

The Educational and Occupational Expectations of Rural Ohio Tenth- and Twelfth-Grade Students

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The major purpose of this study was to identify the educational and occupational expectations of rural Ohio tenth- and twelfth-grade secondary school students. Extent to which relationships existed between the educational and occupational expectations of these students and personal, family, and school characteristics were also investigated. Using a researcher developed questionnaire, usable data were collected from 491 tenth- and twelfth-grade students.

Results of this study indicated that rural students had educational and occupational expectations that were higher than the attainments of their parents. Over 60 percent of the students reported that they were likely to attend college. Students expected to enter occupations with much higher status scores than the occupations in which their parents were presently employed. Educational and occupational expectations of the rural students were found to have low to substantial associations with gender, type of high school program enrollment, high school grade point average, parental occupations, parental education attainments, and parental expectations.

Education in the United States, provided in large part by rural schools, has furnished the social, academic, technological and economic foundations that have allowed this country to prosper. "As late as 1913, one-half of the school children in the United States were enrolled in the country's 212,000 one-room schools" [7, p. 35]. Current enrollments in rural high schools exceed 4.4 million children [10]. These children represent approximately 30 percent of all students in high school. Ohio, like most other states, has its share of rural schools. These rural schools are widely distributed throughout the state and offer a variety of educational programs to the many students they serve.

The attitudes, aspirations and accomplishments of rural students have recently received a great deal of research attention. This attention has sparked much controversy over the academic preparation [14, 13, 2] of rural students, their educational and occupational expectations [8, 9] and the relationship of family characteristics [1, 4] to these measures of educational and occupational awareness.

Students develop educational and occupational plans that build upon their backgrounds of experiences. The life experiences of secondary students have been determined in part by the families of which they are members, the communities in which they live, and the schools that they attend. These life experiences manifest themselves in the educational and occupational expectations of students. The family has been shown to play an important role in the development of youth. Yang [18] reported that the decision of rural youth to enter college was

strongly influenced by the expectations of their parents. Lee [9] advised that "parents, regardless of their racial background, need to be fully aware of their influence on the aspirations and expectations of young men and women" (p. 33).

The educational and occupational expectations of rural students may be reflections of the diversity, or lack of it, in the educational programs offered by rural schools. Schwarzweller [15] concluded that rural schools directly influenced the occupational plans of rural students. Rural students desiring educational and occupational opportunities not prevalent in rural areas or promoted through rural school curricula, find themselves at a distinct disadvantage in the competitive world of today.

PURPOSES AND OBJECTIVES

The purpose of the study was to identify the extent to which relationships existed between the educational and occupational expectations of rural Ohio secondary school students and their personal, educational and family characteristics as well as the characteristics of the rural Ohio schools that they attended. The following research questions were developed to guide this study:

1. What were the personal, educational, and family background characteristics of rural Ohio high school students?
2. What were the educational and occupational expectations of rural Ohio high school students?

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3. What were the characteristics of the rural Ohio high schools being attended by the students studied?
4. What relationships existed between the personal, educational, and family background characteristics of rural Ohio high school students and their educational and occupational expectations?
5. What relationships existed between the characteristics of rural Ohio schools and the educational and occupational expectations of the high school students who attend them?

PROCEDURES

This study employed descriptive survey research of a comparative nature. This type of research looks "for accurate information about the characteristics of particular subjects (Ss), groups, institutions, or situations or about the frequency with which something occurs" [17, p. 285].

Population and Sample

Absence of a consistent definition of "rural" was evident from the review of literature on rural education. Nobel [11] pointed out that lack of a common definition of rural education hindered research efforts directed at this area.

For purposes of this study a rural public high school in Ohio was one that met the following criteria:

- 1) Located in a county outside a Standard Metropolitan Statistical Area.
- 2) Located in a county with a total population under 40,000 people.
- 3) Offered vocational agriculture as a high school course.
- 4) Had a high school enrollment of 500 or fewer students (average high school class of under 125 students).

Using the *Ohio Educational Directory* [12], 52 public secondary high schools were identified that met the outlined criteria. These 52 high schools served as the population for the study. The population was geographically stratified into four groups to account for social and economic differences associated with location. One school was randomly selected from each of the four strata for participation in the study. The four selected schools constituted the sample for this study. Data were collected from the observation unit, which consisted of students in grades ten and twelve.

Even though random selection was employed, the small sample size of this study could be considered a limitation to its generalizability. The researcher chose to be conservative in generalizing the findings only to the rural students in the four schools that made up the sample.

Instrumentation

Data describing characteristics of rural students and their families were collected using a Student Information

Questionnaire (SIQ) and high school student records. The instrument contained a variety of question types, including open-ended questions. Content validity of the (SIQ) was established by a panel of experts. The instrument was pilot tested by high school students in a rural high school not included in the sample, to determine suitability and reliability. The test-retest reliability procedure employed resulted in an eight day stability coefficient of .84. Characteristics of rural high schools participating in the study were obtained from the chief school administrator of each school using an Administrator Information Questionnaire (AIQ). Content validity of the AIQ was established by a panel of experts. A reliability coefficient of .96 was obtained when selected information from the AIQ was compared to the same data available from the Ohio State Department of Education.

Data Collection

Data were collected during the 1984-1985 school year from all tenth- and twelfth-grade students returning signed parental permission forms. This procedure resulted in the collection of data from 498 of the 632 (79 percent) students. Data were collected at each school site using a researcher developed questionnaire. Of the 498 questionnaires in the sample participating, 491 were included in the data sample.

Data Analysis

Descriptive statistics (frequencies, percentages, measures of central tendency, and variability) were used to organize and summarize the data. Occupations expected by rural students were assigned occupational status scores ranging from 0 (low status) to 96 (high status) using the socioeconomic index developed by Duncan [5]. Relationships between characteristics were described using appropriate correlation coefficients as recommended by Glass and Stanley [6].

FINDINGS

Personal and Educational Characteristics

Mean age of the rural tenth- and twelfth-grade students in this study was 16.7 years. Just over 50 percent of the students were females. Over 99 percent of the tenth- and twelfth-grade students in the four schools studied were white. Over three-quarters of the students were enrolled in academic or general high school programs. Less than 14 percent of the students reported enrollment in vocational programs. The mean high school grade point average for the students studied was 2.64, or nearly a B-average. Three-quarters of the students had grade point averages above C (2.00).

Family Background Characteristics

The socioeconomic status of the occupations held by parents of the tenth- and twelfth-grade students in the

study were determined by assigning their reported occupations to Duncan's Socioeconomic Index (SEI) which provided a scale 0 (low status) to 96 (high status) for the measurement of status. The mean status score for the occupations of fathers was 29.65 and 39.25 for mothers. Parental occupations were also assigned to 21 categories using the *Standard Occupational Classification Manual* [15]. Almost 33 percent of the fathers were reported to be mechanics, repairers, material handlers, or laborers. Almost 47 percent of the mothers were homemakers. Over 60 percent of the mothers and 52 percent of the fathers were reported to have terminated their formal education after graduation from high school. Sixteen percent of the fathers and almost ten percent of the mothers had not completed high school. Twelve percent of the mothers and fathers had completed four or more years of formal education beyond high school. Three-quarters of the students reported having at least some discussion with their parents relative to their educational plans. Almost 99 percent of the students reported that they thought their parents expected them to complete high school and 50 percent believed their parents expected them to attend college.

Educational Expectations

Over 93 percent of the students reported that they would not quit high school. Almost 36 percent of the students said they definitely would attend college. Another 26 percent thought college attendance would be likely. Four-year colleges or universities were identified by 37.7 percent of the students as the type of institution they would attend for advanced education. Twenty-three percent reported plans to attend a technical school. Engineering was the most frequently (11.8 percent) identified area of planned study while in college. The combined areas of Education, Engineering, Health Science, and Business accounted for almost 40 percent of the identified areas of study.

Occupational Expectations

Occupations that the students expected to have were coded using the Duncan [5] Socioeconomic Index (SEI). The mean value of the occupations expected was 54.15. Over 52 percent of the students expected to be employed in occupations with SEI scores of 60 and above. A little over 11 percent of the expected occupations were executive, administrative or managerial. Eighteen percent of the students expected to work in clerical and service occupations, while fewer than 15 percent expected to work in construction, extractive, transportation, mechanics, production, or laborer occupations. Over 83 percent of the students expected to make less than 25,000 dollars during the first year in their expected occupation. Less than 4 percent expected to make over 35,000 dollars. A majority (59.1 percent) of the rural students indicated that they decided on their present choice of an occupation prior to the eleventh grade. A majority (64.3 percent) of the tenth-grade students had decided in ninth or tenth

grades, while a majority of the twelfth-grade students had decided in the eleventh or twelfth grades.

Rural High School Characteristics

The mean enrollment for grade ten in the four schools studied was 83.5 students. The mean enrollment in grade twelve was 74.5 students. Three of the four schools had 7-12 enrollments in excess of 500 students. One school had a 7-12 enrollment of 230 students. The number of full-time high school teachers in the four schools studied ranged from 18 to 24, with a mean of 20. The mean number of full-time staff was 13.5. The four rural schools reported operating budgets ranging from 1,265,281 dollars to 3,871,280 dollars. The mean value for operating budget was 2,969,781 dollars. Total number of curricular offerings in the four schools ranged from 57 to 88 with a mean of 76.25 course offerings per school.

Relationships

The extent to which relationships existed between the educational and occupational expectations of the rural students and their personal, education and family background characteristics was investigated. Magnitudes of the relationships investigated in this study were described based on the scale delineated by Davis [3].

Gender showed low association with five of the seven measures of educational and occupational expectation (Table 1). Gender was substantially associated with the area of advanced study in which students expected to study while in college. High school program enrollment showed moderate association with all three expectations for advanced education and with expected occupation. There were moderate relationships between grade point average and college attendance and type. Parental occupations showed low association with all measures of educational expectation as well as with expected occupation. Parental expectations in the form of discussions about education and expectations for college showed low to substantial association with all three measures of expectation for college and for expected occupation.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and implications are based on the interpretation of data presented in this study.

Conclusion 1: Tenth- and twelfth-grade students in the four rural schools were most frequently enrolled in academic or general high school programs. Most expected to attend college upon graduation from high school, and study at a four year college or university. The four rural schools in this study seemed to emphasize preparation for college attendance.

Conclusion 2: The socioeconomic status of the families in the four rural areas studied was low. Fathers were most often employed in semi-skilled and skilled

TABLE 1
 Relationships between Educational and Occupational Expectations and
 Personal, Educational and Family Background Characteristics
 of Rural Ohio High School Students

	<u>Educational Expectations</u>				<u>Occupational Expectations</u>		
	Plans to Complete High School	Plans for Advanced Education	Type of Advanced Education Planned	Area of Advanced Study	Occupation Expected	When Occupational Choice Was Made	Expected Income
Age	.04	.07	.01	.09	.07	.41	.06
Gender	.10	.21	.21	.61	.25	.07	.15
Program Enrollment	.15	.33	.33	.37	.35	.02	.04
Grade Point Average	.08	.43	.36	.07	.36	.02	.07
Socioeconomic Status	.01	.19	.17	.06	.17	.05	.06
Occupation							
Father	.18	.21	.19	.24	.23	.02	.13
Mother	.26	.20	.17	.29	.24	.05	.03
Educational Attainments							
Father	.04	.25	.29	.04	.15	.01	.08
Mother	.08	.22	.27	.10	.15	.00	.05
Parental Expectations							
Discussions	.10	.26	.18	.30	.24	.13	.06
For High School	.26	.11	.09	.11	.10	.07	.01
For College	.17	.57	.43	.43	.29	.01	.10

occupations and a majority of the mothers were not employed outside the home.

Conclusion 3: Most parents of the rural tenth- and twelfth-grade students in this study had not experienced a college education and the educational expectations that parents held for their children were much higher than the educational attainments of the parents.

Conclusion 4: Status of the occupations that the rural tenth- and twelfth-grade students in this study expected to hold were, on the average, much higher than the status of the occupations in which their parents were employed.

Conclusion 5: Most students had somewhat unrealistic expectations about the incomes they would receive during their first year in an occupation.

Conclusion 6: Tenth- and twelfth-grade students enrolled in academic and general high school programs were more inclined to plan education beyond high school, and expect occupations with higher status, than were students enrolled in vocational or other high school programs.

Conclusion 7: The rural tenth- and twelfth-grade students in this study expected college study and employment in areas that were sex stereotypic.

Conclusion 8: Rural tenth- and twelfth-grade students of high academic ability were more inclined to plan for college attendance and expect occupations with higher status scores than were students of lower academic ability.

Conclusion 9: Expectations parents held for their children for education beyond high school had a profound influence upon plans for advanced education and area of advanced study.

Conclusion 10: Characteristics of the four rural schools investigated in this study did not have meaningful relationships with the educational expectations and the occupational expectations and aspirations of the tenth- and twelfth-grade students.

Recommendations for the Rural Schools in this Study

1. Rural schools in this study should assess the impact of the educational programs they offer on: (a) the students who participate in them, (b) school economics, and (c) the rural communities they serve. Impact on students should be assessed by conducting follow-up studies of high school graduates relative to advanced education, occupational attainments, income, and location of employment. Impact of high school programs on the economics of the rural school and on the rural community

should be assessed by monitoring program costs, occupational placement of graduates, and number of program graduates that reside or work in the community.

2. Rural schools in this study should promote educational opportunities beyond high school for students in vocational and other non-college preparatory programs. Guidance personnel should work with the two-year technical schools to develop programs and relationships that will encourage students to enter these programs.

3. Guidance counselors in the rural schools studied should provide leadership to teachers and administrators in reducing sex stereotyping. Rural school administrators should provide sex equity inservice to teachers, counselors, and staff. Teachers should use non-sexist textbooks and teaching materials. Information about women and men in non-traditional roles should be included in all high school courses.

4. Rural schools in this study should be sure to include parents in the career development of rural students. High school teachers and counselors must make parents aware of the influence they exert on the career development of rural students. Teachers in these rural schools should construct learning situations that take into account the impact of parental expectations.

5. Rural schools in this study should consider implementation of some type of career education course prior to high school, with at least one ten-week course on occupational awareness during the high school years.

Recommendations for Research Methodology

1. Research using designs and instrumentation that will allow for the development of predictive models should be considered.

2. Although Duncan's Socioeconomic Index has been extensively used to measure occupational status, the 1961 version over-estimates the status of many female occupations, and under-estimates some male occupations. The index also lacks a score for individuals who work in the home as homemakers. Future research in this area should use the recently revised version of the index or use some other measure of status.

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