

# Do Rural Youth Attain Their Educational Goals?

*While boys and girls have similar educational aspirations and eventually attain similar educational levels, family background characteristics matter more to girls, especially rural girls. Additionally, rural girls do not enjoy the same educational benefits from taking part in extracurricular activities, despite the fact that they have relatively high participation rates. In contrast, male aspirations and attainment appear to be less the result of family background processes and more a result of their own achievement and activities. The largest differentials in educational goals and attainment occur within rural and urban areas between those who experience advantaged versus disadvantaged family backgrounds, schools, and communities.*

Residents of rural areas typically have lower overall educational attainment than urban residents. Data from the 1993 Current Population Survey reveal that 61.9 percent of nonmetro residents age 25 and over had at most completed high school or earned an associate's degree at a community college, compared with 57.4 percent of metro residents. Only 13.4 percent of nonmetro residents obtained a college degree (at least 4 years of college) compared with 24.3 percent of metro residents. This gap persists even for young adults. Among persons age 25 to 34 in 1993, 71.5 percent of nonmetro persons had completed high school or community college, and 13.2 percent had completed college or more. This compares with 61 and 26.4 percent of metro residents the same age. This can have long-term consequences for nonmetro young adults, as lower rural educational attainment typically translates into reduced access to existing occupational opportunities and lower earnings.

Why does this urban-rural gap in educational attainment remain? Do rural youth have different educational goals and aspirations than urban youth? If not, are urban youth somehow better able to attain their educational goals than rural youth? What family, school, or community factors

influence educational attainment? We examine these questions using data from the National Longitudinal Survey of Youth (NLSY). The young men and women in our sample were age 14 to 17 and were still enrolled in school in 1979. By 1990, the sample respondents were 25 to 28 years old and many had completed their educations.

The educational goals of the youth in the NLSY in 1979 show that rural youth aspired to fewer years of education than their urban counterparts (fig. 1). Rural boys' and girls' aspirations averaged 13.8 and 14.2 years of education, respectively. Both urban boys and girls had aspirations of 14.6 years of school, on average. If we look at how much education these individuals had received by 1990 (fig. 1), none of the groups had reached their average educational aspirations. However, rural youth came closer to achieving their goals than urban youth. For example, rural boys' attainment was 1.2 years less, on average, than their aspirations, the smallest difference between attainment and goals of the four groups. But, rural youth had lower aspirations to begin with—and rural boys had the lowest aspirations of the four groups.

## Family Background Influences the Attainment of Educational Goals

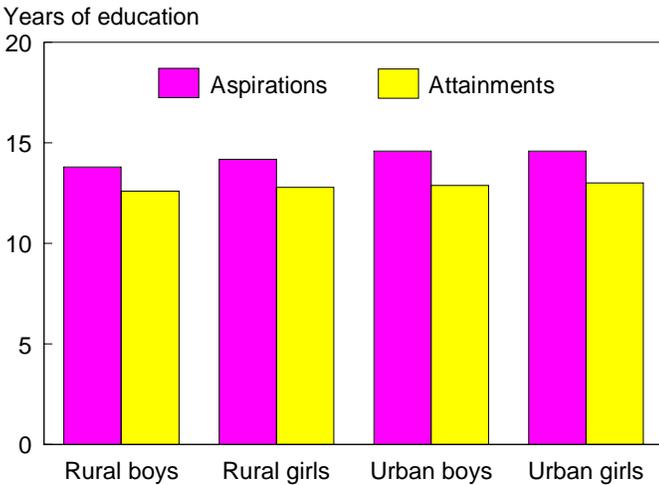
What factors influence the ability of youth to achieve their educational goals? These influences can be categorized as traits of the individual, the family, the school, and the

Debra L. Blackwell is a postdoctoral trainee in sociology and demography at Pennsylvania State University; Diane K. McLaughlin is an assistant professor of rural sociology at Pennsylvania State University.

Figure 1

### Educational aspirations and attainment

Rural and urban youth have different educational aspirations but end up with similar mean attainment levels



Source: National Longitudinal Survey of Youth, 1979-1990.

community (see “The National Longitudinal Survey of Youth”). A student’s characteristics that influence educational attainment can be separated into those that would be expected to increase educational attainment and those that would hinder continued enrollment in school. Students with higher self-esteem and higher educational goals plan their educational careers by taking the college preparatory curriculum in high school, and they have the confidence to follow through on those goals. Having friends with high educational goals also increases student interest in and support for continuing beyond high school. On the other hand, students who experience a teen birth, who face suspension or expulsion from school for behavioral problems, or who are involved in illegal activity are less able to follow through on educational goals, and may have lower goals to begin with. For young women, attitudes toward women’s roles may influence their educational aspirations and attainment.

Many characteristics of the students themselves are indeed shaped by the family and community in which the students live. Family background characteristics are important determinants of educational goals and attainment. Children whose parents have attained higher educational levels are themselves more likely to perceive college as a reasonable goal that will be supported by their families. Seeing an older sibling attend college also is likely to give younger siblings a role model and to start them thinking about college sooner. Parents with higher prestige and higher paid occupations may be able to provide more support, both economic and moral, for their children to attain higher education. Family structure may

also play a role, with children from female-headed families or poor families less likely to achieve higher levels of education. The reasons for this may range from lack of economic resources to differences in the outlook of children from these families.

The urban youth in our sample are much more likely to have parents who have completed some college and who hold professional occupations. Roughly 40 percent of the urban youth had a father who had some college, while only about 27 percent of rural youth did (table 1). About 20 percent of urban mothers, compared with roughly 11 percent of rural mothers, had some college experience. Rural youth were less likely to be in a one-parent family and were more likely to belong to a two-parent biological family at age 14. For the rural boys, almost 81 percent lived in their biological family at age 14, compared with about 70 percent of urban boys. Differences in poverty and family size were minimal between rural and urban boys and girls.

Families also supply learning resources and emotional support for children’s higher educational attainment. Families that have magazines and newspapers and that hold library cards provide resources for learning and an emphasis on the importance of books and reading. In contrast, parents who are influential in their children’s lives but discourage their children from attending college can send a very strong message that limits their children’s goals and attainment. Urban children had slightly more educational resources in their homes than rural youth (table 1). Also, about one-quarter of rural boys reported that an influential parent discouraged them from attending college, whereas only 16 percent of rural girls reported such discouragement from a parent. Among urban youth of both sexes, over 18 percent had influential parents who discouraged college attendance. The gender difference in discouraging college attendance in rural areas is interesting and may reflect the continued reliance in rural areas on jobs in extractive industries, manufacturing, and low-level services where parents may not perceive a need for a college education. Such practices may also relate to the expectation among rural parents that if their son attends college he will not return home, but will find employment in another location. Daughters may not face the same discouragement because it is assumed that they would not even think about college, or because some jobs held by women in rural areas—teachers, nurses, or health-care workers—require education beyond high school but may not draw women away from home.

### School Characteristics and Extracurricular Activities Influence Attainment

School attributes may also influence students in completing high school and attending college. Dropout rates and daily student attendance measure the level of commitment or motivation that students in a particular school have

Table 1

**Weighted means for selected family background variables, 1979-90***Urban youth are more advantaged in terms of parental occupation and educational status*

Variable	Rural boys	Rural girls	Urban boys	Urban girls
Years				
<b>Dependent variables:</b>				
Educational aspirations in 1979	13.8	14.2	14.6	14.6
Educational attainment (as of 1990)	12.6	12.8	12.9	13.0
Percent				
<b>Independent variables:</b>				
<b>Family background—</b>				
Father attained some college	27.4	27.5	42.2	38.1
Father attained high school diploma	33.8	36.3	31.8	32.5
Mother attained some college	11.7	10.5	22.5	19.7
Mother attained high school diploma	50.2	48.1	43.6	43.0
Eldest sibling attained some college	11.9	10.1	13.0	14.6
Professional/managerial/technical father	17.2	18.0	22.9	21.5
Professional/managerial/technical mother	5.5	6.1	10.0	10.3
Biological family (respondent is 14)	80.9	75.3	69.5	69.5
One-parent family (respondent is 14)	7.9	10.3	16.8	16.6
Family has 4 or fewer members	42.8	44.2	43.2	44.9
Respondent's family was poor in 1979-82	14.9	14.2	15.1	14.8
<b>Family resources—</b>				
Parent did not encourage respondent to attend college	25.5	15.5	18.3	18.9
Scale, 1-3*				
Newspaper/magazine/library card	2.02	1.97	2.22	2.28

\*Receiving a newspaper or magazine or possessing a library card each counted as 1 point.

Source: National Longitudinal Survey of Youth, 1979-1990.

toward education, as well as that school's ability to inspire commitment and motivation in its students. Schools with high dropout and truancy rates are probably not maintaining an achievement-oriented learning atmosphere. Small schools may have limited resources, fewer counselors and teachers, and a less varied curriculum. Schools also vary in the quality of their teaching staffs, particularly regarding the amount of training teachers have received. Salary levels of beginning teachers also reflect the quality of a school's teaching staff and provide an overall indicator of a school's expenditures per student.

Schools also offer opportunities for children to become involved in extracurricular activities. School clubs involve obligations and expectations, serve as information channels for students, reinforce school norms, and are likely to be important for admission to college. Extracurricular activities may also require the participation of parents from time to time, increasing the potential for both parent-child (within and across families) and parent-parent interactions. This, in turn, brings people together and facili-

tates the formation of school and community connections and networks, a form of social capital. Extracurricular high school activities can also have different effects according to gender. High school team sports, for example, typically involve boys much more than girls. On the other hand, girls typically pursue activities that involve the formation of cultural capital—such as playing in a band or engaging in drama club—more often than boys. In either case, school activities help form social and cultural capital and encourage participants to become more embedded in and committed to their schools. Students may form higher aspirations and attain more years of education as a result.

Rural youth were more likely to have participated in student government; vocational clubs; band, orchestra, or drama clubs; and high school newspaper/yearbook activities than were urban youth of the same gender (table 2). For example, 41 percent of rural girls took part in vocational clubs, as opposed to 30 percent of urban girls; for rural and urban boys, the percentages were 35 and 18 percent.

Finally, the characteristics of the area in which the youth live can influence their attitudes and beliefs about the importance of educational attainment. Areas with higher family incomes, lower poverty rates, and higher educational attainment of adults may provide an atmosphere of strong support for higher levels of educational attainment. Such communities would also provide good role models, showing the advantages of staying in school.

**Combined Effects of Family Background, School Attributes, and Club Activity on Educational Attainment**

How does educational attainment differ for youth who have different family backgrounds and resources, attend different schools, participate in different extracurricular activities, and live in different types of communities? For the most part, the effects of local-area measures are small or nonexistent. But local-area indicators of median family income and percentage of adults with 4 or more years of college do have statistically important effects on the educational attainment of rural boys. In particular, rural boys gain additional years of school from living in communities

with higher percentages of college graduates. For example, if 13 percent of adults in the community (the mean on this variable for rural boys) are college graduates, there is a corresponding increase in educational attainment of nearly 6 months compared with communities where there are no college graduates; if 25 percent of adults are college graduates, the gain is roughly 1 additional year of school. Regarding rural females, the unemployment rate is positively associated with educational attainment, suggesting that young women may remain in school if they live in communities with higher unemployment.

Family background appears to matter more in the educational attainment of young women than young men. Parental education is very important in explaining the educational attainment of both rural and urban girls, and to a lesser extent, urban boys. Rural girls gain more from family background and resource measures than do urban girls. Having college-educated parents—and mothers in particular—pays big educational dividends to young women; even having high school-educated parents is beneficial compared with having parents who did not com-

Table 2  
**Weighted means for nonfamily variables, 1979-90**  
*Rural girls have the highest overall levels of participation in extracurricular school activities*

Variable	Rural boys	Rural girls	Urban boys	Urban girls
Percent				
<b>Independent variables:</b>				
<b>Extracurricular activities—</b>				
Participation in student government	10.7	18.7	10.4	16.8
Participation in hobby club	8.9	11.5	10.0	13.1
Participation in community club	8.2	10.6	11.1	11.1
Participation in vocational club	35.4	40.9	18.4	30.2
Participation in band/orchestra/drama	19.1	33.6	16.9	26.6
Participation in high school sports	48.5	35.6	44.9	37.4
Participation in honors club/society	10.7	19.7	12.1	17.7
Participation in yearbook/school newspaper	10.1	21.5	8.8	16.8
<b>Local-area measures (1980)—</b>				
Aged 25+, high school diploma	49.4	48.5	50.7	50.4
Aged 25+, college degree or more	13.1	13.7	16.2	16.2
Families with female head	13.9	14.2	18.0	17.9
Families living below poverty line	13.1	13.4	13.5	13.4
Unemployed	7.0	6.8	6.8	6.7
Rural	47.3	44.2	21.1	21.1
Dollars				
Median family income	18,625	18,854	20,306	20,386

Source: National Longitudinal Survey of Youth, 1979-1990.

plete high school. In contrast, parental education does not explain the educational attainment of rural boys. Rural and urban girls and urban boys benefit from having a father in a professional, managerial, or technical occupation, with rural girls gaining almost 10 months of school. Parental occupation is unrelated to the educational attainment of rural boys, however. Interestingly, having a parent discourage college attendance has no effect on the educational attainment of rural girls. But, a parent discouraging college attendance decreases attainment for the remaining three groups, with rural boys being more affected than either urban boys or girls. Last, family poverty is more detrimental to rural boys than to either rural girls or urban youth.

Extracurricular activities have an important impact on educational attainment. Despite the fact that we control for a variety of high school clubs, our results suggest that these club activities make statistically significant, independent contributions to overall educational attainment of all four groups. While their overall participation levels are high, rural girls gain the least, in terms of years of schooling, from participating in clubs. Only participation in an honors society increases educational attainment of rural girls. In contrast, rural boys gain from participating in sports, community clubs (like scouting or Junior Achievement), and honors clubs (there is a negative effect associated with participation in vocational clubs). Club activity especially increases the educational outcomes of urban girls, whose participation in student government; band/orchestra/drama activities; and hobby, community, and honors clubs is associated with higher educational attainment (again, girls who join vocational clubs usually finish fewer years of school). Finally, urban males gain additional schooling from participation in student government, community and hobby clubs, sports, and honors societies.

### Bundling Advantages Produces More Variation in Educational Goals/Attainment

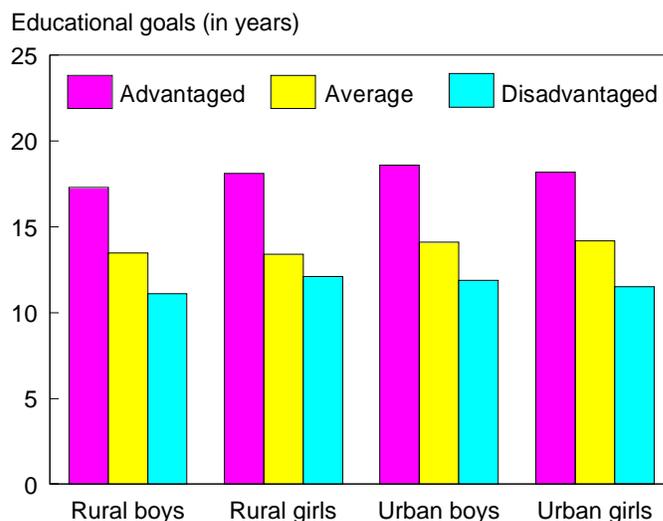
How do educational goals and attainment differ when we vary individual characteristics, family backgrounds and resources, involvement in extracurricular activities, and community characteristics? We combine characteristics to identify three hypothetical types of youth: advantaged, average, and disadvantaged. The advantaged youth is White, has college-educated parents employed in professional occupations who also provide high levels of family resources, attends a good high school (with well-paid, well-educated teachers, low dropout rates, and high student attendance), is in a college-prep curriculum, has high self-esteem, has a best friend with aspirations for a college degree, and participates in all types of clubs. The advantaged rural boy aspires to 17.3 years of school (fig. 2). Advantaged rural girls aspire to even higher amounts of education, 18.1 years. As high as these aspirations are, they lag those of urban youth, where advantaged boys

desire 18.6 years, and advantaged girls want 18.2 years of school, on average.

When we look at the average youth, educational aspirations in every group drop by about 4 years, the equivalent of a college education. The average youth is White; has parents who graduated from high school, are not employed in professional occupations, and provide some family resources; attends a good high school (with low dropout rates and high student attendance); is not in a college-prep curriculum; has a best friend with aspirations for “some college”; and does not participate in any clubs. Average rural youth aspire to roughly 13.5 years of school, regardless of gender, while average urban youth want just over 14 years of school (equivalent to an associate’s degree), again regardless of gender.

Disadvantaged youth have average educational aspirations that are, for the most part, below high school. Their parents have less than high school educations, are not in professional occupations, provide no family resources, and discourage their children from attending college. Disadvantaged youth attend poor schools, are not in college-prep classes, do not have educationally motivated friends, do not join clubs, engage in delinquent activities, and may become a parent while in high school. Disadvantaged rural boys aspire to just 11.1 years of school, while disadvantaged rural girls want 12.1 years, on average. Among urban disadvantaged youth, boys wish to complete 11.9 years of school and girls only 11.5 years of

Figure 2  
**Predicted educational goals**  
*Breakdowns by family background and school attributes produce more variation in educational goals*

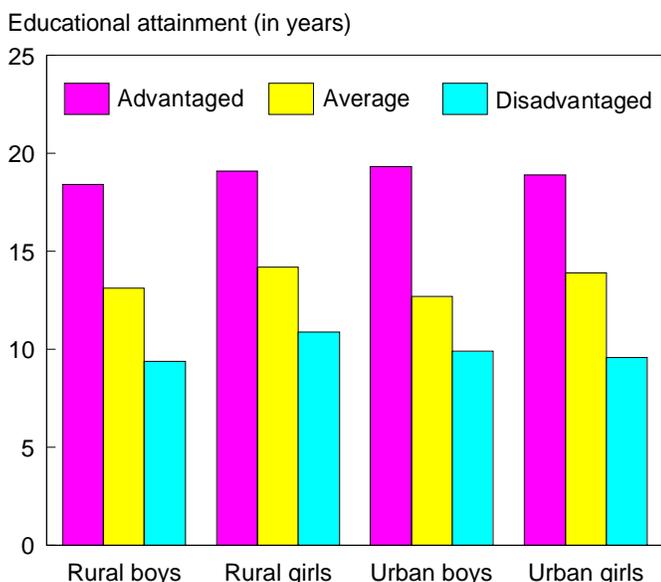


Source: National Longitudinal Survey of Youth, 1979-1990.

school. With the exception of rural girls, none of the disadvantaged groups aspires to a high school diploma.

Regarding educational attainment, advantaged rural boys are likely to complete an estimated 18.4 years of school on average, and advantaged rural girls have an estimated educational attainment of 19.1 years—clearly, well beyond a 4-year college degree (fig. 3). Advantaged urban youth will likely complete even more years of school: girls nearly 19 years and boys 19.3 years. Average rural boys can be expected to complete 13.1 years of school, more than high school but far less than any college degree. Average rural girls attain more schooling, 14.2 years. Among urban youth, average girls and boys will likely complete 13.9 and 12.7 years of school, respectively. Predicted attainments of disadvantaged youth are quite low: rural boys are likely to attain only 9.4 years of school; rural girls, 10.9 years; urban boys, 9.9 years; and urban girls, 9.6 years. The estimated attainments of both average and disadvantaged youth generally fall short of their goals. Advantaged youth, on the other hand, are likely to attain far more education than that to which they aspire. The result, among the under-achievers at least, may be a lingering frustration with the school system over unmet educational goals; they may conclude that school was not for them—and is not for their children as well. What these comparisons show is that the largest differentials in educational attainment occur within residence and gender groups.

Figure 3  
**Predicted educational attainment**  
*Family background and school attributes also result in gaps in completed schooling*



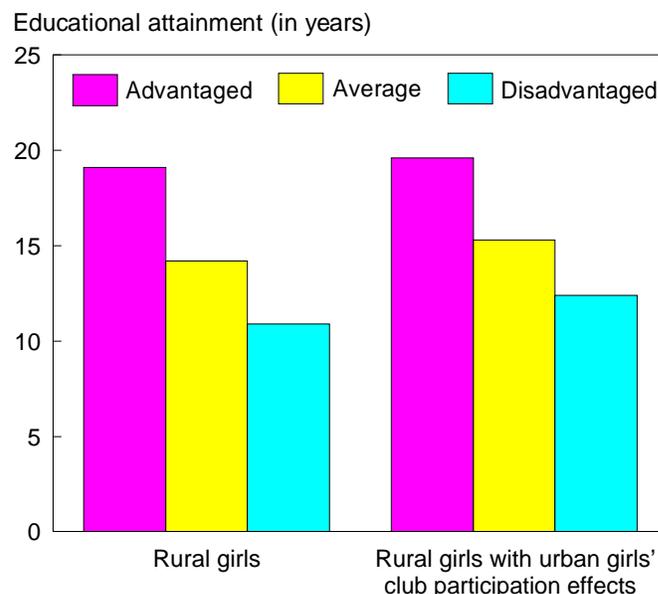
Source: National Longitudinal Survey of Youth, 1979-1990.

To further examine residential discrepancies, we asked what the estimated educational attainment of rural girls would be if they received the same educational benefits from participating in high school clubs that urban girls receive. Figure 4 shows predicted educational attainments for disadvantaged (10.9 years), average (14.2 years), and advantaged (19.1 years) rural girls (the same values shown in figure 3), along with adjusted predictions. An advantaged rural girl would gain one-half year of additional schooling (or a predicted total of 19.6 years). And if average rural girls took part in all school clubs (except honors) and benefited to the same extent as urban girls, the gain in schooling is over a year (to 15.3 years). Finally, disadvantaged rural girls would gain 1.5 years of school (attaining 12.4 years) and the equivalent of a high school diploma.

### Summary and Conclusions

Our results suggest that, for the most part, rural youth have only slightly lower educational aspirations than urban youth. Moreover, after adjusting for factors that influence educational attainment to varying extents across rural and urban settings, rural youth eventually attain similar levels of education as urban youth with the same characteristics. Different characteristics contribute to these patterns, however. Educational attainment for girls appears to be more closely tied to family background and resources than for boys. Daughters of highly educated parents are clearly more likely to obtain additional schooling, with rural girls being particularly advantaged. In contrast, family back-

Figure 4  
**Predicted educational attainment of rural girls**  
*Rural girls would attain more education if they benefited from club activities to the same extent as urban girls*



Source: National Longitudinal Survey of Youth, 1979-1990.

ground matters less for boys, suggesting that personal achievement or other factors may be more important in determining their educational attainment. Regarding rural boys, community education levels positively influence educational attainment, indicating that the presence of well-educated role models in the community is important for rural boys' educational achievement. Urban girls may represent some middle ground, where both family background and extracurricular activities play important roles.

While the overall educational attainment of rural and urban boys and girls is not very different on average, within both rural and urban areas there are huge gaps in educational attainment between those who come from advantaged situations and those who do not. There is a gap (of at least 8 years) in predicted completed schooling between the advantaged and disadvantaged youth in each setting. Policy efforts to increase educational attainment in rural and urban areas alike would be most fruitful if they focused on strategies to improve the educational goals and attainment of the youth from disadvantaged and average backgrounds. Such strategies should begin well before high school, as the discrepancy in goals in this study was seen for 10th-grade students. Strategies might include exposing grade school and junior high school children to successful adults as role models, and giving students access to such individuals on a regular basis. Extracurricular activities that include a number of other students' parents, or others from the community, may be useful in this regard. Additional resources for learning—books, magazines, access to libraries and computers—and reinforcement to use such resources might increase disadvantaged students' interest in school.

However, it appears that such programs must be combined with efforts to convince parents, as well as children, that higher educational attainment is a realistic goal for the child. Counseling for parents and children on the advantages of attaining additional education, combined with programs that inform parents about financial assistance and scholarship programs, may make college a realistic option for these families. Schools also could establish programs to assist all parents, but especially less-educated parents, with completing the rather complex applications for financial assistance and aid. Helping disadvantaged families realize that college attendance for their child is within their grasp may lead such families to encourage their children to stay in school and work hard.

There also appears to be a need for a re-examination of extracurricular activities in rural schools. Why do rural girls who participate in many extracurricular activities receive little additional benefit from being involved compared with urban girls in terms of schooling completed? Are the extracurricular activities for rural girls not geared to encouraging additional educational attainment or

investment in schooling? More detailed information on the types of activities carried out in extracurricular clubs might help explain this important difference in the benefits that clubs offer. Overall, our results suggest that all community members, especially those who have benefited from completing college, should take an active role in participating in school activities, especially with grade school and junior high school students. This participation can provide students with contacts and other adults with whom they can talk or discuss their dreams and goals, while providing successful role models. Such individuals may also be aware of programs that can help disadvantaged students obtain funding for college, or may provide another source of assistance in completing forms for college applications or financial aid.

### For Further Reading . . .

Lionel J. Beaulieu and Glenn D. Israel, "Strengthening Social Capital: The Challenge for Rural Community Sustainability," in Ivonne Audirac, ed., *Rural Sustainable Development in America*, New York: John Wiley & Sons, 1997, pp. 191-223.

Lionel J. Beaulieu and David Mulkey, "Human Capital in Rural America: A Review of Theoretical Perspectives," in Lionel J. Beaulieu and David Mulkey, eds., *Investing in People: The Human Capital Needs of Rural America*, Boulder, CO: Westview Press, 1995, pp. 3-21.

James S. Coleman, "Social Capital in the Creation of Human Capital," *American Journal of Sociology*, Vol. 94 Supplement, 1988, pp. S95-S120.

Daniel T. Lichter, Gretchen T. Cornwell, and David J. Eggebeen, "Harvesting Human Capital: Family Structure and Education among Rural Youth," *Rural Sociology*, Vol. 58, No. 1, 1993, pp. 53-75.

David A. McGranahan and Linda M. Ghelfi, "The Education Crisis and Rural Stagnation in the 1980's," in *Education and Rural Economic Development: Strategies for the 1990s*. AGES9153, USDA-ERS, 1991, pp. 40-92.

Rural Sociological Society Task Force on Persistent Rural Poverty, "Human Capital, Labor Supply, and Poverty in Rural America," in *Persistent Poverty in Rural America*, Boulder, CO: Westview Press, 1993, pp. 39-67.

Mark H. Smith, Lionel J. Beaulieu, and Ann Seraphine, "Social Capital, Place of Residence, and College Attendance," *Rural Sociology*, Vol. 60, No. 3, pp. 363-380.

## The National Longitudinal Survey of Youth

Our analyses are carried out using the data from the 1979 to 1990 surveys of the National Longitudinal Survey of Youth (NLSY). The NLSY is a nationally representative sample of 12,686 young men and young women who were 14 to 22 years of age when they were first interviewed in 1979. Oversamples of Blacks, Hispanics, and low-income Whites are also included in the sample. The initial survey collected detailed information on family background and resources, the influence of significant others, a locus-of-control scale, educational/occupational aspirations and expectations, and sex role attitudes. Subsequent surveys included questions on childhood residence and geographic mobility, delinquent behavior, and self-esteem. Detailed information was also obtained regarding high school experiences and activities (both respondent-specific and school-specific), and educational status and attainment. Additionally, separate data files indicate each respondent's current residence and childhood residence (at age 14), as well as environmental characteristics for the county or metro area of current residence, making the inclusion of local-area variables possible.

The variables are organized into the following categories.

### I. Respondent's Personal Characteristics

Female, White, Black, number of siblings, birth order, lived in the South at age 14, childhood religion, church attendance (in 1979), high school parenting, class rank, college-prep curriculum, educational goals in 1979 (attainment analysis only), self-esteem, traditional outlook toward women's roles, educational goals of closest high school friend, residential migration, school suspensions and expulsions, illegal activity in 1980.

### II. Family Background

Spanish spoken in childhood home, father's and mother's education and occupation (when respondent was age 14), eldest sibling's education, family structure at age 14, small family, poverty status (during 1979-82).

### III. Family Resources

Magazines, newspaper subscriptions, and library card (held or received by any family member, when respondent was age 14), parent did not encourage respondent to attend college.

### IV. Characteristics of the Respondent's High School

Public (vs. private), small school (fewer than 1,000 students), agricultural classes or trade/industrial classes available, daily attendance less than 89 percent, dropout rate 7 percent or more, 40 percent or more of students non-White, 60 percent or more of teachers with advanced degrees, (beginning) teacher salary indicator.

### V. Respondent's Extracurricular Activities

Vocational club, community club, hobby club, student government, sports, performing arts, honors club, newspaper/yearbook.

### VI. Local-Area Characteristics (1980)

Median family income, percentage of adults with high school diploma, percentage of adults with 4 or more years of college, percentage of families below poverty line, unemployment rate, percentage rural.

We split the sample into four different groups (rural boys, rural girls, urban boys, and urban girls) and ran the models separately. We limited our analyses to those respondents who were in high school at the time of the first survey (respondents who were age 14 through 17 in 1979). Rural residence was determined in the first year by asking where respondents were living at age 14; our urban observations were derived from those respondents who replied that they were living in a town or city, while all other respondents (those who said they lived in the country but not on a farm, or on a farm or ranch) were coded as rural. Given this definition, the NLSY contains about 1,200 respondents age 14-17 in 1979 living in a rural area at age 14.

We first predicted educational goals. We then determined the statistically significant variables in the model and used these variables to estimate a simplified, "reduced form" model. We used a two-step procedure to estimate educational attainment. The two-step procedure was carried out in the attainment analysis to control for the fact that some respondents were still enrolled in school at the time of their last interview. Accordingly, these respondents (approximately 400) were used in the first stage to predict the probability of being in school at the time of their last interview; the results of this analysis were used in the second stage, which excludes these respondents, to control for the selection effects associated with educational attainment. Tables showing the complete models are available upon request.

The coefficients that result from the "aspirations" and "attainment" models were then used to predict the educational goals and attainment values shown in figures 2-4. Predictions of educational attainment are insightful because, unlike group means, they take into account the effects of the many individual, family, school, and neighborhood variables known to influence educational attainment.