

DOCUMENT RESUME

ED 168 768

RC 011 246

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**TITLE** Social Inequality and Educational Achievement in Rural America.  
**INSTITUTION** Texas A and M Univ., College Station. Texas Agricultural Experiment Station.  
**SPONS AGENCY** Department of Agriculture, Washington, D.C.; National Inst. of Education (DHEW), Washington, D.C.  
**PUB DATE** Apr 79  
**GRANT** NIE-G-76-0072  
**NOTE** 21p.; Publication contributes to USDA Cooperative State Research Service Southern Regional Project 2-114, "Defining and Achieving Life Goals: A Process of Human Resource Development"; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, California, April, 1979)

**EDRS PRICE** MF01/PC01 Plus Postage.  
**DESCRIPTORS** \*Academic Achievement; Adolescents; Aspiration; Blacks; \*Career Choice; Caucasians; \*Comparative Analysis; \*Educational Attitudes; Educational Background; Educational Status Comparison; Females; Males; Marital Status; Objectives; \*Occupational Aspiration; Place of Residence; Rural Areas; Rural to Urban Migration; \*Rural Youth; Social Background; Young Adults  
**IDENTIFIERS** \*United States (South)

**ABSTRACT**

Career and career related preference expressed by a number of rural Southern high school youth were found to moderately predict their early adult behaviors. Preferences for post high school education were the dominant influence and single best predictor of subsequent educational attainment. Moderate linkages were also found to exist between preferences for early marriage, residence, and military service with the corresponding early adult behavior. These findings resulted from a study of a broad population of rural Deep South youth over a six year period. Three sets of social surveys followed the same individuals from the high school sophomore year in 1966 into young adulthood, four years past high school. Responses were gathered on career preferences, educational aspiration, marriage plans, and fertility and residential expectations, with the final phase of the survey seeking data on actual educational and residential attainment, marital status, and fertility. Whether male or female, Black or White, an overwhelming number of the rural youth shared the American success dream of high educational attainment and career preference. Blacks, however, consistently were less likely to enact their preferences, due to such possible causes as differential opportunity, barriers, knowledge and racism. Black rural students were more likely at both the senior year and early adult period to hold residential preferences (in effect migration preferences) to urban residences. (DS)

Arthur Cosby

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Social Inequality and Educational Achievement in Rural America<sup>a</sup>

by

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Introduction

The process through which youth develop preferences and make decisions about critical life issues and the ways in which they translate these into actual adult behavior has been an enduring concern among educators and social scientists. How and what kind of preferences do youth develop for educational achievement, occupational attainment, residence, marriage, and fertility? How and to what degree are they able to translate these into actual achievements? As a research question, the problem is especially acute among groups which have historically experienced lower achievement and attainment: the poor, ethnic and racial minorities, women and rural populations. An improved understanding of this complex phenomenon of "taking on the adult role: is essential for efforts directed toward the reduction of societal inequalities".

This paper examines the relationship between choices and actual behaviors, and how new choices develop during adulthood. It focuses on a broad population of rural Deep South youth, both Black and White, both male and female, at a critical point (circa 1966-1972) in the historical development of education in that region. The general strategy of the study utilizes sets of social surveys carried out over a six-year period beginning in 1966 which follow the same individuals into adulthood during the early 1970's. This period is an especially strategic one since it overlaps several fundamental changes in Southern society. Of prime importance during this time was the intense drive for racial equity as reflected in the civil rights movement, the subsequent forced desegregation of public schools, and to some degree, the height of school consolidation.

<sup>a</sup>Paper prepared for the Division G Symposium "Research on the U.S. Rural School and Its Adolescent Clients", at Annual Meeting of the American Educational Research Association, San Francisco, California, April 1979. The paper is based in part on the research monograph, Education and Work in Rural America: The Racial Context of Early Career Decisions and Achievement, Arthur G. Cosby and Ivan Charner (eds.) and with the contributors William W. Falk, William G. Howard, Frank M. Howell, Virginia P. McDermott, J. Steven Picou and John K. Thomas. This research was conducted under the auspices of grants from the Home, Community and Work Group, National Institute of Education, Department of Health, Education, and Welfare (NIE-G-76-0072) and from the Texas Agricultural Experiment Station, Texas A&M University (TAES 3141) and Cooperative State Research Service, United States Department of Agriculture, Project S-114. Data for analysis was obtained by pooling information collected by the Agricultural Experiment Stations of Alabama, Georgia, Louisiana, Mississippi, South Carolina, and Texas. However, the opinions expressed herein do not necessarily reflect the position of the above agencies, and no official endorsement should be inferred.

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It can, therefore, be assumed that analysis of the choices and attainments of this special population will allow for insights into career decisions and achievements within a context of rapid social change particularly where minority youth were perhaps perceiving increased opportunities, improvement of educational facilities, and, in general, a period of rising expectations.

### Rural Youth and Inequalities

It is legitimate to ask, "Why should the issue of social inequalities be raised in relationship to the rural youth population?" How is this population similar to other groups or aggregates such as Blacks, Mexican American, Native Americans or Women who are recognized as not sharing equally in opportunities available to other Americans? In addressing this issue, it should be first recognized that the U.S., and in fact most rural populations, have historically and are currently experiencing more problems of poverty, illiteracy, malnutrition, unemployment, and associated social difficulties than contrasting metropolitan groups (Hassinger, 1978). In terms of social indicators, the rural population along with the inner city consistently emerge as locals with continuing and serious difficulties. Of the two, it seems clear that the preoccupation and concern has been with the urban - the crisis of the cities. Subjectively, rural problems are somewhat invisible. The dispersed nature of rural life with few people in any single locale makes it relatively impossible to experience rural poverty as dramatically as that produced by a single visit to an urban slum or ghetto. The urban emphasis extends to education. Sher (1978) pointing to neglect of rural schools by the federal government argues that 1) contrary to public opinion, the rural sector is a major U.S. educational constituency; 2) that rural educational issues and institutions have not been treated equitably and appropriately by federal education agencies; and paradoxically 3) that federal aid is designed to benefit disadvantaged or special need populations. Interestingly, this symposium on rural schools is a novel session for the American Educational Research Association.

Without going into the intricacies of rural social problems, it seems safe to say that for most rural Americans, rural society does not offer the "general opportunity structure" available to urban populations in urban society. Perhaps the most evident difference in rural-urban opportunity structure occurs in the nature of the sharply differing economic and occupational structures associated with place of residence. The rural economy often centers around agricultural production and services which support such production, while the urban economy is, by comparison, extremely diversified with a wider range of goods and services. One difference is that the rural occupational structure is relatively undifferentiated in terms of types of occupations, whereas the urban structure has a substantially larger universe of occupational types, reflecting both a greater diversity and specialization in work roles (Lipset, 1955: Lipset and Bendix, 1959).

At the individual level these varying occupational structures may have negative implications for rural youth in their competition for available jobs. Obviously, if rural youth choose to remain in rural locale, there will be fewer types of jobs that they can realistically consider. The historical trend has been for rural youth to migrate in large numbers to the city seeking jobs. There has been a growing realization that the growth of urban ghettos and slums has been one product of this long-term

process. Nevertheless, this suggests that for much of U.S. history, rural youth have perceived the urban area as having a more favorable job market. Migration as a type of social behavior is a disparity factor in and of itself, because it represents a difficult and disruptive prerequisite for rural youth seeking employment, but not for the urban. The rural youth who migrates must learn to cope with what may be a new and strange urban environment at the same time he or she is competing for jobs.

### The Conceptual Model

Now to the research proper, the focus of the empirical analysis in the subsequent pages of this paper is an investigation of the processes through which careers and career-related preferences are developed during adolescence. The influence that such attitudes may have upon early adult behaviors is examined as well as the consequences that these factors collectively have upon the reformulation of new career and career-related preferences in young adulthood. In Figure 1 the conceptual model is depicted. It serves as a guide for the analysis by pointing to the general processual order of influences to be considered and to the general types of variables that will be incorporated. The model is based upon research literature stressing life-cycle changes brought to the forefront in developmental theory in Psychology and status attainment theory in Sociology. Its underlying assumption is that career decision making is carried out in conjunction with social maturation; and as such it is a highly dynamic process subject to different sets of influences at each new point in an individual's life cycle (see Falk, 1978 for an extended discussion of theoretical issues).

The model specifically addresses a number of research issues concerning the maturation process which occurs during late adolescence and early adulthood. It explicitly points to possible influences of social origins and school tracking upon adolescent career preferences. It addresses the question that once these attitudes are developed, to what extent can youth translate them into actual adult behaviors? And, given the probable mediating influence of early adult maturation and experiences, how are these same types of attitudes reformulated?

At every point in the analysis that research investigates relationships among the varied influences in the career decision making model, an accompanying comparative issue is empirically assessed. Examination is made of the maturation process and whether it differs with respect to sex and race of the respondents. That is, does the career decision making process differ substantially at any point or perhaps in its totality for men and women or for Blacks and Whites?

### The Southern Youth Study

Data for the career decision model was obtained from the Southern Youth Study (SYS). The SYS is a longitudinal survey of rural youth in the deep south states of Alabama, Georgia, Louisiana, Mississippi, South Carolina and Texas. To date, three waves of data have been collected from panel members - fourth wave data collection is currently under way. The original data was collected via group interviews with high school sophomores in 1966; a second senior wave interview was conducted in 1968; and an early adult wave was collected in 1972 when most of the students were four years out of high school. Purposive sampling procedures were

Figure 1: A Study Model of Career Decision Making Processes

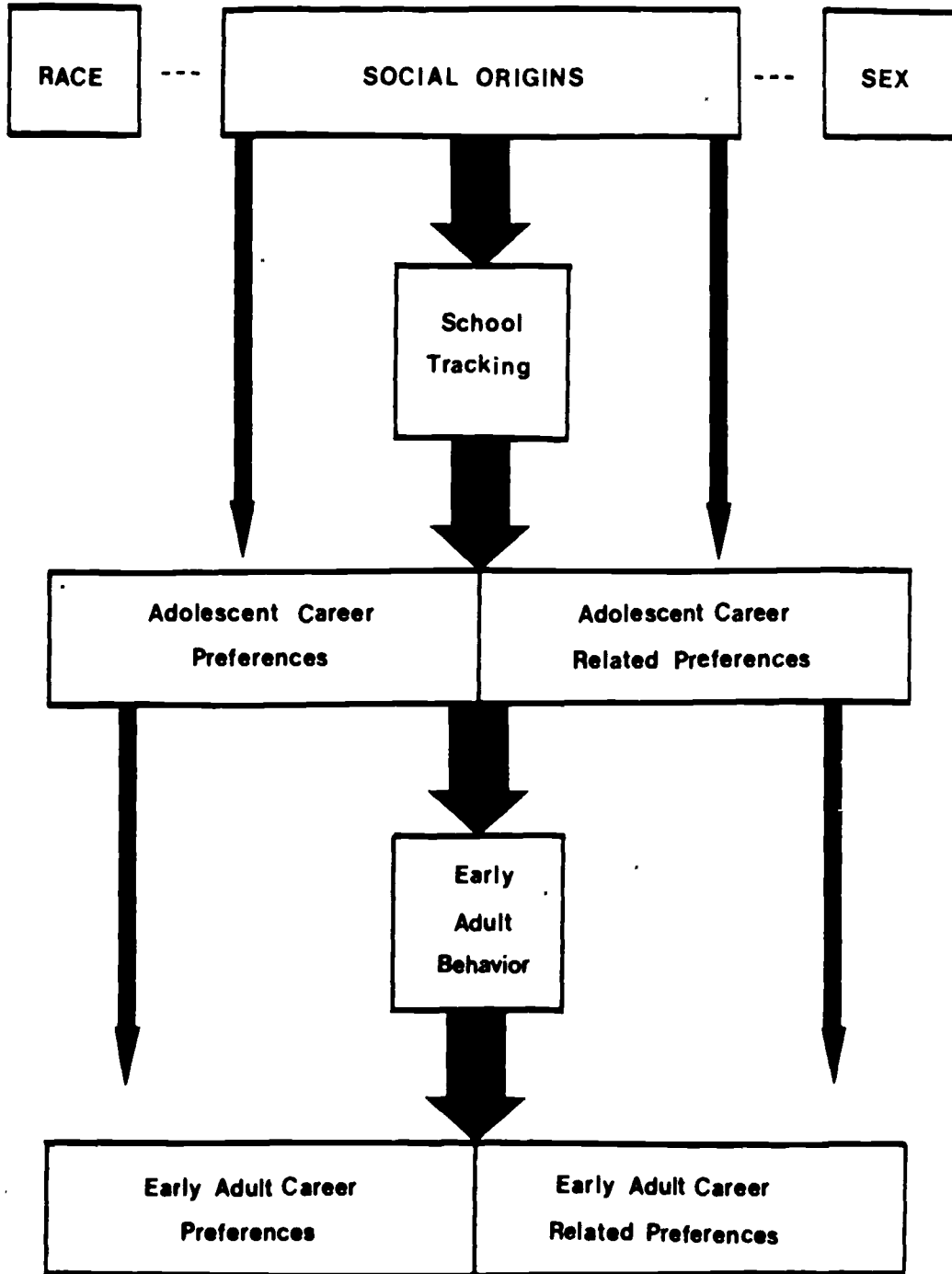
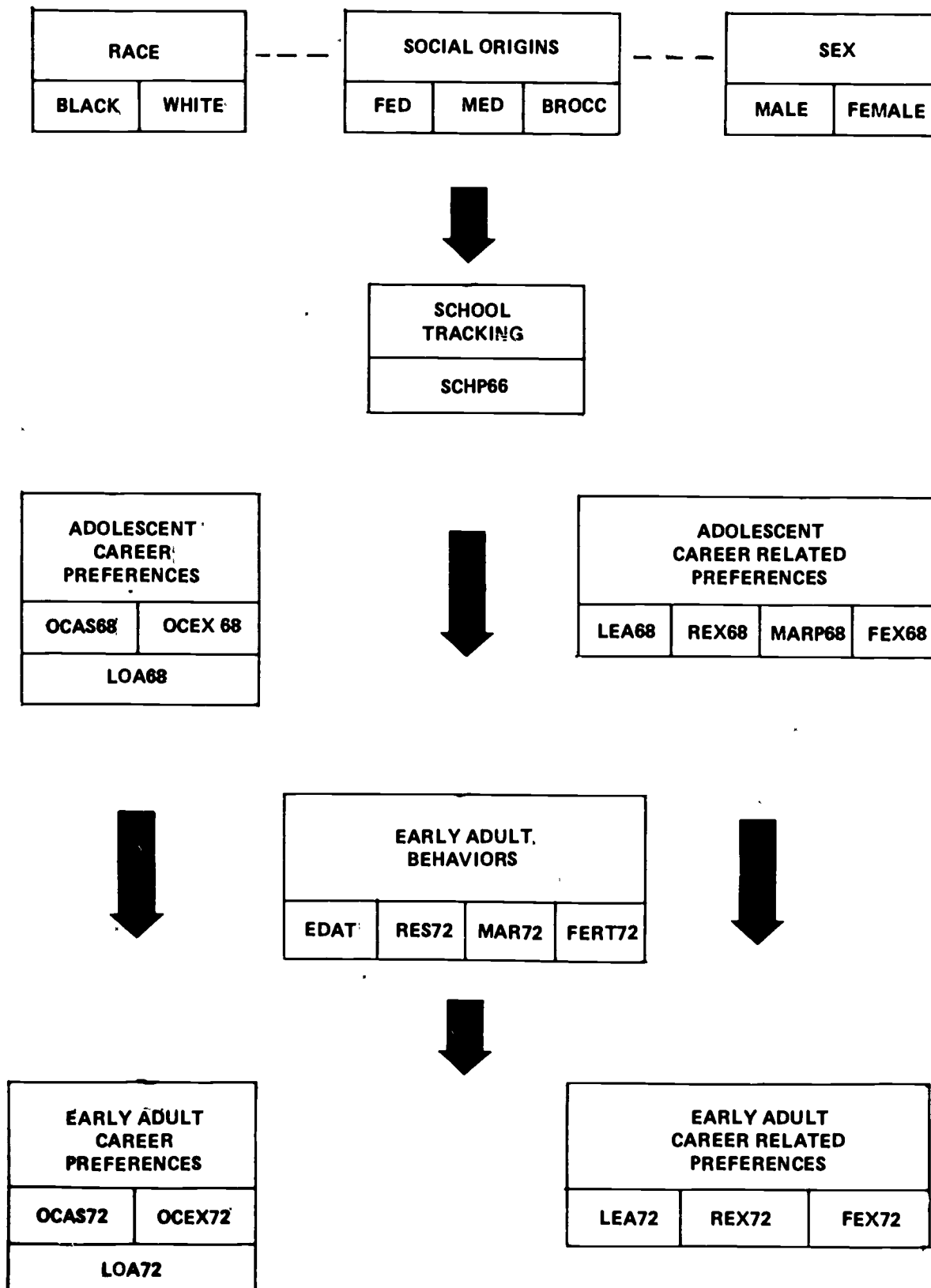


Figure 3: STUDY MODEL



used to select schools that generally designated the inclusion of schools in rural counties, that were relatively poor and that had a relatively high percentage of black students (see Thomas, 1978 for a detailed discussion of the study design). Because of difficulties in comparability of data, the present report has necessarily excluded the Mississippi data and consequently the analysis is based on information from the other five states. The resulting data file consists of 1052 students with race/sex ratios of 42.6% black, 57.4% white and 58% male and 42% female.

In figure 2, the study model is elaborated in terms of specific indicators. Each of these variables were operationalized in the following manner:

### Social Origins

#### RACE (Race of Respondent)

In 1966, respondents were asked, "What is your race?" In addition, a second question was asked, "Are you of Spanish-American Origin? The responses to these two questions were coded: (1) American Indian; (2) Oriental; (3) Negro; (4) Caucasian; and (5) Spanish American. The respondent circled one of these categories. Only Negroes and Caucasians have been selected.

#### SEX (Sex of the Respondent)

Each panel member indicated their gender on the 1966 survey.

#### FED (Father's Educational Attainment)

Father's education was determined initially by asking in 1966, "What is the highest school grade completed by your father?" If no response was given, the grade reported by the respondent in 1968 to the same question was coded. The nine fixed education levels were: (1) Did not go to school; (2) Grades 1-7; (3) Eighth grade; (4) Some high school but did not graduate; (5) Graduated from high school; (6) Went to vocational school after graduating from high school; (7) Some college but did not graduate; and (8) College graduate. Whenever discrepancies arose between the educational level reported in 1966 and in 1968, the information in the latter year was coded because of the respondent's increased likelihood of having more accurate knowledge about his or her parents.

The responses were adjusted to correspond with the fixed categories for educational aspirations (EDAS68).

#### MED (Mother's Educational Attainment)

Mother's education was determined in the same manner as FED. The original eight fixed response categories were recoded to conform to the six categories for EDAS68.

### **BROCC (Breadwinner's Occupation)**

This variable was determined by asking (in Wave 1), "What is the main job held by the major money earner of your home?" The occupational responses were coded according to the Duncan (1961) Socioeconomic Index (SEI). Unemployed breadwinners, and breadwinners who were retired, on social security, and/or welfare were treated similarly to "missing data".

### **School Tracking**

#### **SCHP66 (Respondent's High School Program in 1966)**

During the sophomore year of high school, respondents were asked, "What kind of program are you taking in school?" The fixed program responses were: (1) General; (2) Academic or College Prep; (3) Vocational; and (4) Other.

### **Adolescent Career Preferences**

#### **OCAS68 and OCAS72 (Occupational Aspiration in 1968 and 1972)**

In 1968 and 1972, respondents were asked, "If you were completely free to choose any job, what would you desire most as a lifetime job?" Responses were coded according to Duncan's SEI. In those instances when "Housewife" was stated (always by a female), the response was treated in the same manner as missing data.

#### **OCEX68 and OCEX72 (Occupational Expectation in 1968 and 1972)**

Panel members were asked in Waves II and III, "Sometimes we are not able to do what we want most. What kind of job do you really expect to have most of your life?" Responses were handled similarly as OCAS68.

#### **LOA68 and LOA72 (Level of Occupational Aspiration in 1968 and 1972)**

The OCAS68 and OCEX68 responses of a panel member were averaged to calculate LOA68. This is also the case for LOA72.

### **Adolescent Career Related Preferences**

#### **EDAS68 and EDAS72 (Educational Aspiration in 1968 and 1972)**

In 1968 and 1972, panel members were asked, "If you could have as much schooling as you desired, which of the following would you do?" Responses were coded in the six categories listed for FED.

#### **EDEX68 and EDEX72 (Educational Expectation in 1968 and 1972)**

In 1968 and 1972, respondents were asked, "What do you really expect to do about your education?" The fixed educational categories corresponded to those for EDAS68.

#### **LEA68 and LEA72 (Level of Education Aspiration for 1968 and 1972)**

The responses of a panel member were averaged for EDAS68 and EDEX72 to calculate LEA68.



#### REX68 and REX72 (Residential Expectation in 1968 and 1972)

The respondent's residential expectations were obtained by asking, "From the kinds of places listed...What type of place do you really expect to live most of your life?" Responses were coded: (1) in a very large city; (2) in a small city; (3) in a town and village; (4) in the country, but not on a farm; and (5) in the country on a farm.

#### MARP68 (Marriage Plans in 1968)

Panel members were asked, "At what age would you like to get married?" The expressed age of marriage was directly interpreted as an indicator of marital plans. The amount of marriage deferment was calculated by subtracting the respondent's 1968 age (AGE) from their desired age of marriage. The larger the resulting figure, the longer the deferment. Those respondents "already married" or whose desired marital age was equal to his or her present age had no deferment.

#### FEX68 (Fertility Expectation in 1968)

Fertility expectation was determined by the question, "How many children do you expect to have?" The actual number was recorded. Persons expecting five or more children were recoded to five. Persons not desiring to marry did not respond; these persons were considered to expect no children.

#### Early Adult Attainment

#### EDAT (Educational Attainment in 1972)

Respondents' educational attainments were obtained in 1972 by asking, "What is the highest degree or educational program you have completed?" The original level category responses were changed to correspond to the sex categories for EDAS68. If respondents were currently pursuing a degree or participating in some type of educational program, they were assumed to have achieved the level of education currently being pursued. Further, if respondents reported having attained high school or less education but had participated in the military, they were considered to have participated in a "military training program."

#### RES72 (Residential Attainment in 1972)

Residential locations for panel members in 1972 were obtained by asking, "Which of the following best describes the place you now live?" The fixed residential choices were the same as those for REX68.

#### MAR72 (Marital Status in 1972)

Respondent replied to the question, "If married, when did you get married?" Month and year responses were reported. "Duration" or number of years respondents have been married through 1972 was then calculated.

## FERT72 (Fertility in 1972)

Responses to the question, "If married, how many children do you have?" were treated or given. Unmarried panel members did not respond.

### Analytical Techniques

Analyses of the data are conducted along two dimensions. The first dimension involves level analyses in which comparisons are made indicating the relative magnitude of variable levels across study groups. The second dimension concerns process analyses. Comparisons based on process analyses contrast the relative effects of the model variables for each race-sex grouping to determine which factors have the greater importance or contribution to career development. Elaboration of each dimension follows.

General level analyses initially incorporate a descriptive comparison of frequencies, means, and standard deviations of race-sex groups for each variable as it appears in the flow of the study model. The interest here is in race-sex differences of social origins, adolescent career and career related preferences, and so forth. Secondary level analyses employ analysis of variance (ANOVA) as described by Steele and Torrie (1960) and Kerlinger (1964). Specifically, a 2 X 2 factorial design is used for each variable to detect differences that may be attributed to race, sex, or a race-sex interaction.

### Process Analyses

The primary statistical technique to be utilized in this research is path analysis (Wright, 1934, 1960; Duncan, 1966; Land, 1969; Namboodiri, Carter and Blalock, 1975). This technique, which is a form of multivariate analysis based on regression procedures, is intended to assess efficiency and plausibility of a posited causal system of interrelated variables. Path analysis includes procedures aimed at estimating the total "causal effect" of each of the independent and intervening variables in the system of variables on the specified dependent variable. Put differently, the technique attempts to identify the amount of variation in endogenous variables that can be directly associated with one unit change in one or more of the "determining" variables, while other variables are held constant. The technique also encompasses estimates of the total effect of the entire system of variables and of the effects exerted by unmeasured variables on each of the endogenous variables.

### Discussion of Findings

The statistical summary tables for both the level and process phases of the analyses are numerous and would necessarily exceed the space limitation of this paper. However, they do appear in Education and Work in Rural America (Cosby and Charner, 1978) and will be made available on request. The strategy here will be to outline, the major pattern of findings that emerged from the study.

This overview will not consist of a detailed interpretation of the many findings, but rather will stress a few major outcomes. When considering the results of this study, it should be recalled that the

analysis was guided by a complex model of status achievement. This model depicts a chain of life cycle influences beginning with parental social origins and ending with adult, career and career-related attitudes and attainments. The significance of any single result does not stand alone but can best be understood within the dynamics of the overall process. Therefore, it was not simply that a given attitude was found to be generally of a high state during adolescence rather, of more significance was the critical process question of the ability or lack of ability to translate these into behavior.

### Social Origins and School Tracking

Social origins were found to have only modest consequences for early adult educational attainment.

Following historic patterns of race and sex disparity in educational attainment, White students and male students tended to realize higher levels of post-high school education.

Social origins (social class, sex and race) were found to have only a minor impact upon placement in a college or academic track program.

Placement in a college or academic track was found to have only a slight effect upon subsequent college attendance.

The model begins by examining the effects of a broad set of social origin indicators (breadwinner's occupation, father's education, mother's education, race, and sex) on levels of early educational attainment. Our analysis indicates that these influences, taken singularly or together, had low predictability in estimating achievement levels. Only about 13% of the variation in early education levels was explained by these influences combined. When school tracking was introduced as an intervening influence between social origins and educational attainment, only a slight improvement in prediction of about 3% was obtained. These findings were not anticipated since prior research on other populations have found social origins and tracking to have substantially more effect on attainment.

There are several possibilities that could account for the weak effects of social origins and tracking. First, there may be certain features about education in the rural areas that would decrease the importance of such influences. We can note, for example, that socioeconomic status of parents was relatively homogeneous in the SYS data. Parental levels of educational and occupational attainment was concentrated in the low and middle ranges of the status continuum. Attainment levels for Black parents were especially homogeneous since they were almost uniformly restricted to the lower status category. Put another way, the Black middle class is only a small part of the rural Black population. Hence, given the restricted nature of socioeconomic status in the SYS data, it was impossible to provide a test that assessed the effect of the full range of variation implied by these variables.

Although admittedly on a subjective bases, there is good reason to question the social meaning and the accuracy of school tracking responses. Even though considerable variation in participation in vocational, general and academic programs was recorded, it was highly unlikely that these academic options were in actuality available in many of the SYS schools. About one half of the students were attending small schools where the senior class had less than ten students. It is difficult to imagine that such small and often poor schools could develop multiple tracks and if they did it is questionable whether they would be effective. For this reason, it appears that tracking responses were most likely a mixture of actual tracking (where tracking existed) and measurement error (where tracking was not provided). Lacking sufficient data to evaluate this possibility, it is perhaps prudent to consider the results on tracking as a weak test of its consequences for educational attainment.

### Adolescent Preferences

Career and career-related preferences for higher status achievement characterize adolescent responses for all sex and race groups in the SYS reflecting a strong general endorsement of traditional success themes of higher educational and occupational attainment.

Career and career-related preferences as attitudes were related to behavior observed years later. Moderate linkages were found between preferences for education, marriage, residence, and military service with the corresponding early adult behavior.

In general, an "imperfect ceiling effect" was observed between attitudes and behaviors where higher level attitudes tended to intersect with either high or low attainment whereas lower level attitudes tended to intersect primarily with low attainment and only rarely with high attainment.

Preferences for post-high school education emerged as the dominant influence and single best predictor of subsequent educational attainment.

The desire for early marriage tended to predict the timing of marriage.

Fertility desires stood alone as the only preference type considered that was not associated with either its corresponding behavior (levels of actual childbirth) or with the complex of achievement variables.

Residence preferences were more difficult to enact by the early adult period and the desire for rural farm residence, even among a rural sample, was especially difficult to obtain.

Preferences for military service had only a modest association with actual participation.

When considered together, the cluster of career and career-related preferences observed at the senior year reflects a strong endorsement of the American success themes of higher level educational and occupational achievement. For example, the overwhelming response in all sex and race categories was aspirations and expectations for college training. Occupational responses were of a similar high status nature, with the majority of responses falling in the upper half of the Duncan socioeconomic index. This result takes on added significance when it is considered that the pattern held for all four sex and race groups, even rural Black youth, were expressing mainstream American success orientation in spite of severe problems of backgrounds and opportunity. Such data clearly counters the contention that lower achievement among rural youth results from the lack of aspirations or ambition. Rather it seems that rural youth, even the more disadvantaged, are participating social psychologically in the "American Success Dream" if not in terms of actual behavior or attainment.

As types of attitudes, career and career-related preferences were found to moderately predict subsequent early adult behaviors: i.e., educational preferences were found to predict educational attainment; marriage plans were found to predict early marriage; residential preferences were found to predict actual residence; and military service preferences were found to predict military service (see Table 1). This finding points to career and career-related preferences as one of the few categories of attitudes that can be empirically related to corresponding behaviors. This transferal or enactment of preferences into actual behaviors takes on added significance since it occurred over a considerable period of time (four years after high school). As such, career and career-related preferences can be identified as candidates for programmatic intervention. Presumably, programs that improve the quality of career and career-related preferences could operate indirectly through this relationship impact upon actual attainments and achievements.

A paradox remains. If rural youth, even the more disadvantaged, tend to hold high career preferences that reflect the "American success theme" and if these preferences do predict subsequent career attainments, why do rural youth, especially rural minorities, still experience low career attainments? The answer to this question lies in an examination of the strength and nature of the relationships. First, the strength of the relationships ranged from moderate to weak indicating that the transferal or enactment was only a partial one. Substantial numbers were unable to enact their desires. Second, a relationship correspondence of attitude and behavior levels. For example, a correlation can be obtained if students with high level preferences tend to have higher attainment than students with low level preferences even if the exact preferences are not realized.

TABLE 1: Correlations of High School Senior Attitudes (A) and Behavior (B) Four Years Later

A-B Object	Total Sample	White Males	Black Males	White Females	Black Females
Education	.501***	.547***	.404***	.655***	.343***
Marriage	-.518***	-.427***	-.379***	-.615***	-.383***
Fertility	.014	.092	-.034	-.059	.011
Residence	.288***	.290***	.281***	.258***	.127
Military <sup>a</sup>	.145***	.171***	.097	---	---

<sup>a</sup>Only a few young women in the SYS had participated in the military as of 1972; hence, statistics for females are omitted since they would have little meaning.

LEGEND: \*\*\*p < .001

Taken from Frank Howell, "The Consequences of Adolescent Attitudes for Early Adult Behavior", Education and Work in Rural America: The Social Context of Early Career Decision and Achievement. Arthur G. Cosby and Ivan Charner (eds.).

The notion of "imperfect ceiling effect" was adopted to describe the pattern of the relationship between preferences and behaviors. It refers to the situation where the preference level tends to set a maximum or ceiling on attainment levels, i.e., higher level preferences tend to intersect with either high or low attainment whereas lower preferences tend to intersect with lower attainment and only rarely

with higher attainment. Within this context, adolescent career and career-related preferences approximate a necessary (though obviously not sufficient) prerequisite for later attainment. This pattern was clearest for the enactment of adolescent desires to attend a senior college or university. For example, of the 502 SYS students who desired to attend a senior college, 48% had done so four years later; whereas of the 463 students who expressed preferences for vocational/technical or junior college, only 5% went to senior college; and of the 87 students who wished to terminate their education with high school graduation, only a slight 1% went on to senior college. Thus, the preference for college, developed during adolescence, emerges as an important condition for college attendance if not a perfect predictor.

### Early Adult Behavior and Preferences

Educational Attainment in early adulthood was strongly influenced by career and career-related preferences developed years earlier in high school.

There appeared to be a continuing reciprocal and complementary relationship between educational attitudes and educational attainment where there was a continuing process of attitudes leading to attainments and attainment in turn to the maintenance and reformulation of attitudes.

Preferences for higher level educational and occupational attainment tended to encourage educational attainment while preferences for early marriage tended to depress attainment.

Early adult career and career-related preferences in the aggregate did not differ greatly from those observed in high school indicating the continued endorsement of the "success theme" even though many were experiencing difficulties in attainment.

Adult Preferences for education were both high and slightly greater than that observed during high school. Occupational aspirations remained at about the same level while occupational expectations decreased modestly.

Early adult educational attainment was influenced strongly by the complex of career and career-related variables. Educational preferences had the dominant influence followed by occupational preferences and marriage plans. High level educational and occupational preferences acted as facilitators while preference for an early marriage tended to depress attainment. The general process, as well as the relative order of influences among variables held for all race and sex groupings.

Now turning attention to educational and occupational preferences observed during early adulthood, we extended the general attitude to behavior analysis to a three phase flow from adolescent attitudes to

early adult behavior to early adult attitudes. A careful evaluation of the direct and indirect influences among these variables leads to two general patterns. First, there appeared to be a continuing reciprocal and complementary relationship between career and career-related preferences and educational attainment where attitudes influenced attainment and attainment in turn influenced the maintenance and reformulation of new attitudes. Second, and at the same time, there appeared to be a direct effect of adolescent preferences on adult preferences that was independent of early adult attainment indicating a maintenance of attitudes even in the presence of early "failure". If these two outcomes are combined, the following process is implied. Rural high school seniors generally hold preferences for high level educational and occupational attainment. Many of these are able to enact their preferences into higher level educational attainment which acts to reinforce and maintain high status preferences during early adulthood. Many seniors, however, do not enact their preferences yet are still able to maintain them into the adult period when opportunities for higher educational attainment were diminishing.

Related to the above finding of continued maintenance of high status preference was the observation that early adult career and career-related preferences, in the aggregate, did not differ greatly from those obtained in the high school senior data. Early adult preferences for education represented even a slight increase over the same measure in the senior year. Occupational aspiration levels were about the same at each period while occupational expectations decreased slightly. These outcomes seriously bring into question the developmentalist notion of "increasing realism and crystalization of choice" as a feature of the early adult period. There was little in a comparison of the SYS senior year and early adult data that indicated a basic realignment of career and career-related preference levels with actual opportunities for attainment.

### Sex Differences

Sex appears to be a substantially more important social origin variable in the actual content of occupational preferences than either race or socioeconomic status.

Although female occupational preferences were of relatively high status as measured by the Duncan SEI Index, there was a consistent trend during both the senior year and post-high school periods for women to select a few highly restricted occupations that are generally considered "traditional female pursuits". Males, in contrast, expressed considerably more and varied occupational choices.

Although early marital plans were found to depress the educational attainment levels of both male and female, the negative effects were considerably greater for women.



Although the overall process of career development for rural women did not generally appear to diverge from that of the males in the SYS, two fundamental differences can be noted that possibly have far reaching impact. The first of these is the often cited sex differences in the content of occupational preferences. While hierarchical or status measures of occupational preferences usually result in similar scores for men and women, an examination of the actual types of occupations selected lead to an entirely different interpretation. Such a pattern was clearly evident in the SYS data. Rural men tend to select a large number of occupations as both aspirations and expectations that range along the entire status continuum. Female aspirations and expectations, on the other hand, tended to be restricted to a few occupational types located in the middle of the status continuum that could be easily classified as "traditional female pursuits." Such choices as teacher, secretary, nurse, beautician and "housewife" typify female responses. This tendency for sex typed responses was strong in both the senior and post-high school periods. Interestingly, the "housewife" response was more apt to be given as an expectation rather than as an aspiration. As high school seniors, about 3% of the white females desired to be "housewives" while about 29% expected to have "housewife" as an occupation. These responses suggest a pattern of resignation to traditional female roles.

The second difference between male and female patterns was the effects of marital plans on educational attainment. While plans for early marriage tended to depress attainment for both sexes, the negative effects were more costlier for women. The depressing effects for women were of about twice the magnitude of that for men. This supports the not too surprising contention that men were considerably more able to reconcile early marriage and post-high school educational attainment while women needed to defer marriage in order to achieve additional education.

Both the patterns of sex-related differences in the content of occupational preferences and the differential sex-related effects of marital plans points to special career development problems of women similar to that reported for other non-rural populations. It is obvious that familial influences are of considerable more significance for women within the context of traditional sex-typed attainment processes and that programs designed to enhance women's educational and occupational attainment need to be sensitive to the importance of familial influences in their design.

### Race Differences

At every phase in the process, Blacks were less able to transmit attainment linked advantages to the next phase.

Black parents were less able to transmit advantages of socio-economic status to their children's educational attainment.

The educational attitudes of Blacks were influenced less by school tracking and social class than the attitudes of Whites.

Although the career and career-related preferences of Whites and Blacks were similar, Black students were generally less able to enact their preferences as actual behavior.

The sharpest race difference in occupational choices was between Black and White females. Substantial numbers of White women expressed a desire or expectation to become a "housewife" whereas this response was rarely given by Black women.

Black rural students were more likely at both the senior year and early adult period to hold residential preferences (in effect migration preferences) for urban residence.

At almost every phase in the analysis, important differences in the career decision processes were noted between Black and White students. The general pattern was for a breakdown in the transferal of attainment linked advantages from stage to stage in the process. It was not only that parents of Black youth had lower socio-economic status, but also that Black parents with status advantages were less able to transmit these advantages to their children's attitude development or to their actual educational attainment. Likewise, school tracking had less consequences for Black youth.

Although senior year preferences for education and occupation were similar for both Blacks and Whites, Blacks consistently were less likely to enact their preferences. Since these estimates were made controlling for parental socio-economic status, racial differences in class origins do not account for racial difference in the attitude to behavior transferal. Given the similarity of attitudes between races, it can be hypothesized that the difference in preference enactment rather is an indirect global index of differential opportunity, barriers, knowledge and racism. That is, it is an indicator, of the social power that a group has for attainment.

Two additional race linked differences in levels of preferences should be discussed. First, the sharpest race difference in occupational choices was between the expectations of Black and White females. Slightly less than a third of the White females at both the senior and early adult period expressed an occupational expectation to become a "housewife" whereas this response was rarely given by Black women. Although the meaning of this pattern is unclear, two alternatives come to mind. First, it may be that the cognitive structure for occupation of Black women does not include "housewife" as an occupation while White women do conceive of it as such. Second, it may be that women of both races share the same cognitive structure of "housewife" as an occupation and that Black women neither aspire or expect to pursue that occupation.

Race related differences in preferences for residence were also found to be distinct. Blacks both as seniors and as young adults were considerably more prone to express desires and expectations for urban residence. It should be recalled that the SYS is based on a sample of Southern rural youth and consequently preferences toward either small or large city residence also indirectly indicate an orientation

of migration. As a career-related preference, residential choice suggests that Black youth incorporate a special locality condition in their achievement orientation. It is not simply that the prevalence of urban preferences among rural Blacks reflects their perceptions of limited opportunities in rural areas that is important. It should also be stressed that they are more likely to view migration as a necessary condition for attainment. In one sense migration to urban areas operates as a facilitator for Black attainment and as such can be detected in the differential career-related preferences for that locale. However, this migration can also be viewed as a special difficulty for rural Blacks, since migration constitutes a special requirement for attainment with possible disruptive aspects.

Our overview of sex and race differences in the career decision process of rural youth can be summarized in two themes. Both of which may have salience for the design of programs intended to improve the attainments of these groups. First, sex differences in the process generally involved the content of career preferences (restricted sex-typed orientations) and the greater depressing effects of familial influences attainment. Blacks, however, tended to have greater difficulties in transmitting advantages achieved at any stage in the process to the next phase. Consequently, programs directed toward rural women would emphasize expansion of the preference content of orientation and perhaps the consequences of early marriage and fertility on attainment. Programs designated for rural Blacks would perhaps be more effective focusing on means and strategies of transmitting preferences into attainment.

## REFERENCES

- Cosby, Arthur G. and Ivan Charner (eds.)  
1978 Education and Work in Rural America: The Social Context of Early Career Decision and Achievement. Houston, Texas: Stafford-Lowdon.
- Falk, William W.  
1978 "Career Development in Theoretical Perspective." Education and Work in Rural America: The Social Context of Early Career Decision and Achievement, Arthur G. Cosby and Ivan Charner (eds.), Houston, Texas: Stafford-Lowdon.
- Hassinger, Edward W.  
1978 The Rural Component of American Society. Danville, Illinois: Interstate Printers and Publishers, Inc.
- Howell, Frank M.  
1978 "The Consequences of Adolescent Attitudes for Early Adult Behavior." Education and Work in Rural America: The Social Context of Early Career Decision and Achievement, Arthur G. Cosby and Ivan Charner (eds.), Houston, Texas: Stafford-Lowdon.
- Kerlinger, Frederick Nichols  
1964 Foundations of Behavioral Research. New York: Holt, Rhinehart and Winston.
- Land, K.C.  
1969 "Principles in Path Analysis." Sociological Methodology 1969. San Francisco: Jossey-Bass.
- Lipset, S.M. and R. Bendix  
1959 Social Mobility in Industrial Society. Berkeley, Los Angeles: University of California Press.
- Namoodiri, N.K., Lewis Carter and Hubert Blalock  
1975 Applied Multivariate Analysis and Experimental Designs. New York: McGraw-Hill.
- Sher, Johnathan  
1978 "Federal Neglect of Rural Schools." Kappan, December, 1978.
- Steel, Robert and James Torrie  
1960 Principles and Procedures of Statistics. New York: McGraw-Hill.
- Thomas, John K.  
1978 "The Southern Youth Study." Education and Work in Rural America: The Social Context of Early Career Decision and Achievement, Arthur G. Cosby and Ivan Charner (eds.), Houston, Texas: Stafford-Lowdon.

Wright, Sewell

1934 "The method of path coefficients." Annals of Mathematical Statistics, 5:161-215.

Wright, Sewell

1960 "Path coefficients and path regressions: alternative or complimentary concepts?" Biometrics, 16:189-202.