number of cases, the counselors did not have time to fill out the questionnaires while the interviewing team was at the school. Where this was the case, they were requested to mail the questionnaires to the Dept. of Rural Sociology.

Some resistance was encountered from a few counselors. In one case a counselor said to the principal investigator, "I can't make this kind of an evaluation of what a student ought to do. It would be like playing God." This attitude was interpreted by the principal investigator as a reflection of the

influence of the Rogerian "school" of nondirective counseling. No doubt a counselor should use caution in making positive statements to a student about his potentialities, but in cases where a counselor or teacher knows a student well, he certainly has formed some opinion of his capacity and could readily indicate this to an outside, impartial investigator.

Administration of Parents' Questionnaires

Parents of 972 students (nearly 98% of the 992 who were interviewed) were sent questionnaires. Questionnaires were not sent to the parents of the 20 students who indicated that they did not wish their parents to receive one.

The parents' questionnaires were sent about the 1st of May, 1965, by third class mail. They were accompanied by a form letter explaining the purpose of the questionnaire, outlining the procedure for assuring confidential treatment of the answers, and asking for cooperation. A copy of the initial letter appears in Appendix C as Exhibit 8. After approximately 35% of the questionnaires had been returned, a follow-up form letter was sent to parents asking for cooperation, explaining that it was impossible to substitute any other persons for those originally selected. A copy of the first follow-up letter appears in Appendix C as Exhibit 9. This brought the return to about 65%. A final follow-up form letter which appears in Appendix C as Exhibit 10 brought the returns to approximately 70%; however, questionnaires were returned by both mothers and fathers for only 661 cases.

Mailed Questionnaire to Graduating Seniors

To obtain information concerning the extent to which seniors realized their educational and/or occupational expectations, a brief postcard questionnaire was sent (using local funds) to 1168 of the students who were seniors in June, 1965. This questionnaire was mailed in December, 1965, approximately a year after the administration of the classroom questionnaire. One half of the postcard contained the respondent's name and address with a request for the information. The other half contained the questions and the name and address of the investigator. A copy of the postcard questionnaire appears in Appendix B as Exhibit 5.

The first return included 495 questionnaires (42.4%) while a follow-up (Appendix C, Exhibit 12) reaped another 305 (26.1%). Still another follow-up accompanied by a letter (Appendix C, Exhibit 13) brought in 175 more (15.0%) a total response of 83.5 per cent. Later a letter was sent to the schools to obtain information concerning non-respondents and a sample of others. A copy of the letter appears in Appendix C as Exhibit 14.

Notification to County Extension Chairmen

Because the Department of Rural Sociology is closely affiliated with the Cooperative Extension Service of Washington State University, notification was sent to each of the 39 Extension Chairmen in the state of Washington informing them of the project and its purpose. It was thought that possession of this information by the County Extension Chairmen might be useful in case questions concerning the study were asked of him by school officials or members of the community. A copy of the communication to County Extension Chairmen appears as Exhibit 11, Appendix C.

Editing and Coding of Data

As explained earlier, it proved to be necessary to key punch the data on the classroom questionnaires. In preparation for key punching, questionnaires were inspected and those which were blank or mutilated by students were discarded. Occupational data (questions 28 and 31) were coded using a modified version of the Census Occupational Code. (See Exhibit , Appendix B). Since the other questions had been precoded, no further coding was required.

Codes used for the interview data, for counselors' evaluations and for the parents' questionnaires will be made available on request to the Department of Rural Sociology, Washington State University.

Computer Processing

As already noted, problems were encountered in getting the data key punched and verified.

This turned out to be a harbinger of things to come. Serious problems continued to appear throughout the remainder of 1965 and 1966.

The first problem was the existence of many response errors (impossible answers) which had to be identified and removed. This operation was made more difficult by the amount and complexity of the information available for various respondents.

Following this, difficulties were experienced in programming. The WSU Computing Center does not provide programming guidance or supervision to programmers who work for individual investigators. Consequently, it was necessary for our programmers to develop their own solutions to various technical problems.

it appears that requests for data by the investigators were initially conceptualized by the programmers as unique. Thus, there was little transfer from one program to another. This problem was not overcome until the summer of 1966 when a generalized program (which will greatly reduce programming time) was developed by Bryan Bremner. It is written in Fortran IV and MAP. This can be made available on request to investigators having access to an IBM 709, 7090 or 7094 (using the BJOB operating system).

Steps are being taken, with funds from other sources, to translate this program into language acceptable to the IBM 360, which is currently being installed at WSU.

Another problem was machine failure, which was encountered a number of times. Coupled with this was an occasionally encountered problem of obtaining access to the computer because of heavy demand by other users.

Still another problem is one which is still encountered. It apparently is not economical to obtain small amounts of data from the computer because a large portion of the cost consists of the time required to read the tape into the computer. This has led our programmers to construct very large programs. This, in turn, multiplies the probability of error in the control cards and even a small error may cause the computer to reject a program. Consequently, a considerable amount of pretesting is required even with the new generalized program.

Feedback to Schools

As partial reward for cooperation in the study, each participating school was provided with two copies of a report providing statistical data and interpreting answers by students in all 30 schools to selected questions (about one-fourth of the questions) on the classroom question aire. The questions reported on were selected in part on the basis of preferences obtained from school principals.

In addition, each participating school was provided with a computer print-out of comparable statistical data for that school. This was done to provide school administrators, counselors and teachers with an opportunity to compare the distribution of responses given by their students with the responses of all students in the study.

No public release was made of data for particular schools but a news story was prepared on the educational aspirations of all students.

APPENDIX B.

Instruments

**Department of Rural Sociology
Washington State University
EDUCATIONAL AND OCCUPATIONAL QUESTIONNAIRE
FALL, 1964**

INSTRUCTIONS: Mark your answers in the appropriate boxes == with a pencil. Mark heavy and black. Example: ==. If you change any answer, erase the original mark.

1. Mark the boxes at the left of the phrases that best describe your desires for further education.

Desires	Expectations
== Quit high school and not go to any kind of school again.	==
== Graduate from high school.	==
== Attend business or commercial school (not college level).	==
== Attend technical school (not college level).	==
== Attend a junior college.	==
== Graduate from a junior college.	==
== Attend a college or university.	==
== Graduate from a college or university.	==
== After graduating from college, do 1-2 years of advanced work in a special field (work for a master's degree).	==
== After graduating from a college, do 3-4 years of advanced work in a special field (work for a doctor's degree).	==

2. Now look at the above phrases again and mark the boxes at the right of the ones which best describe the education you think you will actually be able to obtain.

3. Sex. Boy == Girl ==

4. What grade are you in? == 10th == 11th == 12th

5. How old are you at your nearest birthday?

== 11 == 12 == 13 == 14 == 15 == 16 == 17 == 18 == 19 or older

6. Do you agree or disagree with the following statements? Mark your answers as follows:

- a—Agree
- b—Undecided
- c—Disagree

a	b	c	
==	==	==	Scholarly achievements as reflected in rewards such as high grades, membership in honorary groups, etc., are quite important.
==	==	==	One should be interested in education for its own sake rather than education as a means to some other end (job, social prestige, money, etc.).
==	==	==	If a person can get a job without formal education there is no real purpose in formal education beyond high school.
==	==	==	Homework assignments are an infringement by the school on time that should be available for other activities, including work.
==	==	==	Success in life depends upon ability and effort, not how much education one has.
==	==	==	It is not necessary to have a college education in order to earn a good salary or to be a leader in the community.
==	==	==	Girls should go to college because the country is going to need more trained women to fill important jobs.
==	==	==	Girls should go to college only if they plan to use their education on a job.

Boys Only (7, 8, and 9) (Girls skip to question 10)

7. Has the possibility of military service affected your educational plans?
 == Yes == No

8. Do you consider the military service as an opportunity to obtain vocational training or education?
 == Yes == No

9. What do you plan to do about military service? (Mark One Only.)

- (a) Quit high school and enlist
- (b) Enlist right after high school
- (c) Work for a commission through a college program
- (d) Enlist after I have completed some college training
- (e) Enlist after I have graduated from college
- (f) Enlist in the Reserves or National Guard and continue school
- (g) Register as a conscientious objector
- (h) Not eligible—physical disability
- (i) Wait until I am drafted

== (a) == (b) == (c) == (d) == (e) == (f) == (g) == (h) == (i)

ANSWER QUESTION 10 ONLY IF YOU DO NOT PLAN TO ATTEND COLLEGE. (ALL OTHERS SKIP TO QUESTION 11.)

10. How important to you is each of the following as a reason for not going to college? Mark your answers as follows:

- a—Important
- b—Unimportant
- c—Not a reason

a	b	c	
==	==	==	A college education would not help me to do the things that I am most interested in.
==	==	==	I want to get a job and start earning a living as soon as possible.
==	==	==	I need to start earning a living in order to support myself.
==	==	==	It would cost more than my parents are willing to pay.
==	==	==	I would rather get married.
==	==	==	My high school grades are too low.
==	==	==	I don't like to study.
==	==	==	I am not sure that I have the ability.
==	==	==	It would cost more than it is worth to me.
==	==	==	My mother does not want me to go.
==	==	==	My father does not want me to go.
==	==	==	Most of my friends will not go.
==	==	==	I probably would not use a college education on the job.
==	==	==	I am not taking a college preparatory curriculum.

ANSWER QUESTIONS 11, 12, 13 AND 14 ONLY IF YOU ARE PLANNING TO ATTEND A COLLEGE OR UNIVERSITY. (ALL OTHERS SKIP TO 15.)

11. If you are planning to attend college how important to you is each of the following as a reason for going to college? Mark your answers as follows:
 a—Important
 b—Unimportant
 c—Not a reason
- | a | b | c | |
|----|----|----|--|
| == | == | == | A college degree is necessary for the kind of work I want to do. |
| == | == | == | My father wants me to go. |
| == | == | == | My mother wants me to go. |
| == | == | == | I would be able to earn more money as a college graduate. |
| == | == | == | I want to learn more about the careers I might enter. |
| == | == | == | I want to meet the kind of person I would like to marry. |
| == | == | == | I enjoy learning. |
| == | == | == | My teachers think that I should go to college. |
| == | == | == | I expect to get into college athletics. |
| == | == | == | Many of my friends are going. |
| == | == | == | I want to participate actively in college social life. |
| == | == | == | I want to make good personal contacts for business or an occupation. |

12. If you are planning to go to college, what plans do you have for financial support in college? (Mark all that apply.)
- == Family support
 - == Part-time work
 - == Self-support
 - == Scholarship
 - == Don't know
 - == Other

13. In college I expect to major in:
- == Agriculture
 - == Business Administration
 - == Education
 - == Engineering
 - == Fine Arts (music, art, etc.)
 - == Home Economics
 - == Science-math
 - == Social Science
 - == A program not listed
 - == Undecided

14. The college I plan to enter is:
- == A private college or university
 - == A Washington junior college
 - == An out of state college or university
 - == University of Washington
 - == Washington State University
 - == Western, Central, or Eastern Washington State College
 - == Undecided

15. Since completing the eighth grade, how many semesters will you have studied each of the following subjects by the end of high school? Mark the appropriate number.

0	1	2	3	4+	
==	==	==	==	==	Agriculture
==	==	==	==	==	Algebra
==	==	==	==	==	Art and music
==	==	==	==	==	Biology
==	==	==	==	==	Business
==	==	==	==	==	Chemistry
==	==	==	==	==	English
==	==	==	==	==	Foreign language
==	==	==	==	==	Geometry
==	==	==	==	==	History
==	==	==	==	==	Home economics
==	==	==	==	==	Physical education
==	==	==	==	==	Physics
==	==	==	==	==	Shop
==	==	==	==	==	Social studies
==	==	==	==	==	Trigonometry

16. My teachers in high school have:
- (a) Encouraged me to go to college
 - (b) Discouraged me from going to college
 - (c) Had no effect on my decision
- | (a) | (b) | (c) |
|-----|-----|-----|
| == | == | == |

17. What school subjects do you like best? (More than one can be marked.)
- == Agriculture
 - == Algebra
 - == Art and music
 - == Biology
 - == Business
 - == Chemistry
 - == English
 - == Foreign language
 - == Geometry
 - == History
 - == Home economics
 - == Physical education
 - == Physics
 - == Shop
 - == Social studies
 - == Trigonometry

18. What types of additional vocational training would you like to get from your school? (Mark all that apply.)
- == More agriculture
 - == More home economics
 - == More industrial arts
 - == More business training
 - == Electronics
 - == A course in careers so that I would know what is involved in various jobs
 - == Vocational counseling to help me decide which job to choose
 - == None—school has everything I need
 - == None—I'll get it elsewhere

19. How much of your school work are you interested in?

- All
- Most
- Some
- Little
- None

20. On your last report card did you get mostly: (Mark one only)

- A's
- A's & B's
- B's
- B's & C's
- C's
- C's & D's
- D's
- D's & F's

21. To what extent have you discussed your educational or occupational plans with a school counselor?

- Not at all
- Some
- Very much
- No counselor

22. How much did he or she influence your plans?

- Not at all
- Some
- Very much
- No counselor

23. To what extent have you discussed your plans with one or more teachers?

- Not at all
- Some
- Very much

24. How much did (he) (she) (they) influence your plans?

- Not at all
- Some
- Very much

25. In which of the following organized school activities do you participate? (Mark each one according to how active you are in it.)

- Very Active
- Quite Active
- Not very Active
- Not at All

- Athletics
- Music
- Dramatics
- Debate
- School paper or annual
- Student government
- FFA or FHA
- Hobby clubs
- Others

26. How many high office positions (president, vice president, captain) have you held in the organized school activities that you marked in the question above.

- 0
- 1
- 2
- 3
- 4
- 5
- 6+

27. Are there any activities you would like to take part in that you aren't doing now? What are they? (Mark all that apply.)

- Athletics
- Music
- Dramatics
- Debate
- School paper or annual
- Student government
- FFA or FHA
- Hobby club
- None of these

28. What occupation do you think you would like best when you are 30 years old?

FOR OFFICE USE ONLY

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. Mark the items in the following list which led you to choose the occupation you have listed as the one you would like to have when you are 30 years old.

- No occupation listed
- There are many job openings in that field
- The pay is good
- People working in that field make it sound good
- My parents want me to go into that field
- Many of my friends are choosing that occupation
- The work sounds interesting
- People in that work have high prestige
- Teachers encouraged me to choose it
- School counselors encouraged me to choose it
- I worked in a job related to that occupation and became interested
- Years of education required are not excessive
- Aptitude or interest tests indicated it would be a good occupation for me
- I have always wanted to go into that line
- TV program or movie
- Security
- Chance to be creative and original
- Freedom in the job
- Gives me a chance to have power and authority
- I admired a person in the occupation
- Interest in this occupation was obtained through a high school course
- Other

30. What are the chances that you will actually be in the occupation you listed in question 28 when you are 30?

- Certainly will
- Probably will
- Chances are 50-50
- Probably will not
- No job listed

31. What is the job that you think you will actually have when you start to work full-time?

FOR OFFICE USE ONLY

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

32. What source(s) of information has (have) been of most help to you in deciding on an occupation? (Mark the source(s) of information which has (have) been the most helpful.)

- Parents
- Friends
- People working in the same occupation
- High school counselor
- Occupational handbooks
- Teachers
- Own personal experience with actual job(s)
- None
- Other

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

33. As to my knowledge of the work I intend to enter: (Mark as many as apply).
 == I have good knowledge because I have worked at it
 == I have good knowledge because I have relatives or friends who work at it
 == I have a general knowledge, but don't know much about details of it
 == I don't know much about it yet, but will find out by experience on the job
 == I don't know much about it yet, but will find out when I go to school
 == I don't know because I have not as yet made a choice

34. For the occupation I have chosen I think my ability is:
 (a) Very much above average
 (b) Somewhat above average
 (c) Just average
 (d) Somewhat below average
 (e) Very much below average
 (f) I don't know yet because I have not yet made a choice
 == == == == == ==
 (a) (b) (c) (d) (e) (f)

35. What persons have helped you with your job planning? (Mark all who have helped you.)
 == My father
 == My mother
 == A teacher
 == A school counselor
 == A prominent person in the community
 == Close friends my own age
 == Someone else
 == No one has tried to help me

36. Which would you prefer: (Mark one only)
 (a) To be self-employed (farmer, businessman, or professional)
 (b) To work for a small business firm
 (c) To work for a large private corporation
 (d) To work for the government (national, state or local)
 (e) To work as a farm manager
 (f) No preference
 == == == == == ==
 (a) (b) (c) (d) (e) (f)

37. What type of work do you think you would like best? (Mark more than one if you wish.)
 == Work with things
 == Work with people
 == Work with ideas

38. If you have worked for pay during the past 12 months, what kind of work did you do? (Mark more than one if necessary.)
 == Did not work for pay
 == Farm work
 == Waiter or waitress
 == Manual labor or housework
 == Paper route, delivering, messenger
 == Clerk in store
 == Office work
 == Baby sitting
 == Other

39. Have you any physical defects which might have a bearing on your educational or occupational plans?
 == ==
 Yes No

40. GIRLS ONLY: Do you plan to work after finishing your education?
 == ==
 Yes No

41. Think for a minute about your family (father, mother, brothers, and sisters). Some or maybe all of them probably have expressed certain attitudes concerning formal education (high school, college). When you look at the following statements, think of those members of your family whose attitudes you are familiar with; and respond to the statements on basis of your knowledge of the attitudes of those members. Response categories:

This describes the attitude of
 e--All of them;
 b--Most of them;
 c--About half of them;
 d--Only a few of them;
 e--None of them;

- | | | | | | |
|----|----|----|----|----|--|
| a | b | c | d | e | |
| == | == | == | == | == | They feel that formal education tends to take people away from their home communities; and because of this, it is undesirable. |
| == | == | == | == | == | They are opposed to formal education beyond high school. |
| == | == | == | == | == | They feel that a good education helps a person to lead a better life. |
| == | == | == | == | == | They do not think that formal education is really very important. |
| == | == | == | == | == | They expect the younger members of the family to get all the formal education they can. |
| == | == | == | == | == | They believe that the most important thing in formal education is the diploma or degree. |

42. Do you own a car? Yes No
 == ==
 Yes No

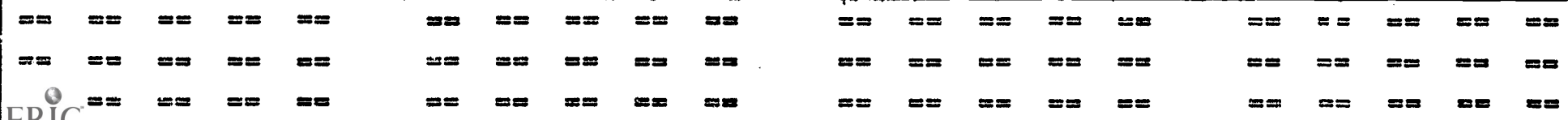
43. If no, are you allowed to drive another car when you wish to?
 == ==
 Yes No

44. Where do you live?
 == == == ==
 City Town On a Country but
 2,500-10,000 Under 2,500 farm not farm

ANSWER QUESTIONS 45, 46, 47, 48, 49, 50 AND 51 ONLY IF YOU LIVE ON A FARM OR HAVE LIVED ON A FARM. (ALL OTHERS SKIP TO 52.)

45. How many years have you lived on a farm?
 == == == == ==
 0 1-3 4-7 8-12 12+
46. If you did live on a farm, when was that?
 (a) Sometime between birth and 12 years of age
 (b) After 12 years of age
 (c) Most of my life
 (d) Other
 == == == ==
 (a) (b) (c) (d)
47. How do you like farm life?
 == == == == ==
 Like it Like it Neutral Dislike it Dislike it
 greatly greatly
48. What is the most important factor in the choice of farming as an occupation? Mark the one factor you consider most important.
 (a) Farming background
 (b) Desire to farm
 (c) Availability of an adequate farm
 (d) Adequate financing
 (e) Other
 == == == == ==
 (a) (b) (c) (d) (e)
49. Is there a farm available if you want to go into farming?
 == == ==
 Yes No Don't know
50. If "yes," where is the farm located?
 (a) Present home address
 (b) Farm in present locality
 (c) Farm in other section of Washington
 (d) In nearby state
 (e) Farm in distant part of country
 (f) Other
 == == == == == ==
 (a) (b) (c) (d) (e) (f)
51. Does most of your family income come from farm or non-farm employment?
 == ==
 Mostly from farm Mostly from non-farm

This is not the end of the questionnaire. Please turn the booklet around and answer the questions on pages 5, 6, and 7.



52. What is your father's main occupation? If your father is not working or if he is not living, mark the job he had last.

- (a) Professional (doctor, lawyer, teacher, etc.)
- (b) Farmer or farm manager
- (c) Manager, official or proprietor of his own business
- (d) Clerical or sales worker
- (e) Craftsman, foreman or technician
- (f) Works in factory, mill or mine
- (g) Service worker (policeman, barber, beauty operator, bartender, etc.)
- (h) Unskilled laborer
- (i) Not listed

53. In terms of income or wealth of families in my community, I think my family is:

- (a) Considerably above average
- (b) Somewhat above average
- (c) Average
- (d) Somewhat below average
- (e) Considerably below average

54. Does your mother work outside the home for pay?

- Full time
- Part time
- No

55. What is the marital status of your mother and father?

- (a) Both alive, living together
- (b) Both alive, separated
- (c) Father alive, divorced
- (d) Father not living
- (e) Mother not living
- (f) Neither father nor mother living

56. Mark all of the following who live in your house at present.

- Father
- Mother
- Stepfather
- Stepmother
- Brothers
- Sisters
- Grandmother
- Grandfather
- Husband
- Wife
- Other relatives
- Persons who are not relatives

57. How many living brothers and sisters do you have?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8+

58. Are you:

- (a) The oldest child in your family
- (b) The youngest child
- (c) In between
- (d) The only child

59. In which of the following would your parents be willing to help you financially? (Mark all that apply.)

- Farming
- College
- Vocational schooling
- Setting up a business of my own
- None of the above

60. What was the highest grade completed by your father?

- 1-7
- 8
- 9-11
- 12
- 1-3
- 4
- 5+
- Grade School
- High School
- College

61. What was the highest grade completed by your mother?

- 1-7
- 8
- 9-11
- 12
- 1-3
- 4
- 5+
- Grade School
- High School
- College

62. The number of older brothers and sisters who graduated from high school is:

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9+

63. The number who quit school before graduating from high school is:

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9+

64. The number who have attended or are attending college is:

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9+

65. Think for a minute about the group of students with whom you most often associate. Think about the things they do in school. Mark the following statements according to how well you think they describe your group of friends. Response categories:

- a—All of them
- b—Most of them
- c—About half of them
- d—Only a few of them
- e—None of them

	a	b	c	d	e	
						They would probably not go to school if they could find a way to quit without getting into an unpleasant situation.
						They seldom get into trouble with teachers or school officials.
						For entertainment during out-of-school hours they generally run around with friends and do whatever seems interesting at the time rather than going to school sponsored activities such as ball games, plays, and dances.
						They enjoy high school.
						They participate in such activities as academic honor societies, science and language clubs, and other scholastic honorary organizations.
						High grades (A's and B's) are not important to them.
						They are planning to go to college.
						They are planning to take vocational training.
						The boys are active in athletics.
						They are leaders in school activities.
						They are from farms.

66. About how many close friends do you have?
 0 1 2 3 4 5 6 7 8 9+

67. When you do things with these friends, do you usually do them together as a group or with only one of them at a time?
 As a group One at a time

68. Did any of them drop out of high school before graduating?
 Yes No

69. If yes, how many?
 0 1 2 3 4 5 6 7 8 9+

70. Is there a "leading crowd" in your school whose members hold most of the important club and student body offices, and run most of the main social activities?
 Yes No

71. If yes, would you say that you are part of the leading crowd of your school?
 Yes No

72. If you answered the above question no: Would you like to be a part of the leading crowd?
 Yes No Don't care

73. Are there any organized groups that you would like to belong to that you do not belong to now? What are they? (Mark all that apply.)

- Church youth groups
- School clubs
- Sports clubs and teams
- 4-H
- Campfire or scouts
- Fraternal organizations like DeMolay, Rainbow, etc.
- YWCA or YMCA
- Other youth groups
- None of these

74. How many times did you date last month?
 0 1 2 3 4 5 6 7 8 9+

75. Are you going steady? Yes No

For questions 76 and 77 mark the one box which corresponds to your first choice of the alternatives listed below.

- (a) Father
- (b) Mother
- (c) Older brother (or sister)
- (d) Friends in school
- (e) Teacher (counselor or principal)
- (f) Adult other than those listed
- (g) No other person

76. Which person would you most want to be like?
 (a) (b) (c) (d) (e) (f) (g)

77. Which person expects you to accomplish the most in the future?
 (a) (b) (c) (d) (e) (f) (g)

78. If you had a problem in any of the areas listed to the right, below, which one person would you most likely go to first for advice? Mark your answers as follows:

- (a) Father
- (b) Mother
- (c) Older brother (or sister)
- (d) Friends in school
- (e) Teacher (counselor or principal)
- (f) Adult other than those listed
- (g) No other person

(a)	(b)	(c)	(d)	(e)	(f)	(g)	Problem
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Career choice
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Dating
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Family
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. School
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Religious
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Financial
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Moral
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Impressing others favorably

79. Which three of the problems listed in question 78 are of the greatest importance to you? Mark the appropriate boxes.

- 1. Career choice
- 2. Dating
- 3. Family
- 4. School
- 5. Religious
- 6. Financial
- 7. Moral
- 8. Impressing others favorably

1	2	3	4	5	6	7	8	Importance
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	First
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Second
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Third

80. To what extent do you refer on teenage columns, and magazines for advice?
 Much Some Little None

81. Mark the following statements on the basis of whether or not they agree with your ideas concerning work.

- (a) Strongly agree
- (b) Agree
- (c) Neutral
- (d) Disagree
- (e) Strongly disagree

a	b	c	d	e	Statement
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Everyone who possibly can should work.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Even if I were financially secure and did not need a job, I would probably work. It is a person's duty to work.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If I did not work I would feel that I was not leading a "right" life. I find it hard to respect a man who doesn't work.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If I were financially well off, I think I could lead a perfectly happy and satisfying life without working.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A person who has never worked has missed a valuable experience. If a person can live the way he wants to without working, there is no reason for him to work.

GIRLS ONLY:

If I were married, I would want my husband to do some kind of work even if he were financially secure and did not need a job.



82. Question 82 contains some statements about things which may or may not be of importance to you. Examine each statement and rank it according to its importance to you.

- Mark the following statements on the basis of their importance to you. (a) Very important (b) Important (c) Of little importance (d) Unimportant (of no importance)

HOW IMPORTANT ARE THE FOLLOWING TO YOU?

Table with 4 columns (a, b, c, d) and 15 rows of statements for ranking importance.

On the scales below, please mark the position which best represents the way you feel about yourself. EXAMPLES: I feel that I am slightly heavy; therefore, in the first sample (S-1) I marked the blank under Slightly on the heavy side of the scale. In the next sample (S-2) I feel that I am very healthy; therefore I marked the blank under Very on the healthy side of the scale. RESPONSES: V=very; Q=quite; S=slightly; N=neutral.

(S-1) light heavy scale with V, Q, S, N markers.

83. Physical scale with V, Q, S, N markers for attributes like healthy, energetic, strong, etc.

84. Academic

Academic scale with V, Q, S, N markers for attributes like capable, intellectual, talented, fast, etc.

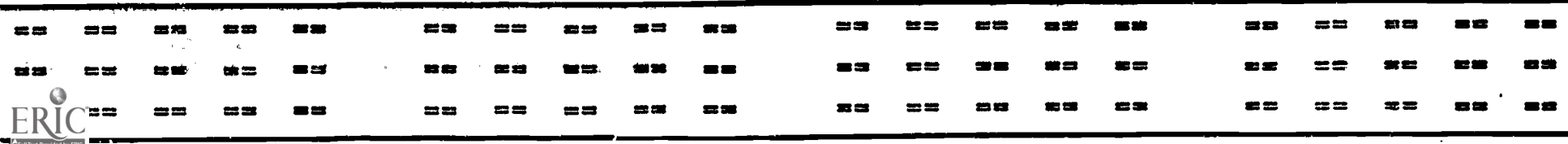
(S-2) healthy unhealthy scale with V, Q, S, N markers.

85. Social

Social scale with V, Q, S, N markers for attributes like companionable, warm, cooperative, exciting, etc.

86. Emotional

Emotional scale with V, Q, S, N markers for attributes like deliberate, calm, practical, self-confident, etc.



DEPARTMENT OF RURAL SOCIOLOGY
WASHINGTON STATE UNIVERSITY

Educational & Occupational Study
Student Interview, 1965

(Good morning/Good afternoon). I am (name of interviewer) from Washington State University. I would like to talk with you for a few minutes about your educational and occupational wishes and plans. Your answers will be confidential. First, what would you like to do with respect to further education after this year if you had a free choice?

1.

Desires

Expectations

- | | | |
|--------------------------|---|--------------------------|
| <input type="checkbox"/> | Quit high school and not go to any kind of school again. | <input type="checkbox"/> |
| <input type="checkbox"/> | Graduate from high school. | <input type="checkbox"/> |
| <input type="checkbox"/> | Attend business or commercial school (not college level). | <input type="checkbox"/> |
| <input type="checkbox"/> | Attend a technical school (not college level). | <input type="checkbox"/> |
| <input type="checkbox"/> | Attend a junior college. | <input type="checkbox"/> |
| <input type="checkbox"/> | Graduate from a junior college. | <input type="checkbox"/> |
| <input type="checkbox"/> | Attend a college or university. | <input type="checkbox"/> |
| <input type="checkbox"/> | Graduate from a college or university. | <input type="checkbox"/> |
| <input type="checkbox"/> | After graduating from college, do 1-2 years of advanced work in a special field (work for a master's degree) | <input type="checkbox"/> |
| <input type="checkbox"/> | After graduating from college, do 3-4 years of advanced work in a special field (work for a doctor's degree). | <input type="checkbox"/> |

2. How much education do you think you will actually be able to obtain?

3. It will help us to learn how young people make their choices if you would name the key persons who have had an influence on your thinking and planning about further education after high school and then tell us how this happened. First, has anyone urged you to go to college? Has anyone suggested that you should take technical vocational training? Has anyone urged you to find a job as soon as you get out of high school?

Now I would like to ask a few questions about the nature and importance to you of each of these influences. Your answers are, of course, voluntary. We will not tell anyone else what you say. We are mainly interested in learning how the approaches used by adults in educational counseling can be improved. To do this, we need to find out more about actual methods now being used and how these look to specific high school students.

Name of Student

INTERVIEWER: Use a separate copy of this page for each person listed on page 1.

(Name and classification of person listed-e.g., father, high school science teacher, counselor, friend of own age.)

3a. What did this person do or say that influenced you?

3b. In what way did this influence you?

3c. When did this happen?

3d. Is there anything else about your relationship with this person that you would like to mention?

EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS STUDY
 Department of Rural Sociology
 Washington State University

On the scales below, place a cross mark (X) at the position which best represents the way you would like to be.

EXAMPLES:
 If it were possible, I would like to be slightly tall; therefore, in the first sample I have marked the blank under Slightly on the tall side of the scale.

In the next example I would like to be quite attractive; therefore, I marked the blank under Quite on the attractive side of the scale.

	<u>Very</u>	<u>Quite</u>	<u>Slightly</u>	<u>Neutral</u>	<u>Slightly</u>	<u>Quite</u>	<u>Very</u>	
short	_____	_____	_____	_____	_____X_____	_____	_____	tall
attractive	_____	_____X_____	_____	_____	_____	_____	_____	unattractive

PHYSICAL

	<u>V</u>	<u>Q</u>	<u>S</u>	<u>N</u>	<u>S</u>	<u>Q</u>	<u>V</u>	
healthy	_____	_____	_____	_____	_____	_____	_____	unhealthy
energetic	_____	_____	_____	_____	_____	_____	_____	easily exhausted
strong	_____	_____	_____	_____	_____	_____	_____	weak
attractive	_____	_____	_____	_____	_____	_____	_____	unattractive
impressive	_____	_____	_____	_____	_____	_____	_____	unimpressive
superior	_____	_____	_____	_____	_____	_____	_____	inferior
able	_____	_____	_____	_____	_____	_____	_____	unable
clean	_____	_____	_____	_____	_____	_____	_____	dirty
brave	_____	_____	_____	_____	_____	_____	_____	cowardly
graceful	_____	_____	_____	_____	_____	_____	_____	awkward
mature	_____	_____	_____	_____	_____	_____	_____	immature
handsome	_____	_____	_____	_____	_____	_____	_____	ugly

SOCIAL

	<u>V</u>	<u>Q</u>	<u>S</u>	<u>N</u>	<u>S</u>	<u>Q</u>	<u>V</u>	
companionable	_____	_____	_____	_____	_____	_____	_____	lonely
popular	_____	_____	_____	_____	_____	_____	_____	unpopular
cooperative	_____	_____	_____	_____	_____	_____	_____	uncooperative
participating	_____	_____	_____	_____	_____	_____	_____	observing
friendly	_____	_____	_____	_____	_____	_____	_____	unfriendly
active	_____	_____	_____	_____	_____	_____	_____	passive
pleasant	_____	_____	_____	_____	_____	_____	_____	unpleasant
accepted	_____	_____	_____	_____	_____	_____	_____	unaccepted
warm	_____	_____	_____	_____	_____	_____	_____	cool
likeable	_____	_____	_____	_____	_____	_____	_____	unlikeable
agreeable	_____	_____	_____	_____	_____	_____	_____	disagreeable
exciting	_____	_____	_____	_____	_____	_____	_____	boring

ACADEMIC

	<u>V</u>	<u>Q</u>	<u>S</u>	<u>N</u>	<u>S</u>	<u>Q</u>	<u>V</u>	
capable	_____	_____	_____	_____	_____	_____	_____	incapable
intellectual	_____	_____	_____	_____	_____	_____	_____	unintellectual
talented	_____	_____	_____	_____	_____	_____	_____	untalented
fast	_____	_____	_____	_____	_____	_____	_____	slow
successful	_____	_____	_____	_____	_____	_____	_____	unsuccessful
sharp	_____	_____	_____	_____	_____	_____	_____	dull
good	_____	_____	_____	_____	_____	_____	_____	poor
high	_____	_____	_____	_____	_____	_____	_____	low
thorough	_____	_____	_____	_____	_____	_____	_____	careless
skillful	_____	_____	_____	_____	_____	_____	_____	unskillful
wise	_____	_____	_____	_____	_____	_____	_____	foolish
alert	_____	_____	_____	_____	_____	_____	_____	unalert

EMOTIONAL

	<u>V</u>	<u>Q</u>	<u>S</u>	<u>N</u>	<u>S</u>	<u>Q</u>	<u>V</u>	
happy	_____	_____	_____	_____	_____	_____	_____	unhappy
cheerful	_____	_____	_____	_____	_____	_____	_____	gloomy
deliberate	_____	_____	_____	_____	_____	_____	_____	impulsive
decisive	_____	_____	_____	_____	_____	_____	_____	indecisive
self confident	_____	_____	_____	_____	_____	_____	_____	unconfident
calm	_____	_____	_____	_____	_____	_____	_____	easily excited
relaxed	_____	_____	_____	_____	_____	_____	_____	tense
carefree	_____	_____	_____	_____	_____	_____	_____	moody
bold	_____	_____	_____	_____	_____	_____	_____	timid
even tempered	_____	_____	_____	_____	_____	_____	_____	easily angered
practical	_____	_____	_____	_____	_____	_____	_____	impractical
secure	_____	_____	_____	_____	_____	_____	_____	insecure

4. Some people say that the attitudes and plans of young people are usually similar to those of their close friends. Others disagree. We would like to check this out on a scientific basis and it will help us to do this if you would be willing to tell us the names of three or four persons in this school that you regard as your best friends:

Names:

_____	_____
_____	_____
_____	_____
_____	_____

Would you say that the attitudes toward education of each of these friends are similar to yours? (Interviewer: Code each name as follows: Similar 1, Somewhat similar 2, Not similar 3, Don't know 4.)

5. What is the occupation that you think you would like best when you are 30 years old?

6. What are the chances that you will actually enter the job you just mentioned?

1. Certainly will.
2. Probably will.
3. Chances are 50-50.
4. Probably will not.
5. No job listed.

7. Is there a particular person in this occupation whom you admire?

1. () yes.
2. () no.

8. Has this person influenced you to choose this occupation?

1. () yes.
2. () no.

9. If yes, what did (he), (she) do or say that encouraged you?

10. Has anyone tried to influence you against this occupation?

1. () yes.
2. () no.

11. If yes, what did (he), (she) do or say?

12 (a) What do you want most from your life's work? (Check all that apply)
[SHOW LIST]

- 1. () money
- 2. () job security
- 3. () work that continues to be interesting
- 4. () public recognition or prestige
- 5. () freedom of behavior
- 6. () chance to be of service to humanity
- 7. () pleasant associates
- 8. () other: _____
- 9. () undecided

(b) Which is most important? ()

13. Of all the jobs you have heard of, there have probably been some jobs of which you have said: "I sure would not like to have that job." Tell me some jobs you definitely would not like. (Be specific)

- 1. _____
Why? _____
- 2. _____
Why? _____
- 3. _____
Why? _____

14. GIRLS: Go on to Question 15.

BOYS: Have you ever heard of the occupation of male nurse?

- () Yes. (If "Yes", go on to Question 15)
- () No. (If "No", go on to Question 16)

15. Have you ever seriously considered becoming a nurse (male nurse) when you leave school?

- () Yes.
 - 1. When did you first consider it as a possibility? _____ (Age)
 - 2. Is it still a possibility?
 - () Definitely
 - () Maybe
 - () Unlikely
 - () NoWhy? _____

() No. Why don't you want to be a nurse (male nurse)?

16. What are the essential qualities required to be a nurse (male nurse, if BOY answers "yes" to Question 14)?

- 1. _____
- 2. _____
- 3. _____

17. Has someone in your family, or relatives, ever been a nurse?

- Yes Who? _____
- No

18. Here is something I want you to think about. [Hand card to respondent] Look at the card I have just handed you and tell me how you would rate yourself on your ability to control your emotions and feelings. Tell me the number which applies to you.

- 1. Much above 2. Above 3. Average 4. Below 5. Much below
-

BOYS

GIRLS

19. If you are married when you reach the age of 30, would you prefer your wife to work, or not work?

- work
- not work
- don't know
- Other _____

If work, or not work, why?

19. If you are married when you reach the age of 30, would you prefer to work, as well as your husband, or not work?

- work
- not work
- don't know
- other _____

If work, or not work, why?

20. (a) Try to imagine you are 30 years old and married. Your husband has just finished his job for the day and is coming up the walk to your home. Now, supposing you are married when you are 30 years old, what sort of occupation would you like to see him coming home from (assuming he will be happy and satisfied with it)? (Be specific) _____

(b) Now, using your imagination in the same way, what sort of an occupation do you expect him to have? (Be specific) _____

Parents' name: _____

EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS STUDY
Department of Rural Sociology
Washington State University

(Teachers, Counselors and Administrators Questionnaire)

- A. Do you know this person well enough to give any opinions about (him) (her)?
(1) Yes (2) No
- B. What is your impression of the intellectual ability of this person?
(1) High
(2) Above Average
(3) Average
(4) Below Average
(5) Poor
- C. In relation to (his) (her) ability (he) (she) is:
(1) An over achiever
(2) Average
(3) Under achiever
- D. What level of education do you think this person would be able to obtain?
(1) Should probably drop out of H.S.
(2) H.S. only
(3) Junior College
(4) College
(5) Post Graduate
- E. What type of technical-vocational education should this person try to obtain?
(0) None
(1) Stenographer-typist
(2) Clerical or business
(3) Mechanical
(4) Electronics
(5) Other (specify) _____
- F. Have you ever talked to this person about (his) (her) educational plans?
(1) Yes (2) No
- G. If yes to Question F, have you:
(1) Encouraged (him) (her) to go to college?
(2) Encouraged (him) (her) to finish high school?
(3) Encouraged (him) (her) to attend vocational-technical school?
(4) Did not make any specific recommendation.
(5) Other
- H. Have you ever talked to this person about (his) (her) occupational plans?
(1) Yes (2) No
- I. If yes to Question H, what was the nature of your discussion?
(1) Explained job requirements or duties.
(2) Informed (him) (her) of specific job opportunities.
(3) Recommended specific occupations to (him) (her).
(4) Other
- J. What type of work would you say this person is best suited for?
(1) Professional
(2) Technical (lab technician, etc.)
(3) Manual-skilled (carpenter, electrician, etc.)
(4) Manual-unskilled
(5) Clerical
(6) Sales
(7) Farm operator
(8) Farm Laborer
(9) Other (specify) _____

Educational and Occupational Study
 Department of Rural Sociology
 Washington State University

FATHER'S QUESTIONNAIRE

This questionnaire should be completed by either the () father, () stepfather, () male guardian or () other male head of this household. Please place an X in front of the appropriate category).

Place an X in the blank in front of the number or sentence that applies to you in each of the following questions.

- | | | | | | | | | | | | | | | | | | | | |
|---|---|---|-------|--|------------|------------|--|--------|--------|---------------------------------------|--------|--------|---------------------------------|--------|--------|---|--------|--------|---|
| <p>A. College education should be (mark one)</p> <p>1. ___ limited to bright students (top 25 per cent).</p> <p>2. ___ limited to students who have the ability to do college work.</p> <p>3. ___ available to most youth.</p> <p>4. ___ available to all who wish to attend.</p> | <p>B. Assuming a boy or girl has the necessary intellectual capacity, a college education for</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">a girl</td> <td style="text-align: center;">a boy</td> <td></td> </tr> <tr> <td style="text-align: center;">(mark one)</td> <td style="text-align: center;">(mark one)</td> <td></td> </tr> <tr> <td>1. ___</td> <td>1. ___</td> <td>is essential under modern conditions.</td> </tr> <tr> <td>2. ___</td> <td>2. ___</td> <td>is desirable but not essential.</td> </tr> <tr> <td>3. ___</td> <td>3. ___</td> <td>is of questionable value unless required for success in desired occupation.</td> </tr> <tr> <td>4. ___</td> <td>4. ___</td> <td>is not essential under modern conditions.</td> </tr> </table> | a girl | a boy | | (mark one) | (mark one) | | 1. ___ | 1. ___ | is essential under modern conditions. | 2. ___ | 2. ___ | is desirable but not essential. | 3. ___ | 3. ___ | is of questionable value unless required for success in desired occupation. | 4. ___ | 4. ___ | is not essential under modern conditions. |
| a girl | a boy | | | | | | | | | | | | | | | | | | |
| (mark one) | (mark one) | | | | | | | | | | | | | | | | | | |
| 1. ___ | 1. ___ | is essential under modern conditions. | | | | | | | | | | | | | | | | | |
| 2. ___ | 2. ___ | is desirable but not essential. | | | | | | | | | | | | | | | | | |
| 3. ___ | 3. ___ | is of questionable value unless required for success in desired occupation. | | | | | | | | | | | | | | | | | |
| 4. ___ | 4. ___ | is not essential under modern conditions. | | | | | | | | | | | | | | | | | |

.....

Answer questions C, D, E, F, and G only if you have a son in high school. If you have more than one son in high school, answer the questions in regard to the oldest son only.

- | | |
|---|--|
| <p>C. How do you feel about college for your son who is in high school?</p> <p>1. ___ I don't think he should go to college.</p> <p>2. ___ it doesn't matter to me whether he goes or not.</p> <p>3. ___ I have encouraged him to go to college, but will leave the decision up to him.</p> <p>4. ___ I will insist he go to college.</p> | <p>F. If you do not feel that your son should go to college, what are the major reasons? (Mark as many as apply).</p> <p>___ want him to help with my business.</p> <p>___ want him to work at home.</p> <p>___ want him to enter military service.</p> <p>___ want him to take technical training instead of college.</p> <p>___ want him to get a job.</p> <p>___ college education is too much of a luxury.</p> <p>___ college life is not a good influence.</p> <p>___ costs too much.</p> <p>___ family needs income he could earn.</p> <p>___ he does not get good grades.</p> <p>if other reason, please state.</p> <p>_____</p> <p>_____</p> |
| <p>D. How often have you discussed college education with your son?</p> <p>1. ___ often.</p> <p>2. ___ occasionally.</p> <p>3. ___ never.</p> | <p>G. How often have you discussed your son's occupational plans with your son?</p> <p>1. ___ often.</p> <p>2. ___ occasionally.</p> <p>3. ___ never</p> |
| <p>E. In which of the following would you be willing to help your son financially? (Mark all that apply).</p> <p>___ farming.</p> <p>___ college.</p> <p>___ vocational schooling.</p> <p>___ setting up a business of his own.</p> <p>___ none of the above.</p> | |

Answer questions H, I, J, K and L only if you have a daughter in high school. If you have more than one daughter in high school, answer the questions in regard to the oldest daughter only.

H. How do you feel about college for your daughter who is in high school? (Mark one).
 1. ___ I don't think she should go to college.
 2. ___ it doesn't matter to me whether she goes or not.
 3. ___ I have encouraged her to go to college, but will leave the decision up to her.
 4. ___ I will insist she go to college.

I. How often have you discussed college education with your daughter?
 1. ___ often.
 2. ___ occasionally.
 3. ___ never.

J. If you do not feel that your daughter should go to college, what is the major reason? (Mark as many as apply).
 ___ want her to help with my business.
 ___ want her to work at home.
 ___ want her to take technical training instead of college.
 ___ want her to get a job.
 ___ college education is too much of a luxury.
 ___ college life is not a good influence.
 ___ costs too much.
 ___ family needs income she could earn.
 ___ she does not get good grades.
 ___ if other reason, please state.

K. How often have you discussed your daughter's occupational plans with your daughter?
 1. ___ often.
 2. ___ occasionally.
 3. ___ never.

L. In which of the following would you be willing to help your daughter financially? (Mark all that apply).
 ___ farming.
 ___ college.
 ___ vocational schooling.
 ___ setting up a business of her own.
 ___ none of the above.

M. Do you agree or disagree with the following statements? Mark your answers as follows:

1 - agree 2 - undecided 3 - disagree

1	2	3	
___	___	___	scholarly achievements as reflected in rewards such as high grades, membership in honorary groups, etc. are quite important
___	___	___	one should be interested in education for its own sake rather than education as a means to some other end (job, social prestige, money, etc.)
___	___	___	if a person can get a job without formal education there is no real purpose in formal education beyond high school.
___	___	___	homework assignments are an infringement by the school on time that should be available for other activities, including work.
___	___	___	success in life depends upon ability and effort, not how much education one has.
___	___	___	it is necessary to have a college education in order to earn a good salary or to be a leader in the community.
___	___	___	girls should go to college because the country is going to need more trained women to fill important jobs.
___	___	___	girls should go to college only if they plan to use their education on a job.
___	___	___	I feel that formal education tends to take people away from their home communities; and because of this it is undesirable.
___	___	___	I am opposed to formal education beyond high school.
___	___	___	I feel that a good education helps a person to lead a better life.
___	___	___	I do not think that formal education is really very important.
___	___	___	I believe that the most important thing in formal education is the diploma or degree.

N. Do you agree or disagree with the following statement? Mark your answer as follows:
 1 - agree 2 - undecided 3 - disagree

1 2 3
 ___ ___ ___ I expect my children to get all the formal education they can.

0. This section contains some statements about things which may or may not be important to you. Examine each statement and rank it according to its importance to you.

Mark your answers as follows:
 (1) important (2) neither important nor unimportant (3) unimportant

HOW IMPORTANT ARE THE FOLLOWING TO YOU?

- 1 2 3
- ___ ___ ___ to have at your fingertips many work-saving conveniences that would make life easy.
 - ___ ___ ___ to be one who makes a very good showing on the job.
 - ___ ___ ___ to be one of the important members of the most influential group in my community.
 - ___ ___ ___ to save money in order to avoid financial problems in the future.
 - ___ ___ ___ to do something in life that would benefit many people.
 - ___ ___ ___ to have the opportunity to work with sociable and friendly people.
 - ___ ___ ___ to be provided with many luxury items.

- 1 2 3
- ___ ___ ___ to work for an organization or in a job where there are many opportunities for promotion and advancement.
 - ___ ___ ___ to have myself and my family considered as the best in the community.
 - ___ ___ ___ to know in advance what is involved in a new venture or situation before becoming involved in it.
 - ___ ___ ___ to contribute money and my services to charitable organizations.
 - ___ ___ ___ to avoid jobs or situations which require me to be separated from my friends.
 - ___ ___ ___ to have an expensive car and house.
 - ___ ___ ___ to be able to achieve things which I and other people consider difficult.
 - ___ ___ ___ to be able to work my way into a position which would give me wealth, prestige and power.
 - ___ ___ ___ to avoid getting into situations where I thought that my feelings might get hurt.
 - ___ ___ ___ to be able to do good things for others in the job of my choice.
 - ___ ___ ___ to have my life arranged in such a way that I would have plenty of time for association with good friends.



P. Mark the following statements on the basis of whether or not they agree with your ideas concerning work.

- (1) strongly agree (4) disagree
 (2) agree (5) strongly disagree
 (3) neutral

 1 2 3 4 5

_____ everyone who possibly can
 _____ should work.

_____ even if I were financially
 _____ secure and did not need a
 _____ job, I wo 'd probably
 _____ work.

_____ it is a person's duty to
 _____ work.

_____ if I did not work, I
 _____ would feel that I
 _____ was not leading a
 _____ "right" life.

_____ I find it hard to
 _____ respect a man who
 _____ doesn't work.

_____ if I were financially
 _____ well off, I think
 _____ I could lead a
 _____ perfectly satisfying
 _____ life without working.

_____ a person who has never
 _____ worked has missed a
 _____ valuable experience.

_____ if a person can live
 _____ the way he wants to
 _____ without working,
 _____ there is no reason
 _____ for him to work.

Q. Employment history: Please list below the four most recent jobs you have held beginning with the present or last job:

1. Present or last job:
 Name of job: _____
 Date begun: Month _____ Year _____
 Date ended: Month _____ Year _____

2. Next to last job:
 Name of job: _____
 Date begun: Month _____ Year _____
 Date ended: Month _____ Year _____

3. Next previous job:
 Name of job: _____
 Date begun: Month _____ Year _____
 Date ended: Month _____ Year _____

4. Next previous job:
 Name of job: _____
 Date begun: Month _____ Year _____
 Date ended: Month _____ Year _____

R. What kind of a job would you like your son to have as a lifetime job? (Answer only if you have a son in high school. If you have more than one son in high school, answer for the oldest one.)
 1. ___ same kind of job as I have.
 2. ___ slightly better job than I have.
 3. ___ much better job than I have.
 4. ___ no preference.

S. What is your approximate age?
 1. ___ under 30
 2. ___ 30 - 34
 3. ___ 35 - 39
 4. ___ 40 - 44
 5. ___ 45 - 49
 6. ___ 50 - 54
 7. ___ 55 - 59
 8. ___ 60 and over.

T. What is the highest grade in school that you completed?
 1. ___ less than 8th grade.
 2. ___ 8th grade graduate.
 3. ___ some high school.
 4. ___ high school graduate.
 5. ___ some college.
 6. ___ college graduate.
 7. ___ other: _____

Thank you for your cooperation.

Educational and Occupational Study
 Department of Rural Sociology
 Washington State University

MOTHER'S QUESTIONNAIRE

This questionnaire should be completed by either the () mother, () stepmother, or () other female guardian in this household. Please place an X in front of the appropriate category.

Place an X in the blank in front of the number or sentence that applies to you in each of the following questions.

A. College education should be (mark one)

- 1. ___ limited to bright students (top 25 per cent).
- 2. ___ limited to students who have the ability to do college work.
- 3. ___ available to most youth.
- 4. ___ available to all who wish to attend.

B. Assuming a boy or girl has the necessary intellectual capacity, a college education for

- | a girl | a boy | |
|------------|------------|---|
| (mark one) | (mark one) | |
| 1. ___ | 1. ___ | is essential under modern conditions. |
| 2. ___ | 2. ___ | is desirable but not essential. |
| 3. ___ | 3. ___ | is of questionable value unless required for success in desired occupation. |
| 4. ___ | 4. ___ | is not essential under modern conditions. |

.....
 Answer questions C, D, E, F, and G only if you have a son in high school. If you have more than one son in high school, answer the questions in regard to the oldest son only.

C. How do you feel about college for your son who is in high school?

- 1. ___ I don't think he should go to college.
- 2. ___ it doesn't matter to me whether he goes or not.
- 3. ___ I have encouraged him to go to college, but will leave the decision up to him.
- 4. ___ I will insist he go to college.

F. If you do not feel that your son should go to college, what are the major reasons? (Mark as many as apply).

- ___ want him to help with my business.
- ___ want him to work at home.
- ___ want him to enter military service.
- ___ want him to take technical training instead of college.
- ___ want him to get a job.
- ___ college education is too much of a luxury.
- ___ college life is not a good influence.
- ___ costs too much.
- ___ family needs income he could earn.
- ___ he does not get good grades.
- if other reason, please state.

D. How often have you discussed college education with your son?

- 1. ___ often.
- 2. ___ occasionally.
- 3. ___ never.

E. In which of the following would you be willing to help your son financially? (Mark all that apply).

- ___ farming.
- ___ college.
- ___ vocational schooling.
- ___ setting up a business of his own.
- ___ none of the above.

G. How often have you discussed your son's occupational plans with your son?

- 1. ___ often.
- 2. ___ occasionally.
- 3. ___ never.

Answer questions H, I, J, K and L only if you have a daughter in high school. If you have more than one daughter in high school, answer the questions in regard to the oldest daughter only.

H. How do you feel about college for your daughter who is in high school? (Mark one).

- 1. ___ I don't think she should go to college.
- 2. ___ it doesn't matter to me whether she goes or not.
- 3. ___ I have encouraged her to go to college, but will leave the decision up to her.
- 4. ___ I will insist she go to college.

I. How often have you discussed college education with your daughter?

- 1. ___ often.
- 2. ___ occasionally.
- 3. ___ never.

J. If you do not feel that your daughter should go to college, what is the major reason? (Mark as many as apply).

- ___ want her to help with my business.
- ___ want her to work at home.
- ___ want her to take technical training instead of college.
- ___ want her to get a job.
- ___ college education is too much of a luxury.
- ___ college life is not a good influence.
- ___ costs too much.
- ___ family needs income she could earn.
- ___ she does not get good grades.
- if other reason, please state.

K. How often have you discussed your daughter's occupational plans with your daughter?

- 1. ___ often.
- 2. ___ occasionally.
- 3. ___ never.

L. In which of the following would you be willing to help your daughter financially? (Mark all that apply).

- ___ farming.
- ___ college.
- ___ vocational schooling.
- ___ setting up a business of her own.
- ___ none of the above.

M. Do you agree or disagree with the following statements? Mark your answers as follows:

1 - agree 2 - undecided 3 - disagree

1 2 3

- ___ scholarly achievements as reflected in rewards such as high grades, membership in honorary groups, etc. are quite important.
- ___ one should be interested in education for its own sake rather than education as a means to some other end (job, social prestige, money, etc.)
- ___ if a person can get a job without formal education there is no real purpose in formal education beyond high school.
- ___ homework assignments are an infringement by the school on time that should be available for other activities, including work.
- ___ success in life depends upon ability and effort, not how much education one has.
- ___ it is necessary to have a college education in order to earn a good salary or to be a leader in the community.
- ___ girls should go to college because the country is going to need more trained women to fill important jobs.
- ___ girls should go to college only if they plan to use their education on a job.
- ___ I feel that formal education tends to take people away from their home communities; and because of this it is undesirable.
- ___ I am opposed to formal education beyond high school.
- ___ I feel that a good education helps a person to lead a better life.
- ___ I do not think that formal education is really very important.
- ___ I believe that the most important thing in formal education is the diploma or degree.

N. Do you agree or disagree with the following statement? Mark your answer as follows:
 1 - agree 2 - undecided 3 - disagree

1 2 3
 ___ ___ ___ I expect my children to get all the formal education they can.

O. This section contains some statements about things which may or may not be important to you. Examine each statement and rank it according to its importance to you.

Mark your answers as follows:
 (1) important (2) neither important nor unimportant (3) unimportant

HOW IMPORTANT ARE THE FOLLOWING TO YOU?

- 1 2 3
- ___ ___ ___ to have at your fingertips many work-saving conveniences that would make life easy.
 - ___ ___ ___ to be one who makes a very good showing on the job.
 - ___ ___ ___ to be one of the important members of the most influential group in my community.
 - ___ ___ ___ to save money in order to avoid financial problems in the future.
 - ___ ___ ___ to do something in life that would benefit many people.
 - ___ ___ ___ to have the opportunity to work with sociable and friendly people.
 - ___ ___ ___ to be provided with many luxury items.

- 1 2 3
- ___ ___ ___ to work for an organization or in a job where there are many opportunities for promotion and advancement.
 - ___ ___ ___ to have myself and my family considered as the best in the community.
 - ___ ___ ___ to know in advance what is involved in a new venture or situation before becoming involved in it.
 - ___ ___ ___ to contribute money and my services to charitable organizations.
 - ___ ___ ___ to avoid jobs or situations which require me to be separated from my friends.
 - ___ ___ ___ to have an expensive car and house.
 - ___ ___ ___ to be able to achieve things which I and other people consider difficult.
 - ___ ___ ___ to be able to work my way into a position which would give me wealth, prestige and power.
 - ___ ___ ___ to avoid getting into situations where I thought that my feelings might get hurt.
 - ___ ___ ___ to be able to do good things for others in the job of my choice.
 - ___ ___ ___ to have my life arranged in such a way that I would have plenty of time for association with good friends.



P. Mark the following statements on the basis of whether or not they agree with your ideas concerning work.

- (1) strongly agree (4) disagree
- (2) agree (5) strongly disagree
- (3) neutral

 1 2 3 4 5

_____ everyone who possibly can should work.

_____ even if I were financially secure and did not need a job, I would probably work.

_____ it is a person's duty to work.

_____ if I did not work, I would feel that I was not leading a "right" life.

_____ I find it hard to respect a man who doesn't work.

_____ if I were financially well off, I think I could lead a perfectly satisfying life without working.

_____ a person who has never worked has missed a valuable experience.

_____ if a person can live the way he wants to without working, there is no reason for him to work.

_____ I would want my husband to do some kind of work even if he were financially secure and did not need a job.

Q. If you are working or have held jobs previously, please list below, beginning with the present or last one: (If you have never been employed, check here _____ and go on to the next question.)

1. Present or last job:

Name of job: _____

Date begun: Month _____ Year _____

Date ended: Month _____ Year _____

2. Next to last job:

Name of job: _____

Date begun: Month _____ Year _____

Date ended: Month _____ Year _____

3. Next previous job:

Name of job: _____

Date begun: Month _____ Year _____

Date ended: Month _____ Year _____

4. Next previous job:

Name of job: _____

Date begun: Month _____ Year _____

Date ended: Month _____ Year _____

R. What is your approximate age?

1. _____ under 30

2. _____ 30 - 34

3. _____ 35 - 39

4. _____ 40 - 44

5. _____ 45 - 49

6. _____ 50 - 54

7. _____ 55 - 59

8. _____ 60 and over.

S. What is the highest grade in school that you completed?

1. _____ less than 8th grade.

2. _____ 8th grade graduate.

3. _____ some high school.

4. _____ high school graduate.

5. _____ some college.

6. _____ college graduate.

7. _____ other: _____

Thank you for your cooperation.

Educational and Occupational Study
Department of Rural Sociology
Washington State University

GENERAL INFORMATION QUESTIONNAIRE

For statistical purposes, we will need some general information about your family. This questionnaire may be completed by either the man or the woman representing this household. Place an X in the blank in front of the number or sentence that applies to your family in the following questions:

- A. How many children in your family?
(Include stepchildren and those no longer at home). _____
- B. How many of these were in high school any time during the 1964-65 school year?
Boys _____ Girls _____
- C. Where do you live?
1. _____ city 2,500-10,000.
2. _____ town under 2,500.
3. _____ in the country, but not on a farm.
4. _____ on a farm.
- D. If you live on a farm, please indicate if you are
1. _____ a full-time farmer.
2. _____ a part-time farmer and most of family income comes from farming.
3. _____ a part-time farmer and most of family income comes from non-farm sources.
- E. If you live on a farm, do you own or rent the farm?
1. _____ own farm.
2. _____ rent farm.
- F. If you live in town, do you own or rent the house in which you are living?
1. _____ own house.
2. _____ rent house.
- G. The 1964 income for my family from all sources was: (If you do not know exactly, make the best guess you can.)
1. _____ under \$2,000.
2. _____ \$2,000-\$2,999.
3. _____ \$3,000-\$3,999.
4. _____ \$4,000-\$4,999.
5. _____ \$5,000-\$5,999.
6. _____ \$6,000-\$7,499.
7. _____ \$7,500-\$9,999.
8. _____ \$10,000-\$14,999.
9. _____ \$15,000 or over.
- H. In terms of income or wealth of families in my community, I think my family is:
1. _____ considerably above average.
2. _____ somewhat above average.
3. _____ average.
4. _____ somewhat below average.
5. _____ considerably below average.

**Rural Sociology Department
Washington State University
Pullman, Washington**

Dear Friend:

Last fall you participated in a study on the educational and occupational desires and plans of high school students in the state of Washington. We are interested in the kinds of occupational and educational activities that last year's seniors are engaged in now. Please complete the five questions on the attached post card and send the card to us as soon as possible. Your answers will be kept confidential.

In case the student is away from home at the present time, his (her) parents may complete the card. Thank you for your cooperation.

**Sincerely yours,
Walter L. Slocum
Professor and Chairman**

THIS SIDE OF CARD IS FOR ADDRESS



**Department of Rural Sociology
Washington State University
Pullman, Washington 99163**

1. Are you at the present time attending a college or other school?

Yes _____ No _____

2. If yes, what is the name of the college or school?

3. If yes to question No. 1, what is your course of study? _____ City _____ State _____

4. If no to question No. 1, are you employed at the present time?

(Yes _____ --Full-time _____ Part-time _____) (No _____)

5. If no to both questions Nos. 1 and 4, which of these reasons apply at the present time?

_____ will be employed in the near future.

_____ going to enlist in the service (army, navy, etc.).

_____ going to attend college or school next term.

_____ can't get a job.

_____ married - (full-time homemaker)

_____ other (specify) _____

THIS SIDE OF CARD IS FOR ADDRESS



APPENDIX C.

Letters

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 1

Department of Rural Sociology

The Department of Rural Sociology at Washington State University has received a grant under the Cooperative Research Program of the United States Office of Education to make a study of the factors which influence the educational and occupational aspirations of rural boys and girls--sophomores, juniors, and seniors attending high school in places of 10,000 population or less.

Previous research has revealed the existence of substantial differences in educational aspirations among students with similar scholastic ability. It is our hypothesis that there are several influential factors in most cases. These include family background, especially the orientation of the family toward education, the relevant attitudes of friends, personal experiences in the classrooms, other school related activities and encouragement from teachers, counselors, and others. We hope to be able to determine the relative importance of these.

The study will include administration of a questionnaire to sophomores, juniors, and seniors, and subsequent interviews with a sample of students to be selected on the basis of information obtained during the questionnaire phase. The questionnaire has been designed for completion by the average high school student within a 50-minute class period. Interviews with selected students will take approximately 30 minutes per student. It is our hope that arrangements can be made for the administration of the questionnaire during November or early December so that the interviews can be started by February or March.

In previous studies in rural high schools, teachers have administered the questionnaires in their classrooms, explaining the study and picking up all of the questionnaires afterwards. A representative of this department would bring the questionnaires to the school, explain the details of administration, and take the answers back to Pullman.

Exhibit No. 1

Page 2

Because we plan to use questionnaire data to select students for interview, it is necessary to obtain the names and addresses of students who fill out the questionnaire. Special precautions will be taken to safeguard the confidentiality of the information thus provided. The name and address cards will be removed from the questionnaires as soon as they are filled out, passed to the front of the room and placed in a sealed envelope where they will remain until they reach Washington State University.

No information provided by a particular student will be released by this department or any unauthorized person except on an anonymous basis. Data will not be published for individual schools but, if desired, statistical tables can be provided for your use.

We also wish to interview counselors and some high school teachers to learn what suggestions, if any, they have made with respect to the educational plans and occupational objectives of students. We also plan to send a short questionnaire to parents to learn what educational and occupational aspirations they have for their children. We will not disclose this information to any unauthorized person but will handle it in a confidential manner also.

If you can participate please let me know as soon as possible as we will want to discuss the detailed arrangements with you or with your high school principal. You may wish to discuss the matter of participation in the study with your board. Please write me if there are any aspects of the study about which you would like further information before making your decision.

Enclosed you will find near-final copies of the student questionnaire and preliminary interview questions for your inspection.

We hope that you will find it possible to cooperate with us in this study.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

Enc.

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 2

Department of Rural Sociology

On September 22 I wrote you to find out if it would be possible for your school to participate in a study of the factors which influence the educational and occupational aspirations of rural boys and girls. We believe that the study may provide information which will be useful to school administrators and counselors in helping to raise the educational aspirations of boys and girls who have the capacity for additional education.

We had the advice of Dr. Gordon McCloskey, Professor of Education at Washington State University, in the preparation of the questionnaire and procedures. We have also discussed the questionnaire and the procedures with Dr. Ray Jongeward, Director of Research in the office of the Superintendent of Public Instruction.

Your school is one of several selected by scientific sampling methods to represent all rural high schools in the state of Washington. Consequently, we hope that it will be possible for you to participate.

It may be that your reply was on the way when we mailed this letter. If not, I would appreciate it very much if you would let us know your decision within the next few days. If there are any questions which you would like to have answered before you make your decision, please write or call me collect at EDison 5-4163.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

WLS:kw

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 3

Department of Rural Sociology

In accordance with our phone conversation, I am sending you herewith six sample copies of the final version of the Educational and Occupational questionnaire. I have also enclosed six copies of the instructions.

The questionnaire has been designed to follow up on leads provided by earlier research conducted by this department and elsewhere. We have learned, for example, that family backgrounds, including attitudes toward education, while they do not fully explain differences in educational and occupational aspirations and plans, are very important. Nevertheless, we need some information of this kind if we are to determine how influence is exercised by families, by other teenagers and by teachers and counselors. If any student objects to providing an answer to any specific question, he can, of course, leave the question blank. I would hope that he would be permitted to make that decision himself.

We plan to use the information to answer general questions rather than to accumulate information about individuals or families as such. We have been told by the U. S. Department of Agriculture that only one out of 35 farm boys will find career opportunities in farming. Furthermore, it appears that the key to a successful occupational career in the nonfarm sector is education, and this is likely to be even more important in the future. Yet we have learned through research that farm boys and girls are less interested than nonfarm boys and girls in education beyond high school. Why is this? What can be done and by whom to raise their aspirations and motivate them to make the kind of educational preparation that will enable them to make the most effective use of their talents?

As you will note, we have made it clear that participation in the study is entirely voluntary and we have set up safeguards to prevent information about individuals from falling into the hands of anyone who might use it for unethical purposes.

I hope that your board will approve the study and permit you or some member of your staff to accept the responsibility for administration of the educational and occupational questionnaires to sophomores, juniors and seniors in your high school. Under separate cover we have sent you _____ copies of the questionnaire together with instructions for conducting this phase of the study.

We hope that the instructions are clear and adequate. However, if you have any questions, please feel free to call me collect at Edison 5-4163, Pullman.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

Enclosures

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 4

Department of Rural Sociology
December 8, 1964

I am writing you today to make inquiry about the possibility of making a change in the plans for administering the questionnaires on educational and occupational aspirations of rural high school students.

After receipt of the special paper from the IBM Corporation, we encountered additional technical difficulties due primarily to the fact that the IBM Corporation uses the metric scale and our print shop does not. However, we now anticipate that the questionnaires will be ready early next week.

We would like to complete this phase of the study before Christmas, if possible. As you know, we had planned to send a representative to each school to explain the questionnaire and to take the completed questionnaires back to Pullman. In view of the shortness of time and the limited number of graduate students and staff members available, we will not be able to send a representative before Christmas to each of the 27 schools which have agreed to participate in the study. Consequently, we are wondering if it would be possible for you or someone designated by you to accept the responsibility for explaining the questionnaire to the classroom teachers who will actually administer it and for sending the completed questionnaires back to Washington State University. We will, of course, provide specific instructions for administration of the questionnaires.

We have been authorized to make a token payment of \$10 to you or to the person designated by you for accepting this responsibility.

If the suggested arrangement does not appear feasible in your school, we will make every effort to send a representative.

Please let me know by return mail whether or not the suggested arrangement appears feasible. I have enclosed a self-addressed card for this purpose.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 5

Department of Rural Sociology

We appreciate very much your cooperation in accepting the responsibility for administration of the educational and occupational questionnaires to sophomores, juniors and seniors in your high school. Under separate cover we have sent you _____ copies of the questionnaire together with instructions for conducting this phase of the study.

We hope that the instructions are clear and adequate. However, if you have any questions, please feel free to call me collect at Edison 5-4163, Pullman.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

WLS:jj

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 6

Department of Rural Sociology

This will acknowledge receipt of the Educational and Occupational Questionnaires completed by students in your school.

You will recall that we agreed to make a token payment of \$10 for acceptance of the responsibility for administration of the questionnaires. Please fill out and sign the enclosed "Employee's Withholding Exemption Certificate Form W-4" and return it to me. (If you delegated the responsibility to someone else, please have that person fill it out.)

I wish to thank you very much for your cooperation and for the assistance of your staff members. I wish also to thank the students who participated.

We hope to start the interview phase of the study early in February. I will contact you later to make definite arrangements.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

WLS:jj
Enc.

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit 7

Department of Rural Sociology

We have now selected a sample of students in your school from those who filled out the Educational and Occupational questionnaire. We would like to interview all of these students, if possible, to obtain some additional information about their educational and occupational wishes and plans. We are especially interested in learning, if we can, how their plans for further education and for occupations have been influenced by other persons who are significant to them.

It is our expectation that the interviews will average 15-20 minutes and we would like to schedule these during school hours. We would also like to have an opportunity to interview school counselors, administrators and selected teachers.

Attached to this letter are the data collection forms which we plan to use in these interviews.

The interviews will be conducted by representatives of this department. During the interval between semesters, February 1 through February 5, we will have an opportunity to employ some graduate students in Sociology and Education. Consequently, we would like to schedule interviews in as many of the 30 participating schools as possible during that week. Would you, therefore, please indicate on the attached self-addressed postal card:

- (1) What dates would be best from your point of view. (Please list alternative dates).
- (2) How many interviewers you would have space for. (We do not expect deluxe accommodations, but each interview should have as a minimum a couple of chairs in the corner of a room.)

I will appreciate it if you will send the card back to me by return mail. After receipt of the cards, we will set up a schedule and communicate with you further.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 8

Department of Rural Sociology

This department is conducting a study to learn how parents feel about education beyond high school. We know from previous studies that some high school students plan to take additional schooling after high school, while others with equal ability as scholars do not. Some people say that nearly all parents want their children to go to college or to take some other kind of schooling, but we are not sure that this is the case.

In a time when it appears that the views of teenagers are not always the same as those of adults, it is important to discover what similarities and differences actually exist. Your opinions would be very helpful to us in answering this important question. We would also like to have your views about work and certain other issues. In addition, we are asking for some information about employment history, education, place of residence and related matters, because this will help us to determine if adults with comparable backgrounds have similar views about education and about work.

It will be greatly appreciated if you will take the time to fill out the enclosed questionnaires and return them in the enclosed postage-free envelope. The questionnaires are not anonymous, but your replies will be handled in a confidential manner. We will use the information for statistical purposes only. We are not asking that names be placed on the questionnaires. This insures that the clerks who code the answers will not know whose questionnaires are being coded. The number which appears on the questionnaire

will enable us to check off the returns as they come in and thus avoid sending a reminder to those who have already returned the questionnaires.

Thank you for your cooperation.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

Enclosures

P.S. Since fathers and mothers may have different opinions, we have enclosed separate questionnaires which we would like to have each of you fill out separately. In addition, there is a sheet which asks for some background information and this may be filled out by either father or mother.

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 9

Department of Rural Sociology

A couple of weeks ago, we sent you a letter asking for your cooperation in a study of the views of parents of high school students about education beyond high school and about certain other issues.

Providing adequate education for our young people is one of the major problems of our times. Your answers, together with those of other parents in the sample, will help us to obtain an accurate picture of the views of parents concerning the educational needs of boys and girls of high school age. As I explained earlier, we will use the information for statistical purposes only.

The sample was selected by scientific methods and it is impossible to substitute any other parents for those originally selected. Consequently, your answers are very important to the success of the study.

We have not yet received your answers to the questionnaires enclosed with the letter. I am writing you to ask you to fill out the questionnaires today, if you can possibly find the time, and send them to us by return mail.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

WLS:jj

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 10

Department of Rural Sociology

I am writing about the study which this department is conducting to learn how parents feel about education beyond high school. This is an important topic today, as you know from your study of the news and from the discussions which are frequently held about the place of education in the world today.

Our study will provide a scientific contribution to these discussions, for it will be a review of what parents actually think about education for boys and girls leaving high school. However, it will be of maximum value only if we are able to include the opinions of all the parents who received questionnaires.

We are enclosing duplicate copies of the questionnaires and a postage-free envelope. If your answers are in the mail, please disregard this letter. If not, we will appreciate it very much if you will fill out the enclosed questionnaires and send them to us by return mail, thereby helping to make this important study complete.

I hope you will send us the completed questionnaires today, if you can.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

WLS:jj
Enclosures

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 11

TO: County Extension Chairmen

FROM: Walter L. Slocum, Chairman, Department of Rural Sociology

DATE: December 9, 1964

SUBJECT: Study of Educational and Occupational Aspirations of
Rural Youth

The Department of Rural Sociology has received a grant from the U. S. Office of Education for Research designed to identify and evaluate the relative importance of factors involved in educational and occupational aspirations of rural youth.

Previous research has revealed the existence of substantial differences in educational desires and plans among students with similar scholastic ability. There may be several influential factors. These include family background, especially the orientation of the family toward education, the relevant attitudes of friends, personal experiences in the classroom, other school related activities and encouragement from teachers, counselors, and others. We hope to be able to determine the relative importance of each of these on the basis of answers to the questions in this study. This would be a contribution to science and might be useful to school officials and other public leaders.

The study involves classroom administration this winter of a questionnaire in sample rural high schools. Participation by students will be voluntary. As of this date, 27 high schools have agreed to participate in the study. There is a possibility of participation by 5 additional schools. If any of these schools are located in your county, the names of the schools are listed at the bottom of this memorandum.

The questionnaire phase of the study will be followed during the winter and spring by personal interviews with selected students. The interviews are designed to probe more deeply into the students' perceptions of their relationships with teachers, counselors,

parents and others who may have influenced educational aspirations. Selected teachers and counselors will also be interviewed to obtain information concerning their efforts to influence the educational aspirations of students. Information provided by individual students, teachers, and counselors will be handled in a confidential manner and will not be disclosed to any unauthorized persons.

We are not asking for any specific assistance at this time. The purpose of this memorandum is to provide you with information which can be used in answering questions about the study.

cc: Director, Agricultural Extension Service
Assistant Director, Agricultural Extension Service

POSTCARD QUESTIONNAIRE TO SENIORS

Communication to Student

Rural Sociology Department
Washington State University
Pullman, Washington

Dear Friend:

Last fall you participated in a study on the educational and occupational desires and plans of high school students in the state of Washington. We are interested in the kinds of occupational and educational activities that last year's seniors are engaged in now. Please complete the five questions on the attached post card and send the card to us as soon as possible. Your answers will be kept confidential.

In case the student is away from home at the present time, his (her) parents may complete the card. Thank you for your cooperation.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

Questionnaire

1. Are you at the present time attending a college or other school?
Yes _____ No _____
2. If yes, what is the name of the college or school?
_____ City _____ State _____
3. If yes to Question No. 1, what is your course of study?

4. If no to Question No. 1, are you employed at the present time?
(Yes _____ -- Full-time _____ Part-time _____) (No _____)
5. If no to both questions Nos. 1 and 4, which of these reasons apply at the present time?
_____ will be employed in the near future.
_____ going to enlist in the service (army, navy, etc.)
_____ going to attend college or school next term.
_____ can't get a job.
_____ married - (full-time homemaker)
_____ other (specify) _____

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 13

Department of Rural Sociology

Last month we sent you a postcard questionnaire to learn whether you are working or in school. We need this information in connection with our study of the plans of young men and women who were high school seniors last year.

We have not yet received a reply from you. We will appreciate it very much if you will take time right now to answer the questions and mail the card.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

P.S. A copy of the questionnaire is enclosed.

WASHINGTON STATE UNIVERSITY
Pullman, Washington 99163

Appendix C
Exhibit No. 14

Department of Rural Sociology

A little over a year ago, students in a sample of Washington high schools were asked about their expectations for additional education vs. immediate work after high school graduation. Approximately three-fourths of the boys and two-thirds of the girls said that they expected to go to a junior college or to a four year college or university. The remainder planned to go to work, to get married, or to enter the Armed Forces.

In order to find out what last year's high school seniors are actually doing this year, we sent out a short questionnaire in January to a sample of those who were seniors last year. We have heard from about three-fourths of those who were contacted, but we have not as yet heard from you. We need your answer because our sample design does not permit us to substitute anyone else for you and your experience may be different from those who have answered.

The information will be valuable in helping to answer the general question: "To what extent do high school seniors have realistic expectations about work vs. additional education." In addition, the information will be of interest to school officials and legislators in connection with their evaluation of the current demand for greater public support for higher education.

Consequently, I hope you will take a few minutes right now to fill out the enclosed questionnaire. A postage-free envelope is enclosed for your convenience in returning it.

Thank you.

Sincerely yours,

Walter L. Slocum
Professor and Chairman

Enc.

APPENDIX D.

Instructions

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Appendix D
Exhibit No. 1

Instructions for Classroom Administration of
Educational and Occupational Questionnaires

General Note: Please read material enclosed in quotation marks to the class.

- a. "This hour we will participate in a Washington State University study of educational and occupational desires and plans. As soon as you get a questionnaire, you should read the statement explaining the study. Do not start yet."
- b. Distribute the questionnaires.
- c. "Participation is voluntary. If you do not wish to participate, please sit quietly in your place and study." (Note: Other arrangements may be made locally at the discretion of the school principal).
- d. "Please fill out the name cards now and pass them to the front. I will seal them in this envelope which will be sent unopened to Washington State University. Do not start yet."
- e. "Now look at the first page of the questionnaire. Mark your answer by placing a heavy line **THROUGH EACH APPROPRIATE BOX. Use a blunt soft lead pencil.** Make your marks like those at the bottom of page ."
- f. (Teachers are requested not to attempt to interpret any question). "If you do not understand a question, put a circle around the number in front of the question and proceed."
- g. "Now you may start."
- h. (At the end of the period). "Please pass all of the questionnaires to the front of the room." (Teacher: count the questionnaires to make sure all have been accounted for, tie a string around the package and deliver them to _____ immediately.)

RURAL SOCIOLOGY DEPARTMENT
WASHINGTON STATE UNIVERSITY
EDUCATION AND OCCUPATION STUDY, 1965

Interview Training Session For
Educational and Occupational Study

1. The interviewer team will be composed of a team leader and two or three other men depending upon the sizes of the schools in which we will be interviewing. The team leader, in most cases, will be familiar with the project. Any questions or difficulties that arise should be brought to his attention.
2.
 - (a) Time in the field - Interviewers will leave Pullman Sunday, January 31 or early Monday morning, February 1, depending on the location of the first school at which interviews are to be conducted.
 - (b) Transportation by state car will be provided. An accurate account should be kept by each interviewer of all expenses for meals and lodging. Receipts are required for all expenses other than meals and lodging. Reimbursement will be made on the basis of actual expenses. Interviewers are expected to keep expenses at a modest level. The maximum will be \$8 per day.
 - (c) Money - Each interviewer will have to pay his own expenses. Adequate money should be taken along to provide subsistence for the entire week. Figuring meals and lodging for this time period, \$40 to \$50 should be taken along.
 - (d) Expense reimbursement - If expense vouchers are submitted immediately upon return to Pullman, you should be reimbursed within a few weeks.
3. Dress - Business suit, white shirt and tie will be expected during the interviews.
4. Use of state car - The state owned vehicles are authorized for business use only. This includes driving to cafes for meals. The team member who checks out the vehicle will be responsible for its use in the field. The state and local police forces are very observant of state vehicles, so drivers should observe traffic regulations closely.

5. Procedures in the school:

The team leader should contact the superintendent, principal or the person who administered the earlier questionnaire in the school. The team leader should explain what we are going to do, try to arrange for adequate facilities to conduct the interviews and ask the person for help or suggestions as to how to locate the student and then how to get him out of class and to the interview room. Several lists of students to be interviewed will be provided. Procedures for getting the students to the interview site will have to be worked out at each school.

6. The interview - Introduce yourself to the interviewee and try to be relaxed and at ease. Indicate that several weeks ago they filled out a questionnaire on educational and occupational aspirations and now we would like to have some additional information on the topic. Ask them if they would be willing to participate in the study, while always giving them a chance to choose not to participate if they so desire. Do not force anyone to answer and do not antagonize anyone.

If they consent to be interviewed, go to the interview schedule.

7. The Student Interview:

(a) Question 1 - Start the interview by asking if the interviewee is planning on finishing high school. Check the appropriate response category on the left. If the interviewee responds that he would like to graduate from high school, ask him the following: "After you graduate from high school, what would you like to do with respect to further education?" Then check the appropriate response on the left. Then ask Question 2.

(b) Question 3 - Some students might give you names of four or five people who have influenced their educational or occupational plans. Fill out page 2 only for the three people listed in Question 3 who have had the most influence upon them. Therefore, you should seldom, if ever, need more than three page 2's for any one student. Be sure to write the student's name in the space provided in the upper right hand corner of page 2 and for all multiple

copies of page 2 needed in the interviews. Also, keep a running list of teachers mentioned in this question, since we will want to interview teachers who are mentioned several times.

(c) Questions 3a and 3b - Question 3b is oftentimes answered in 3a, but write an answer in 3b even if it is already contained in 3a.

(d) Page 4 - Explain the examples to the student and give him some ideas as to what is wanted from the scale. Then let him fill out the entire page as indicated.

After he has completed the semantic differential, tell him that the department would like to contact a select number of parents through the mail to obtain some information regarding their views toward education and certain occupations. Be sure to emphasize the fact that his parents will not have access to the information he has given us thus far. Then ask, "Do you think your parents, guardian, or the people you are living with would be willing to fill out such a questionnaire?" If he consents, ask the student for the father's (guardian's) name only (we have the address) and write it in the blank space above the square boxes at the bottom of page 4. If they do not consent to give you their father's name, drop the issue right there.

This concludes the student interview. Rapidly check over the schedule to see that you have obtained all of the needed information. Thank the student for his time and terminate the interview.

After the student has left the room, fill in his name at the top of the page. Each student has an identification number, so write in this number in the five boxes provided in the lower left hand corner of page 4. Then place the completed schedule in a folder or some other place out of the sight of future interviewees.

8, The Questionnaire for Teachers, Counselors, and Administrators:

The team leader should contact the principal upon arrival (and later the counselor) at the school and ask him if he would be willing to answer some questions about the students in the interview sample. If he consents, give him the option of completing the questionnaire on his own, in which case each

interviewee's name must be written on the top, or answering the questions on each student in an interaction with the interviewer, in which the interviewer can code the teacher's responses on the code sheet. However, the latter alternative can be time consuming due to extraneous discussion. If he chooses to answer the questions on his own, make sure to ask him if he could have them completed before the team leaves the school.

9. Grades - Ask the principal or superintendent if it would be possible to obtain the grade of the students in the interview sample (or of all sophomores, juniors and seniors, if readily available). Some team member might have to sit down to copy these grades on a separate sheet of paper from a record book.

10. Additional Information:

In your conversations with teachers, counselors and administrators, try to find out the following:

- (a) Does the school have support from the parents (strong PTA, etc.)?
- (b) What per cent of the graduates go on to college? What college? If no college, what do they do and where do they go? Dropouts?
- (c) Characteristics of student body.
- (d) What kind of community is this? (Does it support the school? Attitudes toward the school, difficulties between community and school.

Then at the end of the stay at the school, write up a short summary of the above points to be handed in to the department.

11. Before leaving the school, thank the superintendent or principal for their cooperation. Make sure you have all materials from the study in your possession.

SUPPLEMENTARY INSTRUCTIONS TO INTERVIEWERS

Question 3: If the student says parents, ask him or her which one has had the most influence. For the one he names as being the most influential of the two, ask him the page 2 questions about this person first.

Question 3d: As this is not a statistical question, you may vary the way this question is asked from the way it is stated in the questionnaire. For example, you may say: "Is there anything else about this person or your relationship with this person that you would like to mention. For example, how do you get along? what kind of person is this individual? what do you think of this person?"

Question 5: If a female respondent says "Housewife," make the statement: "But apart from that, what is the occupation that you think you would like best when you are 30 years old?" Write housewife in and put it in parenthesis and then write in the occupation she states after that. Ask questions 6, 7, 8, 9, 10, 11 and 12 in reference to the occupation other than housewife. If the respondent insists she has no occupational choice other than housewife, ask questions 6 through 12 anyway.

Take a small piece of paper, fold it in half, and print your name on it. Set this on the desk where the student can see it. The student will probably never have any need to remember your name. However, it is sometimes frustrating to sit with a person for almost a half hour and then leave without knowing his name, even if he introduced himself in the beginning.

APPENDIX E.

Tables

TABLE E-1. Educational Aspirations and Expectations of Rural High School Students by Student's Perception of Relative Level of Family Income

Highest Level of Education	Aspirations by Relative Income			Expectations by Relative Income		
	Above Average	Average	Below Average	Above Average	Average	Below Average
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	30.2	23.7	24.5	17.3	13.3	14.8
Boys.....	34.9	28.2	28.9	20.4	17.6	22.7
Girls.....	24.4	19.5	20.2	13.3	9.2	7.2
Farm.....	25.5	24.6	30.0	15.6	11.2	17.9
Bachelor's Degree						
All.....	30.2	25.4	24.1	30.7	23.0	19.7
Boys.....	30.5	26.2	21.1	31.8	25.4	23.5
Girls.....	29.9	24.6	27.1	29.3	20.8	16.0
Farm.....	31.3	28.0	27.5	32.3	27.1	23.1
Some College						
All.....	23.0	23.5	22.2	32.4	31.4	28.3
Boys.....	19.9	22.0	18.7	29.1	31.4	21.0
Girls.....	26.9	25.0	25.6	36.9	31.3	35.2
Farm.....	26.8	22.0	16.2	34.4	32.1	28.2
High School Only						
All.....	16.6	27.4	29.2	19.6	32.4	37.3
Boys.....	14.7	23.6	31.2	18.8	25.6	32.8
Girls.....	18.8	30.9	27.1	20.6	38.6	41.6
Farm.....	16.5	25.4	26.2	17.7	29.6	30.8
Number of Respondents.....	900	1900	257	854	1799	244

TABLE B-2. Educational Aspirations and Expectations of Rural High School Students by Parental Report of 1964 Family Income

Highest Level of Education	Aspirations by Income			Expectations by Income		
	Under \$4,000	\$4,000-9,999	\$10,000 & over	Under \$4,000	\$4,000-9,999	\$10,000 & over
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	17.2	27.0	29.6	6.9	11.0	15.3
Boys.....	35.5	30.9	33.9	10.3	13.2	23.3
Girls.....	.....	23.2	25.4	3.4	8.8	6.9
Farm.....	15.4	29.0	20.0	8.3	7.6	7.1
Bachelor's Degree						
All.....	17.2	29.9	38.4	13.8	29.2	39.0
Boys.....	6.5	32.6	43.6	6.9	34.5	33.3
Girls.....	27.3	27.4	33.3	20.7	24.2	44.8
Farm.....	23.1	32.3	37.8	20.8	32.8	38.1
Some College						
All.....	15.6	25.9	20.8	25.9	34.3	34.7
Boys.....	12.9	20.4	19.4	20.7	29.9	36.7
Girls.....	18.2	31.1	22.2	31.0	38.5	32.8
Farm.....	11.5	28.2	28.9	25.0	34.5	42.9
High School Only						
All.....	50.0	17.3	11.2	53.4	25.6	11.0
Boys.....	45.2	16.0	3.2	62.1	22.4	6.7
Girls.....	54.6	18.4	19.1	44.8	28.6	15.5
Farm.....	50.0	10.5	13.3	45.8	25.2	11.9
Number of Respondents.....	64	371	125	58	356	118

TABLE E-3. Educational Aspirations of Rural High School Students and Planned Number of Semester Hours of Elective Academic Courses

Highest Level of Education	Number of Semester Hours				
	0	1 & 2	3 & 4	5 & 6	7+
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work					
All.....	10.8	19.0	27.6	36.3	54.0
Boys.....	11.4	23.5	32.0	41.1	57.5
Girls.....	10.2	14.5	24.8	30.5	45.3
Farm.....	11.7	20.9	29.6	31.3	47.3
Bachelor's Degree					
All.....	13.0	21.6	33.9	39.6	37.6
Boys.....	14.4	22.9	35.1	41.1	34.4
Girls.....	11.5	20.3	33.2	37.9	45.3
Farm.....	13.4	22.5	35.4	48.1	44.2
Some College					
All.....	30.2	29.3	23.7	12.4	7.2
Boys.....	30.6	27.5	20.6	10.5	6.7
Girls.....	29.8	31.2	25.7	14.7	8.5
Farm.....	32.9	28.9	21.8	8.4	7.8
High School Only					
All.....	45.9	30.0	14.8	11.7	1.2
Boys.....	43.6	26.1	12.4	7.2	1.4
Girls.....	48.5	34.0	16.3	16.9	0.9
Farm.....	42.0	27.7	13.2	12.2	0.8
Number of Respondents.....	830	730	758	386	402

TABLE E-4. Educational Expectations of Rural High School Students and Planned Number of Semester Hours of Elective Academic Courses

Highest Level of Education	Number of Semester Hours				
	0	1 & 2	3 & 4	5 & 6	7+
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work					
All.....	9.9	11.0	12.3	18.1	29.9
Boys.....	12.2	14.8	18.1	20.5	32.6
Girls.....	7.5	6.9	8.7	15.3	23.3
Farm.....	9.9	11.7	13.4	13.7	19.5
Bachelor's Degree					
All.....	8.1	17.0	28.5	44.1	44.9
Boys.....	10.2	20.6	29.9	45.5	42.8
Girls.....	5.9	13.1	27.6	42.6	50.0
Farm.....	8.8	18.7	33.6	50.0	54.7
Some College					
All.....	27.3	37.7	37.9	25.8	22.2
Boys.....	28.2	36.3	34.9	25.5	22.1
Girls.....	26.3	39.1	39.7	26.1	22.4
Farm.....	32.8	40.9	33.6	24.2	23.4
High School Only					
All.....	54.7	34.3	21.3	12.0	3.0
Boys.....	49.4	28.2	17.1	8.5	2.5
Girls.....	60.3	40.9	23.9	15.9	4.3
Farm.....	48.5	28.7	19.3	12.1	2.3
Number of Respondents.....	766	664	737	376	401

TABLE E-5. Educational Aspirations of Rural High School Students and Planned Number of Semester Hours of Vocational Courses

Highest Level of Education	Number of Semester Hours				
	0	1 & 2	3 & 4	5 & 6	7+
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work					
All.....	30.8	30.5	24.5	20.0	23.7
Boys.....	37.7	40.3	27.5	27.2	25.2
Girls.....	26.3	24.3	21.0	13.7	12.5
Farm.....	29.9	26.3	26.7	21.1	23.2
Nonfarm.....	31.2	32.0	23.5	19.4	24.1
Bachelor's Degree					
All.....	27.4	29.1	26.6	26.4	21.9
Boys.....	24.5	35.5	26.3	29.6	21.2
Girls.....	29.3	25.0	27.0	23.5	27.1
Farm.....	28.0	33.7	29.0	27.8	26.3
Nonfarm.....	27.2	27.4	25.6	25.5	17.6
Some College					
All.....	23.5	20.6	23.1	23.9	27.0
Boys.....	23.2	15.4	21.7	18.3	26.4
Girls.....	23.7	23.9	24.8	28.8	31.2
Farm.....	27.1	20.0	22.8	22.4	25.3
Nonfarm.....	22.1	20.8	23.3	24.8	28.6
High School Only					
All.....	18.3	19.9	25.7	29.8	27.5
Boys.....	14.6	8.8	24.4	24.9	27.2
Girls.....	20.7	26.8	27.2	34.0	29.2
Farm.....	15.0	20.0	21.5	28.7	25.3
Nonfarm.....	19.6	19.8	27.7	30.4	29.6
Number of Respondents.....	383	709	972	645	397

TABLE E-6. Educational Expectations of Rural High School Students and Planned Number of Semester Hours of Vocational Courses

Highest Level of Education	Number of Semester Hours				
	0	1 & 2	3 & 4	5 & 6	7+
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work					
All.....	18.2	15.2	14.2	10.3	17.7
Boys.....	23.4	21.1	17.9	15.9	19.1
Girls.....	14.9	11.3	10.1	5.5	6.7
Farm.....	12.6	11.5	13.2	11.8	15.5
Nonfarm.....	20.4	16.5	14.6	9.5	19.7
Bachelor's Degree					
All.....	27.3	28.4	25.4	21.6	20.3
Boys.....	30.5	34.7	26.4	27.2	20.9
Girls.....	25.2	24.3	24.3	16.7	15.6
Farm.....	29.1	31.7	30.2	24.9	25.7
Nonfarm.....	26.5	27.1	23.1	19.7	15.2
Some College					
All.....	33.1	31.6	30.6	31.4	31.2
Boys.....	25.5	30.9	30.0	30.0	30.3
Girls.....	37.8	32.1	31.4	32.5	37.8
Farm.....	36.9	31.1	32.3	33.5	31.0
Nonfarm.....	31.5	31.8	29.9	30.2	31.3
High School Only					
All.....	21.5	24.8	29.9	36.8	30.9
Boys.....	20.6	13.2	25.7	26.9	29.7
Girls.....	22.1	32.4	34.3	45.3	40.0
Farm.....	21.4	25.7	24.3	29.9	27.8
Nonfarm.....	21.5	24.5	32.4	40.7	33.8
Number of Respondents.....	363	673	911	612	385

TABLE E-7. Educational Aspirations and Expectations of Rural High School Students from Farms by Parents' Report of Dependence on Farm for Income

Highest Level of Education	Aspirations by Dependence on Farm:			Expectations by Dependence on Farm		
	Full-time	Part-time		Full-time	Part-time	
		Mostly Farm	Mostly Non-farm		Mostly Farm	Mostly Non-farm
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	26.2	33.4	23.5	10.1	27.3	2.6
Boys.....	28.9	50.0	28.5	13.9	33.3	2.4
Girls.....	23.9	25.0	18.0	7.0	25.0	2.8
Bachelor's Degree						
All.....	35.7	25.0	33.3	41.8	9.1	31.2
Boys.....	31.6	25.0	33.3	33.3	33.3	26.8
Girls.....	39.1	25.0	33.3	48.8	....	36.1
Some College						
All.....	25.0	25.0	24.7	38.0	54.5	32.5
Boys.....	34.2	25.0	19.1	50.0	33.3	31.7
Girls.....	17.4	25.0	30.8	27.9	62.5	33.3
High School Only						
All.....	13.1	16.7	18.5	10.1	9.1	33.8
Boys.....	5.3	....	19.0	2.8	....	39.0
Girls.....	19.6	25.0	17.9	16.3	12.5	27.8
Number of Respondents.....	84	12	81	88	15	108

TABLE E-8. Educational Aspirations of Rural High School Students by Father's Education

Highest Level of Education	Father's Education				
	Elementary	9-11 Years	H.S. Grad.	Some College	4 or More Yrs. College
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work					
All.....	18.7	21.1	25.0	35.0	45.4
Boys.....	22.0	24.3	30.4	39.9	49.7
Girls.....	15.1	18.3	19.2	30.1	39.8
Farm.....	22.5	19.1	24.1	35.0	32.9
Bachelor's Degree					
All.....	19.6	21.5	30.9	30.8	32.7
Boys.....	20.2	19.5	31.4	35.4	29.8
Girls.....	19.0	23.2	30.4	26.0	36.6
Farm.....	20.5	22.6	34.5	31.5	37.0
Some College					
All.....	26.3	25.9	22.5	21.1	15.8
Boys.....	25.7	22.4	20.8	16.3	13.0
Girls.....	26.9	28.9	24.4	26.0	19.5
Farm.....	22.9	25.2	21.6	23.8	23.3
High School Only					
All.....	35.5	31.6	21.6	13.1	6.0
Boys.....	32.2	33.8	17.5	8.4	7.5
Girls.....	38.9	29.7	25.9	17.9	4.1
Farm.....	34.1	33.0	19.8	9.8	6.9
Number of Respondents.....	739	456	1109	351	284

TABLE E-9. Educational Expectations of Rural High School Students by Father's Education

Highest Level of Education	Father's Education				
	Elementary	9-11 Years	H.S. Grad.	Some College	4 or More Yrs. College
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work					
All.....	11.2	9.7	13.0	20.5	29.0
Boys.....	15.7	13.2	16.4	24.7	35.4
Girls.....	6.4	6.8	9.5	16.0	20.5
Farm.....	12.4	11.0	9.8	18.5	22.2
Bachelor's Degree					
All.....	14.3	19.1	29.5	29.8	41.3
Boys.....	17.1	20.5	31.7	33.3	41.0
Girls.....	11.3	17.9	27.3	25.9	41.8
Farm.....	16.9	22.0	33.1	35.6	43.1
Some College					
All.....	29.8	33.3	32.7	33.6	22.6
Boys.....	29.6	30.0	31.7	32.2	16.8
Girls.....	30.1	35.9	33.8	35.2	30.3
Farm.....	31.7	27.5	35.7	30.4	26.4
High School Only					
All.....	44.7	38.0	24.7	16.1	7.1
Boys.....	37.6	36.3	20.3	9.8	6.8
Girls.....	52.2	39.3	29.4	22.8	7.4
Farm.....	39.1	39.4	21.4	15.6	8.3
Number of Respondents.....	707	424	1043	336	283

TABLE E-10. Educational Aspirations of Rural High School Students by Mother's Education

Highest Level of Education	Mother's Education				
	Elementary	9-11 Years	H.S. Grad.	Some College	4 or More Yrs. College
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work					
All.....	17.9	17.4	25.4	38.4	36.8
Boys.....	19.4	22.5	29.3	46.3	40.4
Girls.....	16.5	13.1	21.1	30.5	31.8
Farm.....	23.7	15.3	25.3	33.6	28.7
Bachelor's Degree					
All.....	18.4	23.3	26.3	33.4	39.8
Boys.....	18.3	26.8	27.4	29.4	38.4
Girls.....	18.6	20.4	25.1	37.5	41.8
Farm.....	16.7	28.7	26.1	36.3	50.5
Some College					
All.....	23.1	29.1	24.8	16.2	13.8
Boys.....	26.2	23.8	22.6	13.9	11.3
Girls.....	20.1	33.5	27.1	18.5	17.3
Farm.....	22.8	26.0	25.3	17.8	12.9
High School Only					
All.....	40.5	30.2	23.6	12.0	9.6
Boys.....	36.1	26.8	20.7	10.4	9.9
Girls.....	44.8	33.1	26.7	13.5	9.1
Farm.....	36.8	30.0	23.4	12.3	7.9
Number of Respondents.....	385	506	1408	401	261

TABLE E-11. Educational Expectations of Rural High School Students by Mother's Education

Highest Level of Education	Mother's Education				
	Elementary	9-11 Years	H.S. Grad.	Some College	4 or More Yrs. College
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work					
All.....	10.9	10.5	14.9	18.6	20.1
Boys.....	15.0	13.6	19.4	23.6	24.0
Girls.....	6.7	7.9	10.0	13.7	14.8
Farm.....	13.3	9.4	13.1	13.0	14.7
Bachelor's Degree					
All.....	12.8	16.0	25.2	37.5	40.9
Boys.....	16.1	19.1	28.5	36.6	39.0
Girls.....	9.5	13.5	21.8	38.4	43.5
Farm.....	17.1	18.1	26.9	39.1	52.6
Some College					
All.....	31.2	32.7	32.0	32.0	25.2
Boys.....	29.4	31.8	30.1	29.8	24.0
Girls.....	33.0	33.5	34.1	34.2	26.9
Farm.....	28.6	32.9	33.9	34.8	25.3
High School Only					
All.....	45.1	40.7	27.9	11.8	13.8
Boys.....	39.4	35.5	22.0	9.9	13.0
Girls.....	50.8	45.1	34.1	13.7	14.8
Farm.....	41.0	39.6	26.1	13.0	7.4
Number of Respondents.....	359	486	1333	381	254

TABLE E-12. Educational Aspirations and Expectations of Rural High School Students by Number of Older Brothers and Sisters Who Have Gone to College

Highest Level of Education	Aspirations by Number of Collegiate Siblings			Expectations by Number of Collegiate Siblings		
	0	1	2 or More	0	1	2 or More
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	24.2	26.6	35.3	24.2	26.6	35.3
Boys.....	27.7	34.4	42.0	27.7	34.4	42.0
Girls.....	20.7	18.5	27.5	20.7	18.5	27.5
Farm.....	23.4	25.5	38.0	13.7	9.8	17.5
Bachelor's Degree						
All.....	24.4	30.0	35.0	24.4	30.0	35.0
Boys.....	26.2	28.5	33.3	26.2	28.5	33.3
Girls.....	22.6	31.6	37.0	22.6	31.6	37.0
Farm.....	28.1	29.5	31.4	27.5	27.4	38.6
Some College						
All.....	23.4	26.1	16.7	23.4	26.1	16.7
Boys.....	21.5	23.6	13.0	21.5	23.6	13.0
Girls.....	25.3	28.8	21.0	25.3	28.8	21.0
Farm.....	21.9	28.2	17.4	29.1	38.1	32.5
High School Only						
All.....	28.0	17.2	13.0	28.0	17.2	13.0
Boys.....	24.6	13.5	11.7	24.6	13.5	11.7
Girls.....	31.4	21.1	14.5	31.4	21.1	14.5
Farm.....	26.6	16.8	13.2	29.8	24.7	11.4
Number of Respondents.....	1940	639	300	1940	639	300

TABLE E-13. Educational Aspirations and Expectations of Rural High School Students by Whether Any Brothers or Sisters Dropped Out of School Before High School Graduation

Highest Level of Education	Aspirations by Whether Siblings Dropped Out of School		Expectations by Whether Siblings Dropped Out of School	
	None Dropped	Some Dropped	None Dropped	Some Dropped
	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work				
All.....	27.6	15.4	15.4	9.7
Boys.....	32.2	19.5	19.9	14.5
Girls.....	22.7	12.2	10.6	6.2
Farm.....	26.8	17.6	13.2	12.8
Bachelor's Degree				
All.....	29.0	14.3	28.2	11.8
Boys.....	29.7	15.0	30.3	14.0
Girls.....	28.4	13.8	25.9	10.3
Farm.....	31.1	16.0	32.2	9.4
Some College				
All.....	23.0	24.0	32.3	23.7
Boys.....	20.7	21.5	29.7	25.7
Girls.....	25.4	26.0	34.9	22.2
Farm.....	23.0	18.4	32.8	20.5
High School Only				
All.....	20.4	46.3	24.1	54.7
Boys.....	17.4	44.0	19.9	45.8
Girls.....	23.6	48.0	28.6	61.3
Farm.....	19.1	48.0	21.8	57.3
Number of Respondents.....	2407	454	2292	422

TABLE E-14. Educational Aspirations and Expectations of Rural High School Students From Farms and Whether Friends Are From Farms

Highest Level of Education	Aspirations by Proportion of Friends from Farms			Expectations by Proportion of Friends from Farms		
	All or Most	Half	None	All or Most	Half	None
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	24.0	29.4	24.9	13.7	15.2	14.2
Boys.....	25.9	35.5	29.8	16.9	20.0	18.7
Girls.....	21.8	22.3	20.4	10.3	9.7	10.1
Farm.....	25.1	28.2	22.8	13.7	12.8	12.3
Bachelor's Degree						
All.....	32.4	30.7	23.3	32.0	28.8	21.3
Boys.....	30.0	31.4	24.7	31.5	32.6	23.3
Girls.....	35.1	30.0	22.0	32.5	24.5	19.5
Farm.....	33.6	30.8	23.7	35.1	30.2	22.1
Some College						
All.....	19.8	22.4	24.2	29.1	31.3	31.9
Boys.....	22.2	20.2	20.3	29.1	28.6	30.3
Girls.....	17.2	24.8	27.8	29.1	34.3	33.5
Farm.....	20.7	23.8	23.1	31.6	34.1	30.6
High School Only						
All.....	23.8	17.5	27.6	25.2	24.7	32.5
Boys.....	21.9	12.9	25.1	22.4	18.8	27.7
Girls.....	25.9	22.9	29.9	28.2	31.5	37.0
Farm.....	20.7	17.3	30.5	19.6	22.9	35.0
Number of Respondents.....	509	787	1642	448	764	1538

TABLE E-15. Educational Aspirations and Expectations of Rural High School Students by Proportion of Friends Who Were Leaders in School

Highest Level of Education	Aspirations by Proportion of Friends Who Were Leaders			Expectations by Proportion of Friends Who Were Leaders		
	All & Most	Half	Few or None	All & Most	Half	Few or None
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	31.8	28.8	20.1	17.0	15.6	11.8
Boys.....	39.3	34.6	24.8	24.5	21.0	14.9
Girls.....	27.0	22.9	13.6	12.3	9.9	7.6
Farm.....	29.8	28.2	20.4	14.2	12.4	12.1
Bachelor's Degree						
All.....	31.1	30.4	21.8	32.0	29.0	18.0
Boys.....	31.6	33.1	22.8	34.9	33.0	20.7
Girls.....	30.8	27.5	20.3	30.1	24.7	14.3
Farm.....	32.1	34.1	23.7	35.8	33.8	20.2
Some College						
All.....	22.2	22.8	23.5	33.4	31.3	29.7
Boys.....	19.9	18.0	22.4	30.1	28.9	29.8
Girls.....	23.7	27.8	25.0	35.4	34.0	29.7
Farm.....	23.2	22.7	21.9	33.3	32.3	31.3
High School Only						
All.....	14.9	18.0	34.7	17.6	24.1	40.5
Boys.....	9.1	14.3	30.0	10.4	17.1	34.7
Girls.....	18.6	21.9	41.1	22.2	31.5	48.4
Farm.....	14.9	15.0	34.1	16.7	21.4	36.4
Number of Respondents.....	900	794	1240	857	756	1174

TABLE E-16. Educational Aspirations and Expectations of Rural High School Students by Students' Report of Discussion of Educational and Occupational Plans With Teacher

Highest Level of Education	Aspirations as by Extent of Discussion			Expectations as by Extent of Discussion		
	None	Some	Very Much	None	Some	Very Much
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	20.5	29.8	44.1	11.8	16.2	31.9
Boys.....	24.3	35.1	49.2	15.1	21.6	36.2
Girls.....	16.5	24.1	39.0	8.3	10.4	27.3
Farm.....	22.8	25.4	41.7	11.3	11.8	37.5
Bachelor's Degree						
All.....	24.6	28.8	24.6	20.4	29.2	29.2
Boys.....	26.4	28.4	20.3	23.0	31.4	27.6
Girls.....	22.7	29.1	28.8	17.8	26.8	30.9
Farm.....	25.8	32.3	27.1	23.7	33.9	20.8
Some College						
All.....	24.5	22.4	18.6	31.5	32.0	24.8
Boys.....	22.2	20.5	15.3	30.4	30.1	20.7
Girls.....	26.9	24.4	22.0	32.7	34.1	29.1
Farm.....	24.8	22.1	16.7	32.7	33.7	22.9
High School Only						
All.....	30.4	19.1	12.7	36.3	22.6	14.2
Boys.....	27.1	16.0	15.3	31.5	16.8	15.5
Girls.....	33.9	22.4	10.2	41.3	28.8	12.7
Farm.....	26.6	20.2	14.6	32.3	20.6	18.7
Number of Respondents.....	1567	1398	118	1479	1330	113

TABLE E-17. Educational Aspirations and Expectations of Rural High School Students by Student's Report of Extent of Discussion of Plans with Counselor

Highest Level of Education	Aspirations by Extent of Influence			Expectations by Extent of Influence		
	None	Some	Very Much	None	Some	Very Much
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	21.8	29.3	30.0	13.1	15.7	16.3
Boys.....	25.1	35.0	34.0	17.0	21.0	19.5
Girls.....	17.9	23.7	26.7	8.5	10.6	14.0
Farm.....	23.3	28.1	29.7	13.1	12.8	17.6
Bachelor's Degree						
All.....	26.5	25.0	20.0	21.5	26.0	29.6
Boys.....	27.8	24.6	24.0	23.7	29.6	29.3
Girls.....	24.9	25.4	16.7	19.0	22.5	29.8
Farm.....	29.5	25.4	21.6	24.7	29.0	29.4
Some College						
All.....	23.5	23.3	30.0	31.2	32.0	33.7
Boys.....	21.7	21.8	26.0	31.5	28.1	36.6
Girls.....	25.7	24.7	33.3	30.8	35.8	31.6
Farm.....	23.3	22.4	29.7	33.5	32.8	29.4
High School Only						
All.....	28.2	22.4	20.0	34.2	26.3	20.4
Boys.....	25.4	18.5	16.0	27.7	21.4	14.6
Girls.....	31	26.2	23.3	41.7	31.1	24.6
Farm.....	24.0	24.1	18.9	28.6	25.5	23.5
Number of Respondents.....	1236	1168	110	1180	1107	98

TABLE E-18. Educational Aspirations and Expectations of Rural High School Students and Student's Report of Teacher Influence

Highest Level of Education	Aspirations by Extent of Influence			Expectations by Extent of Influence		
	None	Some	Very Much	None	Some	Very Much
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	20.9	30.6	39.5	11.9	17.5	21.0
Boys.....	24.4	37.0	40.7	15.1	23.4	26.2
Girls.....	17.4	23.1	38.3	8.8	10.7	16.1
Farm.....	21.6	26.8	39.2	10.3	14.7	22.7
Bachelor's Degree						
All.....	26.2	28.3	23.5	21.7	28.7	32.4
Boys.....	28.9	26.3	22.9	23.8	31.6	29.9
Girls.....	23.6	30.7	24.2	19.6	25.3	34.8
Farm.....	28.9	32.2	20.3	26.1	31.7	28.0
Some College						
All.....	23.2	23.4	23.1	30.8	32.6	30.1
Boys.....	20.2	22.2	22.0	30.2	29.5	29.0
Girls.....	26.1	24.8	24.2	31.4	36.2	31.2
Farm.....	22.1	24.3	22.8	31.0	35.4	30.7
High School Only						
All.....	29.8	17.7	13.9	35.6	21.2	16.4
Boys.....	26.6	14.5	14.4	30.8	15.5	15.0
Girls.....	33.0	21.4	13.3	40.2	27.9	17.9
Farm.....	27.3	16.8	17.7	32.6	18.1	18.7
Number of Respondents.....	1736	1035	238	1642	994	219

TABLE E-19. Educational Aspirations and Expectations of Rural High School Students and Teacher Encouragement to Go to College

Highest Level of Education	Aspirations by Teacher Encouragement			Expectations by Teacher Encouragement		
	En-cour-aged	Dis-cour-aged	No Effect	En-cour-aged	Dis-cour-aged	No Effect
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	34.8	15.6	20.9	17.8	17.4	12.6
Boys.....	42.3	25.9	24.0	25.5	25.9	15.5
Girls.....	27.3	.....	17.6	10.3	5.3	9.5
Farm.....	34.5	8.3	20.3	15.0	23.1	11.6
Bachelor's Degree						
All.....	34.2	15.6	23.4	35.8	6.5	19.5
Boys.....	33.1	7.4	25.6	39.2	7.4	22.0
Girls.....	35.4	27.8	21.1	32.5	5.3	16.6
Farm.....	35.1	16.7	26.4	39.1	.....	22.7
Some College						
All.....	20.0	13.3	25.3	32.5	28.3	31.0
Boys.....	15.0	14.8	24.3	25.0	25.9	32.0
Girls.....	25.0	11.1	26.4	39.8	31.6	30.0
Farm.....	19.8	25.0	24.3	32.4	38.5	32.5
High School Only						
All.....	11.0	55.6	30.3	13.9	47.8	36.9
Boys.....	9.6	51.9	26.1	10.2	40.7	30.4
Girls.....	12.3	61.1	34.8	17.4	57.9	43.7
Farm.....	10.6	50.0	29.1	13.6	38.5	33.1
Number of Respondents.....	1040	45	1826	1003	46	1717

TABLE E-20. Educational Aspirations and Expectations of Rural High School Students by Students' Report of Counselor's Influence

Highest Level of Education	Aspirations as by Extent of Influence			Expectations as by Extent of Influence		
	None	Some	Very Much	None	Some	Very Much
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	23.1	30.5	29.7	14.3	15.5	15.9
Boys.....	27.0	35.7	31.7	18.0	20.6	21.6
Girls.....	18.9	25.2	27.6	10.4	10.2	9.9
Farm.....	22.0	30.5	30.4	17.4	12.6	18.0
Bachelor's Degree						
All.....	26.5	24.9	17.7	22.3	26.1	24.8
Boys.....	28.3	23.9	15.9	23.8	29.6	24.3
Girls.....	24.6	26.0	19.7	20.8	22.6	25.4
Farm.....	30.8	22.4	17.9	25.0	27.7	23.0
Some College						
All.....	21.4	24.9	31.6	29.4	34.3	35.2
Boys.....	19.3	23.4	35.4	30.7	29.1	36.5
Girls.....	23.7	26.5	27.6	28.1	39.5	33.8
Farm.....	20.8	25.6	30.4	32.7	34.2	34.0
High School Only						
All.....	29.0	19.7	20.9	33.9	24.1	24.1
Boys.....	25.4	17.1	17.1	27.6	20.6	17.6
Girls.....	32.9	22.4	25.0	40.7	27.7	31.0
Farm.....	26.4	21.5	21.4	29.9	25.5	20.0
Number of Respondents.....	1388	791	158	1318	750	145

TABLE E-21. Educational Aspirations of Rural High School Students by Counselor's Reported Recommendation

Highest Level of Education	Counselor's Recommendation			
	College	Finish High School Only	Vocational School	No Recommendation
	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work				
All.....	33.5	9.1	16.1	22.2
Boys.....	38.3	14.0	15.6	21.4
Girls.....	29.4	2.6	16.7	23.5
Farm.....	28.1	7.1	23.5	22.2
Bachelor's Degree				
All.....	36.3	18.2	11.3	20.0
Boys.....	37.4	20.0	9.4	21.4
Girls.....	35.3	15.8	13.3	17.6
Farm.....	40.6	21.4	5.9	11.1
Some College				
All.....	19.5	27.3	30.6	24.4
Boys.....	17.4	22.0	31.2	25.0
Girls.....	21.3	34.2	30.0	23.5
Farm.....	22.9	32.1	41.2	33.3
High School Only				
All.....	10.8	45.5	41.9	33.3
Boys.....	7.0	44.0	43.7	32.1
Girls.....	14.0	47.4	40.0	35.3
Farm.....	8.3	39.3	29.4	33.3
Number of Respondents.....	251	88	62	45

TABLE E-22. Educational Expectations of Rural High School Students by Counselor's Reported Recommendation

Highest Level of Education	Counselor's Recommendation			
	College	Finish High School Only	Vocational School	No Recommendation
	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work				
All.....	15.4	7.1	11.2	9.5
Boys.....	19.5	4.0	10.7	12.5
Girls.....	11.9	11.4	12.0	5.6
Farm.....	8.4	4.0	5.9	10.0
Bachelor's Degree				
All.....	37.7	15.3	13.2	19.0
Boys.....	41.6	18.0	17.9	20.8
Girls.....	34.3	11.4	8.0	16.7
Farm.....	26.8	20.0	11.8	10.0
Some College				
All.....	32.0	24.7	39.6	28.6
Boys.....	28.3	24.0	28.6	29.2
Girls.....	35.1	25.7	52.0	27.8
Farm.....	35.8	24.0	52.9	40.0
High School Only				
All.....	15.0	52.9	35.8	42.9
Boys.....	10.6	54.0	42.9	37.5
Girls.....	18.7	51.4	28.0	50.0
Farm.....	18.9	52.0	29.4	40.0
Number of Respondents.....	247	85	53	42

TABLE E-23. Educational Aspirations and Expectations of Rural High School Students by Students' Report of School Grades

Highest Level of Education	Aspirations by Grades			Expectations by Grades		
	High ^a	Medium ^b	Low ^c	High ^a	Medium ^b	Low ^c
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Graduate Work						
All.....	41.9	22.2	12.4	20.5	12.3	13.0
Boys.....	50.3	27.7	12.1	32.7	16.4	12.7
Girls.....	32.0	16.0	13.3	13.2	7.7	13.7
Farm.....	40.0	20.6	16.0	17.8	9.5	16.9
Bachelor's Degree						
All.....	32.9	20.1	10.5	39.5	22.7	6.9
Boys.....	31.3	31.5	10.5	45.6	27.3	7.6
Girls.....	33.9	24.3	10.5	36.0	17.6	5.3
Farm.....	36.7	29.3	14.6	44.1	25.9	6.9
Some College						
All.....	15.2	25.9	26.4	26.0	35.1	25.6
Boys.....	7.7	23.1	27.0	18.5	34.5	25.7
Girls.....	19.6	28.9	25.2	30.4	35.7	25.2
Farm.....	11.6	27.8	23.6	24.1	36.8	31.5
High School Only						
All.....	9.9	23.9	50.7	14.0	29.9	54.5
Boys.....	2.1	17.7	50.5	3.2	21.8	54.0
Girls.....	14.5	30.8	51.0	20.4	39.0	55.7
Farm.....	11.6	22.4	45.8	14.1	27.8	44.6
Number of Respondents.....	768	1852	458	751	1762	407

^aHigh = mostly A's and B's.

^bMedium = mostly C's.

^cLow = mostly D's or less.