DOCUMENT RESUME

ED 211 292 RC 013 098

AUTHOR Hansen, David C.; Ross, Peggy J.
TITLE Education, Significant Others and Farm-Reared Adolescents.
PUB DATE 1 May 80
NOTE 23p.; Paper presented at the Annual Meeting of the North Central Sociological Society (Akron, OH, May 1-3, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Aspiration; Adolescents; *Career Choice; Career Counseling; Counselor Client Relationship; Educational Counseling; *Family Influence; Longitudinal Studies; Peer Influence; Principals; Rural Education; *Rural Youth; Secondary Education; Self Concept; *Socioeconomic Influences; *Teacher Influence; Young Adults.
IDENTIFIERS National Longitudinal Study High School Class 1972

ABSTRACT

Data from the National Longitudinal Study of High School Seniors (1972) were utilized to examine the effects of school personnel on educational and occupational decisions of farm-reared students. Information was gathered on 10 "significant others" grouped into 5 types: (1) ego--influence of self; (2) family--parents and relatives; (3) friends; (4) educators--guidance counselors, teachers, and principal; and (5) others--clergymen, state employment officers, and "other" adults. Respondents were asked to indicate the degree of influence that each significant other exercised on choice of high school curriculum and post-high school plans. Data indicated that students perceived teachers, guidance counselors, and school principals as having less impact on curriculum and post-high school plans than parents and friends. Family influences were the most salient. Status differences among farm youth did not explain most of the variation in the relatively small influence of school personnel on curriculum choice and future plans. Variations were only weakly predicted by ability. However, some variation by status did appear for specific post-high school activities. Farm youth of higher status backgrounds were more highly encouraged to continue college studies while those of lower status were more highly encouraged to take vocational/technical courses. (Author/CM)

Education, Significant Others and Farm-Reared Adolescents*

David O. Hansen
The Ohio State University

Peggy J. Ross, ESCS,
United States Department of Agriculture

Paper to be Presented at the Annual Meeting of the North Central Sociological Society, Akron, Ohio, May 1-3, 1980.

*The authors are grateful to Dr. Richard Study of ESCS/USDA for his computing assistance and to the USDA for free use of their data processing facilities.

"Education, Significant Others and Farm-Reared Adolescents"

The mandate that schools provide equal educational opportunity for all has generated considerable debate about the role of teachers and guidance counselors in setting life changes for youth. Researchers generally agree that school experiences affect subsequent occupational careers and by implication, earnings and life styles (Coleman, et al., 1966; Jencks, et al., 1972). However, there is less agreement about whether the effects are desirable or undesirable, or about how teachers and guidance counselors participate in this process.[1]

In this paper we assess the role of significant others in tracking the careers of farm reared youth in the U.S., and of the impact of several ascribed factors on that role.. The following questions are addressed:

1. Compared to others how important are educators in influencing the choice of high school curriculum?
2. Compared to others how important are educators in influencing post-high school plans?
3. To what extent do educators influence the choice of post-high school career activities? and
4. What factors predict variations in the influence of educators and other significant others on curriculum choice and post-high school plans?

Many writers argue that teachers either willfully or unwillfully discriminate against minority and other youth from less privileged backgrounds. Some base their assertions on an early observation by Warner, et al. (1944) that teachers' influence varies by student class origin (ex. Alexander and McDill, 1976). Others note that the effect of origin on teacher influences is mediated by scholastic achievement (Heyns, 1974). Various reasons have been advanced for differences in treatment of students including (1) unintended race or class biases, (2) differing parental pressures on school personnel, and (3) differing projections of chances in college based on past performance and family resources. Regardless of the causes, the consequences are similar: student behavior tends to conform to teacher expectations and becomes a self-fulfilling prophecy (Rosenthal and Jacobson, 1968). Teachers' expectations are associated with different types of school tracks (Rosenbaum, 1975).

The impact of ascribed background characteristics on the treatment of students by school personnel has also been discussed in the status attainment literature. Portes and Wilson (1976) argue that students are slotted into "insider" and "outsider" tracks. It has also been argued that they compete in different "contest" vs "sponsored" mobility systems (Portes, 1974) depending on their race and/or sex. These interpretations place the influence of school significant others within a broader context of different achievement routes.[2]

Several studies argue, to the contrary, that school personnel do not arbitrarily influence life chances. For example, Williams (1978) demonstrates that students socialize teachers with respect to educational ambition to a far greater extent than teachers influence students. Any independent effect of teachers on students is based on student performance (Williams, 1976). Similarly, Rehberg and Hotchkiss (1972) find that student counselors tend to spend more time with students not disposed to go to college than with those who are.

In this study, we examine the principal effects of school personnel on educational and occupational decisions of farm reared students. Previous studies reviewed the educational disadvantages of farm residents and farm workers (Fratoe, 1979; Flinn and Munoz, 1978). Occupational career disadvantages for rural youth have also been noted, especially for those from lower SES backgrounds (Ross, 1978). To what extent are these disadvantages an outcome of differential treatment by educators?

Data are from the National Longitudinal Study of High School Seniors initiated in 1972. It is sponsored and administered by the National Center for Educational Statistics (Levinsohn, et al., 1976). The sample was drawn in two stages, the first being schools and the second being students within them.[3] The base-year sample used in this study initially consisted of a 1,069 primarily sample schools and 19,144 students.

Farm youth were defined as those who listed their father's primary occupation as farming and who resided in small towns or rural areas. They totalled 692. Because this study was at least partially concerned with the unique effects of farm life on the socialization of youth, respondents who indicated that their fathers were farmers, but resided in cities of 50,000 or more inhabitants were eliminated.

The data are based on unbiased estimates of population parameters generated by a weighting procedure (Bailey, 1976). When unadjusted student weights are summed, they represent an estimate of the total number of students in the population and are appropriate parameter estimates. However, to reduce bias from instrument nonresponse, the weights were adjusted.[4] The adjustment involved separating the entire sample into weighting classes. These classes are homogenous groups with respect to the following survey classification variables: (1) race (white vs. non-while); (2) sex (male vs. female); (3) high school curriculum (general academic vs. vocational-technical); (4) high school grade (B or better vs. C or below); and (5) parents' education (less than high school graduate, high school graduate, some post-high school, college graduate).

Indicators

Variables treated in this study were operationalized using measures developed by staff of the research Triangle Institute of North Carolina (Levinsohn, 1978; Danteman, Peng and Holt, 1975).

Perceived Significant Other Influences on Post-High School Plans

Information was gathered on ten significant others. They are grouped into five types: (1) ego-influence of self; (2) family-parents and relatives; (3) friends; (4) educators-guidance counselors, teachers and principal; and (5) others-clergymen, state employment officer, and "other" adults. The respondent was asked to indicate the degree of influence that each significant other exercised on post-high school plans. Response alternatives were: not at all-1, somewhat-2, and a great deal-3.

Perceived Significant Other Influences on Post-High School Curriculum Choices

This set of variables was measured by asking students to rank the importance of significant others in the choice of their high school curriculum. Again, three alternative responses were possible: not important-1, somewhat important-2, very important-3. The significant other references are almost identical to those used for post-high school plans and are similarly grouped.

Perceived School Personnel Influences on Post-High School Activities

Five activities open to students after high school were listed: (1) college plans; (2) vocational plans; (3) apprenticeship plans; (4) military plans; and (5) job plans. Students were asked to indicate whether their teachers or counselors discouraged them-1, didn't try to influence them-2, or encouraged them-3, with respect to each.

Socioeconomic Status

An index elaborated by Levinsohn, et al., (1978) was used to measure this variable. It is an equally weighted linear composite of father's education, mother's education, father's occupation, family income, and possession of a set of household items. The distribution was grouped into three categories: High, Middle, Low.

Ability

A sum of scores from four tests of academic ability was used to operationalize this variable. They were reading, letter groups, vocabulary and mathematics. A factor analysis indicated that one general factor loaded highly on each of them (Levinsohn, et al., 1978). Scores were also grouped into three categories: High, Middle, Low.

Gender

A self-reported classification of sex was used to measure this variable. Male was assigned a score of 1; female was assigned a score of 2.

Results

Means for the perceived influence of significant others (SOs) on curriculum choice and coefficients for the regression of each on socioeconomic status, ability and gender are found in Table 1.[5] Means indicate the relative importance that can be attributed to each SO influence. Obviously, students feel that

self-assessment of their situation and preferences is most important in choosing a curriculum. The choice is rational and conscious. Of course, self-assessment may be influenced in part by interaction with SOs as argued by Clark (1960) among others. If so, however, the magnitude of these SO influences should be reflected in other means.

Table 1: Perceived Significant Other Influence in Curriculum Choice: Magnitude and Causes

Significant Others	SES[a]	IQ[a]	SEX[a]	$\bar{X}$
(1) Self	-.130	.082	-.024	2.865
(2) Family				
Parents	.023	-.156	.113	2.134
Relatives	-.077	-.153	.088	1.312
(3) Friends	.012	-.013	.177	1.828
(4) School				
Teachers	-.049	-.102	.023	1.528
Guid.Counsel.	-.041	-.130	.016	1.671
Principal	-.046	-.132	.060	1.261
(5) Others				
Adults	-.001	-.131	.056	1.326
Clergymen	.000	-.141	.081	1.118

[a]Statistics are standardized regression coefficients.

SES - Socioeconomic Status

IQ - Ability

SEX - Gender

Teachers, guidance counselors and school principals were perceived by students to have less impact on curriculum choice than parents and friends. The finding agrees with results presented by Picou and Carter (1976) from a southern regional study. The relatively low values of the means imply that students attribute little importance to educators' influence on choice.[6]

In evaluating the determinants of educators' influence, the data indicate that they are substantially affected only by student ability. Lower ability students are more likely to be influenced by school SOs than are higher ability students. This probably reflects the greater attention given to lower achievers by student advisors (Rehberg and Hotchkiss, 1972). However, ability is probably a general determinant of SO influence because the regression of other adult SO influences on ability yields similar results. Students who perform poorly in the classroom perceive greater adult influence than those who have better performance.

Girls tend to feel that SOs have more influence over their curriculum choice than boys. Gender differences in perceived influence levels are greatest for parents and friends. Why this is so cannot be ascertained from these data. However, it is speculated that farm girls are more oriented to their primary groups than farm boys. Individualism, independence and self-reliance are important components of the agrarian ethic (Buttel and Flinn, 1975) but boys maybe more socialized to these values

at a younger age than girls. Girls may be more dependent on their family and other primary groups before marriage and on their husbands after marriage.

Data in Table 2 indicate a similar pattern of influence of SOs on post-high school plans. Farm origin students also believe that they influence these plans to a greater extent than other SOs. Next in order of importance are parents, friends, relatives, and other adults. The influence of adults on student post-high school aspirations is probably of two types. Students view them as "models" as well as "definers" of post-high school activities (Haller and Woelfel, 1972). Obviously the model effects of these same SOs are nonexistent for curriculum choice, since adult SOs are no longer in school.

Table 2: Perceived Significant Other Influence on Post-High School Plans: Magnitude and Cause

Significant Others	SES[a]	IQ[a]	SEX[a]	$\bar{X}$
(1) Self	.006	.071	-.044	2.937
(2) Family				
Parents	.042	-.044	.021	2.398
Relatives	-.085	-.116	.023	1.798
(3) Friends	.004	-.211	.217	1.992
(4) School				
Teachers	-.025	-.036	.042	1.599
Guid.Counsel.	-.026	-.038	-.025	1.625
Principal	.021	-.106	.036	1.147
(5) Others				
Adults	-.066	-.115	.124	1.714
Clergymen	.038	.063	.075	1.130
State Emp.Ofc.	.020	-.136	.099	1.071

[a] Statistics are standardized regression coefficients

SES - Socioeconomic Status

IQ - Ability

SEX - Gender

As was true for curriculum choice, the amount of influence exercised by SOs on plans is not predicted by socioeconomic origin. None of the coefficients so SO influence on SES were greater than 0.10. Ability, on the other hand, does predict influence levels, although less consistently than was true for curriculum choice. Lower ability students are more highly influenced in developing their plans, but the relationship is not substantively significant for parents, teachers or guidance counselors.

However, students perceive friends to exercise different levels of influence over their plans. Girls are more prone to follow the advice of friends than are boys. As was speculated earlier, this may be due to their greater reliance on primary groups for orientation. Lower IQ students also rely more heavily on orientation from friends than do higher IQ students.

In Table 3 are data about the degree of influence that students perceive teachers and guidance counselors to exercise over several possible alternative post-high school activities. Congruent with their own vocation and the nature of their interaction with students, educators encourage educational plans most. They are slightly encouraging with regard to apprenticeship plans and, on the average, discourage students from entering the military or taking a job more than they encourage them to do so. These results suggest that educators do not "cool out" farm youth. Rather, they are supportive of continuing educational plans.

Table 3: Educators Influence on Post-High School Activity: Magnitude and Causes

Activity Plans	SES[a]	IQ[a]	SEX	$\bar{X}$
College Plans	.222	.109	.000	2.658
Vocational School Plans	-.252	-.206	.039	2.402
Apprenticeship Plans	-.091	-.117	-.181	2.066
Military Plans	.058	.023	-.138	1.933
Job Plans	-.128	-.183	.067	1.926

[a]Statistics are standardized regression coefficients

SES - Socioeconomic Status

IQ - Ability

SEX - Gender

Differences in levels of encouragement, however, are apparent for different socioeconomic origin and ability level students, and for boys and girls. The regression coefficients imply that higher status and higher ability students are more encouraged to attend college. Socioeconomic status is the more important predictor which suggests that educators may indeed show greater preferences to higher class students independent of ability. However, the bias is only in type of education deemed most appropriate. Lower status and lower ability students are more highly encouraged to undertake training in vocational/technical programs after

graduating. Educators may deem this type of training most appropriate for them since it is less expensive and less intellectually demanding.

Lower socioeconomic origin and lower ability students also were discouraged less from starting to work after high school either as apprentices or in regular jobs, than were their higher status and ability counterparts. This pattern, again, is probably congruent with the plans students have formulated for themselves.

Finally boys were discouraged less than girls to enter the military service or to take an apprenticeship. Obviously neither option was viewed as a desirable choice by educators. However, they were probably discerned to be less viable for females. This may result from the tendency to identify military and craft occupations as masculine-oriented.

Conclusions and Discussion

Several tentative conclusions emerge from these data. Perhaps the most salient is that farm origin students perceive that teachers and guidance counselors exercise little influence over their career choices. They are relatively less important SOs in choice of high school curriculum and in forming post-high school plans than are family and friends. This finding agrees with those of Woelfel (1972) and Picou and Carter (1976) for small town and rural samples. Family influences are the most important salient (Mueller, 1974).[7]

Most of the variation in the relatively small influence of school personnel on curriculum choice and future plans is not explained by status differences among farm youth. And, hey are only weakly predicted by ability. It is possible that the impact of parental education and income differences are minimized by the general effect of farm background (Nelson and Storey, 1969). However, some variation by status did appear for specific post-high school activities. Farm youth of higher status backgrounds were more highly encouraged to continue college studies while those of lower status were more highly encouraged to take vocational/technical courses.

To the extent that farm students expect to remain in farming, the pattern of counselling emerging from these data may be desirable. Those who stand to inherit small farm operations can use additional vocational/technical training to enter the nonfarm employment sector. Their ability to compete with owners of large enterprises as full-time farmers is limited and they may subsequently wish to leave farming or only farm on a part-time basis. Those who will inherit large operations, on the ohter hand, would enhance their ability to eompete with other farmers and farm corporations by getting a college education. Thus, teachers and guidance counselors may unwittingly provide positive inputs into the career decision-making process of farm youth, and in this way, reduce incongruencies that exist between aspirations and market realities (Geurin, et al., 1977; Jordan, Golden and Bender, 1967). To the extent that farm parents have a

more limited knowledge of alternative opportunities, inputs by educators increase in importance and should ideally be independent of parental influence.

Footnotes

1. For summaries of arguments about the goodness or badness of the effects, see Alexander, Cook and McDill, 1978: 62-64. Schafer and Alexis, 1971: 10-14. And Cicourel and Kitsuse, 1963: 4-12.

2. Other studies with rural samples have yielded similar conclusions (see DeBord, Griffin and Clark, 1977).

3. Schools were stratified according to six variables: type of control, region, senior class size, proximity to instruction of minority enrollment, community income level, and level of urbanization.

4. Unadjusted student weights were computed from increases of the sample inclusion probabilities expressed as the following:

$$P_{hi} = n_h \left(\frac{A_{hi}}{A_h} \right)$$

n_h = number of schools in the final sample for stratum h;

A_{hi} = size measure for school i of stratum h

A_h = sum of size measures for all schools in stratum h

With the adjustment procedures, students from whom data were not collected were assigned a weight of 0, and other students were assigned

adjusted weights were calculated as:

$$W_{uhij} = \frac{1}{P_{hi}} \cdot \frac{N_{hi}}{n_{hi}}, \text{ where}$$

N_{hi} = number of senior students in school hi and

n_{hi} = number of sample students in school hi

5. Given the large N on which the regressions are based, it makes little sense to evaluate statistical significance. Rather substantive significance will be attributed to coetficients of 0.10 or greater.

6. The mean lies between scores attributed to responses indicating "not important" and "somewhat important".

7. This, of course, does not down play the importance of tracking itself. The type of curriculum followed by students greatly determines their chances for continuing into a four year college degree program.

References

Alexander, Karl L., Martha Cook and Edward McDill

1978 "Curriculum Tracking and Educational Stratification: Some Further Evidence." American Sociological Review 42 (February): 47-66.

Alexander, Karl L. and Edward L. McDill

1976 "Selection and Allocation within Schools: Some Causes and Consequences of Curriculum Placement." American Sociological Review 41 (December): 963-980.

Cicourel, Aaron V. and John I. Kitsuse

1963 The Educational Decision-Makers. New York: Bobbs-Merrill.

Clark, Burton

1960 "The Cooling Them Out Function in Higher Education." American Journal of Sociology 65 (May): 569-576.

Coleman, James S., E.Q. Campbell, C.J. Hobson, J. McPortland, A.M. Mood, F.D. Weinfeld and R.L. York

1966 Equality of Educational Opportunity. Washington, D.C.: U.S. Government Printing Office.

Bailey, J.P.Jr.

1976 "The National Longitudinal Study of the High School Class of 1972." Paper presented at the Meeting of the North Carolina Association for Research in Education, Winston-Salem, N.C., May, 1976.

DeBord, Larry W., Larry Griffin and Melissa Clark

1977 "Race and Sex Influences in the Schooling Processes of Rural and Small Town Youth." Sociology of Education 42 (April): 85-102.

Buttel, Frederick H. and William L. Flinn

1975 "Sources and Consequences of Agrarian Values in American Society." Rural Sociology 40 (Summer): 134-151.

Dunteman, G.H., S.S. Peng and M.M. Holt

1975 Composite Score Analyses: Ability Index, SES Index, Some Psychological and Educational Construct Scales. Research Triangle Park, North Carolina: Research Triangle Institute.

Flinn, William L. and Robert D. Munoz

1978 "Changes in the Educational Levels of Farmers and Farm Managers." Socio-Economic Information for Ohio Agriculture and Rural Communities (April): 3-4.

Fratoe, Frank A.

1979 The Educational Level of Farm Residents and Workers. Washington, D.C.: USDA/EDD/ESCS, Rural Development Research Report No. 8.

Geurin, Virginia, J.M. Redfern, B.L. Green and M.J. Grinstead-Schneider

1977 Adjustment to Modern Society by Youths from Rural Areas: A Longitudinal Analysis, 1965-71. Fayetteville: Agricultural Experiment Station Bulletin 820.

Haller, Archibald O. and Joseph Woelfel

1972 "Significant Others and Their Expectation: Concepts and Instruments to Measure Interpersonal Influence on Status Aspirations." Rural Sociology 37 (December): 591-622.

Heyns, Barbara

1974 "Social Selection and Stratification within Schools." American Journal of Sociology 79 (May): 1434-1451.

Jencks, Christopher, M. Smith, H. Acland, M.J. Bane, D. Cohen, H. Gintis, B. Heyns and S. Michelson

1972 Inequality: A Reassessment of the Effect of Family and Schooling in America. New York: Bas Books

Jordan, Max F., James F. Golden and Lloyd D. Bender

1967 Aspirations and Capabilities of Rural Youth in Relation to Present and Projected Labor Market Requirements. Fayetteville: Agricultural Experiment Station Bulletin 722.

Levinsohn, J., L.B. Henderson, J.A. Riccobono and R.P. Moore

1978 National Longitudinal Study Base Year, First, Second and Third Follow-up Data File User Manual. Washington, D.C.: U.S. Government Printing Office.

Mueller, E. Jeanne

1974 "Rural Family Life Style and Son' School Achievement." Rural Sociology 39 (Fall): 362-372.

Nelson, Hart M. and Stuart E. Storey

1969 "Personality Adjustment of Rural and Urban Youth: The Formation of a Rural Disadvantaged Subculture." Rural Sociology 34 (March): 43-55.

Picou, J. Steven and T. Michael Carter

1976 "Significant Other Influence and Aspiration." Sociology of Education 49 (January): 12-22.

Porter, James N.

1974 "Race, Socialization and Mobility in Educational and Early Occupational Attainment." American Sociological Review 39 (June): 303-316.

Portes, Alejandro and Kenneth L. Wilson

1976 "Black-White Differences in Educational Attainment." American Sociological Review 41 (June): 414-431.

Rehberg, Richard A. and Lawrence Hotchkiss

1972 "Education Decision-Makers." The School Guidance Counselors and Social Mobility. Sociology of Education 45 (Fall): 339-361.

Rosenbaum, James E.

1975 "The Stratification of Socialization Processes." American Sociological Review 40 (February): 48-54.

Rosenthal, Robert and Lenore Jacobson

1968 Pygmalion in the Classroom: Teacher Expectation and Pupils' Intellectual Development. New York: Holt, Rinehart and Winston.

Ross, Peggy J.

1978 "Educational and Occupational Profiles for U.S. High School Seniors in the Class of 1972." Paper presented at the Annual Meeting of the Southern Association of Agricultural Scientists, Houston, Texas, February.

Schafer, Walter E. and Carol Olexis

1971 Tracking and Opportunity: The Locking Out Process and Beyond. Scranton: Chandler.

Warner, W. Lloyd, Robert J. Havighurst and Martin Loeb

1944 Who Shall be Educated? New York: Harper.

Williams, Trevor

1978 "Educational Ambition: Teachers and Students." Sociology of Education 48 (Fall): 432-456.

1976 "Teacher Prophesies and the Inheritance of Inequality." Sociology of Education 49 (July): 223-236.

Woelfel, Joseph

1972 "Significant Others and Their Role Relationship to Students in a High School Population." Rural Sociology 37 (March): 86-97.