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THE EDUCATIONAL AND OCCUPATIONAL PERSPECTIVES OF RURAL YOUTH.
BY- SEWELL, WILLIAM H.

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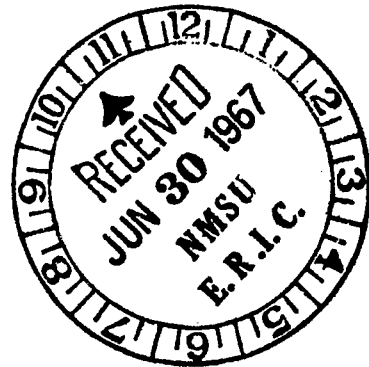
THE PURPOSE OF THIS PAPER IS TO PRESENT A SUMMARY OF PRESENT KNOWLEDGE CONCERNING RURAL AND URBAN DIFFERENCES IN STUDENT ASPIRATION AND OCCUPATIONAL CHOICE OF YOUTH. THE PAPER RELIED HEAVILY ON DATA OBTAINED IN A WISCONSIN RESEARCH PROJECT FINANCED BY THE ROCKEFELLER FOUNDATION AND THE U.S. PUBLIC HEALTH SERVICE. OTHER STUDIES MENTIONED INDICATED THAT THE EDUCATIONAL PLANNING AND ASPIRATIONS OF RURAL YOUTH WERE GENERALLY LOWER THAN THOSE OF URBAN YOUTH. THE WISCONSIN DATA CONFIRMED PREVIOUS EDUCATIONAL PLANNING STUDIES AND ALSO INDICATED THAT THE OCCUPATIONAL CHOICE OF YOUTH WAS RELATED TO PLACE OF RESIDENCE. FACTORS CITED FOR THESE DIFFERENCES INCLUDED THE SOCIOECONOMIC STATUS AND ACADEMIC ACHIEVEMENT OF THE HOME, SCHOOL AND COMMUNITY ATTITUDES, AND MEASURED INTELLIGENCE. SUGGESTIONS FOR IMPROVEMENT INCLUDED INCREASED QUALITY OF RURAL SCHOOLS, BETTER EDUCATIONAL AND OCCUPATIONAL GUIDANCE IN THE RURAL SCHOOLS, ESTABLISHMENT OF PARENTAL GUIDANCE PROGRAMS, EARLY TALENT IDENTIFICATION OF SUPERIOR STUDENTS, AND INCREASED AVAILABILITY OF COLLEGE FACILITIES.
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by

William H. Sewell
University of Wisconsin

National Committee for Children and Youth
1145 Nineteenth Street, N. W.
Washington, D. C. 20036

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OF RURAL YOUTH**

by

**William H. Sewell
University of Wisconsin**

Prepared for

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in a Changing Environment**

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OF RURAL YOUTH

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University of Wisconsin

ABSTRACT

The research results reported in this paper indicate that the educational and occupational plans and aspirations of rural youth -- both boys and girls -- are quite low in comparison with those of urban youth. This is true not only when we consider the group as a whole, but also when we take into account those in the highly talented third. In almost every comparison the farm group is lowest in aspirations. A number of variables have been examined that have bearing on the lower aspirations of the rural students. From all of the evidence, it seems clear that many culturally-determined characteristics of the rural youth themselves work against their having high level educational and occupational aspirations. Rural youth are disadvantaged in that the school and community environment in which they grow up is not as conducive to high level aspiration and achievement as is the urban environment. But perhaps the most important factor is that the educational and socioeconomic status of the families in which rural youths are reared tends to inhibit their aspirations.

The research on rural-urban differences in educational and occupational aspiration shows that there is no single factor which explains the differences. These persistent differences result from the interaction of many factors. This does not mean that remedies should not be sought. Some programs of action may be suggested for the consideration of this Conference. First, programs for the improvement of the rural high school should be considered, because the school is an important force in the determination of the educational and occupational aspirations of youth. Second, there is great need for expansion and improvement of programs for educational and occupational guidance for in-school youth. Third, programs of educational and vocational guidance should be designed to include parents of rural youth, since parents' attitudes and values are major factors in the relatively low aspiration levels of youth. Fourth, there is need for programs that would permit early identification of especially talented rural youth so that they might be encouraged to develop their special talents. Fifth, everything possible should be done to increase the availability of post-high school educational facilities to rural youth.

THE EDUCATIONAL AND OCCUPATIONAL PERSPECTIVES
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by

William H. Sewell

INTRODUCTION

In the present year approximately 2,750,000 youths will complete their public schooling, either through graduation from high school or by dropping out before graduation. They will then be faced with one of the great decisions of their lives -- whether to continue their education beyond high school or to enter the labor market, permanently in the case of most boys and temporarily in the case of most girls.

This decision, which probably started taking shape much earlier in the youth's life, will determine in large part the type of career he will follow, his income throughout life, his associates, his family life, where he will live, the extent to which he will be free to make future decisions, his health and happiness, and the contribution he will make to society.

* The Wisconsin data reported in this project are from a research program originally supported by the Rockefeller Foundation and currently financed by a grant (M-6275) from the National Institutes of Health, U. S. Public Health Service. The basic data are from questionnaires and data cards furnished by J. Kenneth Little, Professor of Education, University of Wisconsin, from his state-wide survey of Wisconsin high school seniors. This survey was conducted in 1957 under a contract with the U. S. Office of Education. A report of the major findings of this survey has been published, J. Kenneth Little, A State-Wide Inquiry into Decision of Youth About Education Beyond High School, Madison, Wisconsin, School of Education, 1958. For the analysis reported in this paper, a new sample has been drawn, certain data have been recoded, and new indexes have been constructed both from the original data and data from other sources. The writer wishes to acknowledge Professor Little's generosity, the help of his research assistants, J. Michael Armer, Vimal P. Shah and William H. Sewell, III, and the computational services of the Numerical Analysis Laboratory of the University of Wisconsin.

A decision of such great importance is not only a concern of the individual but of the society as a whole. This is true because to a large extent the great problem of modern complex societies is the maximum development and utilization of human resources. In a society such as our own the emphasis is on freedom of choice, but the responsibility of the society is to provide the information, the opportunities, and the rewards which make it possible for an individual to make a wise choice -- one which will make appropriate use of his talents and provide the personal satisfactions he seeks. Such a choice will at the same time contribute maximally to the welfare of the society. In many other societies no such freedom of choice exists; either tradition dictates the educational and occupational career the individual will follow or some formal bureaucratic system decides these matters.

How well does this free choice system operate and what can be done to make it operate better? Unfortunately we do not have good answers to these questions. But we do know something about the extent and nature of the problem of educational and occupational aspirations of rural youth. ^{1/} In this paper the writer will review the available knowledge which has resulted from recent studies of the educational and occupational aspirations of rural youth. The emphasis will be comparative in the sense that it will focus on the differences between youth from rural communities and youth from cities. The research we will discuss is all based on studies of high school youth. It deals mainly with high school seniors, whose decisions are of paramount importance because they make up more than nine-tenths of the group who must decide whether to enter the labor market or continue their education. Other background papers will deal with rural youth in the dropout group.

The plan of the paper is to present an over-all summary of present knowledge concerning rural and urban differences in educational and occupational plans and aspirations of youth, and to discuss some implications of these findings. Attention then will be given to an examination of factors which help to account for the differences in the educational and occupational perspectives of rural and urban youth. Next, we will focus on the "talent loss" problem and the contribution that rural society makes to it by the failure of so many of its most able youth to aspire to higher education and high level occupations. Finally, a few brief suggestions about possible ways in which the perspectives of rural youth may be enlarged will be offered for consideration. It is hoped that this paper will provide the basis for a fruitful discussion of one of the serious problems facing rural society -- the relatively low educational and occupational aspirations of its youth.

Much of the basic data to be discussed comes from the writer's continuing research program dealing with educational and occupational aspirations of Wisconsin youth. ^{2/} The data on rural-urban differences are not yet published elsewhere, and much of the information is reported here for the first time. The reason for the heavy reliance on the Wisconsin study is that these data constitute the only body of information in existence which is based on a large enough sample to make possible extensive rural and urban comparisons of detailed educational and occupational aspirations, and at the same time to permit division by sex, socioeconomic status, intelligence, and many other meaningful categories that should be taken into account in examining differences

in educational and occupational perspectives. It is not argued that what is true for Wisconsin necessarily is true for the United States, or for any other state for that matter. Probably no single state is representative of the whole country, nor are any two states sufficiently alike in all details for a sample from one to be adequate to represent another. But at least Wisconsin is a state with great diversity in its population and in its economy. It is comprised of a large and diversified rural population and many rural communities. It is also part of a diverse urban complex with many urban communities of all types and most sizes. Consequently, the Wisconsin sample should furnish information on trends which should be generally meaningful for other areas even though not applicable in all details.

EDUCATIONAL AND OCCUPATIONAL PERSPECTIVES

EDUCATIONAL PLANS

During the past ten years a number of studies have been made which provide comparative data on the educational aspirations and plans of rural and urban youth. Only two studies have been based on national samples. The most useful of these is the study by Nam and Cowhig, which reports information on a probability sample of 1,170 high school seniors in 1959 and provides comparisons on the college plans of farm, nonfarm, and urban boys and girls. ^{3/} Their data clearly show that students from farm families are considerably less likely to plan on attending college after graduation from high school than are rural nonfarm and urban students, and that girls in all residence categories are less likely to plan on college than boys -- although there is little difference between farm boys and girls. The second study, by Rogoff, does not provide data on farm youth or for boys and girls separately but shows that seniors who attend high school in rural communities (under 2,500) are considerably less likely to plan on college than those who attend school in larger communities. ^{4/}

Four studies have been based on state-wide samples. A Minnesota study provides data on farm, nonmetropolitan (villages and cities under 100,000), and metropolitan seniors. This study shows that farm students are less likely than those in either of the other categories to plan on college, and that there are consistent sex differences, with boys more likely than girls to have college plans in each residence category. ^{5/} A Florida study found that a much smaller proportion of rural students than urban students aspired to college, and that boys are more likely than girls to have college plans. ^{6/} A Wisconsin study shows that farm seniors are less likely to plan on college than nonfarm seniors, and finds the usual sex differences favoring boys. ^{7/} A Washington study reports similar findings for boys but finds no differences between farm and nonfarm girls. ^{8/} (In both studies the nonfarm category includes rural nonfarm and urban students.) None of the several studies based on county data disagrees with the general trend reported in the above studies. Although the county and local studies made in Michigan, ^{9/} Kentucky, ^{10/} Utah, ^{11/} and Washington, ^{12/} vary in their definition of aspiration, their residential categories, and the nature of their samples, all of them report that the farm group tends to lag well behind the more urban segments of the population in educational aspirations.

The writer's current study of rural-urban differences in educational and occupational aspirations provides the most complete data on the subject and permits much more detailed tabulation and analysis than was possible in the previous studies. This study is based on a large probability sample (10,322 cases) of all seniors in Wisconsin high schools in 1957. ^{13/} The data on educational and occupational plans were gathered late in the senior year after most students had made definite post-high school plans: consequently, their responses most likely represent intentions or plans rather than fantasy choices. This is indicated by the fact that over 90 percent of a subsample of 1000 students who said in the spring of their senior year that they planned to enter college were actually enrolled in the following fall. It also helps to account for the fact that the percentages reporting college plans and high prestige occupational choices tend to be lower than for some of the studies previously referred to, which were made of younger children or of seniors earlier in their final year of high school. Thus some further insights into the problem of rural-urban differences in educational plans and occupational aspirations can doubtless be gained by a more detailed examination of the extensive Wisconsin data.

The data on educational plans of Wisconsin high school seniors are classified by place of residence and sex. The residence categories used in the study are farm, village (open country nonfarm and those residing in places of under 2,500), small city (2,500 to 25,000), medium city (25,000 to 100,000), and large city (over 100,000). The total of the farm and village categories roughly corresponds to the rural category of the U.S. Census, and the total of the second three corresponds to the urban category. Educational plans are classified in three categories: no further educational plans, plans to attend a school offering vocational training not at the college level (e.g., business college, electronics school), and plans to attend a degree-granting college (or one whose credits are transferable to the University of Wisconsin). Data classified in this way are given in table 1.

It is quite apparent that the proportion planning on continuing their education beyond high school is closely related to the size of community of residence. Only 37 percent of students from farms and 44 percent of those from villages, in comparison with 50 percent of those from cities, plan on further education. Within the urban category the differences are not great but always favor the larger cities. This same general trend holds both for males and females, although farm girls are considerably more likely to continue their education after high school graduation than are farm boys. For the village and urban groups, the sex differences are small and favor the girls. Farm boys are more likely than other boys to choose vocational training, with the proportions decreasing as the size of community increases. Among girls, the same over-all relationship holds except that village girls are more likely than farm girls to choose vocational training. In all communities girls are at least twice as likely as boys to seek vocational training. This is probably directly related to the fact that the occupational opportunities for which girls compete are predominantly white-collar jobs that require vocational training.

Table 1. Community of Residence and Educational Plans of Wisconsin High School Seniors

Community Size	Males			Females			Total (Both Sexes)		
	Not continuing	Vocational training	College Total	Not continuing	Vocational training	College Total	Not continuing	Vocational training	College Total
Farm	67.7	10.3	22.0 (931)	58.1	20.8	21.1 (949)	62.9	15.6	21.5 (1880)
Village (under 2,500)	58.6	9.6	31.8 (938)	53.2	22.9	23.9 (932)	55.9	16.2	27.9 (1870)
Small City (2,500 to 25,000)	53.7	7.9	38.4 (1235)	49.7	20.8	29.5 (1219)	51.7	14.3	34.0 (2454)
Medium City (25,000 to 100,000)	51.1	7.1	41.8 (1093)	49.3	18.0	32.7 (1228)	50.2	12.9	36.9 (2321)
Large City (100,000 or more)	42.3	6.9	50.8 (806)	48.6	15.8	35.6 (990)	45.8	11.8	42.4 (1796)
Total Rural	63.2	9.9	26.9 (1870)	55.7	21.9	22.4 (1881)	59.4	15.9	24.7 (3751)
Total Urban	49.9	7.4	42.7 (3134)	49.2	18.4	32.4 (3437)	49.5	13.1	37.4 (6571)
Total	54.8	8.4	36.8 (5003)	51.5	19.6	28.9 (5318)	53.1	14.1	32.8 (10321)

By far the most important data in the table are those related to college plans, and it is here that we find the largest rural-urban differences. While only 22 percent of the seniors from farms and 28 percent from villages plan on college, over 37 percent of those from cities have such plans. Within the urban category the proportions range from 34 percent for small cities to 42 percent for large cities. Without a single exception the percentage planning on college increases in each size category and for both sexes as the size of community of residence increases. The differences are much greater for the males than the females -- ranging from 22 percent for the boys from farms to 51 percent for boys from the large cities, and from 21 percent for the girls from farms to 36 percent from the large cities.

Thus, it seems quite apparent that the results of earlier studies are generally confirmed and considerably extended by the Wisconsin data. Clearly rural life seems to be associated with more limited educational perspectives. In every comparison made, the more rural the group the lower the educational aspirations of youth. This effect is greatest on boys but is still considerable for girls, particularly in relation to college plans.

OCCUPATIONAL PERSPECTIVES

Before going on to further analysis and discussion of the implications of the educational plans data, attention should be turned to the studies of occupational aspirations, since educational plans are very intimately tied to occupational aspirations. While a number of studies of occupational aspirations have been made during the past ten years, most of them have not presented rural-urban comparisons. To the writer's knowledge, no study providing rural-urban data has been made in recent years using a national sample, and only two studies have been reported which furnish some data on state-wide samples. The data from these are quite limited, providing information only on occupational dichotomies, such as white-collar and blue-collar jobs, and are very restricted in their rural-urban comparisons. (The county studies generally offer still less information.) The state-wide studies include one in Florida which compared the occupational aspirations of ninth-grade boys attending school in communities of under 2,500 with those of boys attending school in urban communities of various sizes, and found that the larger the community the higher the occupational aspirations of the boys. ^{14/} In a later analysis, differences were also found favoring urban over rural twelfth-grade boys, and this relationship held even when intelligence and father's occupation were taken into account. ^{15/} An earlier Wisconsin study providing data only on farm and nonfarm high school students found no significant differences between farm and nonfarm seniors. ^{16/} The county studies include one which showed that farm boys in a semi-industrialized county of Michigan ranked behind nonfarm boys in level of occupational aspiration. ^{17/} Another Michigan study based on four agricultural counties found that a lower proportion of farm than open country nonfarm or village students aspired to white-collar occupations. ^{18/} A study of Kentucky seniors in central bluegrass and eastern mountain counties also reports that farm boys have lower occupational aspirations than nonfarm boys. ^{19/} A study done in Greene County, Iowa, found that among high school seniors, farm boys ranked lower than rural nonfarm boys in occupational aspirations, and that urban boys ranked highest of all. ^{20/}

The very limited available data on vocational choices, in the studies referred to, show less rural-urban differences for girls than for boys, and in one study the farm girls were more likely to plan on high prestige occupations than were nonfarm girls (village and urban taken together). Despite the limited samples and the wide differences in the sampling methods, the questions asked, and the methods of categorizing rural and urban residence in the studies reviewed, the evidence suggests that farm boys generally have lower occupational aspirations than village or urban boys, but that there are only slight differences between girls.

The data from the writer's Wisconsin study are much more complete. Two methods of treating level of occupational aspiration have been used in the analysis. One is to classify occupational choices into the traditional categories: professional and executive, other white-collar (sales, clerical, secretarial, small retail business, etc.), skilled, farming, and other blue-collar occupations (operatives, unskilled workers, service workers, etc.). The second method has been to rate vocational choices according to scores on a widely used, standardized scale of occupational prestige. ^{21/} Data are presented using each method for each sex with students classified according to residence using the five community size categories previously employed in presenting the data on educational plans.

Table 2 gives the data for boys according to the above classification schemes. The proportion of farm boys aspiring to the professional occupations is considerably lower than for village boys (24 percent and 34 percent respectively), and that both are markedly lower than for urban boys (48 percent). Among the city size categories, only boys from the large cities differ much from the average urban proportion. For other white-collar positions the farm boys are somewhat below the other groups, but the difference between the village and city boys is small. The same is true for the skilled occupations. Farm boys are the only group to have a significantly large proportion wishing to enter farming (27 percent), and rural boys are more likely to plan on semiskilled, unskilled, and service jobs (other blue-collar) than urban boys, with village boys being highest in this category. The conclusion drawn from these data is that rural boys expect to enter blue-collar occupations (including farming) to a much greater extent than urban boys, whose choices are predominantly in the white-collar group. The proportion of white-collar choices, particularly the aspiration to professional occupations, tends to increase sharply as the size of the community increases, with well over half of the boys from large cities aspiring to a career in the professions.

When the boys' occupational choices are assigned prestige scores, and these scores are divided into High (includes mainly professional occupations ranging from school teachers to medical doctors), Middle (includes mainly technicians, office workers, small retailers, and skilled workers), and Low (includes mainly unskilled and semiskilled factory workers, service workers, and farmers) thirds, the lower prestige choices of the rural boys are even more clearly indicated. Only 21 percent of the rural boys aspire to high prestige occupations, whereas 37 percent of the urban boys have such aspirations; the range is from 17 percent for farm boys to 45 percent for large-city boys. The rural boys clearly tend to concentrate their choices in the low status occupations.

Table 2. Community of Residence and Occupational Aspirations
of Wisconsin High School Senior Boys

a. Occupational Classifications

	Profes- sional and Executive	Other White Collar	Skilled	Farmer	Other Blue Collar	Total	
Farm	24.0	10.5	8.5	27.3	29.7	100.0	(932)
Village	34.5	13.9	11.1	3.5	37.0	100.0	(938)
Small City	44.7	14.0	10.2	1.5	29.6	100.0	(1235)
Medium City	45.4	14.6	11.2	0.7	28.1	100.0	(1093)
Large City	56.9	12.8	9.4	0.5	20.4	100.0	(806)
Total Rural	29.2	12.2	9.8	15.4	33.4	100.0	(1870)
Total Urban	48.1	13.9	10.4	0.9	26.7	100.0	(3134)
Total	41.1	13.3	10.1	6.3	29.2	100.0	(5004)

b. Prestige Classes

	High Third	Middle Third	Low Third	Total	
Farm	17.1	27.2	55.7	100.0	(932)
Village	24.4	36.6	39.0	100.0	(938)
Small City	34.4	36.0	29.6	100.0	(1235)
Medium City	34.7	37.9	27.4	100.0	(1093)
Large City	45.2	35.1	19.7	100.0	(806)
Total Rural	20.8	31.9	47.3	100.0	(1870)
Total Urban	37.3	36.4	26.3	100.0	(3134)
Total	31.1	34.7	34.2	100.0	(5004)

Table 3. Community of Residence and Occupational Aspirations
Of Wisconsin High School Senior Girls

a. Occupational Classifications

	Professional and Executive	Other White Collar	Blue Collar	No Job Plans	Total	
Farm	27.2	51.1	12.9	8.8	100.0	(949)
Village	31.0	45.5	12.6	10.9	100.0	(932)
Small City	38.1	42.9	10.0	9.0	100.0	(1219)
Medium City	40.8	42.5	9.6	7.1	100.0	(1228)
Large City	41.7	46.2	6.7	5.4	100.0	(989)
Total Rural	29.1	48.3	12.7	9.9	100.0	(1881)
Total Urban	40.1	43.7	8.9	7.3	100.0	(3436)
Total	36.2	45.3	10.3	8.2	100.0	(5317)

b. Prestige Classes

	High Third	Middle Third	Low Third	Total	
Farm	30.0	47.0	23.0	100.0	(949)
Village	29.8	44.6	25.6	100.0	(932)
Small City	35.4	43.6	21.0	100.0	(1219)
Medium City	37.0	43.9	19.1	100.0	(1228)
Large City	43.0	44.1	12.9	100.0	(989)
Total Rural	29.9	45.8	24.3	100.0	(1881)
Total Urban	38.2	43.8	18.0	100.0	(3436)
Total	35.3	44.5	20.2	100.0	(5317)

The occupational choices of girls are somewhat more concentrated because a relatively more limited set of choices is available to girls. Also employment, although increasingly important to women, is still secondary to the major adult role of wife and mother for the great majority of women in our society. However, most girls do intend to work, or at least to prepare themselves for gainful employment, after completion of their education, and if present trends continue, it seems likely that most girls will be employed in jobs outside the home at sometime during their adult lives.

When the occupational choices of girls are examined, using the traditional occupational categories (table 3), the overwhelming majority of girls plan on professional or other white-collar occupations, and relatively few plan to enter the lower status occupations. However, when we examine the distributions, it is immediately apparent that the farm and village girls are much less likely to plan on the professional occupations and more likely to plan on the lower prestige white-collar jobs than are the girls from urban areas. Again, for girls as for boys, the general rule seems to be that the more urban the girl's background the higher is her occupational aspiration.

If we examine the occupational prestige levels by place of residence categories, there is even more marked evidence of this trend. A lower proportion of rural than urban girls are in the high prestige third, and the proportion increases with size of urban community. Rural girls, and particularly the village girls, tend to pile up in the middle and low prestige thirds; in contrast, city girls are particularly underrepresented in the low prestige third, and are overrepresented in the high prestige third.

SOME CONCLUSIONS AND IMPLICATIONS

There seems no doubt that the educational and occupational perspectives of youth are definitely related to place of residence. For both educational plans and occupational aspirations farm youth rank lowest, with the village youth intermediate, and city youth highest. Not only is this true but the differences are quite large and are consistent from study to study. The Wisconsin results clearly clinch the point in that there is not a single exception to the rule either for boys or girls; moreover it holds not only for rural-urban comparisons but for comparisons involving several size of community categories, and for both educational and occupational aspirations. On the basis of all of this evidence, one must conclude that whatever other virtues it may hold, rural life -- particularly farm life -- has a depressing effect on the educational and occupational perspectives of youth.

The significance of this conclusion should not be underestimated. Certainly most rural youth, especially farm youth, will spend their adult occupational life in urban places. There are simply not enough occupational opportunities in rural areas to absorb them. This is true because the rural economy is not expanding fast enough to absorb more than a small fraction of the youth who are raised in rural areas. This is especially true in the farm sector where rapidly increasing science and technology have made it possible for fewer and fewer farmers to produce an overabundance of goods, and where the number of farms has decreased as the size of operations and capital requirements have increased.

This excess of youth, many of whom would prefer to remain in the rural areas, must find their places in urban society. By and large they cannot help but be handicapped by their lower educational and occupational aspirations when they enter competition with urban youth. Not only will urban youth be more likely to have acquired the additional education required for the better jobs (although it is clear that many who aspire to the professions will end up in other jobs), but they will have other obvious advantages such as greater knowledge of the job market in cities, better contacts with those responsible for hiring, and greater experience in coping with the requirements of urban life and work. It may also be that many rural youth will not have the value orientations and personality characteristics that are necessary for upward social mobility in urban society. There is already a good deal of evidence from several studies made in various parts of the country indicating that rural migrants have less success on the urban labor market than people reared in urban areas. 22/ In large measure this may be explained by their lower levels of educational attainment and their lower occupational aspirations.

With current employment trends and those projected for the future, the outlook for those who cannot meet high educational and training requirements is not favorable. Whereas a high school education was sufficient for entry into many of the better positions a generation ago, a college education is now required. Increasingly, those who do not plan on college can expect routine, low paying, and insecure jobs in cities. This is a handicap that the great majority of rural youths will have to bear throughout their occupational careers, and may well be one that will be increasingly difficult to overcome.

Nor should the point be overlooked that those who remain in rural areas also will be handicapped by their lower educational and occupational aspirations. The notion that one does not need post-high school education for high level positions in rural areas is false, and may well be based on ignorance of the present situation in the rural community. More and more the standards common in urban areas are extending into rural communities. Many of the business and government agencies that operate in rural areas give preference to college-trained people. Moreover, it is difficult to believe that rural communities can continue to play an important role in modern society without a relatively high proportion of highly trained and educated citizens. The view that seems to be so commonly shared by farm youth and their parents -- that college training is not necessary for success in farming -- may also be proven wrong as agricultural production and farm management come to be increasingly dependant on scientific and technological knowledge.

FACTORS IN RURAL-URBAN DIFFERENCES IN EDUCATIONAL AND OCCUPATIONAL PERSPECTIVES

What are the factors which help to account for these rural-urban differences in educational and occupational perspectives? Are there characteristics of the youths themselves which may help to account for these differences? Are there differences in their family environments which cause rural youths to set lower educational and occupational goals? Are there factors in the rural school climates or in rural communities which furnish less incentive to high aspirations and offer less opportunity for high level achievement? If we had

even tentative answers to these questions we might gain a better understanding of the problem. Such knowledge also would be useful in practical programs designed to broaden the perspectives of rural youth.

The few studies which have investigated these questions offer some evidence to indicate that there are differences in each of these areas that adversely affect the perspectives of rural youth. However, none of these questions has been studied with sufficiently large and representative samples to provide definitive answers. 23/ From studies so far available, most of which do not deal with rural-urban differences, it seems clear that certain personal characteristics of youths themselves are closely related to their educational and occupational perspectives. Certainly one factor of paramount importance is the youth's intellectual ability. While the writer does not wish to become involved in the controversy about whether intelligence tests are true measures of native intelligence, numerous studies have shown that measured intelligence is highly related to aspirations and is an excellent predictor of future success in educational and occupational endeavors. 24/ Another characteristic which is highly related to future academic and occupational aspiration and achievement is past academic performance, as indicated by such measures as grades and rank in high school class. The motivation to succeed in tasks requiring persistence and high level performance is likewise an important factor. 25/ The individual's attitudes and values about mobility, security, independence, the kinds of work he likes, the place he wants to live, and possibly some deeper traits of personality are doubtless related to his educational and occupational perspectives. 26/

Several studies have shown that the educational climate of the home -- including the educational level of the parents, of older brothers and sisters, and of other relatives -- is related to aspirations. 27/ The extent to which the parents stress high level educational and occupational goals clearly influences the perspectives of their children. 28/ Other studies have shown that the family's socioeconomic status, whether measured with some index or scale or by father's occupation, family income, wealth or other measures, is directly related to educational and occupational perspectives. 29/

Certainly the school itself must be important since in a very real sense it is a testing ground for the student, with the school serving as one of the mechanisms for sorting out those who have the skills and other qualities which make them candidates for additional training or for direct entry into various occupations. 30/ The teachers and counselors perform an important function in this process by encouraging some and discouraging others, by giving information about adult occupational opportunities and scholarships, and by serving as role models for youth. The standards and aspirations of one's peers, particularly in adolescence, greatly influence one's behavior. Those who associate with classmates having high aspirations are more likely to aspire to college and to high level occupations than are those whose associates have low aspirations. 31/ Finally, the communities themselves differ greatly in the extent to which they stress academic and occupational achievement, in the number and kinds of occupational and educational opportunities which are visible and available to youth, and in the extent to which social mobility is possible in the local community. 32/

In the Wisconsin study, a number of variables may be examined in relation to the educational plans and occupational aspirations of farm, village, and urban students. Those dealing with the individual characteristics of the students include: (1) the student's measured intelligence, (2) his rank in his high school class, (3) whether he found high school work interesting, (4) the extent to which he places a high value on education, (5) whether he followed a college preparatory course, (6) whether he had given much consideration to college, (7) whether he had applied for a college scholarship, (8) his college plans, and (9) the prestige level of his occupational aspiration. Also included are the variables dealing with the school and community: (10) whether most of his best friends in high school plan on college, (11) whether he had much discussion of his plans with his teachers and counselors, (12) whether his teachers had encouraged him to plan on college, (13) the size of his high school class, (14) whether he attended a school in which a high proportion of the senior class plans on going to college, (15) whether he lives in a community in which there is a college, and (16) whether he lives in an urbanized county. Variables dealing with the educational climate and socioeconomic level of his home include: (17) the socioeconomic status of his family as measured by a factor-weighted scale, (18) his father's occupation, (19) the educational levels of his parents, (20) the economic status of his family, (21) whether he had much discussion of his plans with his parents, and (22) whether his parents had encouraged him to attend college.

The relationship of each of these variables to educational and occupational plans and to rural-urban residence has been tested. While the statistical analysis is too complicated to present in full, two simplified tables give some of the data. (The analysis has been done for each intelligence third, for the total sample, and by sex, but only the figures for the total sample and for the high intelligence third are given in the tables.) Table 4 lists the variables which differentiate between those who plan on college and those who do not, and those who plan on professional occupations and those who do not. Table 5 presents data showing how these variables are distributed between the major residential categories: farm, village, and urban. From the data in tables 4 and 5 we can infer which variables may help to explain the rural-urban differences in the educational and occupational plans of the youth in this sample.

Some examples may help to clarify the presentation and the method of reasoning. If we take variable (17), family socioeconomic status, which is based upon a carefully constructed factor-weighted index of six items dealing with the financial and educational level of the student's family, we find from table 4 that 56 percent of the students whose families' socioeconomic status ranks in the top one-third of the sample plan on college while only 21 percent of those whose families' socioeconomic status is in the bottom two-thirds have such plans. This is a very large difference and shows that the socioeconomic status of the student's family is an important determinant of his educational plans. We also find from table 5 that there are large and significant differences in socioeconomic status among the residence groups; 20 percent of the farm students come from families ranking high in socioeconomic status in contrast with 29 percent of the village, and 38 percent of the urban students.

Therefore, we may infer that the lower socioeconomic status of the farm and village students may help to account for their lower educational aspirations.

Another variable which several studies have shown to be related to educational plans is the student's past record in high school. One would expect this to be an important factor in educational plans because it provides the student with a basis for estimating what he may hope for in the way of future educational attainment. In the present study this variable is assessed by the student's rank in his high school class (variable 2). Data presented in table 4 show that approximately 46 percent of the students in our sample who rank in the top half of their high school class plan on college, whereas only 19 percent of the students who rank in the lower half of their high school class have such plans. Obviously rank in high school class has an important bearing on educational plans for the students in this sample. However, when we examine the data on rank in high school class (in table 5), we find that there are only small differences among the rural and urban seniors in the proportion who rank in the top half of their class, and these differences favor the farm group. Consequently, we cannot expect rank in high school class to explain why the farm and village students differ from the urban students in educational plans.

In a similar fashion we could proceed through the tables, examining each of the 22 variables to identify those which might help to explain the rural-urban differences in the educational and occupational aspirations of this group of boys and girls. Space will not permit an extended treatment of this sort, but we can summarize the ways in which the rural students differ from the urban group on the variables that are relevant to high educational aspirations. Although the data for occupational aspirations also are shown in the table, our attention is focused mainly on the college plans data because the two sets of aspiration are very clearly related and space will not permit discussing them separately.

The rural students definitely rank well below the urban students in measured intelligence, which past studies have shown is one of the most important determinants of college plans. The farm and village students make about the same showing. The rural students tend to find high school work somewhat less interesting than the urban students, and the value placed on education by rural students, particularly those from farms, is considerably lower than for urban students. The rural students, especially the farm group, are much less likely to have followed the college preparatory curriculum than are urban students -- thus indicating an early lack of interest in college. The rural group is somewhat less likely than the urban group even to have given serious consideration to college; they are also less likely to have applied for a college scholarship. As was noted earlier, the farm students are less likely than either the village students or the urban students to aspire to a high prestige occupation requiring post-high school training. From all of the evidence it seems quite apparent that the rural students, particularly the farm students, are less academically oriented, somewhat less able, and considerably less convinced of the value of higher education than urban students. Consequently they have taken few of the steps which are necessary for college entrance, such as following the college preparatory curriculum, giving consideration to college, and applying for scholarships, than have the urban students.

Table 4. Relation of Selected Variables to College Plans and High Occupational Choices for Wisconsin High School Seniors

	Percent With			
	College Plans		High Occ. Choice	
	Total Sample	Top 1/3 IQ	Total Sample	Top 1/3 IQ
1. Intelligence level				
Top 1/3	55	--	61	--
Bottom 2/3	22	--	28	--
2. Rank in high school				
Top 1/2	46	60	52	66
Bottom 1/2	19	38	24	43
3. Interest in high school work				
High	50	67	57	73
Low	11	24	15	29
4. Value of college education				
High	55	67	63	77
Low	14	24	13	27
5. Took college preparatory				
Yes	50	64	58	71
No	9	19	12	18
6. Consideration of college				
High	41	58	48	64
Low	5	18	8	24
7. Application for scholarship				
Yes	86	89	93	93
No	25	42	30	48
8. College plans				
Yes	33	55	93	94
No	--	--	12	20
9. Prestige of occupational aspiration				
High	62	75	76	86
Low	4	10	1	2
10. Proportion of high school class going to college				
High	38	59	42	63
Low	28	50	35	57
11. Discussed plans with teacher				
Much	41	61	48	66
Little	12	27	16	34

(Continued)

Table 4. Relation of Selected Variables to College Plans and High Occupational Choices for Wisconsin High School Seniors
(continued)

	Percent With			
	College Plans		High Occ. Choice	
	Total Sample	Top 1/3 IQ	Total Sample	Top 1/3 IQ
12. Teachers encouraged going to College				
Yes	56	68	63	74
No	15	32	20	38
13. Size of high school class				
Over 100	36	58	43	65
Under 100	29	50	33	54
14. Friends' college plans				
Going	62	75	70	81
Not going	16	31	21	36
15. Availability of college				
Within 15 miles	36	60	40	62
None within 15 miles	27	52	32	54
16. Degree of urbanization of county				
Has city of 25,000	36	59	43	64
Has no city of 25,000	28	48	33	54
17. Socioeconomic status				
Top 1/3	56	73	61	76
Bottom 2/3	21	40	27	47
18. Father's occupation				
White collar	54	70	60	75
Blue collar	23	43	29	50
19. Educational status of parents				
High	51	68	56	73
Low	22	41	28	48
20. Economic status				
High	47	66	52	71
Low	22	43	28	49
21. Discussed plans with parents				
Much	39	60	46	66
Little	23	46	27	49
22. Parents encouraged college going				
Yes	57	71	64	77
No	6	15	11	21

Table 5. Percent of Wisconsin Farm, Village, and Urban High School Seniors Possessing Selected Characteristics

Variable	Total Sample			Top 1/3 Intelligence Sample		
	Farm	Village	Urban Total	Farm	Village	Urban Total
1. Top 1/3 in intelligence	27	29	36	33	--	--
2. Ranked in top half of high school class	54	46	52	51	80	77
3. Found high school work interesting	51	53	59	56	67	71
4. Places high value on education	39	45	50	47	24	25
5. Took college preparatory course	44	55	63	58	65	80
6. Gave consideration to college	70	75	79	77	87	91
7. Applied for college scholarship?	9	13	15	14	20	28
8. Plans on college	22	28	37	33	40	55
9. Plans on high prestige occupation	36	44	56	50	54	70
10. High proportion of class plans on college	43	45	52	49	46	54
11. Discussed plans with teachers	58	69	73	70	81	83
12. Teachers encouraged college plans	41	44	43	43	61	64
13. Large high school class	23	10	80	57	23	60
14. Most school friends plan on college	21	28	42	36	35	54
15. College within 15 miles of residence	29	27	82	63	27	58
16. Lives in county with city of 25,000 or more	25	29	76	58	27	63
17. High family socioeconomic status	20	29	38	33	25	47
18. Father a white-collar worker	--	32	40	32	--	44
19. High family educational status	21	32	44	38	29	51
20. High family economic status	38	41	46	43	42	53
21. Much discussion of plans with parents	54	55	63	60	60	66
22. Parents encouraged college plans	37	50	57	52	53	71
23. Parents encouraged college plans	37	50	57	52	53	71

The rural students attend smaller high schools and schools that send smaller proportions of their graduating class to college than do urban students. They are considerably less likely than urban students to have as their best friends other boys and girls who plan on college. They are somewhat less likely than urban students to have discussed their post-high school plans with their teachers and counselors, but are equally likely to have been encouraged by them to attend college. They are less likely than urban students to live within commuting distance of a college and are less likely to have lived in an urbanized county where a wide variety of educational and occupational opportunities are visible to them. Thus rural youth, in comparison with urban youth, find themselves in a school and community environment with considerably less potential for arousing and maintaining high level educational and occupational aspirations.

Our data indicate that the variables related to the socioeconomic and educational level of the student's family are among the most powerful determinants of educational and occupational perspectives. Each is significantly related to college plans and on every one of them the rural students rank well below urban students in our sample. Perhaps of greatest significance is their relatively low ranking on the general measure of socioeconomic status used in this study. This variable is highly related to educational and occupational aspirations not only in this sample but in every study in which it has been tested. Farm students rank well below village students and village students rank well below urban students on general socioeconomic status. On the other socioeconomic status indicators, such as father's occupation and economic status of the family, the rural students also are disadvantaged. The educational status measure, which is based on the educational attainments of both parents, reflects the lower educational climate of the farm homes in contrast to the other homes. Finally, the rural students are somewhat less likely than the urban students to have discussed their post-high school plans with their parents and are much less likely to have been encouraged to go to college. This is especially true for the farm students.

Thus, we may conclude that the rural students, especially the farm students, are disadvantaged in the following ways: (1) They have personal characteristics (most of which are probably culturally determined) that make them less likely than urban students to plan on college. (2) The school environments and the communities in which they live are less likely to arouse high aspirations than are those of urban youth. (3) Finally, the socioeconomic and educational levels of their homes tend to limit their educational and occupational perspectives. These factors go a long way in explaining the lower aspirations of rural youth.

The relationship between these variables and rural-urban differences in educational and occupational plans is by no means a simple one. This is indicated by an analysis in which we have tried to diminish the rural-urban differences by controlling the effects of some of the variables related to educational plans. ^{33/} Because the analysis is complicated, it need not be given here; we can summarize the results by noting that separate controls for intelligence and socioeconomic status, although generally reducing the rural-urban differences, did not remove them for either the boys or the girls in our sample. However, when both were controlled simultaneously, rural-urban differences in educational aspirations for the girls were largely eliminated. For the boys there were

still significant differences at all socioeconomic status levels, especially in the high ability group. In fact, the largest rural-urban differences were for the high-ability and high-socioeconomic status boys. Finally, each of the 16 variables (out of the original list of 22 discussed above) that were related to rural-urban differences in educational plans of boys in the top ability group was controlled along with socioeconomic status and intelligence to see if any of these combinations of variables could account for the rural-urban differences in educational aspiration we had previously noted. To make a long story short, no combination of any of these variables with socioeconomic status and intelligence was sufficiently powerful to account for the original rural-urban differences. Still more complex statistical analysis is now under way to test other explanations, but at least we may conclude that causes of rural-urban differences in aspirations of youth are by no means simple and that the differences are real and persistent.

THE RURAL CONTRIBUTION TO TALENT WASTAGE

There seems to be general agreement that one of the major problems facing the United States is that of talent loss -- the failure of a sizeable portion of academically talented youths to obtain the education and training required for positions which will make good use of their talent. The need for engineers, physical and biological scientists, doctors, and teachers has been particularly stressed. However, a rapidly changing and complex society such as ours also requires an ever increasing component of well-educated people in business, farming, government, and other fields. These needs may be less pressing and spectacular than those associated with the world-wide competition for scientific and technological supremacy, but few will deny that we must move forward on all fronts and that the goal of our society should be to provide higher education for all of our most able youth. This does not imply that we should not be concerned with those who are not highly talented; rather, educational leaders should plan for youth at each level of talent to obtain the education and training for which their various abilities and interests make them qualified. For those who have high academic talent it would seem that a college education should be the minimum level of educational attainment toward which they should strive, if their talents are to be most efficiently utilized.

A number of studies have shown that a high proportion of those with high academic ability do not have high levels of educational and occupational aspiration, and that many who do will fail to achieve their aspirations. ^{34/} The data from the Wisconsin study are particularly revealing on this point because they permit rural-urban comparisons of talent wastage, which until now have been unavailable. Most experts would agree that students in the top one-third in academic ability, whether measured by intelligence or college aptitude tests, should profit from a college education and, if they have other requisite interests and basic skills, should be able to master the increasingly complex requirements of high level occupations. When the Wisconsin sample of high school seniors is divided into three ability levels -- High, Middle, and Low -- according to their scores on a standardized test of mental ability, it is apparent that a considerable proportion of high ability youths do not plan on college or aspire to high level occupations. For the total sample (table 6), almost two-thirds of the high ability boys plan on college and aspire to professional and executive positions. Less than one-half of the highly talented

girls plan on college and only 57 percent on professional occupations. If as high a proportion as one-half of those with high educational aspirations actually enter and complete college, which from past experience seems an optimistic estimate, the loss of talented youth is staggering. To illustrate, according to our data, of every 1,000 highly talented high school seniors, 549 plan on college but at most 494 will actually attend, and no more than one-half of these will finish college, giving a maximum yield of only 247 college graduates. This is an overwhelming loss. Obviously, not all of the talented group who do not graduate from college will fail to attain important positions in society because many will find it possible to compete successfully despite their educational handicaps, but all manpower experts agree that it is becoming increasingly difficult for those without a college education to compete for the better positions.

Turning now to rural-urban comparisons of educational plans and occupational aspirations of the highly talented third, again we find that the farm boys and girls have the lowest aspirations. Most notable is the fact that the farm boys rank well behind the village boys, who in turn rank well below the urban boys; 44 percent of the farm boys, 55 percent of the village boys, and 67 percent of the urban boys in this talented group plan on college. The same general trend holds also for high level occupational aspirations. (See table 6.) Rural girls also lag behind urban girls in their educational and occupational plans, but the difference between farm and village girls is not great. Only 36 percent of the highly talented farm girls and 39 percent of the village girls plan on college, whereas 53 percent of the urban girls have such plans. For occupational plans the results are very similar.

Some idea of the talent loss which is likely to result from these differences in plans may be indicated by the following figures resulting from applying the procedures used in the preceding illustration. For each 1,000 highly talented farm boys the yield of college graduates would be 197, for village boys, 248, and for urban boys, 301. For girls, the yield would be 161 for the farm group, 173 for the village, and 241 for the urban group. Thus, it can be clearly seen that the lower educational perspectives of the highly able rural boys and girls contributes substantially to the talent loss problem.

The low educational and occupational aspirations of farm boys in the talented third is worthy of comment. One of the most common explanations for the lower educational aspirations of the farm boys is that most farm boys who plan to farm do not think college is necessary for success in agriculture, and therefore do not plan on going to college. ^{35/} In our sample it is apparently true that even the brightest farm boys who plan to farm do not plan to obtain a college education. ^{36/} Of the boys in the high intelligence category who plan to farm, only 10 percent plan to attend college; in contrast, 52 percent of the equally intelligent farm boys who do not plan to farm plan to go to college. Eliminating the farm boys who plan to farm from the computations materially raises the proportion of farm boys with high educational plans (52 percent in comparison with 44 percent when the boys who plan to farm are included) and high occupational choices (30 percent choosing professions in comparison with 26 percent when the boys who plan to farm are included); it does not, however, bring the farm group up to the level of the village boys, and still leaves them far behind the urban boys. Thus, other factors than farm plans must be called upon to explain the differences in the educational perspectives of the talented

farm, village, and urban boys in this sample. Needless to say, the rural-urban differences between the high ability girls also must be explained by other factors.

Table 6. Percent of High Ability Seniors (Top One-Third in Intelligence) Who Plan on College and Aspire to Professional Occupations, by Community of Residence and Sex

	Percent with College Plans			Percent Aspiring to Professional Occupations		
	Males	Females	Total	Males	Females	Total
Farm	44	36	40	48	43	45
Village	55	39	47	54	47	51
Urban	67	53	60	70	62	66
(Total Rural)	50	37	43	51	45	48
Total	62	48	55	64	57	61

The failure of the bright boys who plan to farm to aspire to a college education represents a potentially tragic talent wastage. This is not only because there is great need for college educated farmers in rural communities, but also because many of the talented boys who plan to farm may eventually end up in the nonfarm labor market working at jobs well below their ability levels. This is because fewer and fewer farmers are needed, and it is becoming increasingly difficult to get started in farming. ^{37/} Many who are determined to farm will not have adequate capital or credit resources to finance the purchase of a commercial farm. Some will take poorer farms and work against unfavorable odds and either become discouraged and quit farming for nonfarm employment or continue to farm under unfavorable conditions. Others will try their hand at nonfarm employment in the hope that they can save enough to make a down payment on a farm -- and few will succeed. In any case, the probability is high that many of the talented boys who plan to farm and do not plan to continue their education beyond high school will neither follow a farming career nor obtain the education required for good positions in the nonfarm labor market.

SOME SUGGESTIONS FOR BROADENING THE PERSPECTIVES OF RURAL YOUTH

The research results reported in this paper indicate that the educational and occupational plans and aspirations of rural youth -- both boys and girls -- are quite low in comparison with those of urban youth. This is true not only when we consider the group as a whole, but also when we take into account those in the highly talented third. The fact that in almost every comparison the

farm group is lowest in aspirations has been noted as well. A number of variables have been examined that have bearing on the lower aspirations of the rural students. From all of the evidence, it seems clear that many culturally determined characteristics of the rural youth themselves work against their having high level educational and occupational aspirations. It is also quite apparent that rural youth are disadvantaged in that the school and community environment in which they grow up is not as conducive to high level aspiration and achievement as are those in the urban environment. But perhaps the most important factor of all is that the educational and socioeconomic status of the families in which rural youths are reared tends to inhibit their aspirations. The research on rural-urban differences in educational and occupational aspiration shows that there is no single factor which explains the differences. Actually, it suggests that the differences are quite persistent and probably result from the interaction of many factors. Consequently, there is probably no simple solution to the problem. Rather, its solution will demand multifaceted programs carried out over a long period of time. Moreover, there is no guarantee that some new problems may not be created when programs are introduced to change such a complicated social psychological phenomenon as the aspirations of youth. Those who hope for a simple solution to the complex problem of altering the perspectives of rural youth are doomed to disappointment.

This does not mean that remedies should not be discussed nor that solutions should not be sought. The writer does not pose as an expert on this problem, but he is prompted by the seriousness of the problem to make some suggestions, growing out of consideration of the research results, which the members of this conference may wish to discuss.

First, it almost goes without saying that everything possible should be done to improve the quality of rural high schools. This includes not only the physical plant, the curriculum, the teachers, and the quality of the supervision but also the intellectual climate of the school. The evidence indicates that the school is an important force in the determination of the aspirations and achievements of youth. For this reason, whatever can be done to improve the rural schools should result in an improvement in the educational and occupational perspectives of rural youth.

Second, it would appear that there is great need for in-school programs stressing educational and occupational guidance. Rural students, especially farm students, probably know much less about educational and occupational opportunities than do urban youths, yet very few rural high schools have guidance programs. While counseling cannot be expected to work miracles, it should be especially useful in making students aware of the range of jobs appropriate to their talents and in informing them of the educational requirements of these positions.

Third, any program of educational and vocational counseling should involve not only the youth but his parents as well. This is particularly true for rural parents since they often exert a negative influence on their children's educational and occupational aspirations. This is probably due to their own ignorance of the labor market and of their children's abilities and interests. The purpose of such a program would be to provide rural parents with objective

knowledge of educational and occupational opportunities so that they might be in a better position to help their child arrive at an appropriate decision.

Fourth, it seems to the writer that there is special need in rural school systems for programs which would attempt to make an early identification of those students who should be given encouragement to develop their unusual talents. If, as seems to be true, many rural schools do not provide a stimulating environment to the more talented scholars, possibly such students could be sent to schools where more challenging programs are available. Such a program would be costly and might be disruptive of local social arrangements, but it might provide an effective way of reducing rural talent wastage.

Fifth, since many rural youths cannot afford to attend college and vocational training institutions in distant places, everything possible should be done to increase the availability of such educational facilities. This may be done by the provision of community colleges, as in California and some other states, and by greatly increasing scholarship programs for talented rural youth. However, if scholarship programs are expanded, intensive efforts will have to be devoted to making students, teachers, and parents aware of them. Our research seems to indicate that able rural students are much less likely to apply for existing awards than are urban students.

This brief list by no means exhausts the possible suggestions for broadening the perspectives of rural youth. Doubtless, the participants in this conference will have other suggestions that they will wish to discuss. The research reported in this paper has shown some of the dimensions of the problem. It is a problem which should be of concern not only to rural people but to the whole nation.

FOOTNOTES

1. A good summary of previous research is given in Lee G. Burchinal, with Archibald O. Haller and Marvin J. Taves, Career Choices of Rural Youth in a Changing Society, Minnesota Agricultural Experiment Station Bulletin 458, November, 1962.
2. Other papers reporting research on the writer's larger project include: Sewell, William H., and Ellenbogen, Bertram L. "Social Status and the Measured Intelligence of Small City and Rural Children." American Sociological Review, October, 1952, 17, 612-616; Marshall, Douglas G., Sewell, William H., and Haller, Archie O. "Factors Associated with High School Attendance of Wisconsin Farm Youth." Rural Sociology, September, 1953, 18, 257-260; Sewell, William H., Marshall, Douglas G., Haller, Archie O., and DeHart, William A. "Factors Associated with Attitude Toward Higher Education in Rural Wisconsin." Rural Sociology, December, 1953, 18, 359-365; Haller, Archie O., and Sewell, William H. "Residence and Levels of Educational and Occupational Aspiration." American Journal of Sociology, January, 1957, 60, 407-411; Sewell, William H., Haller, Archie O., and Straus, Murray A. "Social Status and Educational and Occupational Aspiration." American Sociological Review, February, 1957, 22, 67-73; Haller, Archie O. "The Influence of Planning to Enter Farming on Plans to Attend College." Rural Sociology, June, 1957, 22, 137-141; Haller, Archie O. "Research Problems on Occupational Achievement Levels of Farm-Reared People." Rural Sociology, December 1958, 23, 355-362; Haller, Archie O., and Miller, I. W. The Occupational Aspirational Scale: Theory, Structure, and Correlates, Michigan Agricultural Experiment Station Technical Bulletin 288, East Lansing, 1963; Sewell, William H. "Residential Background and College Plans." American Sociological Review, forthcoming.
3. Nam, Charles B., and Cowhig, James D. "Factors Related to College Attendance of Farm and Nonfarm High School Graduates: 1960." Farm Population Bureau of the Census, June 15, 1962; and Cowhig, James D. and Nam, Charles B. "Educational Status, College Plans, and Occupational Status of Farm and Non-farm Youths: October 1959," Farm Population, Bureau of the Census, August, 1961.
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7. Haller, Archie O., and Sewell, William H. "Farm Residence and Occupational Aspiration." The American Journal of Sociology, January, 1957, 62, 407-411.

8. Slocum, Walter L. Occupational and Educational Plans of High School Seniors from Farm and Nonfarm Homes, Washington Agricultural Experiment Station Bulletin, 564.

9. Cowhig, James, Artis, Jay, Beegle, J. Allan, and Goldsmith, Harold. Orientalions toward Occupation and Residence: A Study of High School Seniors in Four Rural Counties of Michigan, Michigan Agricultural Experiment Station Special Bulletin 428, 1960.

10. Schwarzweller, Harry K. Sociocultural Factors and the Career Aspirations and Plans of Rural Kentucky High School Seniors. Kentucky Agricultural Experimental Station, 1960.

11. Christiansen, John R., Cowhig, James D., and Payne, John W. Educational and Occupational Aspirations of High School Seniors in Three Central Utah Counties, Social Science Bulletin No. 1, Brigham Young University, in cooperation with the U. S. Department of Agriculture, June, 1962; and Christiansen, John R., Cowhig, James D., Payne, John W. Educational and Occupational Progress of Rural Youth in Utah: A Follow-up Study, Social Science Bulletin No. 2, Brigham Young University, in cooperation with the U. S. Department of Agriculture, August, 1962.

12. Edlefsen, J. B. and Crow, M. J. "Teen-Agers" Occupational Aspirations, Washington Agricultural Experiment Station Bulletin 618, 1960.

13. Actually all seniors from all public and private high schools were included in the original survey. A probability sample of approximately one-third of the cases was drawn for the analysis reported in this paper.

14. Grigg, Charles M., and Middleton, Russell. "Community of Orientation and Occupational Aspirations of Ninth Grade Students." Social Forces, May, 1960, 38, 303-308.

15. Middleton and Grigg, op. cit.

16. Haller and Sewell, op. cit.

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26. For references, see footnote 23.

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34. Kahl, op. cit.; and Sewell, Haller, and Straus, op. cit.

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36. Our data also show that the farm boys, in all ability categories, who plan to farm are generally much less likely to plan on college than are the farm boys who plan on nonfarm occupations. Thus, the effect of eliminating the farm boys who plan to farm from consideration in our total sample results in a substantial increase in the percentage of farm boys who plan on college -- from 22 percent for the total group to 28 percent for the group who plan on nonfarm occupations. However, this is still below the village and well below the urban proportions of 32 percent and 43 percent, respectively. Thus, it can be concluded that while the lower aspirations of the boys who plan to farm help to account for the poor showing made by the farm boys generally, this effect is not sufficient to explain the rural-urban differences in educational aspiration which we had previously noted.

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