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AUTHOR	Nelson, Joel I.
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ABSTRACT

The purpose of this 1967 study was to compare rural-urban differences in the academic aspirations held by some 6000 Minnesota high school juniors. Criteria for determining the college plans of adolescents were taken from responses to the question "What further schooling do you plan after high school?" Those selecting the alternative "college or university" were classified as aspiring to a higher education. The standard procedure for distinguishing rural and urban areas according to community size was used, while socioeconomic status was determined by the amount of education attained by the parents. To test for the relative achievement potential of rural and urban adolescents, scores derived from the Minnesota Scholastic Aptitude Test were used. It was revealed that neither intelligence, rank, school size, nor satisfaction accounted for aspirational differences across community categori These data suggest that a conception of academic opportu hich much of the analysis was based, may not be the most profitable way to examine aspirational differences with respect to community size. (LS)

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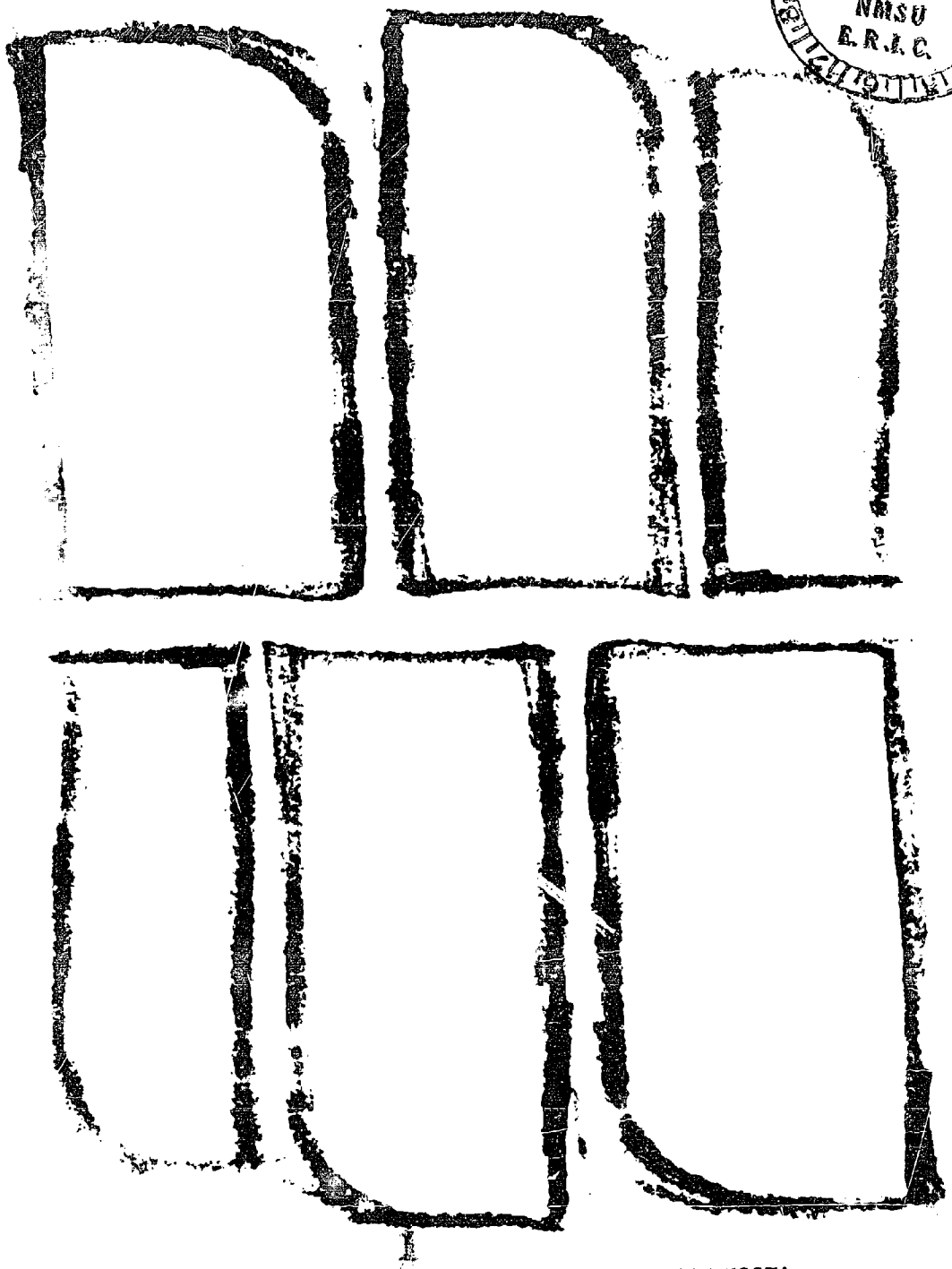
EDUCATIONAL ASPIRATIONS IN MINNESOTA:

RURAL-URBAN COMPARISONS

Joel I. Nelson



AGRICULTURAL EXPERIMENT STATION · UNIVERSITY OF MINNESOTA

CONTENTS

Joel I. Nelson is an associate professor, Department of Sociology, University of Minnesota.

Educational Aspirations in Minnesota: Rural-Urban Comparisons

Whether the research has been conducted on adolescents in Wisconsin (Sewell, 1964), Florida (Middleton and Griggs, 1959), Michigan (Cowhig et al., 1960), Kentucky (Schwarzweller, 1960), Washington (Slocum, 1956), Iowa (Burchinal, 1961), or on a national sample of adolescents (Ramsøy, 1961), the findings are clear and persistent: high school students from urban areas are more likely than those from rural areas to plan on attending college. In some instances (Rogoff, 1960), there have been slight reversals of this trend, where smaller intermediate size towns have more aspirants than larger intermediate size towns; but in no instance have adolescents from the metropolis been shown to be less desirous of a college education than their counterparts in small rural towns and the open country.

That these generalizations can be extended to Minnesota has been fairly well established. In 1951, Nelson (1960) showed that parents of children reared in villages were more likely to maintain positive attitudes towards education than parents of children reared on farms. A study in Goodhue County (Nelson and Donohue, 1966) showed rural area families to have among the lowest educational aspirations for their children, although in this instance parents in hamlets and villages were slightly more likely to want their children to attend college than those in urban areas. In the most definitive research to date, Berdie (1954) estimated that approximately 20 percent of the males reared on farms aspired to college, compared with 50 percent of the males reared [illegible] areas. A decade later, Berdie and Hood (1965) showed that 54 percent of the urban males interviewed maintained college aspirations, in contrast to 48 percent of the males from nonfarm areas and 28 percent from farms. Data for females showed a parallel and similarly dramatic decrease from urban to rural areas.

Explanations of Rural-Urban Divergencies

Apparently, despite differences in definition and procedure, there is broad support for the conclusion that adolescents from rural and urban backgrounds are entering adulthood in different channels of vertical mobility. Less clear are the reasons why divergent aspirations along community lines persist. From one point of view, it might be thought that such divergencies should have attenuated. Sixty to 70 years ago, for example, rural and urban areas indeed appeared distinctive: some 60 percent of all Americans then were classified as living in rural communities that were geographically isolated from their urban counterparts, and purportedly were parochial, individualistic, and firm believers in the lore of common sense. Good evidence on attitudes is difficult to come by, but the 20th century has proceeded against the backdrop of enormous technological innovations with potential for bridging geographically distinct communities: planes, radios, automobiles, buses, televisions, telephones. With such innovations, is there still good reason to believe that communities differ from one another; to maintain that, in what appears to be a mass society, the aspirations of some should differ from the aspirations of others?

Despite broad changes in the social structure, there is some evidence to suggest that widespread community differences continue. Schnore (1966), for example, has recently and convincingly underlined the fallacy of maintaining that demographic characteristics between rural and urban areas have attenuated. Information regarding educational aspirations over time is less clear, but this much can be said: each year, scores of rural migrants are drawn to urban areas, migrants who frequently are more intelligent and ambitious than those they leave behind (Lipset and Bendix, 1959, p. 206). These traits are known to be related to plans and aspirations for mobility. What may be occurring is a form of selective migration in which an unsystematic, nonrandom, and typically immobile sample of adolescents is left in the rural countryside. Other circumstances undoubtedly offset this trend. Among them is the centralization of schools, or the location of colleges in rural areas. In addition, migration probably cannot be studied without specifying the original [illegible] of the migrant's view of his environment (Taves and Coller, 1963). Migration may nonetheless be considered an instrumental factor in increasing rather than attenuating divergent aspirations for higher education.

Selective migration is one possible explanation for rural-urban differences in aspirations; others can be posed. The difficulty in isolating the exact causes of these differences lies in the fact that rural and urban adolescents vary in more ways than in the size of the communities in which they reside. In a classic experiment, these variations could be readily taken into account. Adolescents, for example, might be matched in pairs on important characteristics such as intelligence, sex, and social class; randomly selected; assigned to rural or urban residences; and observed in the respective development of aspirations for higher education. Through standardizing personal characteristics, differences in aspirations could then be more safely attributed to community factors. Obviously, such experiments are beyond the dreams of even the most avid advocates of social engineering.

In part, also, the difficulty in isolating causal factors may be a consequence of ambiguous definitions of rural and urban communities. To some theorists, community

refers to population size only (Sjoberg, 1964). To others, its chief referent may be to an occupational pursuit, as in the distinction between rural farm and rural nonfarm areas. To still others, it refers to an invariable and monolithic cluster of items: isolation, size, personalized relations, etc. (Redfield, 1947).

Because of these ambiguities, the concepts of rural and urban residence have become receptacles for loosely reasoned analysis. Features distinguishing rural and urban areas are taken as legitimate explanations for aspirational differences. It may be true, for example, that urban families receive higher incomes than rural families and it may be equally true that high income families are likely to have children aspiring to college, but it does not necessarily follow that income levels account for differences in aspirations. In survey research, logic is not a reliable substitute for an empirical demonstration of effects. However, some researchers (cf. Berdie and Hood, 1965) have not even attempted such explanations, hence allowing room for speculation about observed differences and results.

What may be called for is the examination and analysis of a range of community and individual circumstances pertaining to possible sources of explanation for rural-urban differences in college aspirations. The purpose of this bulletin is to provide an initial examination of the relevance of three such factors within Minnesota: access to opportunity; values and goals; and achievement potential.

Data and Procedures

Data and Sample. The data were drawn from materials collated by the Student Counseling Bureau at the University of Minnesota. As part of a statewide testing program, the Bureau annually administers an aptitude [illegible] and questionnaire to each junior in every Minnesota [illegible] school [illegible], the year from which the data were taken, some 60,000 students responded, approximately 95 percent of the total. The analysis presented here is confined to students enrolled in public high schools.

The sample obviously does not account for all Minnesota adolescents in this age range, most notably because of those who drop out prior to their 11th year in school. It has been well established that dropouts are from the lower classes and lower intelligence categories, hence biasing the sample in this direction. Whether they are also more likely to come from rural areas is unknown, although experience suggests that this may be the case. What is known is that Minnesota has among the lowest dropout rates in the nation: for every 100 students who start high school, about 92 complete it (*Minneapolis Tribune*, 1966). Consequently, the bias due to dropouts is not likely to be substantial.

Educational Aspirations. The criteria for determining the college plans of adolescents were taken from responses to the question "What further schooling do you plan after high school?" Those selecting the alternative "college or university (four year liberal arts college, university, junior college, state college, and teachers college) . . ." were classified as aspiring to a higher education. All others, among them students who did not know what to do, or who were planning on a trade school, a business school, or nothing at all, were classified in a residual category of noncollege aspirants.

The question used falls within the rubric of realistic rather than idealistic plans. It presumably taps what students actually plan to do rather than what they would like to do or think they ought to do. How many of the students classified as college aspirants actually capitalize on their plans is an important but separate question. In a followup study of Wisconsin high school seniors, Sewell (1964) noted that approximately 90 percent of those who planned on college actually attended. Berdie and Hood (1965) conducted a similar study of high school juniors 1 year after their graduation and concluded that "while 84 percent of the students planning on college actually entered college, 91 percent of those who actually entered had originally planned to do so". As these authors further note, about one-third of those who failed to act on their original plans were considering going to college in the near future.

An additional caution is appropriate: aspiration is one factor, mobility is another (Anderson, 1961). Not everyone who plans on college enters; of those who enter, not all graduate (Eckland, 1965); and of those who graduate, not all translate their training into capital for prestigious occupations (Sewell, Haller, and Portes, 1969). This is not to undermine the relevance of educational aspirations, for they constitute important parameters for plans, for ideal goals, for future success, and for frustration. Nonetheless, educational plans are not synonymous with mobility.

Community Size. In this study, the standard procedure for distinguishing rural and urban areas according to community size was used. The following population categories were delineated: 1,000 and less; 1,000-5,000; 5,000-20,000; 20,000-40,000; and 100,000 and more. Rochester was placed in the fourth category. Aside from it, no other Minnesota community was in the 40,000-100,000 range. The largest category included three areas: Duluth and suburbs, Minneapolis-St. Paul and suburbs, and, because of its extended metropolitan complex, Moorhead. The size distinction reflects only the barest social meaning of rural and urban communities; alternative meanings such as isolation and occupational composition will be introduced later.

The frequent designation of farm as a separate residential category was omitted purposively. Although farmers' children have been shown to be different from others in their aspirational levels (Portes, Haller, and Sewell, 1968) their separation in a residential classification represents a critical inconsistency in rural-urban distinctions. It introduces an occupational classification of bureaucratic-entrepreneurial pursuits into a residential classification. If the rationale for the practice is that farmers' children have lower aspirations, it may be countered that children of parents in other entrepreneurial pursuits, small business for example, place similarly low value on continued education. In addition, while many farmers live in the open country, not all do and certainly persons other than farm families live there as well.

A more serious hindrance stemmed from limitations in the original questionnaire. Using the Counseling Bureau's data, community size could be classified only by reference to the size of the town in which the student's high school was located, not by his actual residence. Consequently,

families living in the country adjacent to different size towns would be variously classified. A possible rationale for this procedure is that adjacent towns probably serve as reference points for adolescents in the area, and at least constitute the place traveled to each day for education. The rationale, however, is somewhat less convincing for adolescents who live in or near towns without high schools and who must travel some distance from their social and geographical base. Without additional information, it is impossible to estimate how serious a limitation this deficiency imposed on the data and analysis.

Sources of Extraneous Variability. In survey research, extraneous influences on analysis are considerable. Two variables have been identified as so consistent and fundamental an influence on educational aspirations that it would be folly to examine rural-urban differences without accounting for them: the sex of the student and the socio-economic status (SES) of his family. Because the items on father's occupation were too unreliably answered, indicators on parental education were considered in constructing an SES scale. A complex scoring system was used, but the three SES levels distinguished can be summarized as follows: **lower class,** in which the summary scores indicated that neither parent had likely completed high school; **middle class,** in which the summary scores indicated that one or both parents had likely completed high school, but neither had likely been to college; and **upper class,** in which the summary scores indicated that one parent or both had likely attended college. These differences were drawn on the basis of theoretically plausible differences in the meaning of high school and college educations, as well as on the empirical utility indicated by the exacting manner in which these points differentiated those with divergent aspirations. Evidence has been presented elsewhere on the precision with which parental education predicts the educational aspirations of adolescents (Sewell and Shah, 1968).

The Parameters of Rural-Urban Comparisons

Clarifying the causes of rural-urban divergencies in aspirations would be facilitated by an overarching theory of community influence. Unfortunately, no such theory exists; in fact, there is no substantial agreement on even so rudimentary an issue as an organizing framework. A similar situation characterizes the analysis of social mobility. The most carefully worked out theoretical statement to date (Lipset and Zetterberg, 1966) weighs heavily on the assumption that the individual has "a desire to get ahead and advance" himself, an assumption that many would question. In lieu of a guiding rationale, this analysis focused on a host of miniature and discrete theoretical positions organized around the concepts of opportunity, values, and achievement. The objective was to determine which orientations best illuminate the question.

Table 1 presents the cross tabulations between community size and college aspirations for males and females. These data indicate gross differences between adolescents in the smallest towns and the large metropolitan areas amounting to 18-20 percent. There is a slight indication that male aspirations are more reactive than female aspirations to community size, but this is an artifact of class background.

Table 1. Percentage of students aspiring to college, by community size and sex

Community size	Sex	
	Male	Female
1,000 and less	41.2 (4,235)	34.8 (3,937)
1,000-5,000	46.9 (5,924)	38.0 (5,519)
5,000-20,000	55.3 (3,786)	46.6 (3,724)
20,000-40,000	60.3 (1,400)	52.3 (1,298)
100,000 and more	61.7 (10,569)	52.8 (10,163)

A broader interpretation of the meaning of the data in table 1 is largely contingent on the theoretical frame of reference used. If community size is seen as an accidental convergence of factors whereby, for example, small rural towns happen to have adolescents from lower class backgrounds or with low academic aptitudes, then table 1 would not convey a completely valid portrait. Such a portrait could only be attained after these extraneous factors had been standardized among the community size groups; that is, accounted for by holding their effects constant through statistical analysis or some other means of control. Alternately, if communities were conceptualized as functioning entities in which all things are tied together or related, then it may be implausible to hold things constant. From this view, a lower class background and a less than average aptitude are integral aspects of small towns. Controlling or introducing control variables designed to separate the influence of community size from the influence of aptitude, for example, would be tantamount to creating a statistical fiction and denying the reality of small towns and the differences that emanate from them. Nothing in the data suggests that empirical weight be given to one interpretation over the other. As one author (Blalock, 1961) suggests, these are competing perspectives with no empirical resolution. In the data reported in following sections, a compromise has been attempted by seeing both views as valid and representative of different levels of analysis.

Access To Opportunity

The hallmark of an advanced industrial society is the marked differentiation that pervades the economic order. Occupational pursuits are highly specialized, acutely ranked, and systematically distributed in geographical locales or areas of functional concentration. The functional concentration of economic activities has resulted in a remarkably consistent pattern for the rural countryside. These areas not only contain vast concentrations of agriculture, but include much marginal entrepreneurial activity as well as an abundance of semi-skilled and unskilled labor. As a result of rapid technological change and the consequent reduction in labor needed for farming, unemployment and poverty in the country are high. Industry has not sought locations in rural areas, and migration to the city has removed potentially lucrative markets. These trends are incomplete to the extent that they ignore lush agricultural enterprises and urban poverty; yet they represent the basis of our 20th century economy.

Table 2. Percentage of students aspiring to college, by social class, community size, and sex

Community size	Social class		
	Lower	Middle	Upper
Males			
1,000 and less	31.6 (2,500)	49.4 (1,009)	66.9 (643)
1,000-5,000	34.1 (3,160)	54.0 (1,452)	72.7 (1,229)
5,000-20,000	37.6 (1,651)	60.9 (969)	77.4 (1,110)
20,000-40,000	40.3 (524)	63.1 (404)	81.8 (446)
100,000 and more	41.8 (3,039)	59.5 (3,199)	79.5 (4,117)
Females			
1,000 and less	27.5 (2,416)	41.5 (909)	57.5 (551)
1,000-5,000	26.8 (3,053)	45.1 (1,305)	61.4 (1,081)
5,000-20,000	30.1 (1,728)	51.4 (938)	70.3 (999)
20,000-40,000	32.3 (526)	51.4 (315)	77.6 (437)
100,000 and more	34.2 (3,148)	48.5 (2,942)	72.8 (3,827)

A most glaring consequence of the differentiation in rural and urban economies is the potential it introduces for affecting an individual's life chances: the probabilities of commanding an advanced education, a prestigious job, a reasonably substantial income. Regardless of the opportunities for free and supported programs of higher education, going on to college represents a financial burden to a family. It may take the form of costs for the activities ancillary to a college education, as well as a deficit created by removing a potential contributor to family income.

Social Class. The convergence of life chances and community size is adequately reflected in the interpretations given to the indicator of social class: of the families in Minnesota's large metropolitan areas, 30.5 percent were classified as lower class, compared to 61.2 percent of those residing in towns of less than 1,000. The issue is the effect these distributions have on educational aspirations.

Table 2 indicates the percentages of adolescents aspiring to a higher education by social class, community size, and sex. These data are noteworthy in several ways. First, the differences between classes at every community level average two to three times as large as the differences between communities within any given class. Furthermore, the gap between the smallest and largest communities observed in table 1 is not uniformly attenuated. Rather, it is specified by class of origin: in general, the lower classes are slightly less reactive to community size than the middle and upper classes. Apparently, among lower class adolescents for whom the issue of college attendance is most problematic, there is least variation in educational aspirations in connection with town size. There is some indication that this pattern partially holds for females of middle class origin as well. It is, however, among the high status adolescents of both sexes that the aspirations and community size hypothesis is most clearly verified. Here, the original differences noted in table 1 nearly persist. Sewell (1964) observed a similar pattern among Wisconsin adolescents and has suggested that high status students may be most sensitive to the cues emanating from the respective occupational structures in rural and urban communities. For example, rural youths in the Wisconsin sample had lower occupational aspirations than urban youth of comparable intelligence and class, a pattern Sewell ascribed to the more depressed economy of the Wisconsin countryside.

A more detailed examination of the data shows that, in every instance, adolescents from a metropolis are more likely than those from the smallest rural town to aspire to college. The linear pattern between community size and aspirations observed in table 1 cannot, however, be taken for granted. Reversals occur in a number of instances, but are most persistent among adolescents from the middle or upper class. Here, adolescents from intermediate size towns, particularly towns between 20,000-40,000, are slightly more likely to aspire to college than those from a metropolis. A similar finding was noted by Rogoff (1960) in a national sample of high school seniors. Michael (1966) has suggested that intermediate size towns may be sufficiently large to support a first rate academic curriculum and at the same time sufficiently small to preclude the development of a two school town—that is, one for the advantaged and one for the economically deprived. Rochester was the only town in this category to have more than one public school, and these schools were not differentiated by the economic backgrounds of the students. Whatever the cause of the reversal, these data suggest that the presumed advantage of the metropolis is not beyond question.

Because of the nonlinear pattern observed with intermediate size towns, it is difficult to give precise statistical meaning to the variance in community size explained by social class. If use can be made of a crude means of standardizing table 2 (Rosenberg, 1962), the data show that 5-6 percent of the differences in aspirations by community size can be accounted for by an adolescent's social class.

Financial Resources. Social class is a complex variable that reflects a range of considerations other than financial capacity: values, past experience, realistic judgments of life chances, and so on. It is possible, however, to provide a test of the connection between rural-urban divergencies in aspirations and financial capacities.

In Minnesota, as elsewhere, there is a decline in real income from the metropolis to the countryside, even among individuals in comparable occupations. Using 1950 census data, Duncan and Reiss (1956) found that even with adjustments for males with income and experience in the labor force, annual wages in metropolitan areas (1 million or more persons) averaged approximately $350 more than the median expected on the basis of occupational distribution, whereas in small towns (1,000

persons or less) wages averaged $500 less than the median expected.

The Counseling Bureau questionnaire did not contain an item on income level. In its place, a financial picture was obtained from an array of items the Bureau asked separately of college aspirants and nonaspirants. The following questions were included:

(a) If you go to college after high school, to what extent will your family help pay expenses?
  (1) Pay all my expenses
  (2) Pay most of my expenses
  (3) Pay some of my expenses
  (4) Pay none of my expenses

(b) If you are *not* planning to go to college, would you change your plans and attend college if you had more money?
  (1) Yes
  (2) No

(c) If you are *not* planning to go to college, could you afford to go if you wished to go?
  (1) Yes
  (2) No

Two points deserve emphasis. First, the items are attitudinal, and, while they in part reflect the cognitive reality of the student's financial situation, they also allow for more subjective interpretation than would be elicited from a direct question on income levels. Second, the strategy used by the Counseling Bureau in raising these questions separately for aspirants and nonaspirants precluded the possibility of directly determining the relationship between aspirational level and financial capacity. These points represent methodological weaknesses in the analysis.

Table 3 reports the financial capabilities of the families of college aspirants by social class, community size, and sex. The data presented are more notable for their similarities than for their differences. Reading across classes and within community groupings, differences in financial capacities, particularly in the "most" category, average 5-10 percent, somewhat less than initially might be anticipated. Similar, albeit considerably smaller differences, appear across the categories of community size. Given the limited range of differences, a critic might judge the indicator deficient, reflecting perhaps more the idealization of the family's capacity than actual circumstances. While the majority of responses hardly depicts an idealized view of the family (for example, close to one-half of the students thought their parents were capable of paying only some of their expenses), the indicator may otherwise be invalid.

An alternative interpretation might underline the fact that table 3 pertains to aspirants only; that is, to adolescents who may come from mobile families, regardless of class origins or community of residence. Such families, this alternative would have it, may either be financially secure with respect to defined needs, may make all possible funds available for education, or may lead the child to believe in their financial capacity once his decision to attend college has been made. These families would have to be seen as relatively fixed across class and community boundaries. It should be added that the item reflects no estimate of **how much** college will cost, an estimate that could vary enormously by both community and class.

Table 3. Percentage of college aspirants reporting amount of educational expenses to be paid by parents, by social class, community size, and sex

Community size	Lower class					Middle class					Upper class				
	Pay all	Pay most	Pay some	Pay none	N	Pay all	Pay most	Pay some	Pay none	N	Pay all	Pay most	Pay some	Pay none	N
Males															
1,000 and less	6.7	29.2	51.9	12.1	776	6.1	32.3	53.0	8.7	496	9.4	33.5	50.6	6.6	427
1,000-5,000	9.0	29.1	50.9	11.0	1,062	8.3	32.0	50.1	9.6	772	10.2	35.6	49.3	5.0	886
5,000-20,000	8.0	29.5	51.9	10.6	613	11.5	31.8	50.7	6.0	584	8.8	35.2	50.2	5.9	853
20,000-40,000	12.8	23.7	51.7	11.8	211	10.3	30.0	49.4	10.3	253	9.9	33.6	51.2	5.2	363
100,000 and more	10.5	26.7	48.8	14.0	1,250	11.8	28.9	47.8	11.5	1,871	11.7	34.5	46.6	7.1	3,240
Females															
1,000 and less	7.8	30.0	50.6	11.6	656	10.2	33.0	50.9	5.9	373	9.2	38.7	47.9	4.1	315
1,000-5,000	8.9	28.4	53.0	9.7	807	10.0	33.6	51.1	5.3	581	15.5	38.4	42.8	3.3	659
5,000-20,000	9.2	30.3	52.0	8.6	512	10.4	38.6	45.5	5.4	475	14.6	46.1	36.5	2.9	694
20,000-40,000	14.7	32.4	39.4	13.5	170	15.6	33.8	43.8	6.9	160	20.5	41.0	35.0	3.6	337
100,000 and more	10.4	26.1	48.8	14.6	1,065	11.8	33.3	46.7	8.2	1,414	16.4	37.4	40.7	5.5	2,759

Table 4. Percentage of noncollege aspirants who could afford college, by social class, community size, and sex

Community size	Social class		
	Lower	Middle	Upper
Males			
1,000 and less	43.6 (1,710)	55.1 (510)	59.2 (213)
1,000-5,000	45.8 (2,083)	53.3 (668)	58.5 (335)
5,000-20,000	44.4 (1,030)	57.8 (379)	62.2 (251)
20,000-40,000	49.8 (313)	70.5 (149)	70.4 (81)
100,000 and more	47.5 (1,769)	57.7 (1,295)	62.9 (844)
Females			
1,000 and less	51.2 (1,752)	70.7 (532)	73.9 (234)
1,000-5,000	55.8 (2,236)	68.3 (717)	80.1 (417)
5,000-20,000	54.1 (1,208)	73.0 (456)	74.7 (297)
20,000-40,000	53.9 (356)	78.4 (153)	78.6 (98)
100,000 and more	47.8 (2,073)	64.9 (1,514)	78.3 (1,042)

Table 5. Percentage of noncollege aspirants who would have planned to attend college were funds available, by social class, community size, and sex

Community size	Social class		
	Lower	Middle	Upper
Males			
1,000 and less	31.1 (1,710)	35.1 (510)	34.7 (213)
1,000-5,000	32.0 (2,083)	38.0 (668)	42.4 (335)
5,000-20,000	36.3 (1,030)	42.2 (379)	42.6 (251)
20,000-40,000	37.1 (313)	50.3 (149)	50.6 (81)
100,000 and more	37.0 (1,769)	43.1 (1,295)	46.9 (844)
Females			
1,000 and less	40.8 (1,752)	49.6 (532)	53.8 (234)
1,000-5,000	44.0 (2,236)	56.5 (717)	64.0 (417)
5,000-20,000	42.6 (1,208)	55.9 (456)	58.2 (297)
20,000-40,000	46.6 (356)	62.1 (153)	68.4 (98)
100,000 and more	35.7 (2,073)	44.5 (1,514)	59.0 (1,042)

The picture for nonaspirants is somewhat more revealing. Part of it appears in table 4, which reports the percentage of noncollege aspirants who thought they could afford to attend college by social class, community size, and sex. The data reflect some indication of difference in rural-urban capacities regarding financial resources. First, there is substantial variation by class, and, to the extent that class position is associated with community size, there is some suggestion about gross differentials in financial support. Even within class groups, community differences are revealed, although these differences are slightly curvilinear with respect to size: in most instances, it is the adolescents in the intermediate size towns who thought they could afford to attend college if they desired.

A hint of a similar curvilinear pattern is contained in table 5, which reports the outcome of a hypothetical decision by noncollege aspirants to attend college were sufficient funds available. In some instances, most notably in the lower classes, the availability of finances did not appear to exert prime influence on the student's decision. In other instances, notably for males from the middle and upper classes, many more students from intermediate size towns would have attended college were funds available than those from the rural areas and, to a lesser extent, those from a metropolis. If anything, comparable financial capacities appear to have increased rather than attenuated some rural-urban differences. Notice also that for males in towns of less than 1,000, class differentials appear to exert less influence on judgments regarding a college education.

Given both the difficulty in working with noncomparable items for aspirants and nonaspirants and a set of disparate findings, summarizing these data is difficult. The evidence, however, does suggest that the availability of funds is a similar problem for college aspirants, regardless of class and community origins. Apparently, the abundance of funds in urban areas and in the upper class does not alleviate budgeting problems. Whether funds are substantial or not, they are spent, and their availability is somewhat invariant across class and community boundaries. Unfortunately, the item contained only an indication of relative availability, and no indication of the absolute amount of funds in question.

As for those not planning to go to college, proportionately more students from large cities and metropolitan areas thought they could afford to go if they desired. This does not suggest that rural adolescents would attend college were funds available. In fact, the data indicate that, contingent on proper funding, substantially more urban

adolescents would attend college than rural adolescents. Apparently, then, standardizing income across community boundaries might well increase the divergencies in aspirations between rural and urban students. This suggestion is highly inferential, yet it is an interesting counterpoint to the assumptions contained in financial programs designed to reduce inequalities in financial support.

Family Size. The purpose of considering family size is to explore what Blau and Duncan refer to as the "social capillary theory", the hypothesis that asserts that "differential fertility by . . . social class or some other type of variable is completely explained by social mobility" (Blau and Duncan, 1967, p. 367). As stated by Arsène Dumont, the theory claims that "just as a cilium of liquid has to be thin to rise under the force of capillarity, so a family must be small in order to rise in the social scale" (Blau and Duncan, 1967, p. 367). The assumption underlying the thesis is economically based: to the extent that finances are needed to meet basic needs for food, shelter, and clothing, they will be unavailable to finance a child's college education. Besides, it is assumed that the larger the family, the greater are the requirements for satisfying those needs.

Alternative hypotheses and interpretations of the impact of family size have been offered. For example, an orthodox interpretation notes that it is parental immobility, their attitudes and values, that makes for high fertility. The burden fertility imposes, besides the originating attitudes, creates circumstances unconducive to aspirations for higher education. Another variation holds that whatever the cause of a large family, each child must share his parents' time with brothers and sisters. Shared time with parents is a known factor accounting for intelligence, and intelligence in turn is strongly associated with educational aspirations (Nisbet, 1953). Consequently, an additional link between family size and aspirations could readily be deduced. None of these interpretations denies the relevance of financial burdens to family size. Since intelligence and values are evaluated elsewhere in this bulletin, interpretation of family size here focuses on its financial implications.

The relevance of family size to rural and urban communities lies in determining whether by virtue of an initially immobile psychological base, a strong tradition emphasizing large families, or something as fundamental as the limited use of contraceptive devices, families are larger in rural than in urban areas. The 1960 census for Minnesota reported 3.5 as the average number of children in rural farm areas, compared to 2.4 in Minneapolis and Saint Paul (U.S. Census, 1961). The Minnesota Counseling Bureau Data paralleled these statistics: in rural areas of less than 1,000, one out of two families had four children or more, in contrast to the metropolis, with less than one out of three families having four children or more. The significance of these differences was sustained when the effects of social class were controlled.

The manner in which family size differences enter into rural-urban divergencies in college aspirations can be seen in table 6, which reports college aspirations by family size, community size, social class, and sex. There is little question about the impact of family size differences on aspirations: for both sexes and within nearly every class and community size category, the influence of family size on aspirations is clearly discernible.

Table 6. Percentage of students aspiring to college, by family size, social class, community size, and sex

Community size	Lower class				Middle class				Upper class			
	One child	Two-three children	Four-six children	Seven or more children	One child	Two-three children	Four-six children	Seven or more children	One child	Two-three children	Four-six children	Seven or more children
Males												
1,000 and less	34.2(345)	35.1(877)	30.4(876)	24.4(402)	57.0(151)	53.2(404)	43.8(338)	43.1(116)	72.2(108)	70.4(284)	61.3(191)	58.3(60)
1,000-5,000	41.1(465)	40.7(1,081)	29.6(1,088)	23.6(534)	61.6(258)	60.3(600)	46.2(429)	39.4(165)	77.0(226)	77.0(518)	70.7(389)	47.9(96)
5,000-20,000	46.4(265)	42.5(605)	33.7(575)	22.8(266)	66.4(208)	64.9(425)	54.0(252)	47.6(94)	80.9(204)	79.3(542)	76.2(299)	55.4(65)
20,000-40,000	50.6(89)	43.3(194)	35.3(170)	31.0(71)	77.3(88)	63.2(163)	55.9(127)	50.0(26)	85.9(92)	84.3(194)	77.5(129)	66.7(21)
100,000 and more	49.0(575)	46.2(1,237)	36.0(944)	26.9(283)	67.2(760)	61.5(1,461)	53.1(782)	40.8(196)	83.1(973)	81.8(2,041)	73.8(898)	61.1(175)
Females												
1,000 and less	28.9(287)	29.1(807)	27.7(873)	23.2(449)	43.6(124)	44.1(358)	38.8(327)	38.0(100)	67.7(96)	58.0(219)	56.2(178)	43.1(58)
1,000-5,000	32.8(421)	30.6(1,040)	25.1(1,079)	17.5(513)	51.0(194)	47.5(524)	41.6(449)	38.4(138)	69.4(186)	62.6(481)	55.9(332)	54.9(82)
5,000-20,000	38.1(297)	33.9(629)	26.4(556)	19.1(246)	53.4(191)	53.8(433)	44.4(243)	36.6(71)	73.2(190)	71.9(481)	68.8(263)	55.4(65)
20,000-40,000	36.4(88)	35.4(198)	32.7(162)	19.2(78)	62.5(64)	54.0(137)	42.2(90)	41.7(24)	84.3(102)	80.8(198)	68.5(111)	65.4(26)
100,000 and more	41.0(595)	37.4(1,245)	29.4(984)	23.5(324)	53.7(736)	51.7(1,295)	40.9(767)	34.0(144)	76.0(940)	74.4(1,843)	68.9(893)	56.3(151)

Generally, family size is somewhat less critical for women than for men. This suggests that adequate finances in smaller families are more likely to be channeled into higher education for boys than for girls. Furthermore, within some categories, in particular for towns of less than 1,000, family size exerts less influence on aspirations than elsewhere. The only clear exception is for high status females. This suggests that while there are many more large families in towns of less than 1,000, sharp differences in aspirations remain, even among small families.

With this exception, however, no clear and regular patterns were discernible. In some instances, among middle class females, for example, community size differences attenuated for families with four or more children. However, original community size differences in aspirations were never great for females of this class. In other instances, notably among upper status men, aspirational differences among communities increased for families of more than seven siblings. Apparently, family size reduces original community differences by only about 2 percent.

Summary. The findings in table 6, as well as the data reported previously, suggest that social class is the only factor strongly and consistently related to rural-urban aspirational differences. Additional considerations offer little in the way of a uniform explanation. The relevance of these additional factors should not, however, be denied: they offer a partial understanding of particular circumstances; for example, that fewer rural adolescents than urban adolescents would attend college were financial resources available, or that family size has less bearing on the aspirations of adolescents in towns under 1,000 than on adolescents in other size towns. These additional considerations do not, however, systematically contribute to an explanation of rural-urban divergencies.

Values and Goals

Economic resources provide only the opportunity to aspire to a college education. Equally vital are the creation and development of the desire and motivation. On this issue also, rural areas have been scored deficient. The major criticism of the country is based on the assumption that rural youth are unlikely to meet and interact with mobile individuals and, further, that rural centers only rarely provide exposure to culturally or intellectually enriching materials and events. In contrast to their urban counterparts, rural youth are said to be isolated from the transmitters of mobility goals.

Parental Encouragement. In some part, this criticism has been leveled at the primary agent of socialization, the family. Burchinal (1960), for example, showed that farm parents generally provide less encouragement for their daughters' than for their sons' education. Similarly, Nelson (1960) reported that farmers generally are less likely to value education. Abundant evidence and speculation suggest a connection between parental attitudes on farming and the improbability of college attendance among offspring (Burchinal, Haller, and Taves, 1962; Elder, 1963). In these and similar studies, evidence drawn from farm families is taken to be prototypical of rural families and is used to sustain general assertions about the rural community. For example, a bulletin entitled *Career Choices of Rural Youth in a Changing Society* (Burchinal, Haller, and Taves, 1962) persistently uses farm families as critical illustrations of the rural population. Typical, also, is this statement by Elder (1963, p. 42): "the farm family and the school with its informal peer system are the major agents in the socialization of rural youth." Farming may account for a significant portion of occupational activity in rural areas, and agricultural values may pervade some of the ideological postures of the countryside (Vidich and Bensman, 1958). Yet it is erroneous to transfer correlates of farming to rural areas and small towns. The referent in one instance is to an occupation; in the other it is to a community. The presumed similarity parallels the portrait many laymen and rural sociologists hold of the urban area as anonymous and disorganized, a perspective derived from a highly select slice of the metropolis.

The Counseling Bureau's data on encouragement to attend college offered by parents to children are not as clearcut as the material on farm families and rural life would have one believe. The following item was asked of each student:

> How does your family feel about your going to college?
>
> 1. Insists that I go
> 2. Wants me to go
> 3. Is indifferent
> 4. Doesn't want me to go
> 5. Won't allow me to go

Since a scant 2.3 percent selected alternatives 4 and 5, they were combined with alternative 3 for this analysis.

The data suggest some gross differences between rural areas and the metropolis. Some 15 percent more men from urban areas and 10 percent more women from urban areas receive greater encouragement from their parents in support of higher education. When social class is introduced and accounted for in the rural-urban comparison, however, differences among the men slip to 5-10 percent and completely attenuate among the women. To the extent that parental encouragement is strongly related to class and that class in turn is related to community size, rural and urban areas do differ in regard to parental encouragement of higher education. Community size, however, adds little understanding that could not be derived from class alone. Whatever is happening to the presumed stance of the typical farm family towards higher education, its effects are not apparent in the wider rural area. Encouragement cannot, therefore, explain away divergencies in rural-urban aspirations.

What the variability in encouragement can do is provide some partial understanding of the reactions of rural and urban adolescents to levels of parental advice. Table 7 presents the percentages of students aspiring to college by parental encouragement, community size, social class, and sex. The data suggest that for males in the middle and lower classes, substantial rural and urban differences in aspirations are maintained **only** if parents stress higher education as moderately or highly desirable. For those with presumably more substantial resources; that is, for students in the upper class, parental insistence on higher education apparently is an effective guarantee that aspirations will match the encouragement given. Here, approximately 9 out of 10 students plan on attending college, regardless of the size of the community in which

Table 7. Percentage of students aspiring to college, by parental encouragement, social class, community size, and sex

Community size	Lower class			Middle class			Upper class		
	Highly encouraging	Moderately encouraging	Neutral or discouraging	Highly encouraging	Moderately encouraging	Neutral or discouraging	Highly encouraging	Moderately encouraging	Neutral or discouraging
Males									
1,000 and less	57.3(103)	46.6(1,410)	7.8(916)	75.3(89)	58.9(700)	9.9(202)	92.6(95)	73.2(447)	14.9(94)
1,000-5,000	68.2(192)	49.1(1,712)	8.7(1,167)	78.1(169)	63.1(977)	11.6(276)	92.0(212)	77.4(881)	11.3(124)
5,000-20,000	69.5(118)	51.9(964)	7.0(528)	83.3(120)	68.9(672)	14.8(162)	90.1(212)	80.2(800)	25.0(88)
20,000-40,000	60.0(35)	56.1(321)	6.6(151)	95.4(43)	67.9(305)	14.6(48)	92.7(82)	84.6(331)	23.3(30)
100,000 and more	74.9(275)	53.6(1,810)	10.2(844)	83.1(407)	66.8(2,211)	16.4(525)	89.4(784)	83.2(3,005)	21.8(284)
Females									
1,000 and less	49.3(73)	39.8(1,303)	11.0(959)	57.9(38)	52.5(610)	14.5(241)	64.3(42)	64.4(430)	16.7(72)
1,000-5,000	47.0(100)	39.6(1,602)	10.9(1,232)	56.1(82)	55.8(884)	15.0(313)	82.1(117)	66.9(828)	11.4(123)
5,000-20,000	48.4(62)	43.2(1,008)	8.6(608)	61.8(68)	59.4(689)	17.6(170)	78.1(128)	76.3(763)	19.2(99)
20,000-40,000	57.1(14)	47.4(289)	11.6(206)	58.3 (24)	57.6(217)	32.8(67)	86.7(45)	81.4(354)	31.4(35)
100,000 and more	56.9(116)	50.0(1,646)	14.3(1,287)	69.3(176)	61.9(1,936)	13.3(746)	86.8(483)	77.4(2,931)	23.3(356)

they live. Discernible rural-urban differences in this upper class group emerge among the less insistent parents. Apparently, it is in the extreme categories, among upper class males whose parents insist upon their attending college or lower class males whose parents are indifferent or don't want them to attend, that the combination of circumstances overrides community effects.

The pattern for female students is somewhat different. Community differences here fully attenuate only among those in the middle and lower classes whose parents are committed to college attendance for their children. For the others, rural-urban patterns persist and in some instances even exaggerate original differences. Theoretically, this pattern makes less sense when compared to the pattern observed for males. But empirically the result may be the same: parental values in both instances are not well related to community size and, while their introduction into the analysis provides a specification of the original results, they provide no uniform or total explanation of community differences.

Proximity to Institution of Higher Education. Other interpretations of contact with mobility values and goals have focused on the general isolation of rural areas. Observers have long pointed out, for example, the ready access in urban areas to sources of cultural enrichment: museums, good libraries, adequate secondary schools. Duncan (1951) found that colleges and universities, art museums, and AM radio stations were more likely to be found in cities of ¼ million or more. Integral to these observations and other attendant themes is the idea that factors external to the adolescent's milieu, particularly those that are external to his family, are important influences on his mobility. From this view, urbanites are more likely to be mobile and aspire to college by virtue of their access to cultural resources.

There is an intellectual tone to this perspective, and a consequent neglect of the large majority of mobile students oriented to vocational goals. A more moderate interpretation to this position, one that links enrichment with a more practical orientation and permits the family a more important role, speaks directly to the issue of proximity to institutions of higher education. Lipset and Bendix (1959, p. 220) state the case this way:

> Almost every major city in the western world has one or more universities and natives of such communities can attend college or university while living at home. In addition, the simple fact that a child lives in a community which has a college or university within it should mean that he will be more aware of the possibilities and advantages of attending an institution of higher learning than will one who grows up some distance from a college.

The model offered focuses on rural isolation, in which adolescents are cut off from a direct awareness of the importance of higher education. Curiously, one of the studies cited by Bendix and Lipset in support of their position is drawn from work done in Europe nearly a half century ago, a circumstance more likely to fit the classical rural model.

In its most radical form, this thesis probably is untestable. If all urban centers have institutions of higher education, aspirations cannot be linked to proximity to colleges independent of urban residence itself, unless we could locate an urban area without a center of higher

education. Bendix and Lipset probably are correct in stating that in the United States most, if not all, urban centers have such institutions. Consequently, the thesis cannot be used as an explanation of rural-urban aspirational differences. Its utility, if any, is limited to moderate size communities.

However popular the proximity notion has been among sociologists and educators, evidence in its behalf has been far from impressive. Some of it, in fact, has been incorrectly interpreted. Clark (1962), for example, in analyzing a sample of college freshman from San Jose, California, showed that the children of most blue collar workers attended the local junior college or local state college, whereas those of most white collar workers attended either a private university (15 miles away) or the state university (50 miles away). The author concluded that "free local colleges increase educational opportunity" (p. 169). Similar evidence and conclusions have been reached in Minnesota: White (1965), for example, has shown that more students from a particular area attended a local college than students from increasingly distant concentric zones.

For testing the proximity hypothesis, both the California and Minnesota data were misinterpreted. It may be true that students are more likely to attend college in their home towns, but it does not follow that proportionately more students from that town attend college than from more distant towns. Yet this is precisely the point that must be established if the proximity hypothesis is to be given currency.

Except for cursory and impressionistic evidence, careful attempts to sustain the proximity hypothesis have been singularly unsuccessful. Ramsøy (1961), for example, found no relationship between aspirations and distance from college among a national sample of high school seniors. Portes, Sewell, and Haller (1968) showed that distance from college did not alter the mobility orientations of Wisconsin farm boys. At a more general level, McDill and his colleagues (1969) found no consistent relationship of aspirations to access to the professional stage, art galleries, museums, concerts, and opera.

In Minnesota, institutions of higher education, from junior colleges up through the state university, are found primarily in urbanized areas. As illustrated in table 8, every high school district in towns of 20,000 or more has some form of institution of higher education, whereas less than 1 percent of the towns under 1,000 do. Except for this broad and predictable pattern, the data do not otherwise support the proximity hypothesis. Data in support of this assertion are too cumbersome to report here. The assertion, however, was based on the following procedures: within each of the community categories, every town with a high school district was classified according to whether or not it contained an institution of higher education. If it did not, it was classified according to how distant it was from this type of facility. Working first with type of school (junior college, state college, denominational college, etc.) and then with the average distances from multiple schools, absolutely no association emerged between proximity and aspirational levels among the class graded adolescents of a community.

Table 8. Percentage of towns with a facility for higher education, by community size

Community size	Percentage of towns
1,000 and less	0.4 (N = 235)*
1,000-5,000	0.7 (N = 141)
5,000-20,000	50.0 (N = 34)
20,000-40,000	100.0 (N = 5)
100,000 and more	100.0 (N = 3)

* N denotes number of communities on which percentage is based.

The broad implications of this thesis are difficult to test. In Minnesota, as elsewhere, proximity and community size are so completely confounded that the two cannot be disentangled for separate analysis. The proximity hypothesis may simply not operate within the limited range of community sizes examined here. Besides, in 1967, only a handful of Minnesota towns were more than 50 miles (approximately an hour's ride) from any facility of higher education, and plans to reduce this distance to 35 miles were under consideration (*Minneapolis Tribune*, Nov. 26, 1968). The state is saturated with colleges and universities and may not provide the isolation necessary for critically testing the proximity theory.

High Schools and Socio-Economic Composition. An additional issue in connection with exposure to mobility values relates to the school itself. The point of reference is to the influence of the composition of the student body on college aspirations. Research in this area originates from a longstanding tradition in sociology, a tradition linking personal influence to sociometric choice (Lazarsfeld and Katz, 1955; Moreno, 1953).

Initially, this research tradition was applied to school situations to document friendship selection as a means of identifying popular students and isolates (Moreno, 1947). Later, sociometric techniques were related directly to college aspirations. Haller and Butterworth (1960), for example, found aspirations to be linked to friendship choices within social classes. This finding has been replicated by Simpson (1962). Recently, Alexander and Campbell (1964) have illustrated the influence of sociometric links on aspirations only when friendship choices specified in the links were reciprocated.

The guiding ideas of the sociometric concern have been expanded to touch on the concept of economic segregation. Rather than dealing with friendship units as such, researchers have attempted to summarize the modal socio-economic status of a school and link that status to the aspirations of adolescents. High schools, from this view, were seen as macrocosms of friendship units. Approximately a decade ago, Wilson (1959) supported this view by showing that boys in high status schools were more likely to aspire to college than boys in low status schools, regardless of father's occupation, parents' education, the student's intelligence quotient, or academic grades. Similar findings have been replicated by Coleman (1961) in Chicago, Boyle (1966) in central Canada, Campbell and Alexander (1965) in the Piedmont region of Carolina, Turner (1964) in Los Angeles, Sewell and Armer (1966) in Milwaukee, and most generally by Ramsøy (1961) in a national sample of high school seniors.

The connection between this research tradition and work on divergencies in rural-urban aspirations should be apparent. Rural areas are most heavily populated by lower and lower middle class families and it is conceivable, as Wilson and others have suggested, that their predominance may influence the aspirations of adolescents from the middle and upper classes. Variations on this theme

Table 9. Percentage of students aspiring to college, by status of school, social class, community size, and sex

Community size	Males: 1 (low)	Males: 2	Males: 3	Males: 4	Males: 5 (high)	Females: 1 (low)	Females: 2	Females: 3	Females: 4	Females: 5 (high)
Lower class										
1,000 and less	30.6(1,661)	33.1(797)	45.0(40)	....	....	26.6(1,640)	28.8(739)	38.9(36)	....	....
1,000-5,000	32.7(894)	34.6(2,164)	35.3(102)	....	....	26.2(783)	26.9(2,186)	28.6(84)	....	....
5,000-20,000	....	36.7(1,281)	40.8(370)	....	....	....	28.7(1,312)	34.6(416)	....	....
20,000-40,000	....	40.1(307)	40.6(217)	....	....	....	29.5(281)	35.5(245)	....	....
100,000 and more	29.5(325)	41.5(1,471)	43.8(797)	45.9(246)	50.5(200)	26.0(281)	31.8(1,611)	37.7(843)	39.4(213)	43.5(200)
Middle class										
1,000 and less	48.0(585)	52.3(398)	37.5(24)	....	....	42.5(553)	41.1(341)	13.3(15)	....	....
1,000-5,000	52.0(273)	54.4(1,114)	55.4(65)	....	....	37.6(279)	47.0(981)	48.9(45)	....	....
5,000-20,000	....	59.4(732)	65.4(237)	....	....	....	48.9(693)	58.4([illegible])	....	....
20,000-40,000	....	63.6(184)	62.7(220)	....	....	....	45.8(144)	56.[illegible]	....	....
100,000 and more	42.6(136)	54.2(1,300)	61.0(960)	67.3(361)	70.6(442)	36.0(111)	42.8([illegible])	[illegible]	53.5([illegible])	62.7(365)
Upper class										
1,000 and less	64.9(268)	69.5(338)	56.2(32)	60.0(5)	....	[illegible]	[illegible]	51.8(27)	50.0(2)	....
1,000-5,000	74.2(167)	71.8(986)	81.6(76)	....	....	62.8(137)	60.4(864)	70.0(80)	....	....
5,000-20,000	....	78.4(723)	75.4(387)	....	....	....	70.7(658)	69.5(341)	....	....
20,000-40,000	....	79.1(140)	83.6(269)	....	....	[illegible]	[illegible]	79.9(279)	....	....
100,000 and more	50.0(68)	71.3(912)	78.6(1,258)	82.4(682)	86.7(1.197)	47.1(51)	65.6(842)	72.1(1,163)	76.3(636)	78.0(1,135)

have long been noted. Previous research in Minnesota on economic areas, aspirations, and occupational choice has been ambiguous (Kahn, 1957; Corwin, 1958). More recently, Sewell (1964) commented that:

> . . . urban communities offer a much wider and more varied range of occupational activities than do rural communities. Many of these occupations require a minimum of college training for entry. While rural high school seniors are probably not completely unaware of either the rewards or the entrance requirements of many of the high prestige professional, managerial, and technical positions available in urban communities, they are certainly less likely to have had first hand exposure to most of them. Moreover, they are quite unlikely to have had direct contact with the occupants of these positions, to have observed what their occupational roles involve, to have knowledge of their life styles, or to have heard much about these matters. . . .

Of course, in the rural area and one school small towns, occupational composition of a community is likely to be well reflected in the socio-economic composition of the high school. In urban areas, because of size and residential segregation, there is probably more divergency between high school composition and the socio-economic composition of the school. But even this divergency is amenable to analyzing the influence of high school composition on college aspirations.

To follow this analysis and examine whether the lower aspirations in rural areas were a consequence of the predominance of low status schools, the average socio-economic status of each high school junior in the approximately 600 schools in the sample was calculated. Two indications of social rank were then available: the student's **personal status**, as determined by his parents' education, and the student's **contextual status**, as determined by the average of the personal statuses of all students in his high school class.

As noted previously, the economic rank distributions in rural and urban areas were skewed in opposite directions. As a consequence, none of the high schools in rural areas could be classified as high status, and only three of the high schools in urban areas could be classified as low status. The analysis was further complicated by the fact that in medium size towns, the variability in the status levels of high schools was in some instances so constricted that comparisons of schools were at times virtually impossible to make.

Table 9 indicates the percentages of students aspiring to college by the social status of the school, the social status of the respondent, community size, and sex. The data are revealing in a number of respects. In regard to the impact of the socio-economic status composition of the school, the data show a discernible pattern in the metropolitan areas and less discernible patterns in towns of 5,000-20,000. In medium size towns (20,000-40,000), the variability was so limited and the number of schools so small (seven) that it was difficult to determine the community size at which the contextual effects of high schools were no longer apparent. Clearly, however, the association between the status composition of the school and college aspirations is so spotty for towns of less than 5,000 that, for all purposes, the differences can be considered insignificant.

Caution should be exercised in interpreting these data. First, the socio-economic status levels of respondents in table 9 have been controlled within broad limits, but have not been kept strictly constant. This is a critical point, for if adolescents from a high status school have higher personal statuses than similarly ranked individuals from a low status school, then aspirations would appear to be a function of school status, whereas in fact they would be nothing more than a consequence of inadequately controlled variability in individual status (Tannebaum and Bachman, 1964). To correct this potential source of error, the data in table 9 were re-analyzed using five rather than three status levels, which provided for more precise control. These tables are too cumbersome to report here. Although the re-analysis bore out the trends in the metropolitan area, it opened to question the results in all towns of less than 100,000.

Even in the metropolitan areas, the effects reported may be exaggerated. For example, a number of the low status schools originally considered were vocational high schools with students who were unlikely to be college aspirants. Removing them from the table alters the patterns somewhat, but not enough to reduce confidence in the results. Selectivity in entrance is nonetheless a factor to be accounted for in all urban schools. In towns with one school, selectivity is less of an issue. Had metropolitan areas with elite public high schools (e.g., New York City's Bronx High School of Science) been included, the results may have been even more exaggerated than the data in table 9 indicate.

Findings parallel to these Minnesota data were reported in a recent publication by Richard Boyle (1966): in a sample of 1,701 high school students in western Canada, Boyle found that the status composition of the school was a strong corollary of aspirations in metropolitan communities of 100,000 or more, but weakly if at all connected with aspirations in towns of less than 100,000. The absence of any connection between the two variables in rural areas was attributed to the strong centralization in the Canadian school system, which offset the differentiation of standards according to school composition. Although urban schools also were strongly centralized, Boyle speculated that in these circumstances the effects of centralization were mitigated by the overriding forces of residential segregation. This explanation holds little meaning for the findings in Minnesota: a minimal association between composition and aspirations in rural areas was observed, despite the marked decentralization of the Minnesota school system. In fact, in 1967, the year these data were collected, Minnesota ranked fifth in the nation for number of school districts, a position out of all proportion to its population. It is likely that compositional effects in urban areas have a degree of generality independent of the control exerted by a school system.

Explaining this specification is beyond the scope of this study, but two possibilities deserve mention. First, the comparisons for rural and urban areas involve schools from different scales of analysis. In urban areas, schools (and neighborhoods) are being compared within almost a single metropolitan community, the Twin Cities, whereas in rural areas entire communities, not communities that are internally differentiated, are considered. Conceivably, rural communities are more different from each other than are neighborhoods in an urban area: they may be more subject to regional or county influences that are unwittingly controlled within a single metropolis. Second, selective migration between school areas of differing status composition may be more likely within a confined urban community than among a host of geographically disparate rural towns. From this perspective, urban families move to or remain in neighborhoods consonant with their life styles, particularly in regard to the mobility aspirations parents maintain for their children. The thesis reverses the temporal sequence implied in interpreting table 9; namely, that composition precedes aspirations.

Unfortunately, the Counseling Bureau collected no information to support or deny the validity of these points. Examining them would require a longitudinal study of the evolution of aspirations as they relate to moves within rural and urban areas and a comparison of aspirational differences by school in urban areas substantially divergent in socio-economic composition.

However these questions are reconciled, an additional issue remains: do rural-urban differences persist under the varying social statuses of schools? One point the data in table 9 make abundantly clear is that at nearly every level of personal status, students from high status metropolitan high schools are more likely to aspire to college than students from outlying rural areas or lesser ranked schools in urban areas. There is no question that the higher aspirations in the metropolis are partially derived from adolescents attending high status schools. At the other extreme, the data are almost as unequivocal: there are many more low status schools in rural areas than in the metropolis. However, for students in low status metropolitan schools, college aspirations tend to be **lower** than for students in similar status schools outside the metropolitan area in nearly all instances except among the lower class. The superiority of the metropolitan area in stimulating mobility orientations cannot be taken for granted: students from urban slum schools are less likely to plan on college than similarly situated students in small towns and in the country. As for adolescents in the intermediate categories (scores 2 and 3), the data in table 9 are sufficiently ambiguous to conclude that residence in a metropolitan area neither aids nor hinders students in developing college plans when they are compared to comparably placed adolescents in rural areas.

Summary. Apparently, the status composition of the school provides the most uniform means of explaining rural-urban differences in this area. It also may be the most difficult variable to interpret. Additional work needs to be done on selective immigration within the urban area on whether high aspiration adolescents and families migrate to high status neighborhoods regardless of personal status. Furthermore, the lack of any apparent association between aspirations and high school composition in rural areas cannot remain anomalous if the broader thesis is to have general utility. Two avenues of inquiry appear to be worthwhile. First, it may be necessary to gain some understanding of the extraneous sources of variability that influence scattered rural communities. In most instances, unfortunately, communities of diverse location with varying industrial and economic pursuits have been similarly classified if they are the same size. Second, it may be useful to explore potential mechanisms by which school composition might influence aspirations. Evidence has suggested that rural youth are com-

pliant and sufficiently obedient to their families (Straus, 1964). Does this mean that they are less likely to be influenced by peers in their immediate milieu; that is, by the composition of the school? Were this the case, the notions attributing lower aspirations of rural adolescents to minimal exposure to high status persons would have to be critically re-examined.

While the data appear to warrant further exploration of the influence of high school composition, additional work on the other two variables is less compelling. Data on parental encouragement suggested caution in generalizing from the farm family to the wider rural area. With differing amounts of encouragement, differences in aspirations between rural and urban adolescents attenuated, but, with class controls, parents in small towns were no more likely to support a positive attitude towards college attendance than parents in the metropolis.

The concepts surrounding proximity to institutions of higher education were somewhat more complicated, but again the data were uninspiring. Towns with colleges in their boundaries were no more likely to have adolescents with high aspirations than towns without them, indicating that the mere presence of these facilities has little effect on the plans of rural youth. Extended classifications of institutions, as well as more elaborate estimates of proximity, were equally unrewarding. The lack of any significant results suggests that proximity may not be a factor in areas saturated with existing facilities. One point, however, should be kept in mind: none of the rural communities matched the Twin Cities metropolitan area in number and diversity of higher educational facilities, a consideration that may be important in future work.

Achievement Potential

Regardless of opportunity or encouragement, adolescents must exhibit some academic aptitude if college attendance is to be considered realistic. In Minnesota, like elsewhere, high school students are advised, counseled, and carefully selected according to their performance on ability examinations (Goslin, 1963) and on the basis of grades and such values as intellectual interest or autonomy.

Some suggestion of the depressed potential of rural adolescents has been drawn from inferences concerning performance in objective examinations. Sewell (1964), for example, using the Henmon-Nelson test of mental ability, a presumably culture free intelligence test, found that there were small but persistent differences in the tendency for rural youths to score in the highest tertial less frequently than urban youths. This reversed an earlier finding for Wisconsin adolescents (Sewell and Ellenbogen, 1952), in which intelligence differences according to community size were eliminated (and in some instances reversed) after controls for parental education were introduced. In this latter study, however, community categories did not include any large urban areas. A finding parallel to Sewell's 1964 research has been reported by Middleton and Grigg (1959). Their sample of Florida high school students showed that intelligence scores were lower in rural than urban areas, even with status levels controlled.

Other evidence on the achievement potential of rural adolescents has been inferred less from examinations and more from analysis of the presumed causative agent of achievement potential, the high school itself. The most recent analysis for Minnesota is contained in the so-called Domian (1967) report, *Education, 1967: A Statewide Study of Elementary, Secondary, and Area Vocational-Technical Education in Minnesota*. The Domian report provides a critique of the small, unconsolidated high schools found predominantly in outlying rural areas. These schools, Domian charged, provide fewer specialized and rich academic programs, somewhat more formal pedagogical methods, fewer extracurricular activities, more inadequate library and teaching facilities, greater demands on the capacities of principals and educators, and so on. Domian concluded that (1) students in rural areas were being short-changed educationally, (2) manpower consequently was being wasted, and (3) legislation should be passed immediately to rectify existing educational deficiencies.

Implicit in this and other such reports are a number of assumptions, among them the belief that a changed educational curriculum can change basic mobility orientations that have firm roots in family tradition. More notable, however, is the assumption that wasted manpower (a term that can be read as limited mobility orientations) is a function of inadequate educational facilities. Nowhere in the 440-page Domian report is anything other than inferential evidence presented on an association between high school facilities and wasted manpower or mobility orientations.

High School Size. The documentation in the Domian report concerning high school size and the extensiveness of curriculum offerings is dramatic. During the first year of high school, size makes little difference. But, as students proceed in school, size becomes an ever more critical influence on course diversity. For example, in the instances Domian cites, high school seniors in a school of 200 students could select from four electives, whereas in a school of 1,750, students could choose from 26. Part of the deficiency results from limited resources. However, even if resources were available, it is questionable that small schools could provide sufficient students to attend courses in a diversified curriculum.

Size is a function of two processes: population concentration and school district consolidation. By definition, rural areas are sparsely populated, which in large part accounts for the smaller secondary schools located there. But smaller secondary schools also can be attributed to the failure to consolidate disparate units. In some parts of the state, consolidation is viewed as a mechanism for undermining local autonomy. Minnesota's recent history has been somewhat encouraging: from 1930 to the mid-fifties, the number of districts declined from over 8,000 to just under 3,000 (Nelson, 1960). This reduction has occurred in response to population shifts from rural to urban areas and to the recommendations of educators and legislators. While consolidation and redistricting have continued, Minnesota still leads the nation in number of school districts relative to population.

The relationship between school and community size was apparent from the Counseling Bureau's data. For example, in schools in communities of less than 1,000, more

than one-quarter had junior classes of less than 25 students, and over 80 percent had enrollments of less than 50. Furthermore, none of the schools in towns of this size had junior classes of more than 125. By contrast, no metropolitan school had a junior class of less than 100 students, and some 30 percent had junior classes of more than 500. The schools with enrollments nearing 4,000 were drawn primarily from the rapidly growing suburbs of the Twin Cities.

A population of 5,000 appeared to represent the level at which school size dramatically increased. The distribution of school sizes made for an interesting limitation on the issues that could be raised with the Counseling Bureau's data. That is, if less than one-half of 1 percent of the schools in the under 1,000 category had at least 100 pupils in the junior class, then only with limited confidence would it be possible to compare institutions of similar size in rural areas and in the metropolis.

Beyond these difficulties, one assumption related to the correlated ideas of intellectual enrichment and restraint should be made explicit. Students enter school with given possibilities for development. As they progress, curriculum possibilities hold the potential of promoting interest and curiosity in academic affairs. With limited diversity, curiosity may be restrained because students inevitably must take courses in which they aren't interest. And, consequently, plans to do well or to continue in school may be stifled.

These assumptions are well rooted in the progressive philosophies frequently subscribed to by educators. As goals they may be laudable. But as causes of college aspirations they are seriously open to question. Essentially, the size concept assumes that aspirations that are partially rooted in family and other primary group experience can be reversed, or at least affected, by academic curriculum. A recent study by Coleman and his colleagues (1966) strongly suggested that the curriculum or other aspects of teaching facilities have little effect on either learning or aspirations. Natalie Ramsøy (1961), in a national sample of high school seniors, observed only a slight and insignificant correlation between aspirations and school size, a surprising result considering that controls for urban and rural communities were not introduced into the analysis.

The Minnesota Counseling Bureau's data on school size and aspirations are uninspiring on a number of counts. First, students with low aspirations were not primarily from the smallest rural schools. Second, practically none of the schools within any community size category showed any relationship between size and aspirations. For example, in towns of less than 1,000, 32.8 percent of the females in the smallest schools (with junior classes of less than 25) aspired to college, compared to 34.1 percent for schools with junior classes of more than 100. Similar statistics were obtained in most of the community categories at every level of social class and for both sexes. The only exception was within the metropolitan area: approximately 6-7 percentage points separate the aspirations of students at the smallest schools (100-300 students) from those at the largest (over 500). The relationship was consistent among all classes and for both sexes. Further inspection of these data, however, revealed that the large schools were drawn predominantly from middle and upper middle class suburbs. When the vari-

Table 10. Levels of academic aptitude, by social class, community size, and sex

Community size	Lower class			N	Middle class			N	Upper class			N
	Low aptitude	Intermediate aptitude	High aptitude		Low aptitude	Intermediate aptitude	High aptitude		Low aptitude	Intermediate aptitude	High aptitude	
Males												
1,000 and less	50.2	33.1	16.7	2,666	36.9	36.8	26.3	1,045	25.3	36.0	38.7	659
1,000-5,000	47.3	34.5	18.2	3,299	32.4	37.9	29.7	1,482	27.3	35.1	37.6	1,044
5,000-20,000	46.5	33.5	20.0	1,733	25.6	40.2	34.2	994	18.7	30.0	51.4	1,125
20,000-40,000	48.0	34.2	17.8	552	32.6	35.3	32.1	408	18.8	32.1	49.1	452
100,000 and more	[illegible]	33.1	18.4	3,126	33.5	37.5	29.0	3,241	19.6	31.8	48.6	4,153
Females												
1,000 and less	38.9	38.1	23.0	2,588	26.2	35.4	38.5	936	17.2	31.4	51.4	557
1,000-5,000	39.2	36.3	24.5	3,236	24.4	36.7	39.0	1,342	15.8	31.1	53.1	1,094
5,000-20,000	37.5	36.0	26.6	1,841	21.6	35.4	43.1	959	14.2	24.4	61.4	1,018
20,000-40,000	43.5	33.8	22.6	579	23.7	36.5	39.8	329	14.7	27.1	58.2	443
100,000 and more	44.7	35.1	20.2	3,366	29.0	37.1	33.9	3,055	14.5	30.1	55.4	3,873

Table 11. Percentage of students aspiring to college, by academic aptitude, social class, community size, and sex

Community size	Lower class			Middle class			Upper class		
	Low aptitude	Intermediate aptitude	High aptitude	Low aptitude	Intermediate aptitude	High aptitude	Low aptitude	Intermediate aptitude	High aptitude
Males									
1,000 and less	12.3(1,229)	40.0(837)	70.1(434)	18.7(359)	54.1(377)	83.5(273)	29.2(154)	65.4(234)	91.0(255)
1,000-5,000	13.5(1,475)	41.2(1,097)	72.5(586)	25.6(460)	55.2(554)	82.2(438)	36.7(267)	71.3(432)	92.1(530)
5,000-20,000	16.1(757)	41.6(551)	79.0(342)	25.9(243)	60.3(388)	86.7(338)	39.7(204)	75.2(330)	92.0(576)
20,000-40,000	20.9(249)	51.7(178)	69.1(97)	31.5(130)	69.2(143)	87.8(131)	57.3(82)	76.8(142)	94.1(222)
100,000 and more	22.9(1,462)	49.4(1,008)	76.8(569)	31.7(1,066)	63.5(1,195)	86.0(938)	46.7(792)	77.3(1,308)	93.8 2,017)
Females									
1,000 and less	10.8(911)	26.8(922)	54.7(583)	14.6(233)	38.8(322)	61.6(354)	20.9(91)	50.9(175)	73.3(285)
1,000-5,000	8.4(1,175)	28.4(1,107)	52.5(770)	21.3(310)	37.0(478)	66.7(517)	28.5(165)	52.2(337)	76.2(579)
5,000-20,000	8.1(630)	27.8(622)	62.2(476)	20.2(193)	44.7(333)	71.4(412)	35.1(134)	59.4(244)	82.1(621)
20,000-40,000	15.3(222)	34.4(180)	59.7(124)	32.9(73)	36.6(112)	74.6(130)	43.8(64)	72.6(117)	88.3(256)
100,000 and more	16.3(1,370)	39.7(1,117)	61.9(661)	24.9(834)	42.9(1,085)	73.8(1,023)	39.4(540)	67.0(1,147)	84.3(2,140)

ability in class composition was accounted for, the differences originally observed with respect to size attenuated.

Nothing in these data suggests that school consolidation should be discontinued. Consolidation certainly provides for more varied extracurricular activities and for a more diverse educational curriculum, and may provide for more efficient plant operation as well. Such variety in curriculum and extracurricular activities can stimulate adolescents' interest and commitment to education. But when evaluated from the limited criteria offered here, school size was unimportant as an explanation of rural-urban divergencies in aspirations.

Academic Aptitude and High School Rank. While particular arguments over such points as size are in need of correction, the overall implications of the Domian report concerning the inferior education of rural adolescents may be substantially accurate. Specifically, is there evidence to support Domian's assumption that the aspirations of rural adolescents are depressed because of lower aptitudes for academic work? This prediction is bold but nonetheless consistent with previous hypotheses on intelligence in rural and urban areas (Sewell, 1964; Middleton and Grigg, 1959).

To test for the relative achievement potential of rural and urban adolescents, we drew upon scores derived from the Minnesota Scholastic Aptitude Test (MSAT, Form C). Strictly interpreted, this test measures not intelligence, but a number of factors predicting success in college performance (Swanson, 1967, 1968). Previous work by Berdie and Hood (1965) indicated lower ability scores among rural adolescents, but their analysis did not include corrections for social class.

The data in table 10 contrast with previous results. The table contains the distribution of MSAT scores by community size, sex, and social class. Notice particularly the absence of any discernible association between aptitude and community size. Given the credibility of previous findings on **intelligence differences**, these results suggest that rural and urban schools might attenuate the basis of **scholastic aptitude.** Whatever the alleged deficiencies of the nonmetropolitan schools, faulting the rural educational system from the narrow view of academic capacity would be difficult.

Does aptitude otherwise affect the college aspirations of rural and urban adolescents? Table 11 provides a partial answer. As may be surmised from the previous results, the aptitude scores do not grossly reduce community differences in a statistical sense, and consequently do not adequately account for rural-urban divergencies. What the aptitude scores do is specify the conditions under which community size differences affect aspirations. For example, among the men, who may receive the most pressure to attend college, it is among upper class males who score in the lowest third of the MSAT profile that community size is most influential. In intermediate size towns and in the metropolis, the number of males aspiring to college is 4-5 out of 10; in the smallest towns, the number drops to less than 3 in 10. Contrary to the wasted manpower concept, then, it is precisely among untalented upper class males that rural areas most dramatically detract from college aspirations and urban areas stimulate college aspirations. At the other extreme, for middle and upper class boys scoring in the upper third of the MSAT

distribution, community size does not make a difference. Here, pressures to attend college apparently are so great that 8-9 out of 10 plan to attend, no matter where they reside. In contrast, Sewell's (1964) Wisconsin data showed the most substantial community differences in the high intelligence, upper class male group. Among other things, the comparison might illustrate only the instability of statistical estimates in tables that simultaneously examine the associations among five related variables (Blalock, 1963).

The specifications for females are somewhat less uniform. Again it is among the least intelligent upper class students that rural-urban differences are exaggerated. Curiously, many of the theoretical positions on differences in rural-urban aspirations (Lipset and Bendix, 1959) capitalize on the supposed sensitivity of the urban adolescent to upper class occupations, whereas these data suggest that urban complexes are instrumental for precisely those who, from the standpoint of academic potential, are least likely to gain prestigious positions. However, in contrast to the males, all the high status girls reveal more uniform community differences, regardless of the MSAT tertial in which they placed. Contrary to the results for the males, this finding conforms directly to Sewell's (1964) Wisconsin results, indicating some generality across state lines.

To examine more fully the relationship between aptitude and aspirations in rural and urban areas, an alternate definition of aptitude was introduced. The high school rank of each student was ascertained by the Counseling Bureau from reports issued by the schools on a grade based percentile rank for each student in the junior class. For convenience, ranks were divided into high, medium, and low groupings. In practice, rank scores and MSAT scores may tap identical phenomena, or the former may be derived from the latter. The utility of the rank score stems from each school's independent assessment of a student's capacity, a judgment that reflects the local context.

Rank positions are identical in rural and urban areas, so the data in table 10 have no precise analogue here. The material on rank and aspirations reveals essentially the same pattern as the material on aptitude: rural-urban differences persist, even within similarly ranked groups. Curiously, there is a persistent tendency for females to maintain a higher rank than males, despite apparent equality on the aptitude examination. Controls for class and community size do not alter these results.

Of somewhat more interest is the interplay between rank and aptitude. This type of analysis provides an opportunity to understand how adolescents of equal competence fare in rank position in rural and urban high schools. If, for example, competition for grades is greater in urban areas than rural areas, persons of high aptitude in the metropolis may experience more difficulty in attaining a higher rank than persons with similar aptitude in rural areas. Similar, though less dramatic, difficulties may hold for adolescents of lesser aptitude as well.

Table 12 presents the percentages of students in various rank positions of their high schools by aptitude scores, social class, and sex. The full data on which this table is based are cumbersome, so only small rural towns and urban areas with more than 20,000 persons are reported. The result is somewhat mixed. Among the men,

Table 12. Percentage distribution of class ranks, by academic aptitude, social class, community size, and sex*

Community size	Academic aptitude	Lower class				Middle class				Upper class			
		Low rank	Middle rank	High rank	N	Low rank	Middle rank	High rank	N	Low rank	Middle rank	High rank	N
Males													
1,000 and less	Low	73.7	23.8	2.6	1,284	69.4	27.7	3.0	372	66.0	30.8	3.1	159
	Intermediate	34.1	45.8	20.1	862	26.8	51.6	21.6	380	18.0	52.4	29.6	233
	High	6.9	32.2	60.9	432	5.1	28.2	66.7	273	3.6	22.7	73.7	251
20,000-40,000	Low	71.9	25.7	2.4	253	66.2	30.0	3.8	130	66.3	30.1	3.6	83
	Intermediate	32.8	44.6	22.6	186	33.8	42.2	23.9	142	35.7	42.7	21.7	142
	High	9.3	32.0	58.8	97	11.5	35.4	53.1	130	5.5	23.3	71.2	219
100,000 and more	Low	69.5	26.7	3.8	1,418	65.8	30.5	3.7	1,038	68.6	26.3	5.1	779
	Intermediate	38.3	41.4	20.3	997	42.1	39.4	18.5	1,184	36.4	44.2	19.3	1,304
	High	11.9	32.8	55.3	564	12.0	30.1	57.9	929	10.1	27.8	62.1	1,998
Females													
1,000 and less	Low	55.9	35.7	8.4	963	51.9	38.1	10.0	239	48.4	39.0	12.6	95
	Intermediate	17.2	44.7	38.1	971	11.5	39.8	48.8	322	8.8	47.6	43.5	170
	High	1.5	18.7	79.8	588	0.6	17.5	82.0	355	0.7	11.0	88.3	282
20,000-40,000	Low	69.2	26.2	4.6	237	52.1	38.4	9.6	73	53.8	38.5	7.7	65
	Intermediate	23.3	46.6	30.1	193	21.4	53.8	24.8	117	13.6	44.9	41.5	118
	High	5.5	28.1	66.4	128	2.3	22.9	74.8	131	1.2	17.7	81.1	254
100,000 and more	Low	54.6	35.9	9.4	1,430	53.6	37.5	8.9	858	52.6	37.3	10.1	536
	Intermediate	20.3	42.5	37.3	1,154	20.3	44.6	35.0	1,116	16.3	49.9	33.8	1,151
	High	5.2	23.9	70.9	674	4.1	22.7	73.2	1,023	2.4	21.2	76.3	2,126

* For clarity, intermediate size towns (1,000-20,000) are not reported in this table. The patterns that emerge there are essentially similar to those previously reported in this bulletin.

Table 13. Percentage of students aspiring to college, by class rank, academic aptitude, social class, community size, and sex*

Community size	Academic aptitude	Lower class			Middle class			Upper class		
		Low rank	Middle rank	High rank	Low rank	Middle rank	High rank	Low rank	Middle rank	High rank
Males										
1,000 and less	Low	7.6(864)	25.3(285)	27.6(29)	11.8(238)	28.6(98)	81.8(11)	17.7(96)	50.0(46)	80.0(5)
	Intermediate	21.6(278)	45.8(371)	58.7(167)	35.0(100)	56.0(191)	73.2(82)	40.0(40)	63.6(121)	84.1(69)
	High	31.0(29)	64.0(136)	79.7(256)	28.6(14)	81.6(76)	88.4(181)	77.8(9)	82.5(57)	94.6(185)
20,000-40,000	Low	15.3(170)	32.8(61)	50.0(6)	26.5(83)	43.6(39)	20.0(5)	46.2(52)	72.0(25)	100.0(3)
	Intermediate	28.6(56)	60.8(79)	68.3(41)	51.1(47)	75.0(60)	85.3(34)	69.4(49)	77.1(61)	86.7(30)
	High	44.4(9)	48.4(31)	83.9(56)	80.0(15)	80.4(46)	95.6(69)	83.3(12)	96.1(51)	95.5(156)
100,000 and more	Low	16.7(945)	36.7(371)	49.1(53)	24.9(666)	46.7(315)	61.1(36)	39.7(514)	64.4(202)	62.5(40)
	Intermediate	34.9(370)	51.8(405)	73.5(200)	51.1(489)	68.3(458)	84.5(219)	65.7(469)	82.7(572)	87.6(251)
	High	44.6(65)	73.1(182)	86.4(310)	66.1(109)	77.5(280)	94.6(538)	83.9(199)	89.6(555)	97.5(1,240)
Females										
1,000 and less	Low	5.2(484)	16.1(317)	24.3(74)	5.2(115)	21.6(88)	37.5(24)	4.6(43)	36.1(36)	33.3(12)
	Intermediate	8.8(148)	22.2(406)	39.6(356)	11.1(36)	35.2(125)	48.7(152)	33.3(15)	46.9(81)	58.1(74)
	High	33.3(9)	30.6(108)	61.3(460)	0.0(2)	36.2(58)	67.1(289)	50.0(2)	48.4(31)	76.6(248)
20,000-40,000	Low	11.2(143)	23.2(56)	30.0(10)	28.6(35)	46.4(28)	20.0(5)	29.4(34)	68.0(25)	20.0(5)
	Intermediate	20.5(39)	31.0(84)	51.8(54)	34.8(23)	37.9(58)	35.7(28)	62.5(16)	70.0(50)	77.6(49)
	High	33.3(6)	50.0(32)	65.5(84)	66.7(3)	56.7(30)	80.4(97)	50.0(2)	81.8(44)	90.3(206)
100,000 and more	Low	9.5(702)	22.5(475)	33.6(125)	20.4(431)	29.0(304)	34.2(73)	29.7(273)	47.9(192)	71.7(53)
	Intermediate	24.4(221)	36.8(457)	51.8(415)	27.8(212)	40.4(478)	55.2(379)	48.6(181)	63.4(566)	80.8(385)
	High	29.0(31)	52.6(156)	67.4(467)	34.2(41)	69.1(230)	77.3(741)	67.3(52)	73.4(447)	88.0(1,621)

* For clarity, intermediate size towns (1,000-20,000) are not reported in this table. The patterns that emerge there are essentially similar to those previously reported in this bulletin.

there is some indication that lower class rural students with substantial ability attain a higher rank than urban students, whereas those with lower ability attain a lower rank. In comparison with the urban areas, however, the differences are slight. Somewhat more revealing and discernible are the patterns among the middle and upper classes. In a few instances, rural adolescents scoring in the intermediate MSAT level are somewhat more likely to attain higher ranks than urban adolescents of similar academic capacity. A parallel pattern exists for males in the upper MSAT tertial. It may appear that some of these effects can be explained by the division of metropolitan schools into economically segregated units; that in high status schools, for example, many highly intelligent adolescents are competing for positions that only a limited number can attain. From this view, some students, even those with substantial ability, must fall below high ranks. However, data on economic segregation in metropolitan areas indicate that this line of reasoning is incorrect. Furthermore, a careful examination of the complete data on which table 12 is based shows that the difficulty for those in the intermediate and upper aptitude groupings in achieving a high rank is discernible in communities somewhat smaller than the metropolis where economic segregation is not as pronounced.

Among females, a similar pattern of effects emerges. In the lower status group, there is again less divergence between rural and urban areas than elsewhere. In the middle and upper classes, however, those in the two upper tertials on the MSAT profile are more likely to attain upper rank in the rural areas than in urban areas. For females, like males, a low aptitude score is consistently translated into a low rank throughout both rural and urban areas.

There is an interesting tendency in rural areas for social class to be slightly more influential in determining the combination of MSAT scores and rank position than is the case in urban areas. For example, in towns of less than 1,000, 60.8 percent of the lower class high aptitude males placed in the high rank category, whereas this was true of 66.8 percent of the middle class males and 73.7 percent of the upper class males. Parallel figures for the identical quadrant and classes in the urban areas are 55.6, 58.0, and 62.1 percent, respectively.

Given the tendency for adolescents of moderate and high aptitude to rank distinctively higher in rural than in urban areas, there is a further issue to how the pattern affects aspirational differences. A partial answer can be gained from table 13, which reports aspirations for college by rank position, aptitude scores, social class, sex, and selected community sizes. As might be suspected, there are few reversals in the comparison between metropolitan students and those residing in the smallest rural town: at every rank and aptitude level, aspirations are highest in the metropolis. Furthermore, in most instances, with some possible exceptions among high aptitude females, an adolescent will more likely aspire to college if intermediately ranked in the metropolis than highly ranked in towns of less than 1,000.

On closer examination, the data in table 13 show that the differences between rural and urban areas are least likely to be located in the high MSAT-high rank categories or in the categories immediately next to the highest. Furthermore, the metropolitan advantage over the

smallest towns tends to be confined to the low and at times to the intermediate rank and aptitude positions. For example, in the low and intermediate rank and aptitude positions among upper class males, differences between small and large towns average out to approximately 20 percent, somewhat more than the aspirational differences initially observed without rank and aptitude controls. This specification is a result of the tendency for rural adolescents to go on to college if they have attained high scores on their aptitude examinations and high ranks in school standing. When these adolescents are ignored in rural-urban comparisons, the original aspirational differences are somewhat exaggerated. From this view, the higher rank obtained by a rural youth on the basis of given academic aptitude is only an advantage if he places in the top third of his class. If he falls below this threshold, the initial differences separating him from urban students increase.

Percentages based on few cases, as well as the scope of the data contained in table 13, make summarizing difficult. But, in the development of aspirations, rank apparently plays no more important a role than aptitude in rural than in urban areas. From this view, the state and local standards set forth in particular schools are not at odds with one another. The only differential stimulus accorded the rural student is similar in effect to the one noted in regard to the MSAT data alone: those in either the lower or intermediate rank and aptitude categories are most vulnerable to whatever it is that may be accounting for community differences in college aspirations.

Satisfaction from School. In the popular stereotype, rural families show disdain for scholastic as well as intellectual values and goals. Instead, emphasis is placed on the traditional virtue of common sense. As previously noted, evidence suggests that the stereotype is nothing more than that. For example, the data previously presented on parental encouragement and community size suggest no support for the conception of rural areas as generally devoid of interest in education. Although it may be true that farm families show some disdain for higher education, no evidence suggests that such disdain can be generalized to families living in rural areas.

If higher education is supported by rural parents, isn't there sufficient reason to believe that it will be supported by adolescents as well? This issue is important, for a critical element in the achievement syndrome is the gratification derived from school and the academic environment. If an element of academic gratification is not present, aptitude or achievement potential will not likely be exercised in the school.

However much currency has been given to the popular image of rural antagonism to education, there is little indication that it is widespread among rural high school adolescents. Straus (1964), for example, has shown that although farm children valued such nonintellectual matters as hard (physical) work, this was not true of rural adolescents in contrast to those residing in the metropolis. Other studies have similarly attributed the nonintellectual values of rural areas to farm boys alone.

The findings derived from the Counseling Bureau data were in accord with other research reported on rural and urban areas. The item used in this analysis was phrased as follows:

Do you like school?
(1) Like it most of the time
(2) Usually like it
(3) Don't care one way or the other
(4) Usually dislike it
(5) Dislike it most of the time.

Since few persons selected alternatives 4 and 5, they were grouped with alternative 3 and scored as low in academic gratification. Various interpretations can be drawn from the responses, particularly with reference to academic or extra-academic gratification. Whatever interpretations given, two pieces of evidence suggest its relevance to academic circumstances: (1) there is a dramatic relationship between gratification and percentage aspiring to college, and (2) a relationship exists between social class and gratification; that is, the higher the class, the more likely it is that adolescents consider school a rewarding experience.

The data indicate neither a strong nor persistent relationship favoring greater school gratification among rural than urban adolescents. If anything, the findings suggest a slight but discernible tendency for rural adolescents to enjoy school more frequently than urban adolescents, even with class and sex controlled. Among upper class females, for example, some 58.5 percent of those in towns of less than 1,000 "like [school] most of the time", whereas this was true of 50.4 percent of the females in the metropolis. While slight, these differences strongly indicate that lower aspirations in rural areas cannot uniformly be ascribed to dissatisfaction with school.

The association of satisfaction to aspirations and community size follows something resembling a now fairly well established pattern, as shown in table 14, which reports the percentages of students aspiring to college by academic satisfaction, community size, social class, and sex. For males, the data suggest that at every class level, aspirational differences between communities attenuate for those who like school and increase for those who do not.

As shown previously, a similar pattern held for data in regard to academic rank, aptitude, and, in some instances, parental encouragement: for the intelligent or the encouraged, differences among communities were small, whereas in the low category for either, community differences either persisted or became substantially more dramatic. The consistency of these findings suggests that community differences in aspirations are substantial for precisely those who appear to be most dependent on their environment: the unencouraged, those with poor aptitude, and the academically dissatisfied male who, because of these characteristics, receives little stimulation from himself or others to attend college.

Caution should be exercised in considering this as well as alternate interpretations. There is little in the Counseling Bureau's data that speaks to causality, or the temporal sequence of variables. It has been consistently assumed that aptitude, parental encouragement, and academic gratification precede aspirations. Yet the reverse may be closer to reality. For example, with special reference to the data in table 14, it is conceivable that a majority of the males who aspire to college state that they are satisfied with school, whereas those who do not so aspire most frequently state that they are satisfied with school when they have lived in a rural rather than an urban commu-

Table 14. Percentage of students aspiring to college, by satisfaction derived from school, social class, community size, and sex

Community size	Lower class			Middle class			Upper class		
	Usually like school	Sometimes like school	Neutral or dislike school	Usually like school	Sometimes like school	Neutral or dislike school	Usually like school	Sometimes like school	Neutral or dislike school
Males									
1,000 and less	44.3(858)	34.4(1,038)	8.7(585)	64.1(398)	48.7(413)	22.1(195)	77.3(277)	68.8(266)	30.2(96)
1,000-5,000	49.0(1,005)	36.7(1,302)	12.2(831)	64.9(547)	56.8(609)	27.7(289)	82.9(521)	71.8(535)	44.7(170)
5,000-20,000	54.8(493)	38.1(712)	17.8(439)	69.9(379)	62.1(419)	37.6(165)	85.3(469)	77.6(455)	56.4(179)
20,000-40,000	55.8(156)	41.6(231)	21.2(132)	72.8(136)	65.5(176)	46.6(88)	87.4(167)	85.5(193)	61.9(84)
100,000 and more	51.4(936)	48.9(1,239)	21.3(842)	71.1(1,153)	61.5(1,295)	38.3(736)	86.4(1,608)	82.7(1,749)	57.9(736)
Females									
1,000 and less	33.8(1,096)	26.1(967)	11.6(346)	47.8(467)	41.9(322)	16.1(118)	63.6(327)	51.1(186)	32.4(34)
1,000-5,000	33.5(1,389)	25.2(1,254)	8.2(402)	54.1(627)	42.4(517)	18.2(159)	68.5(575)	56.7(413)	38.6(88)
5,000-20,000	38.6(762)	29.0(706)	7.9(252)	58.8(454)	48.0(352)	28.9(90)	75.5(518)	69.8(387)	41.8(91)
20,000-40,000	43.1(211)	30.0(227)	13.1(84)	58.6(162)	49.2(118)	26.5(34)	82.4(250)	75.7(148)	50.0(34)
100,000 and more	45.7(1,317)	31.8(1,261)	12.6(555)	56.5(1,346)	48.4(1,193)	21.7(391)	79.7(1,547)	69.6(1,438)	52.4(431)

nity. The initial interpretation given to the data may appear more plausible than this one, but there is nothing in the results to confirm or deny either view.

Regardless of causality and the exact interpretation rendered, table 14 shows a similar pattern for females and males only among high status students. In middle and low status groups, the pattern either disappears or is reversed. Clearly, any consistency in regard to sex similarities among communities of varied size cannot be taken for granted. In addition, the reversals suggest that the effects of community size must be considered in conjunction with particular circumstances, such as the dimension of sex. Such considerations have been offered: Sewell (1964), for example, has argued that rural females face more limited occupational opportunity than rural males and consequently must gear their behavior and orientation to compete in the urban labor market. These and other interpretations, however, have yet to be firmly established as integral to a well formulated thesis on community size.

Summary. The items contributing to achievement potential have consistently been uninspiring as adequate explanations of plans for higher education in rural and urban communities. Neither intelligence, rank, school size, nor satisfaction accounted for aspirational differences across community categories. In fact, some of these indicators, notably academic aptitude and satisfaction, were not even associated with rural and urban residence, as initially hypothesized.

These data suggest that a conception of academic opportunity, on which much of this analysis was based, may not be the most profitable way to examine aspirational differences with respect to community size. It is true that schools in rural areas provide less rich and diverse course work than schools in urban areas. It is also true that rural students less frequently aspire to college than urban students. But these facts appear to be unrelated to one another. Furthermore, a variable as critical as academic aptitude bears no simple association to community size. Apparently, additional aspects of rural and urban residence, such as families and other aspects of community structure, are more critical than the school and some of its immediate consequences.

What the data do permit is some delineation of those students whose aspirations are most vulnerable to community effects. From the perspective of academic satisfaction, these are the students who derive little gratification from school. From the perspective of academic aptitude, these are the students who are poorly ranked in their class or who score in the lower thirds of the MSAT profile. From either view, these are the students who receive little stimulation, from themselves or from those around them, to attend college. And, without it, the handicap of residence in a rural area becomes substantial. Unfortunately, the data are not instructive as to the exact elements of community structure that create this handicap.

Summary and Conclusion

Despite the popularity of various explanations of rural-urban divergencies, many can be classified as myths. For example, contrary to common belief:

- rural students register academic aptitude scores similar to those of urban students.
- rural students are as strongly encouraged to attend college as urban students.
- rural students are as likely, and perhaps more likely, to enjoy school as urban students
- rural students do not lower their aspirations as a consequence of the lack of opportunity to attend proximate institutions of higher education.
- rural students do not reject college because of the scarcity of family financial support.
- rural students do not react in their aspirations to the size of the high school they attended.

Each of these factors has been offered as an explanation of rural-urban differences; none has sufficient empirical evidence to support it. What does emerge is the overriding importance of social class in understanding community effects. First, class differences in rural and urban areas are pronounced: as a result of uneven economic development and concentration, the metropolis is the residence for the majority of middle and upper class families in Minnesota. Second, of all the variables examined, social class reduces rural-urban differences most uniformly and consequently provides some understanding of why the differences exist. Also, while aspirations were primarily related to segregation in the metropolis, the higher aspirations were those of urban adolescents drawn from predominantly high status schools. Furthermore, segregation by community size was so confounded that all high status schools, but only a handful of low status schools, were located in the urban area; low status schools were mainly in rural towns of less than 1,000.

The exact meaning of these results on segregation may have to remain unclear until better longitudinal data are available. At the very least, the data locate more precisely the residential origins of college aspirants. Whether these aspirations are a consequence of school facilities and personnel, of selective migration, or of peer group influence must remain a problem for future research.

While the class findings provide a partial understanding of rural-urban divergencies, they by no means constitute complete explanations of aspirational differences. The impact of class, however, is so potent that, once entered in the analysis, other seemingly critical sources of influence provide no further uniform understanding of community effects.

These alternative sources of influence do, however, play a role in specifying rural-urban differences in aspirations, and consequently permit some further understanding of the process. Given an array of reversals and at times confused patterns, the data presented generally suggest that community differences attenuate for those who may feel a direct pressure to attend college. These are the upper class adolescents who have been strongly encouraged by their parents, the adolescents who derive personal satisfaction from school experience, or students who have attained high scores on aptitude examinations. Understandably, these patterns occur more frequently for males than females. What these findings suggest is that the forces generated by encouragement for higher education or by advanced academic aptitude, forces with strong roots in family experience, can serve as a buttress against a potentially oppressive rural environment. However, the data do not clearly show that the opposite is true. At times, rural-urban differences are greatest in a variety of intermediate categories.

The effects of rural areas are, from this view, less than monolithic. Combined with values and aptitudes, the rural community structure appears to depress college aspirations below the level of comparable students from more urbanized areas. Any effort at further explication of low aspirations in rural areas would require a more intensive analysis of adolescents and a more systematic understanding of community structures than is possible here. Whatever the outcome of future efforts, this much the data clearly suggest: rural-urban divergencies in college aspirations are not the simple phenomena they have frequently been taken to be.

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