REGIONAL VARIATIONS IN THE STRUCTURING OF EDUCATIONAL AND MIGRATIONAL PLANS OF RURAL YOUTH

Dissertation for the Degree of Ph. D.

MICHIGAN STATE UNIVERSITY

THOMAS A. LYSON

1976

This is to certify that the

thesis entitled

REGIONAL VARIATIONS IN THE STRUCTURING OF EDUCATIONAL AND MIGRATIONAL PLANS OF RURAL YOUTH

presented by

THOMAS A. LYSON

has been accepted towards fulfillment
of the requirements for

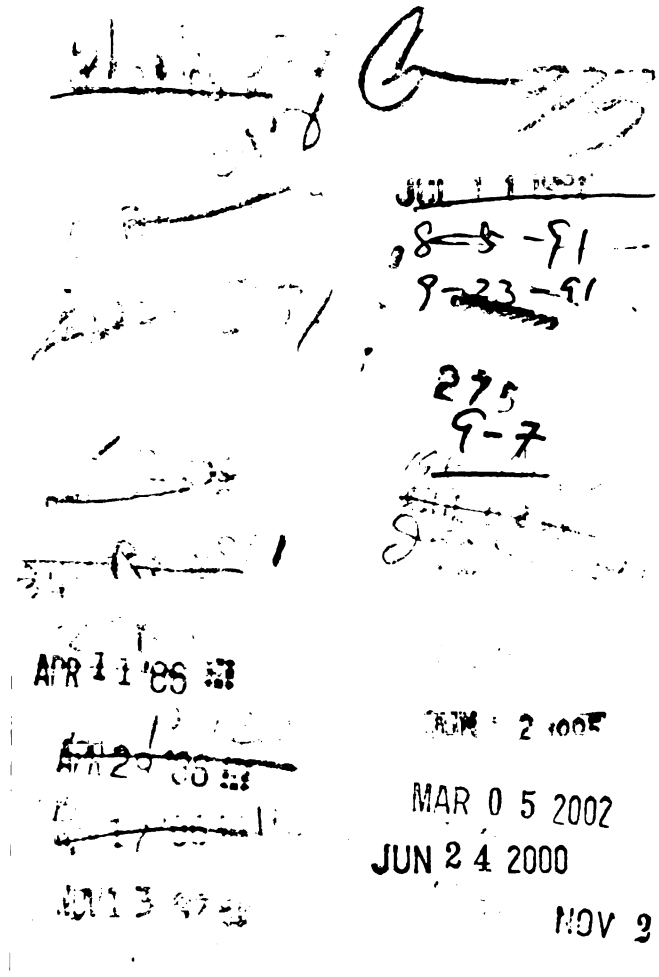
Ph. D. degree in Sociology

Harry K. Schwarzweller

Major professor

Date May 17, 1976

O-7639


8-8-91
9-23-91
275
9-7
APR 11 '95
MAR 0 5 2002
JUN 2 4 2000
NOV 24 2008

ABSTRACT

REGIONAL VARIATIONS IN THE STRUCTURING OF
EDUCATIONAL AND MIGRATIONAL PLANS OF RURAL YOUTH

By

Thomas A. Lyson

This study explores the influence of regional socioeconomic circumstances on the manner by which young people are sorted-out for career roles in the larger society. Our thesis holds that the nature and range of occupational opportunities in a region (i.e., the socioeconomic character of a region) affects the patterning of individual career development and, therefore, should be taken into account in the specification and elaboration of relevant theoretical formulations and exploratory hypotheses. Regional "opportunity structures," for example, as unique configurations of structural circumstances, may combine with or reinforce the effects of such career determinants as social class background, achieved scholastic record in school and sex. Region is viewed as a unique causal universe in which sets of variables may assume distinctive patterns of interrelationship.

Data for this research were obtained through self administered questionaires from 2987 high school seniors in five areas of Kentucky, West Virginia, and Michigan.

In this research, educational plans (plan to attend college) and propensity to migrate (a move out of the home region) are viewed as dependent variables. These two variables, representing individual components of the broader term "career plans," are treated both as independent indicants and as forming an interactive dependent variable

typology. Social class origin and grade rank are introduced individually and jointly as "predictors" of career plans. They are viewed as independent and control variables in the statistical design. Rural/town setting (local community context) is employed as a contextual control and, where appropriate, introduced into the elaboration and prediction procedures. Regional context is treated as a supra-control variable and is not introduced directly into the statistical procedures. Finally, sex is also viewed as a control variable. Career planning models are positted for both boys and girls.

To empirically test the effects of variations in regional and community context on the career planning model, percentage differences observed in contingency tables are employed. A method of non-linear causal analysis, based on Yule's Q, is used to ascertain the independent and interrelated effects, for boys and girls, of social class origin, local residence place, and grade rank on career plans.

Empirical findings from this research clearly support the guiding hypothesis. We found that the relative importance and predictive power of social class and/or grades and/or local residence place in a career planning model is contingent upon the distribution of opportunities and the balance between educational and work opportunities within a region. Although correlation coefficients often mask important relative inter-regional percentage differences, in general, regional effects are noted in zero order as well as multiple control conditions.

REGIONAL VARIATIONS IN THE STRUCTURING OF EDUCATIONAL AND MIGRATIONAL PLANS OF RURAL YOUTH

By

Thomas A. Lyson

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Sociology

1976

ACKNOWLEDGMENTS

I wish to thank Professor Harry K. Schwarzweller, whose patience, guidance and humor made writing this dissertation a very enjoyable and rewarding experience. I wish also to thank the other members of my committee, Professor J. Allan Beegle, Professor Jay W. Artis and Professor Denton Morrison for their advice and criticism of the final draft of this dissertation.

Special thanks goes to Loretta Carrillo, Lucy Hernandez, Joe Marshman, Brian McAteer, and Judy Roach for helping relieve the tedium that is inherent in a project of this sort.

Finally, I wish to extend a very special thanks to Helen Lyson, my mother, without whose encouragement and support this dissertation may never have come about.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

THE RESEARCH PROBLEM

INTRODUCTION

This study explores the influence of regional socioeconomic circumstances on the manner by which young people are sorted-out for career roles in the larger society. Our thesis holds that the nature and range of occupational opportunities in a region (i.e., the socio-economic character of a region affects the patterning of individual career development and, therefore, should be taken into account in the specification and elaboration of relevant theoretical formulations and exploratory hypotheses. Regional "opportunity structures", for example, as unique configurations of structural circumstances, may combine with or reinforce the effects of such career determinants as social class background, achieved scholastic record in school and sex.

The career path a young person pursues and the eventual status he or she attains are dependent, in part at least, on numerous earlier decisions. Perhaps the most critical of these decisions occurs at the point of planning for additional training after high school. If, for whatever reasons, a young person chooses not to pursue further formal education, he or she is, in effect, limiting his or her chances to eventually attain more prestigeful and more rewarding status roles in the world of work. All professional positions and many white collar jobs require that a person have had advanced training, usually at the college or university level.

An additional factor to consider in the career development sequence is the availability and accessability of employment

opportunities. To seek jobs that will match their level of skills, ambitions, abilities, and drives youth living in economically depressed or relatively isolated rural regions must consider out-migration, regardless of their educational credentials or feelings of attachment to family, home community, and/or region.

Clearly, then, two of the more important career decisions facing a young person after high school concern the pursuit of further academic training and whether or not to leave the immediate area in search of work. these two dimensions (as conceptualized here) combine to form an interactive typology that delimits the range and scope of a youth's life chances and eventual career options. In this research the interrelationship between educational and migrational plans will be viewed as the dependent variable cluster.

Sociological attempts to explain educational and occupational career choosing patterns of rural youth have genrally centered on factors such as academic performance in school, I.Q., sex, and family background variables such as occupation of the father, education of the parents, etc. In most studies these variables consistently account for the majority of variance in educational and occupational plans. Increasingly, however, broader, macro-level social, economic and even demographic contexts have been elevated to the level of problematic or conditional variables in an attempt to better refine our predictions and explanations of career planning. Lack of positive reinforcements, favorable circumstnaces, and stimulating opportunities can serve to dampen a young person's career ambitions, his subsequent career mobility and consequently, may set him on a course towards a work career and life style that is characterized by social estrangement and lack of hope for the future.

A simple predictive model often employed to help explain an interpret the nature of educational tracking and the structuring of ambition in rural areas combine three of the above mentioned factors - social class, grades, and sex. It has been repeatedly shown that these factors tend to structure a youth's life chances and as such can be conceived as indicative or predictive of a young person's relative opportunities for upward career mobility. Thus, for example, an upper class boy whose grades in school are excellent would be more likely than an academically unqualified girl from working class origins to advance in the career hierarchy.

However, as was also noted above, regional context plays an important part in the educational sorting process in rural areas. The fact that past studies in the United States using similar problematic variables (e.g., social class, grades, sex) but carried out in different regional settings, have failed to produce consistently similar results suggest that universal generalizations, at least at the societal level (i.e., national) are lacking. Consequently the creation of valid and useful theories of educational sorting and the generalizability of sociological knowledge is dependent upon specifying those conditions which account for variations in the career planning model.

In order to utilize "region" as an analytical tool, useful in generating significant insights and generalizable knowledge about the process of career development among rural youth, we must specify those regionally organized situational circumstances that may affect variables in the predictive model. A classification on the basis of regional "opportunity structures" is a useful concept here. As noted earlier, regional situations can be arranged in terms of the nature

and range of occupational choices and possibilities that a young person believes are available and accessable to him in his home region. The greater the number of job opportunities and the wider the range of potential job chocies, the better the chance a young person has to find suitable employment in the home region and, in general, the less likely he will be to migrate. If, however, opportunities for advancement are limited in a region and/or the range of occupational choices is limited, young people living in that region must decide whether or not to cope with the situation as it exists and perhaps take a job that does not match their desires and aspirations or to seek alternative means (e.g., migrate) to pursue career goals.

Furthermore, as noted above, the eventual occupational status a youth attains is dependent in large measure on his plans for additional training after high school. College training, then, can be seen as either a means for enhancing one's chances of finding a "good" job in the home region or as a preparatory "internship" before seeking employment outside the home area.

In either case, the uniquely patterned opportunity structures and the balance between educational and work opportunities in a region undoubtedly influence decisions on the local level and subsequently structure the nature and range of career options. These regional modalities specify the social context or set of parameters through which and by which educational and occupational plans are shaped, molded and eventually crystallized.

The above thinking is consistent with research reported by Lazarsfeld in his classic study of German and Austrian youth. Translating and summarizing Lazarfeld's findings, Lipset and Bendix make the following observations:

> In reanalyzing the occupational choices of school youth in a number of German and Austrian cities, Paul Lazarfeld reported that "local variations in occupational choices are parallel to differences in the economic structure." Thus, the larger the proportion of persons working in a particular kind of job in a city, the greater the number of 14-year-old school youth who desire to go into that occupation. Lazarfeld interpretted this finding as follows: "The nature of occupational choice is not determined primarily as an individual decision, but rather is a result of external influences. For the occupational impressions offered by daily life are proportional to the actual occupational distribution. The greater the number of metal workers, the more frequently will young people hear about the occupation, and the greater will they be stimulated to choose it." (Lipset and Bendix 1960: 221)

Although the social structural characteristics of a region can be seen as having direct bearing on the career plans of rural youth, the true importance of regional context is recognizd only in terms of the influence it exerts on the manner by which the determinants of plans, namely, social class origin, grade rank, and sex "come together" to explain the nature of career tracking. In other words, the importance of any one or combination of these variables emerges only within a given regional setting. The relative predictive power of social class and/or grades in a causal model is contingent on the opportunity structures and the balance between educational and work opportunities in a region. Thus, even though a region may be relatively depressed and characterized by a limited occupational opportunity structure, its effect on the life chances of an individual is mediated and molded by the immediate pressures (i.e., social conditioning) exerted by the family and school.

In the above case, region is viewed as a unique "causal universe" in which sets of variables assume distinctive patterns of interrelationship. Differing social contexts then, especially on the regional level, may lead to different styles of ambition, career goal setting and the manner by which talent is selected to fill job

roles in the larger society. In short, we believe that equivalent contextual situations are synonomous with homogeneous career planning models, but, as regional circumstances vary, the career setting model is modified and variant mechanisms emerge to sort young people out for career roles.

LITERATURE OVERVIEW

The patterning of occupational choices and the structuring of educational and migrational plans in rural areas is and, of course, can be viewed as being determined by a wide variety of social, psychological and even environmental factors. In this research the effects of two variables (grades in school and social class origin) and two interrelated social contexts (community and regional context) on the educational and migrational plans of boys and girls will be explored. Because normative expectations in the patterning of career ambitions differ for boys and girls, sex is employed as a contextual control. Grade point average in high school and social class origin are introduced as possible explanatory variables and will be treated as attributes whose determinisitic importance emerges only within a given social context. Local community context and regional setting, on the other hand, are indicative of particular institutional configurations, normative climates and opportunity structures and as such define the social mileau in which career plans are formulated.

Social Class

The effects of social class have been widely documented (Sewell 1957; Rosen 1956; Empy 1965; Schwarzweller 1960; Burchinal 1962).[1] Their results have consistently shown that the higher the social class origin of a student the better the base he has from which to build a satisfying career. Even when other variables known to

to be associated with both social class and career plans, such as performance in school and value orientations are controlled, social class has been found to have an independent effect on educational and occupational plans.

A person's social class position, ascribed at birth provides a frame of reference from which career goals emerge. Working class families of America often lack many of the material amenities attributed to upper class standing (e.g., family income, etc.). These monetary aspects provide a youngster with a material resource base necessary for college. More important, perhaps, working class families do not provide strong normative o- motivational support for college. This support, a nonmaterial aspect of class position, includes such things as parental encouragement, favorable attitudes toward education, and, in general, an appreciation of the benefitis education may provide.

Grade Rank

Grade performance has also been shown to be associated with plan for college. A youngster with "high" grades is more likely to enroll in college than a youngster with "low" grades (Kahl 1953; Burchinal, et. al. 1963; Sewell and Shah 1968). Past grade average can be conceived as an achieved status attained within the school and hence as a "stepping stone" on the path toward higher education and a niche in the work world.

However, it should be noted that grade rank is not an absolute standard of achievement, as might be argued for I.Q. and various standardized achievement tests. The distribution of "ability" and the criteria used in evaluating a youth's academic performance may vary not only between regions, but also within a particular region. According to Schwarzweller, though:

> Regardless of the kind or quality of information utilized in establishing a student's scholastic rank, and regardless of the criteria emphasized (creative ability, motivation, aggressiveness, behavioral conformity, scores on tests), the end product is the formation of a stratification system within the mini-society of a school class. As with any other stratification system in other community contexts, the rankings invariably become a basis for the differential allocation of rewards and facilities. (Schwarzweller 1974: 3)

Thus academic rank is indicative of a developmental process that affects a young person's life chances, perception of attainable goals, and consequently his level of abbition (Schwarzweller 1974).

Sex

Sex is almost universally used as a "contextual" control variable in studies of career plans. From time of birth each sex tends to be treated somewhat differently regarding what is expected, what is taught, and what opportunities are presented to them by society. Generally, boys have "higher" plans than girls (Kuder 1960; Schwarzweller 1960; Sewell 1966). Not only do the sexes differ in terms of status goals, but also in terms of the "types" of jobs aspired toward.

In a study of the Kuder preference record, based on responses of 3,418 boys and 4,466 girls, it was found that more interest in outdoor, scientific, and mechanical pursuits is generally expressed by boys than girls. Greater interest in musical, social service, and clerical pursuits is generally expressed by girls than boys (Kuder 1960). It has also been noted that many occupations which tradition ascribes to women are those practices performed by the "ideal" mother, such as nursing and teaching (Mathers and Drabick 1965; Fleege and Malone 1946).

Clearly, then, there are important sex differences in the manner by which career plans are formulated. Normatively sanctioned

role expectations serve as important structuring mechanisms in determining the life chances and career patterns of boys and girls.

Regional/Community Context

As stated in the introduction, the importance of what are generally rearded as deterministic variables (i.e., sex, grades, and social class) is contingent upon the nature of the social context in which they operate. The social context thesis has been well articulated in numerous forms (Sewell 1957; Sewell and Armor 1966; Rogoff 1961; Michael 1961; Bogie 1970; Schwarzweller 1973). The method commonly used to isolate contextual or structural effects requires that a relationship between the distribution of a given characteristic in various collectivities or settings and the effect criterion is isolated while this characteristic is held constant for individuals (Blau 1960).

Linz (1971) provides the social researcher with a succinct, empirically grounded definition of social context:

> Persons in apparently the same "objective" situation -- in terms of occupation, skill, income, education, social origin, religion, etc. -- will think differently about their position and react to it differently depending on social context. Context is defined by attributes such as whether those so placed are in a majority or minority in their community, whether they work in large or small plants, and whether they interact or are isolated. (Linz 1971: 107-108)

Contextual analysis in career planning studies has often centered around rural-urban differences, community size, and peer group associations. At present, however, the one area of contextual analysis that seems to have aroused the most concern and attention deals with the socioeconomic character of the immediate school or community environment. It is generally assumed that a normative climate associated with the class composition of the local community or school district

is influential, over and above, a yputh's actual social class position in determining his level of educational and occupational ambition.

Turner's classic study, Social Context of Ambition, found that when high schools in the Los Angeles area were classified according to the average socioeconomic status of the student body, the educational and occupational aspirations of individual students were influenced in the direction of the majority. That is, working class students attending primarily middle class schools were more likely to aspire to college than their counterparts attending primarily working class schools. The reverse process for middle class students was also noted. Even when a person's social class and intelligence were controlled, he found that a residual school effect of .16 for boys and .12 for girls (Turner 1959).

The social composition of the school has been shown not only to be related to the level of aspiration, but also indirectly through its influence on grade rank (Nelson 1972). Nelson finds that on a theoretical level school context has a real and important influence on the plans of young people:

> In context analysis we may be developing a central principle of social stratification -- that individuals may, involuntarily, be ranked at the bottom of an unequal system which, talent and ability notwithstanding, can adversely effect their aspirations and behavior. (Nelson 1972: 147)

At least one study indicates that the relationship between local residence and occupational and educational choices may be spurious. Sewell and Armor (1966) found that neighborhood context has little effect on college plans when social class and intelligence are controlled. Using multiple regression techniques, they found that neighborhood status results in an absolute increase of 1.8 percent in the explained variance of college plans beyond the effects

of sex, socioeconomic status, and intelligence. However, they also noted that the effect of neighborhood context is considerably more important in some populations than in others, a fact not apparent in multiple correlation analysis.

Rural-urban contextual differences have also been widely examined (Rogoff 1961; Burchinal 1961; Sewell 1964, 1965; Schwarzweller 1973). With few exceptions, these researchers have found that, regardless of the criteria for categorizing communities, youth from small, more rural neighborhoods are less likely to aspire toward high occupational status than youth from urban areas or large towns. The opportunity structure in rural environments tends to be both narrower and more restricted than that found in cities, thus reducing the chances for career advancement.

Additionally, most past researches have failed to grapple with the wider socio-cultural contexts within which structural sub-units such as peer groups, school districts, neighborhoods, and communities exist (e.g., the broader socio-regional contexts that are exemplified by such "bounded" areas as Appalachia, the cut-over area of the Great Lakes, etc.).[2] Socio-regional context may have important influences on the manner by which goals are formulated and plans implemented.

Regional context, a central concern of this exploratory research merits further conceptual clarification.

REGION AND REGIONALISM

The concepts of "region" and "regionalism" have a rich heritage in many of the social sciences. Geography, anthropology, political science, economics, and sociology, of course, have made frequent use of regional divisions for the purposes of collecting, arranging,

analyzing and interpreting various kinds of data about nations and states. Among the social sciences, however, although common threads of meaning exist, there is only limited consensus on the nature and specification of regional entities. This is understandable, for the conceptualization of such entities is heavily dependent upon the problem focus of the discipline and disciplinary needs. Nevertheless, for the purposes at hand, it is appropriate and perhaps useful to search out the themes that characterize the various disciplinary approaches.[3]

Anthropology: The Search for Cultural Areas

Central to anthropology, for example, is a concern with "cultural areas". According to Amos Hawley: "... a cultural area ... is essentially a diagrammatic construct rather than an actual portion of the physical landscape occupied by population." (Hawley 1950: Cultural areas, in other words, are conceptualized primarily in terms of human use factors, not physical characteristics. Nevertheless, the effects of physical environment on culture has not been ignored (Wissler 1916; Kroeber 1939). No culture is wholly intelligible without reference to non-culture (i.e., environemental factors. Wissler, for instance, states that:

> Environment does not produce culture, but stabilizes it. Because at many points that culture must be adapted to the environment, the latter tends to hold it fast. Cultures. therefore, incline to change slowly once they have fitted themselves to a setting, an to enter a new environment with difficulty than to spread over the whole of the natural area in which their form was worked out. (Wissler 1916: 6)

Many sociologists (Taylor 1949; Mangus 1940; Zimmerman 1947) have employed various forms of the culture area concept to delimit rural regions in the United States. However, these attempts have been severely criticized by Herskovits:

> Experience has shown that ... (a cultural area) is not adapted to use where the distribution of geographical differences is overridden by stratification resulting from ... larger population aggregates ... Industrial centers do differ from agricultural regions, but all of them in the United States, for instance, have such preponderant cultural similarities that it obscures rather than brings out the significance of differences between them to regard them as of the order of cultural areas. (Herskovits 1960: 409)

The use of cultural areas in anthropology has waned in recent years. Increasingly, anthropologists have turned their attention from folk to more complex societies and from a culture area approach to a structural-functional alternative (Steward 1950).

Physical and Cultural Areas in Geography

The geographer, on the other hand, views region as a "natural area", the primary elements of which are structure and relief, climate and vegetation. Despite the emphasis on natural areas, however, many early geographers betrayed a naive faith that natural regions would also be found to coincide with regions defined according to cultural patterns (Hall 1935).

As a result of translations and interpretations of European work prior to World War I, a number of human or cultural regional studies were produced (Kaplan 1964). Gradually a reapproachment occurred between the pure natural area and the cultural area approaches. Culture came to be seen as the agent while natural area was seen to be the medium of regional geographic studies (Hall 1935).

The integration of physical and cultural approaches to region has been an uneasy one in geography. There has not yet been any agreement on the relative weights of factors in the fusion of features that depict human occupance of an area (Whittlesey 1954). The present state of geography with regards to region is best summarized by James:

> Geography seeks precision; that is, it is concerned more than bordering fields of study with the exact measurement of areas and patterns, and from these more exact studies of area differences, it brings to light additional understanding of the role of relative location. Geography cannot find all of the answers to economic, social political or military problems of a practical nature; but it can contribute to an understanding by applying its own individual kind of analysis. (James 1952: 215)

The Politcal Science Perspective

The political scientists, likewise, deal with "region" in a manner consistent with their specific subject matter needs. Thus in the political science literature region is very often treated as a politically defined administrative area. The administrative area is any area delineated for the purpose of applying a policy or maintaining a public service. Among the distinctive characteristics of adminstrative areas are their arbitrary determination, their limited purpose use, and the inflexibility of their boundaries (Hawley 1950).

Regional Economics

In economics the concept of region takes several forms, but the overall emphasis has some unity:

> It insists that factors independent of the physical environment critically condition spatial configurations and that these factors are largely economic in nature. (Isard 1956: 14)

Regional economists tend to center their studies on primary trade areas, metropolitan regions (i.e., a large metropolitan center and surrounding territory), regions of convenience (i.e., economic areas delimited by the census), and economic development regions. In economic development region:

> ... the focus is upon economic problems and economic opportunites which can be realized, described, and met primarily on an areal basis. The emphasis is on the development of policies, programs and actions to move the region from where it is economically toward pre-determined economic objectives ... sometimes it is an economic problem area ... sometimes it is an economic opportunity area ... (Fisher 1955: w6-7)

Of all of the fields concerned with region as a unit of analysis, economics has made the most use of quantitative statistical delineation. Such analytical tools as factor input-output analysis, regional balance of payments, gross regional product, benefit cost analysis, and multiplier effects have been employed or proposed by the regional economist. These measurement devices make economic region delineation exceedingly precise.

Regional Science: A Synthesis of Perspectives

The culmination of efforts in the social sciences can be seen in the emergence of a "regional science." Walter Isard, a leading proponent of the regional science concept states:

> Regional science is, primarily, a social science field. It focusses upon spaces and systems of spaces, regions and systems of regions, locations and systems of locations. Distance -- physical, economic, social and political -- are all key concepts. Basic phenomena embrace, among others, transportation and communications, population and commodity flows, and land, water, and other resource use and conservation. Some significant characteristics of concern are population numbers, administrative area structures. Change -- growth and decline -- comprehensive interdependence and linage analysis strongly colors its approaches, both behavioral and mechanistic. (Isard 1956: 13)

Although the stated goal of regional science is to synthesize and utilize the theories and methods of many of the social sciences, it unfortunately has a strong economics bias attached. Attempts to quantify regional characteristics often result in a loss of the richer, sometimes more useful considerations of socio-cultural context. The meaning of "region" to the regional scientist is too often couched in "hard science" terms of input-output models, econometric problems, stochastic chains, and the like.

REGIONAL APPROACH IN SOCIOLOGY

In sociology "region" is often conceived as a geographical area, the inhabitants of which share some common social, economic,

political or demographic characteristics, or combination of these, which deistinguish them from residents of other surrounding geographic areas. A somewhat more analytical definition is offered by Howard Odom, the sociologist whose name is intimately associated with regional studies:

> Region means the composite societal region combining a relatively large degree of homogeneity measure by a relatively large number of indices available for a relatively large number of purposes or classifications. This means it must comprehend both the natural factors and the societal factors which must, of course, include the American states and prevailing historic economic and culture traits. (Odom 1964: 170)

Carl Zimmerman also views region as an important aid to understanding the social activities and solving the social problems of the nation. He thus proposes a "regional sociology" as one method of dealing with area context.

> Regional sociology is an approach to the location of man's values and activities on this globe to the extent that indefinite areas become understandably definite from a combination of geographic factors, working in fairly recognizable similarities of social time and social space. (Zimmerman 1947: 15)

The beginnings of significant though on the concept of region in sociology in the U. S. can be traced to several sources. Charles Galpin laid the foundation for region studies in rural areas, while Burgess and Park and others from the Chicago School dealt with area context using a metropolitan frame of reference.

As early as 1911, Galpin reporting on his research in upstate New York found:

> Village and open farming country form a community of homes which seems to be a sort of social drainage basin beyond whose border every home drains off into some other basin. The big discovery of this survey is the fact of a real rural community ... It appears that this community takes in parts of four townships and ignores in its social dealings the voting precincts set by law. (Galpin 1911 in Warren 1963: 23)

In these early researches a careful distinction between

region and community was not made. Theoretically, both region and community can be viewed as conceptually similar contextual variables. The region, however, is necessarily a larger geographical area encompassing at least one, and usually more, "communities." Galpin used the term "region" in its narrowest sense, defining one community and its surrounding "region." Today, "region" (e.g., Appalachia) generally refers to a broad geographic area composed of numerous "community/regions."

This early interest by Galpin and others in delineating rural community/regions on the basis of process soon gave way to an emphasis on ennumeration of larger homogeneous and quantitatively distinct geographical areas. Even today studies appear in the literature delimiting "types of farming" regions, historical regions, and the like. The scientific validity and usefulness of such studies can be seriously questioned since the extent of homogeneity and the number of regions to be delimited depend solely on the purposes of the investigator. Regional composition and boundaries, if arbitrarily determined, exist only as constructs in the researchers mind and thus cannot be construed as "real" regions or social facts.

Alvin Bertrand provides a systemmatic introduction to the concept of region for sociological research purposes. In his definition of regional study he distinguishes between emphasis on region as a means of categorization and as a system of social structures and relations. According to Bertrand:

> Regional study is a special branch of sociology primarily concerned with (1) the delineation of homogeneous regions and subregions, (2) the study of all forms of human association within a specific regional environment, and (3) the comparative study of regional social systems. (Bertrand 1958: 105)

The importance of region, then, involves several levels of

attack developed along an ascending scale of complexity and integration. Regional analysis at the most elementary level calls for the delineation of homogeneous single and multiple factor geographic areas. At more elaborate levels of complexity it is concerned with the construction of social theories and the exploration of change and process patterns through multiple factor structural-functional regions.

Let us now turn our attention to a more thorough examination of each of these three concerns of regional study that Bertrand lists. Our aim will be to examine the nature, meaning, limitations, and sociological usefulness of "region" as it is conceived in different forms.

The Problem of Delineating Homogeneous Regions

There are many ways, of course, to divide the United States, or any large nation, into meaningful subareas of relatively homogeneity with respect to certain specified dimensions. Depending on the problem under investigation and the resources available, the researcher must at some point decide on the kinds and number of indices he wishes to employ. The least complex strategy in regional analysis is the description of single factor regions. Bertrand notes four types of single factor regions:

> 1) Natural regions are distinguished from one another on the basis of a given geographical characteristic, such as topography, rainfall or type of soil.
>
> 2) Cultural regions are set apart on the basis of differences in any material or nonmaterial cultural trait, such as characteristic literature, esthetic expression, architecture, or dress.
>
> 3) Service regions are distinguished for administrative purposes. There are innumerable examples of such regions in the fields of government and economics, such as Federal Reserve Bank regions and sales regions.
>
> 4) Types-of-farming regions are based on marked differences in agricultural endeavors. (Bertrand 1958: 106)

A somewhat more complex delineation of rural regions involves

construction of regional configurations or universes based on several variables or characteristics since, except for purposes of specialized study, the multiple factor, composite region has greater theoretical significance and impact than single factor regions. Tow methods are commonly employed to delimit complex regional structures. First, one may attempt to reconstruct the process from which a region has been built up out of its component parts (e.g., farm market regions, service areas, etc.). Second, one may use statistical measurement to delimit areas homogeneous in certain economic, social, and cultural characteristics (Vance 1951: 127).

An example of the second method is A. R. Mangus' (1940) delineation of a complete set of rural regions for the United States. He employed such quantitative measures of culture as a plane of living index, percent of farm tenancy, type of non-farm industry, etc. Although his methodology has been criticized on the grounds that he fails to measure distribution of culture within the areas, Mangus contends that quantitative traits or elements, if carefully selected, can be considered valid indicators of more fundamental, unmeasureable aspects of culture.

On a more micro-level, delineations and descriptions of areas of socio-cultural homogeneity have been done for numerous states (e.g., Ohio, Louisianna, Missouri). The delineations generally differ from nation or state "type-of-farming" maps used by agricultural economists and state economic areas of the Bureau of Census, since additional factors of a more "social" nature (e.g., school expenditures, racial composition, age indices, etc.) are also considered.

Intra-Regional Analysis

Delineation of regions by measures of common modes of life (e.g., types-of-farming, etc.) can be advanced beyond the categorization stage if factors employed to describe a region are taken to determine structural-functional relationships operating within a geographic area. The logic here is fairly clear. According to Gregory, "... the fabric of modern society is composed of variable traits that are correlated among themselves." This approach to regional research focusses on an interactive socio-cultural complex and homogeneity of region, as contrasted with others, is one of association rather than kind. Obviously, if no socio-cultural trait were related to any other, a region would have no meaning except in terms of that trait (Gregory 1949). In the present mode of analysis, then, regions move from being merely a classificatory scheme to becoming an analytical scientific tool.

The main concern at this level of analysis is simply stated by Vance:

> Whatever factors are found to fuse together to give us the regional economy, the regional culture, and the region's consensus of opinion -- these, obviously, are the factors which in the beginning should be selected for use in drawing boundaries between regions. (Vance 1951: 133)

Thus, region is seen as a more or less homogeneous entity, a basic configuration of human life. Region is viewed as a unique causal universe in which sets of variables may assume different patterns of interrelationship and, consequently, form unique structural configurations. Bertrand provides us with a list of forces he considers important in weaving the various threads of an area into a unified fabric. The three forces he considers significant are:

> Geographic and Physiographic Characteristics. The natural environment ... is readily recognized as one of the basic region-making forces. This is true because man's physical setting usually conditions his social adjustment to an observable extent. Thus differences such as in occupation, dress, architecture, and recreation may often be linked to topography, climate, soils, etc....
>
> History. Accidents of history can become the most powerful region-making force operative among a people because a strong consciousness of identity is bred through shared experiences and problems....
>
> Cultural Experiences. It is inevitable that cultural materials that are invented, discovered, or borrowed in a specific area are shared only unevenly with the rest of the national group. This fact can be accounted for in terms of the rate of acceptance of any given cultural trait and its usefulness in various areas. The extent to which an item of culture will be useful varies directly with such factors as the economic structure and geographic conditions. Rates of diffusion of culture are, of course, dependent on the values, attitudes, opinions and experiences of the people. Obviously, the amount and kind of cultural material accepted help to determine the socio-cultural characteristics of a people and thus constitute a significant region making force. (Bertrand 1958: 107-108)

In additon to the three "forces" listed by Bertrand, the impact of larger structural entitites (i.e., institutions on the national and international level) as region-making forces have been noted by Steward:

> ... a nation is a great deal more than the sum total of its subcultures. In addition to various subcultural groups based on regional, occupational status, ethnic, and other differences, there are national economic, political, military, and other institutions which influence each local group somewhat differently. Thus, regional subcultures must be understood in relation also to world trade markets, growing industrialization and expanding governmental controls and services. (Steward 1955: 298)

Unfortunately, empirical assessment of the exact weight of a given set of forces in developing a particular region is very difficult. Research has indicated that in one instance one type of force will be the most important in regional development; whereas in a second instance another kind of force will direct the growth of a region. The important point, however, is that regions can

be viewed as distinct entities manifesting internal organizational differences.

To view region as an analytical tool as opposed to a classificatory scheme requires a dynamic rather than static approach. Preoccupation with regional "structure" and the task of defining regional boundaries on a map tends toward the impression that region is a fixed and static thing. An understanding of the structure and functioning of social groups and process becomes the major objective of dynamic regional studies (Vance 1951: 134). Heberle states it another way:

> The local groups of neighborhood and community; the groupings on the basis of interest; the class structure characteristic of a certain region; migration, its forms, causes and consequences; and dissociation; and finally ... public opinion ... all of these and many other phenomena will constitute essential subjects of inquiry aiming at the understanding of a region as a societal entity. (Heberle 1943: 283)

Additionally, Heberle continues, one must examine the "character" of the people of a region in terms of "types." These types are determined by occupation, ethnic origin, religious affiliation, etc., and by the social values adhered to, and the normative conduct resulting therefrom (Heberle 1943: 283). Thus, people in a region are "bound" together by common interests, common traditions and history, and the common socio-cultural structures which have merged from their interests, traditions and history.

W. A. Anderson carried regional analysis one step further by integrating areal context into a broader analytical framework. Region is viewed as one of four structural entities that compose society. According to Anderson: "... when individuals interact with each other, they form ... distinctive structural forms that can be recognized and described as such." (Anderson 1947: 350)

Anderson called these structural forms -- "hurelure" -- and distinguished the following four classes: 1) social groups, 2) ecological entities, 3) instituitions, and 4) collectivities. Each of these is a distinctive type of structural form produced by relationships between men, and each is a reality in any society and therefore essential to describe it. Briefly:

> A social group consists of two or more people meeting in the same environment or overcoming distance by some means of communication, who are influencing each other psychologically.
>
> An ecological entity (region, community, neighborhood) is a population aggregate occupying a contiguous territory integrated through common social and economic activities and so able to and often carrying on many of the functions of a corporate entity.
>
> An institution is a definitely patterned, relatively fixed, and socially sanctioned arrangement of relationships between people which at a given time and place seems to be the most apt way of carrying out some basic need of society that has been crystallized in the mores.
>
> A collectivity consists of a number of people whose behavior is specifically polarized around some temporary center of attraction and stimulus that gives them interaction and unity, which interaction and unity exists only as long as the center of attraction exists. (Anderson 1947: 352)

To Anderson, ecological entities function as social contexts in which "social groups" interact. Regions, the largest of the ecological entities, are composed of similar, but by no means identical, smaller social contexts (i.e., neighborhoods and communities). Although communities and neighborhoods within a given region may posses somewhat distinctive social configurations and situational circumstances, they are tied together in a regional setting by "... an interwoven economic life that established, in addition to the spatial order, other relationships between people." (Anderson 1947: 353)

In conclusion, Anderson states that a complete system of sociology must include:

> ... a description of the structure of the above forms, a consideration of how surrounding environmental forces condition their structure and operation, a statement of the principles by which the forms act, a description of the reciprocal relationships between the forms, how social controls result from the actions of these forms, how these relationship structures change in time, and how, as a result of their operation, cultures and personalities are produced and changed. (Anderson 1947: 354-355)

Comparative Study of Regional Social Systems

The concept of region in sociological research achieves its greatest utility in the comparative study of regional social systems. Research at thi stage embodies the goal to which all social science aspires: formulation of universal propositions and the creation of valid and significant theories of society and human behavior. The purpose and method of cross-regional analysis can be seen as closely analagous to cross-cultural, cross-national or comparative studies. According to Schwarzweller:

> ... greater attention to cross-regional comparative research and the development of an efficient cross-regional method in the social sciences would not only stimulate the formulation of more universally applicable sociological theory, but would function also to enhance the development of an efficient cross-national comparative method. (Schwarzweller 1968: 15)

Cross-regional analysis necessarily involves specialized knowledge of the social organization and linkages between regional social systems. According to Marsh, data relevant for such comparisons "... are derived from human interaction." (Marsh 1967: Employing a framework developed by Parsons, Marsh states that data for comparative analysis:

> ... can be classified under one of the following Systems of Action: social systems, cultural systems, and personality systems. Also relevant are the data referable to other systems with which these three systems mentioned have "boundary" exchanges: the human organism, demographic and ecological systems, and the physical environment. (Marsh 1967: 16)

The above scheme and the nature and types of data it suggests

for analysis is very similar to those presented by Heberle, Vance, and others in the previous section.

The use of region as a "unit" for comparison in comparative research is a relatively recent phenomena. Anthropologists and sociologists have long been concerned with the problem of defining the socio-ecological boundaries of a social group. It is genrally assumed that the units for comparison (e.g., societies, regions, communities, etc.) should have the same characteristics. This problem of sampling "units" was raised by Murdock (1949) and, in a somewhat different form by Radcliffe-Brown. Radcliffe-Brown writes that sociologists:

> ...commonly talk of societies as if they were distinguishable, discrete entities as, for example, when we are told that society is an organism. Is the British Empire a society, or a collection of societies? Is a Chinese village a society, or is it merely a fragment of the Republic of China? If we say that our subject is the study and comparison of human societies, we ought to be able to say what are the unit entities with which we are concerned. (Radcliffe-Brown 1940: 4)

To show the importance of "region" as a unit entity in comparative research we must make a distinction between intra-societal regions and supra-societal regions. Intra-societal regions refer to distinguishable regional situations -- cultural, economic, social, etc. -- of one kind or another <u>within</u> a particular national society. Intra-societal regional areas may differ markedly in terms of historical development, economy, cultural orientation, politics, and even language. However, these "regions" in no way can be considered separate and distinct societies (Schwarzweller 1968).

Supra-societal regions, on the other hand, refer to regional situations that transcend societal or national boundaries and are composed of locality groupings and perhaps even whole societies that are similar with respect to selected classificatory criteria

(Schwarzweller 1968). Schapera cites as an example of a supra-societal region:

> ... the many hundreds of politically separate Bantu speaking "tribes" in south Africa can be divided on the basis of marriage regulations into three major groups, characterized respectively by comprehensive exogamy, preferential matrilaterial cross-cousin marriage and marriage permissable with any kind of first cousin. (Schapera 1953: 359)

In discussing the importance of supra-societal regional classification, as a unit for comparative research, Schapera argues that by making an intensive study of a given "region" (i.e., supra-societal):

> ... embracing all the peoples living there about whom information is available ... (and) ... By carefully comparing the forms taken among those peoples by the particular social phenomena with which we are concerned -- as in this instance, kinship and marriage -- we try to establish, by a process of generalization, one or more basic types into which the various forms can be classified ... such an approach ... will enable us in the first place to ensure that all the known "societies" of people inhabiting a given region are discussed, and will therefore do away with the need for sampling or any other arbitrary form of selection. (Schapera 1957: 359)

In other words, we gain greater universality and prediction through a process of data reduction on a grand scale (i.e., much the same effect and principle as in the collapsing of categories in survey research) (Schwarzweller 1968).

The problem of unit sampling and reduction into regional units becomes more complex when one is dealing with modern industrial societies (e.g., the United States) rather than with village or tribal societies as Schapera does. Within industrialized nations the socio-cultural system of any region or local area cannot be considered autonomous or sovereign. All areas within the geo-politcal boundary of a nation state share a common set of social, legal, and cultural norms. However, one can distinguish certain important regional

differences within even the smallest nation-states and certain similarities, in much the same way as suggested by Schapera. In other words, one can delineate a number of distinct intra-societal regions.

According to Schwarzweller:

> In making comparisons, then, between national societies one must attned to the problems of internal sociocultural differences within such societies. If cross-sectional samples are not drawn, then the scope of generalization must be carefully delineated and specified; and even when random sampling procedures are employed, one often encounters difficulty in specifying the applicability of the results of research to regional circumstances within one or the other nations included in the project (Schwarzweller 1968: 18-19)

Additionally, it is important to reemphasize that no region is a completely homogeneous entity. Differences among sub-regional units (e.g., communities and neighborhoods) exist within each area. Thus, to assure the greatest validity and reliability in research findings, not only must cross-regional samples be drawn, but variations within those regions must also be accounted for.

Julian Steward cites possible cources for intra-regional heterogeneity:

> ... a region is (not) a territory of cultural uniformity, a cultural subarea in which all persons share the same behavior patterns. Partially differing ways of life will characterize town and rural populations -- the former related to marketing, distributing and servicing functions and the latter to various roles in the agrarian productive system ... In the highly industrialized nations which have advanced education, transportation, and mass communications, the sub-cultural differences between city and rural dwellers are diminishing. This is not to say that sub-cultural differences are being leveled. If appropriate studies were made they would probably show that subcultures are increasingly related to occupations. (Steward 1955: 298)

In a nutshell, if one theory could be made to fit all conceivable areas and situations, there would not exist the need for comparative theory that regionalism promises at this level. However, until one is sure that all specifying conditions that account

for, the creation of useful and valid sociological theories and the generalizability of sociological knowledge is at stake. Thus according to Vance:

> ... fortunately or not, regionalism in one form or another seems destined to review -- if not to undermine -- all those theories that speculate about some sort of abstract man, abstract culture, or abstract economy. Theories developed in one culture area or in one stage must be tested against those developed about other areas or stages. (Vance 1951: 136)

FOOTNOTES

CHAPTER 1

1. For a summary of various studies dealing with social class and other structural determinants of educational mobility see James T. Hornor, James G. Butterbaugh and J. Judith Carefoot, "Factors Relating to Occupational and Educational Decision Making of Rural Youth," Department of Agricultural Education, Report 1, University of Nebraska, Lincoln, Nebraska, April 1967.

2. Two exceptions are Schwarzweller (1973) and Bogie (1970). Schwarzweller's study dealt with the influence of regional socio-economic circumstances on the educational plans of rural youth from Germany, Norway and the United States. Bogie concerned himself with the educational and occupational plans of rural youth from three areas of Kentucky.

3. An annotated bibliography that was especially useful in organizing this section was: Paul F. Kaplan, "The Region as a Unit of Analysis: Emerging Consensus," Cornell Journal of Social Relations, 1 (October 1966), pp. 135-54.

CHAPTER II

RESEARCH METHODS AND PROCEDURES

Exploring the career choosing patterns of high school seniors from five rural areas of the United States, this research deals with the interrelated influences of sex, social class origin, scholastic rank, and local and community setting on educational and migrational plans. Chapter II focusses on a detailed description of the regional areas selected for study, the operationalization of the major research variables, data collection techniques and the analytic strategy and statistical design.

DESCRIPTION OF REGIONAL SETTINGS

Earlier we examined some of the ways by which region is conceptualized and used as a research tool in the social sciences. In sociology, generally speaking, region may be conceived as a geographic area, larger than a community, the inhabitants of which share some common social, economic, political or demographic characteristics, or combination of these, which distinguish them from residents of surrounding geographical areas. As employed here, however, region is not viewed solely as a socially, economically, politcally or demographically homogeneous geographical area, but rather as a discrete, well defined "social system." That is, following the thinking of Heberle (1943), Vance (1951) and others, region is conceptualized as a geographically bounded social system distinguishable from other social systems in terms of the manner in which sets of career planning variables assume different patterns of interrelationship and consequently form unique structural/ecological

configurations.

For our purposes, then, a rural county or group of counties sharing similar structural/ecological configurations can be considered indicative or representative of a regional modality or setting. We believe that the uniquely patterned "opportunity structures" and the balance between educational and work opportunites in a region influence decisions on the local level and subsequently structure the nature and range of a young person's career options.

Empirical indicants of a region's opportunity structure are, of course, both numerous and varied. Perhaps the most comprehensive compilation of factors relating to the nature and range educational and occupational opportunities in an area can be found in the census. Selected census material presented in Table 1, for example, give some indication of the social and economic realities of the "regions" drawn into this study. These data, and material from other sources will be used to describe the situational circumstances confronting young people at the point where their educational and migrational plans are crystallized.

However, a more rigorous and complete definition of a region"s "opportunity structure" should include, among other things, quantitative data on geographic proximity of higher education facilities, school drop-out rates, per-pupil school expenditures, availability of financial aid for college, and types of school curriculums (e.g., vocational. college prep, etc.). In addition, qualitative, ethnographic material relating to local value orientations and normative climates would further add to an understanding of the contextual environment in which career plans are formed.

It can be argued, of course, that the greater the number

of indices and characteristics used to define "opportunity structures," the less important "region" becomes as an explanatory variable. Thus, according to Prezworski and Teune:

> The basic assumption is that names of nations, or of social systems in general, are treated as residua of variables that influence the phenomenon being explained but have not yet been considered. Thus such concepts as "culture," "nation," "society," and "political system,' are treated as residua of variables, which can be incorporated into a general theory....
>
> If we accept this residual nature of names of social systems, we can then attempt to replace these names by variables. When we find that societies differ with regard to a particular characteristic, we can ask what it is about these societies that causes this difference. (Prezworski and Teune 1970: 28)

However, we believe one can still employ regional names if these names are used not in an explanatory sense, but rather as descriptors of opportunity structure "types." Regional analysis, in other words, is a useful tool in isolating and categorizing different contextual situations.

The five settings to be examined here include two socio-cultural areas of Appalachia (non-coal/subsistence agriculture and coal mining) and three socio-cultural areas outside of Appalachia (rural industrialized/Western Kentucky, commercial agriculture/ Central Kentucky, and the copper-pulp area of Ontonagon County, Michigan).

Appalachian Non-coal Area

Eight Eastern Kentucky counties (Breathitt, Lee, Menifee, Owsley, Magoffin, Elliot and Wolfe) compose the non-coal region of Appalachia. All of these counties, with the exception of Breathitt, are located in State Economic Area 8 (Eastern Kentucky Hills Area). The economy of this Appalachian region has its roots in agriculture. Over half (55.5 percent) of the high school seniors in this area indicated they lived on farms,[1] contrasted with 37.3 percent in

Table 1. Selected social and economic characteristics of the study regions.

	Western Kentucky (semi-rural, heavily industrialized)		Upper Michigan (copper/pulp industry)		Central Kentucky (commercial farming, diversified industry)	
	Boys	Girls	Boys	Girls	Boys	Girls
Median School Completed, Age 25 and Over	11.3	11.7	11.3	12.1	9.6	10.9
Percentage High School Graduates, Age 25 and Over	45.9	48.7	45.5	54.3	38.5	42.9
Percentage of Work Force (Male-Female) Employed in:						
Agriculture	9.4		4.8		12.6	
Mining	2.0		30.7		.3	
Manufacturing	30.7		14.7		26.0	
Percentage in Civilian Labor Force	77.8	41.0	72.4	31.3	76.4	40.9
Percent Unemployed	3.9	7.5	6.9	7.5	2.8	4.1
Median Income ($)	8,370		8,421		7,815	
Percent Below Poverty	12.5		8.2		15.6	

Table 1 (cont'd,).

	Eastern Kentucky (non-coal, subsistence farming)		Kentucky/W. Va. (coal mining)	
	Boys	Girls	Boys	Girls
Median School Completed, Age 25 and Over	8.0	8.3	8.3	8.5
Percentage High School Graduates, Age 25 and Over	18.0	18.6	21.8	24.3
Percentage of Work Force (Male-Female) Employed in:				
Agriculture	9.4		.6	
Mining	5.7		29.1	
Manufacturing	15.4		6.1	
Percentage in Civilian Labor Force	50.0	20.5	61.9	21.8
Percent Unemployed	10.0	6.7	7.3	7.6
Median Income ($)	3,693		5,055	
Percent Below Poverty	47.8		35.1	

Central Kentucky, 27.0 percent in Western Kentucky, 2.9 percent in the coal area, and 11.2 percent in Ontonagon County, Michigan. Furthermore, many of these farms have little non-farm income due to the lack of industrial development in the area.

In addition to being characterized as a marginal agricultural area, the Appalachian non-coal region is often described as a "familistic" type of society. Schwarzweller and Brown, for example, describe the social organization of Beech Creek in the following way:

> A crucial aspect of the eastern Kentucky situation, confronting any student of the Appalachian mountain areas, is the importance attached to kin relationships in the everyday life of its people. Familism, as a value orientation, tends to permeate the local society and stamps all institutions with its mark. (Schwarzweller, Brown, and Mangallum 1970: 85)

The median income for 1970 ($3,693) and the percent of the population living below the poverty level (47.8 percent) place this region at the bottom, economically, of all the regions in the study. In fact, it is one of the poorest regions in America. Given the general economic conditions of the area and the limited opportunities for securing a "decent" job, it is not surprising that at least 66. 5 percent of the senior boys and 76.9 percent of the senior girls (Table 2) plan to leave the region after graduation from high school. The socio-economic character of the region is also manifested in the small percentage of seniors who intend to continue their formal education beyond the high school level. Table 2 shows that only about one-third of the boys and 37.8 percent of the girls plan on college. The economic resources of the area and the general normative/motivational climate associated with a poverty area effectively mediate against upward educational mobility.

This region, then, can be described as having a relatively low standard of living, high unemployment and, in general, very limited opportunities for occupational and educational advancement. The opportunity structure can be considered narrow and restricted and the social mileau from which plans formed, depressed.

Appalachian Coal Area

The Appalachian coal region is represented by Floyd, Pike, and Leslie Counties in eastern Kentucky and by Mingo County across the Tug River in West Virginia. It is also a rural low income area, though of a different character from the subsistence farming region. The economic resources are based primarily on an extractive industry: coal mining. Due in part to the nature of coal mining as an occupation, the relatively standardized wage scale of miners, the character of the mining community, and the way of life in the coal camps, the coal region emerges as a unique entity in comparison with families in the other study regions. The nature of the mining industry, mechanization in the mines, and the lack of non-coal occuaptional alternatives have lead to high rates of out-migration, especially among the young people.

Union wage sclae permits the coal miner to live at an adequate, but not affluent level. Non-coal manual workers in this region typify a varied level of living status. Some manual non-coal families survive on virtually a nonexistent income that is likely supplimented by social security, food stamps or welfare payments. Those manual workers living in or near the larger towns of the region, however, are more likely to find and hold higher paying jobs.

In generaly, the overall socio-economic climate has a depressing effect on the educational chances of young people. Table 2

shows that only about a third of the high school seniors in the present study population plan on additional formal education beyond the high school level.

Thus, this area of Appalachia is in many respects very similar to the Eastern Kentucky non-coal region. Both Appalachian areas are primarily rural and are characterized by relatively low standards of living, limited chances for upward educational and occupational mobility, and high out-migration rates. What distinguishes the coal area from the subsistence farming area is the somewhat different structural exigencies embodied in the regional economy. Life style characteristics and residential patterns are dependent on the dominant mode of production and the viability of the regional economy. An intra-Appalachian comparison of the determinants of career plans, then, will provide an interesting and enlightening component to the overall research effort.

The Commercial Farming Region of Central Kentucky

The commercial farming region of Central Kentucky is represented by the counties of Jessamine, Anderson, Clark, and Scott. It is the most prosperous non-metropolitan section of Kentucky. About 90 percent of the land area is in farms and almost all of the land is used for agricultural purposes. Unlike the subsistence farms (non-commercial, rural residences) in Eastern Kentucky, Central Kentucky farms are larger, the soils more productive and the topography is more suitable for commercial purposes. Bluegrass farms produce a great diversity of !roducts (e.g., tobacco, grain, dairy, beef, etc.) and are able to provide a stable and adequate income for their operators. Tje metropolitan area of Lexington, plus several smaller cities in and around the region provide a diversity of occupational opportunities for

the young people of Cnetral Kentucky.

The percent of the seniors planning to migrate from Table 2 (boys -- 52.9, girls -- 57.1) and the percent planning college (boys -- 43.3, girls -- 37.7) place this area in the middle of our study regions. Although the area is relatively prosperous and characterized by a favorable opportunity structure, the absence of a large metropolitan area within the immediate region no doubt has a supressing effect on the career plans of young people living in Central Kentucky. (This would be consistent with findings by Burchinal 1962, Sewell 1957 and others.)

The Rural Industrialized Western Kentucky Region

The industrial, semi-rural counties of Henderson and Daviess represent the Western Kentucky region. Once primarily an agricultural region, this area is the most economically developed of those drawn into the study. Owensboro, the county seat of Daviess County, is home to a number of important industries including the manufacturing of radio parts, whiskey distillers, and a relatively large steel plant on the city's outskirts. In addition, there are tobacco manufacturers, steel fabricators, food processors, chemical plants, plastic manufacturers, and furniture making concerns in the immediate area.

Because of its geographical location and relatively economic prosperity, there is a broad range of diverse occupational opportunities for young people, and, subsequently, the rate of planned out-migration (Table 2) is low compared with other regions. A further reflection of the prosperous circumstances of the area is found in the number of seniors planning college: over half of the boys and girls plan to continue their formal education after high school.

The Copper/Pulp Area of Upper Michigan: Ontonagon County

Ontonagon County, Michigan is a rural area located on the shore of Lake Superior in the western portion of Upper Michigan. Agriculture, once an important activity in the area, now occupies only a small fraction of the work force. This is due to the poor soil, short growing season and the remoteness of the area from potential markets. The most important economic enterprises in the area today center on the pulp industry and copper mining. The White Pine copper mine, largest single employer in the area, has over 3,000 workers drawn from as far away as 90 miles. In addition, about 1,000 men and women are employed by Hoener-Waldorf Paper Company and related concerns.

Although the economic and employment situation is bright,[2] the remoteness from urban areas and the lack of many essential services and facilities impose a considerable hardship on the local inhabitants. The nearest cities are between 60 and 70 miles away. Furthermore, indoor recreation facilities, shopping centers, and public transportation are either very limited or entirely absent (e.g., there are nor movies in the county).

Ontonagon County is somewhat unique since it is characterized by high out-migration (66.7 percent boys, 74.6 percent girls) and high educational aspirations (48.9 percent boys, 53.4 percent girls plan on college). Given the balance between educational and work opportunities in the area, however, this is not surprising. The limited range of occupational opportunities (mainly White Pine mine or Hoener Waldorf paper), the remoteness from more diversified occupational opportunities and the lack of entertainment and recreational facilities force many of the young people to migrate.

However, the area's prosperity and generally favorable attitude toward education provide the economic and motivational resources necessary for the stimulation of upward educational mobility. Thus, although a sizeable majority of the young people aim to leave the county, about half of the boys and girls plan to go to college.

To summarize, the "regions" selected for examination in this study represent a wide range of rural socio-economic circumstances. They can be considered somewhat representative of area variations across the United States -- economically depressed, remote rural areas; more prosperous commercialized agricultural areas; rural areas that are becoming industrialized or are already in advanced stages of rural industrialization.

STUDY POPULATIONS

The study population consists of 2987 rural high school seniors from five areas in Kentucky, West Virginia, and Michigan. Table 3 presents the areas to be considered directly in the study, the number of cases in each region, the number of schools represented, the year the data were collected, and the principal investigator.

With the exception of Ontonagon County, Michigan, all studies were organized in line with the aims of a larger project (supervised by Harry K. Schwarzweller) and data were collected in a comparable fashion by means of a self-administered questionaire in the schools.[3] The Ontonagon portion is one part of another larger research project directed by J. Allan Beegle, Jon Rieger, and Harry K. Schwarzweller. Although the foci of the two parent projects are somewhat different, comparable data on career ambitions (educational and migrational plans) and determinants of ambitions (social class, grade rank, and rural-urban residence) are available. For purposes of this study,

Table 2. Percent planning college and percent planning to migrate in each study region.

	Western Kentucky		Upper Michigan		Central Kentucky	
	Boys	Girls	Boys	Girls	Boys	Girls
Percent Planning College	56.4	51.3	48.9	53.4	43.3	37.7
Percent Planning to Migrate	50.0	52.7	66.7	74.7	52.9	57.1

	Eastern Kentucky		Kentucky/W. Va.	
	Boys	Girls	Boys	Girls
Percent Planning College	33.5	37.8	36.0	40.9
Percent Planning to Migrate	66.5	76.9	57.0	63.0

Table 3. Regional study populations compared.

Area	(N)	Number of Schools	Year	Principal Investigator
Western Kentucky	(575)	2	1968	Donald Bogie
Central Kentucky	(617)	5	1968	Donald Bogie
Appalachian Non-Coal	(643)	8	1968	Donald Bogie
Appalachian Coal				
Eastern Kentucky	(481)	5	1970	James Brown/Donald Bogie
Mingo Co., W. Va.	(478)	6	1970	John Marra
Ontonagon Co., Michigan	(193)	5	1968	J. Allan Beegle/Jon Rieger

the m

can b

STUDY

Caree

in ti

a lon

ultim

choic

more

"educa

typolo

occupa

of plan

school.

elsewhe

employm

the give

iables h

on a your

"Do you a

yes)."

treated a

determine

"Do you t

the method of data collection, measurement procedures, and techniques can be considered equivalent.

STUDY VARIABLES

Career Plans

Choosing a career is not an event that occurs at one point in time. Rather, it is best viewed as a series of decisions made over a long period which lead upt to, and in a sense "predict" an individual's ultimate occupational choice. Two of the more important pre-occupational choice decisions concern plans to leave the home area in search of more favorable occupational opportunities. These two career decisions -- "educational plan" and "migrational plan" -- form an interactive typology that helps to delimit the nature and scope of a young person's occupational options and ultimately his life chances.

In this research, educational plans are classified in terms of plan to go to college or to terminate formal education after high school. Migrational plans refer to a youth's expectation to relocate elsewhere in an area with easier access to favorable occupational employment opportunities than the place of origin (i.e., outside the given regional context). For the purposes of this study, the variables have been dichotomized.

For all regions except Ontonagon County, Michigan, information on a young person's educational plan was solicited by the question: "Do you actually expect to go to college? (no; maybe or don't know; yes)." In dichotomizing the variable, a secific "yes" response is treated as "high" and all others as "low."

In Ontonagon County a young person's educational plan is determined by the patterned response to two simultaneous questions: "Do you intend to get further training after high school? (yes;

no; don't know)". "What do you plan? (college; trade school; apprenticeship; other)". Those seniors who indicated a specific intention to go to college were classified as having "high" educational plans; all others were treated as "low" for the pruposes at hand.

To determine migrational plan, seniors in the Kentucky and West Virginia were asked: "Do you expect that someday you will move away from this area (the county) and live somewhere else? (no, definitely not; maybe; yes, perhaps; yes, definitely)". The "yes, perhaps" and "yes, definitely" responses were treated as indicants of plan to migrate (or "high" migrational plan); the other two categories were reduced to a "low" migrational plan category.

In the Michigan study, migrational plan was ascertained by the question: "How eager are you to stay or move from your home community after graduation? (Eager to stay; probably stay, but not eager to stay; probably leave, but not eager to leave; eager to leave)". A response of "probably leave, but not eager to leave" or "eager to leave" is treated as a "high" migrational plan.

Social Class Origin

Social class origin is determined by the father's social class standing, since for the most part a young person assumes the social status of his family and little intergenerational mobility takes place until a youth has completed his formal schooling. The indicant of social class used in this research is based on father's occupational status.

In all of the areas a modified Edward's (1943) type scale was utilized for this purpose. Census divisions and systems of categorization developed by other researchers were employed as criteria of ranking occupations. For our purposes, the ordinal Edward's

scale is reduced to a dichotomy comparing "manual" and "nonmanual" occupations.

Grade Rank

In all areas, intellectual ability is assessed by a youth's grade rank or relative status within the classroom. Information regarding grade point average or grade rank was gathered for each respondent from school records by the field worker. Each senior is ranked in relation to his classmates within his high school. A dichotomy separating the "lower" half from the "upper" half is employed in this study.

Community Context/Rural-Town Setting

In addition to regional setting, rural/town context is employed as an indicant of the immediate situational circumstances confronting as youth and as a possible source of career plan variation within each region. For example, it has been shown that the social environment of the mountain coal camps and subsistence farming neighborhoods of Appalachia differ in many ways from the larger towns and city centers of the region and that these differences are manifested in the career paths young people from the Appalachian regions take (Schwarzweller 1973; Bogie 1970). Although research distinctions have been made between rural/farm and rural/nonfarm residence, rural residence, in general, whether farm or open country, has a distinct effect of the career plans of young people. Consequently, an indicant of local setting based on a rural/town dichotomy is employed in this study.

In all regions the following question was asked: "Where do you live? (on a farm; open country, but not on a farm; village or town)". For our purposes, responses "on a farm" and "open country, but not on a farm" are collapsed into a "rural" category, while

"village or town" represents the "town" category.

STATISTICAL PROCEDURES AND ANALYTICAL STRATEGY

To empirically test the effects of variations in regional and community contexts on the career planning model, percentage differences observed in contingency tables will be employed. This method is cpmmonly referred to as "elaboration by partials." By this technique, relationships between independent and dependent variables are first determined. After these relationships have been established, controls are introduced and the interrelationships among the control measures, independent variables and dependent variables is determined.

It should be noted that in our statistical design, regional setting and sex are treated as "contextual controls" (e.g., supra-control variables) and will not be entered into the elaboration process in the usual manner. The overall research design, then, can be conceived as a multiple replication and elaboration of an identical career planning model in five distinct regional/ecological contexts.

James A. Davis' (1971) method of non-linear causal analysis will be used to ascertain the independent and interrelated effects, for boys and girls, of social class origin, residence place, and grade rank on career plans. Davis' technique is closely analagous to multiple regression/path analysis. However, unlike regression analysis, which assumes linear relationships among the variables under study, the Davis method is based on Yule's Q coefficient and is specifically designed to handle dichtomous variables.

The analytic strategy suggests the following approach: (1) Educational plans and propensity to migrate will be viewed as dependent variables. These two variables, representing individual components of the broader term "career plans", will be treated both

as independent indicants and as forming an interactive dependent variable typology. (2) Social class origin and grade rank will be introduced individually and jointly as "predictors" of career plans. They will be viewed as independent and control variables in the statistical desing. (3) Rural/town setting will be employed as a contextual control and, where appropriate, be introduced into the elaboration and prediction procedures. (4) Regional context will be treated as a supra-control variable and, as noted above, will not be introduced directly into the statistical procedures. (5) Sex will also be viewed as a control variable. Career planning models will be positted for both boys and girls.

The purpose here, and the main objective of the study, is to establish empirically the extent to which regional/environmental contexts effect the manner in which social class, grade rank, and local residence place individually and jointly structure career plans.

FOOTNOTES

Chapter 2

1. A large majority of these farms are small, marginal operations. Most farms in the region are unable to support even a subsistence standard of living.

2. The economic situation in Ontonagon County has been radically altered since data were collected in 1968. In January 1976 White Pine Copper was forced to lay off two-thirds of its labor force due, in part, to a drop in the world price of copper and also due to a U. S. Government ruling against a proposed merger of White Pine with another large copper concern. At present, plans are being made to study the impact of this economic calamity on the residents of the copper/pulp area of Upper Michigan.

3. Although the Mingo County and Eastern Kentucky data were collected by different researchers, for somewhat different purposes, examination of the general socio-economic characteristics of each area shows them to be very similar (i.e., low income, coal mining, depressed areas). Hence, because identical research techniques were employed, for the purposes of this research these two study populations will be combined to form the "Appalachian Coal Region."

CHAPTER III

ANALYSIS OF FINDINGS

This chapter reports the findings. The analysis is organized to explore inter-regional variations in the patterning of career plans among rural high school seniors. We begin with an examination of educational and migrational choices by regions and sex. This overview provides a basis for elaboration by social class background, grade rank, and intra-regional residence place.

BASIC INTERRELATIONSHIPS

College Plan and Migrational Plan

High school seniors from the two Appalachian areas (coal and non-coal) are less likely to pursue further academic training, beyond high school, than are high school seniors in the non-Appalachian areas. This fact is evidenced quite clearly in Table 2. In terms of migration plans, however, the Appalachian -- non-Appalachian distinction does not hold. The copper/pulp area of Upper Michigan is also characterized by very high out-migration and in this respect is strikingly similar to Appalachia.[1]

To help interpret and elaborate on the above pattern, the two dependent variables, educational and migrational plans, are combined into an interactive typology (Table 4). This analytic strategy reveals that a large proportion, nearly half, of "migration oriented" Appalachian youth plan to leave the immediate area without the benefit of college preparation. At least 45 percent of the Appalachian youth (and probably more, considering the hogh drop-out rate from high school) will enter the labor market with no more than a high school

Table 4. Percent going on to college and percent planning to migrate; individually and combined by sex and region of residence.

	Western Kentucky		Upper Michigan		Central Kentucky	
Percent planning to:	Boys	Girls	Boys	Girls	Boys	Girls
Go on to college	56.4	51.3	47.8	53.4	43.3	37.7
Migrate (i.e., leave the region)	50.2	52.7	66.7	74.7	52.9	57.1
Go on to college and migrate	31.5	28.4	32.2	41.7	29.8	24.7
Go on to college but not to migrate	25.2	23.0	15.6	10.7	13.7	13.0
Not go on to college but to migrate	18.6	24.5	34.4	33.0	23.3	32.4
Not go on to college and not to migrate	24.7	24.1	17.8	14.6	33.2	29.9
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0
Total (N)	(295)	(278)	(90)	(103)	(292)	(324)

Table 4 (cont'd,).

	Eastern Kentucky		Kentucky/W. Va.	
Percent planning to:	Boys	Girls	Boys	Girls
Go on to college	33.5	37.8	34.8	35.1
Migrate (i.e., leave the region)	66.5	76.9	63.9	71.5
Go on to college and migrate	24.2	31.8	19.6	22.3
Go on to college but not to migrate	9.4	6.2	15.3	12.9
Not go on to college but to migrate	42.5	45.3	43.8	49.1
Not go on to college and not to migrate	23.9	16.9	21.3	15.7
Total Percent	100.0	100.0	100.0	100.0
Total (N)	(330)	(311)	(489)	(466)

diploma. In contrast, seniors from the copper/pulp area in Michigan who plan to migrate are far more likely to be college bound. Michigan young people from a remote rural area in some ways similar to Appalachia, obviously will enter the labor market in a significantly more competitive position than their Appalachian counterparts.

A comparison between Appalachia and Upper Michigan clearly illustrates the importance of regional normative and economic mileaus in career planning. Families in the depressed Appalachian areas are often unable to provide the material or motivational support necessary for their offspring to pursue a college education. Because of inadequate hogh school preparation, limited occupational opportunities, and limited social and economic resources in the home area, Appalachian youth are, in effect, "pushed" out of the region with little tangeable support or marketable training. In Michigan's copper/pulp region, on the other hand, although a sizeable majority of high school seniors plan to leave the area after graduation, a socio-economic climate that facilitates achievement and advancement and a school system that, in general, maintains high academic standards assures a large proportion of these young migrants the chance to obtain at least some college training or other vocational training before they confront the work world.

In both the heavily industrialized Western Kentucky area and the commercial farming area of Cnetral Kentucky, for boys especially, college education is associated with plans to move out of the home region and, conversely, a decision not to continue on toward college seems to be linked with plans to find employment in the home area. This pattern is especially prevalent where blue collar/farm related occupational opportunities are relatively abundent.

The availability and accessability of stimulating and rewarding manual occupations in these regions offers a realistic alternative to out-migration and/or a college degree.

To briefly summarize: career planning choices vary by region. The more prosperous regions (e.g., Western Kentucky, Central Kentucky, and Upper Michigan) are characterized by larger proportions of seniors planning college than the less affluent Appalachian areas. Additionally, the balance between educational and work opportunities in a region appears to have direct bearing on migrational plans. Seniors from areas with unfavorable or limited occupational structures (e.g., Appalachia and Upper Michigan) are more likely to anticipate moving away from the home area than young people residing in regions where employment chances are both more numerous and varied.

Father's Occupational Status and Career Plans

Given that regional context has an immediate influence on the career choices of high school seniors (Table 4), we are now in a position to begin a more direct exploration of the regional-effect hypothesis. Our thesis holds that regional setting is best viwed as a distinct social system in which sets of career determinants assume different structural configurations.

Table 5 shows, not surprisingly, that father's occupational status is highly associated with further academic plans in all regions. In the case of boys, correlations range from .45 in the copper/pulp area of Michigan to .63 in the non-coal sector of Appalachia. Although the relative differences among the regions are not great, a comparison of absolute percentage differences lends support to our hypothesis. The educational ambitions of senior boys from the more affluent regions (Western Kentucky, Upper Michigan, and to a lesser

Table 5. Percent going on to college and percent planning to migrate by father's occupational status, sex, and region of residence.

	Western Kentucky		Upper Michigan		Central Kentucky	
Percent Planning College	Boys	Girls	Boys	Girls	Boys	Girls
Father's occupational status						
Nonmanual	78.5	76.8	66.7	52.0	68.8	67.1
(N)	(79)	(69)	(18)	(25)	(80)	(85)
Manual	50.0	43.5	43.1	52.6	34.8	28.1
(N)	(206)	(200)	(72)	(78)	(204)	(224)
Yule's Q	.57	.62	.45	.01	.61	.68
Percent Planning to Migrate						
Father's occupational status						
Nonmanual	60.8	60.9	66.7	76.0	68.8	65.9
(N)	(79)	(69)	(18)	(25)	(80)	(85)
Manual	45.4	49.2	66.7	74.4	47.1	54.0
(N)	(205)	(199)	(72)	(78)	(204)	(224)
Yule's Q	.30	.23	.00	.04	.42	.24

Table 5 (cont'd).

	Eastern Kentucky		Kentucky/W. Va.	
Percent Planning College	Boys	Girls	Boys	Girls
Father's occupational status				
Nonmanual	63.8	55.3	60.2	63.2
(N)	(47)	(47)	(88)	(106)
Manual	28.4	36.5	31.5	30.1
(N)	(243)	(233)	(324)	(299)
Yule's Q	.63	.37	.53	.60
Percent Planning to Migrate				
Father's occupational status				
Nonmanual	74.5	83.0	57.5	79.2
(N)	(47)	(47)	(87)	(106)
Manual	64.5	77.6	63.9	67.2
(N)	(242)	(232)	(324)	(299)
Yule's Q	.23	.17	-.13	.30

exte

seni

appr

effe

plan

Mich

are

mode

blue

A lac

Michi

senio

contr

Centr

optio

coal

sub-p

sugge

for u

compa

and r

that

the f

Michig

betwee

extent Central Kentucky) are proportionately higher compared to seniors from Appalachia. Boys from the depressed Appalachian areas approach high school graduation from a socio-economic mileau that effectively dampens chances for further academic training.

The patterning of migrational plans, unlike that of educational plans, varies regionally. In Appalachia and the copper/pulp area of Michigan the correlations between social class and propensity to migrate are low or negative, while in Central and Western Kentucky they are moderately high. Relative differences range from .42 in the Central bluegrass area of Kentucky to -.13 for senior coal boys from Appalachia. A lack of blue collar work options and/or opportunities in Upper Michigan and Appalachia apparently force many lower class high school seniors out of the home region in search of career fulfillment. In contrast, blue collar boys from the more prosperous Western and Central Kentucky regions are confronted with far more occupational options, thus reducing the necessity to leave the home region.

It is interesting to note that nonmanual boys from the coal region are less inclined to migrate than any other Appalachian sub-population (including nonmanual/non-coal boys). This pattern suggests that occupational aspirations and expectations, at least for upper class boys, are more easily attained in the coal area compared with the non-coal area. We suspect that the mining industry and related concerns offer career possibilities and alternatives that are absent in the non-coal area and consequently act to dampen the flow of out-migration.

In the case of girls, Table 5 shows that, although Upper Michigan is somewhat different, the relative and absolute relationships between educational plans and father's occupational status resembles

the boy's pattern. Girls from lower class homes in Western Kentucky and Upper Michigan manifest proportionately higher educational plans than their Appalachian counterparts. Interestingly, upper class senior girls from the copper/pulp area have very low educational ambitions, especially compared with girls from Western and Central Kentucky. It may be that the small study population (N=25) of nonmanual girls in Upper Michigan may, in part, account for the aberant pattern.[2] But then, again, the pattern may not be an artifact and indeed a phenomenon meritting further study.

The migration plans of girls in all regions closely paralell the boy's pattern. Girls from blue collar homes in Appalachia lean more toward migration than their counterparts in Western and Central Kentucky. Furthermore, the propensity to migrate is greater for nonmanual girls in all study areas.

To summarize: inter-regional variations in the association between father's occupational status and career plans (especially migration plans) along with absolute percentage differences supports the contention that regional circumstances have an important impact on the manner by which family background variables (i.e., social class) influence educational and migrational plans. Let us now focus our attention on another important predictor of career plans -- grade rank.

Grade Rank and Educational Plan

High academic performance in school is generally regarded as an important "stepping stone" for admission to college. Grades are accepted as the legitimate sorting criterion in our educational system. A young person with "high" grades has, in effect, attained the endorsement of the school system to pursue higher educational

goa

sta

or

poth

educ

plan

show

leve

for

senic

Kentu

does

boys

gradu

from

non-Ap

among

to go

diminis

ligible

boys an

sanctio

of regio

plays in

appears

goals. However, our research thesis suggests that regional circumstances exert pressure on the youth that may inhibit, supplement, or facilitate the importance of grade rank. In other words, we hypothesize that the importance of scholastic achievement vis-a-vis educational plans varies as situational circumstances vary.

While correlations between grade standing and educational plan are substantial for both boys and girls in all regions, Table 6 shows that absolute inequalities exist among regions at all grade levels. "Low" scholastic performance is especially detremental for Appalachian youth; less than 20 percent of the poor achieving seniors plan on college. In contrast, in Upper Michigan and Western Kentucky, and in particular among boys, a "low" academic placement does not manifest the same consequences; around 40 percent of the senior boys plan on college even though they rank in the bottom half of their graduation class. Even among the better qualified students, seniors from Appalachia plan to go to college less frequently than their non-Appalachian counterparts.

Furthermore, sexual inequlaities are evident in all regions among the "high" achievers. Boys with "high" grades are more likely to go to college than similarly qualified girls. These inequalities diminish, however, among the "low" performers in Appalachia. Negligible percentage differences between the less academically gifted boys and girls in Appalachia suggests the absence of normatively sanctioned expectations at the lower end of the achievement continuum.

Findings from Table 6, then, further confirm the importance of regional context on career plans. The role that academic performance plays in selecting and sorting talent for high academic placement appears to be contingent, to some extent, on the nature of the

Table 6. Percent going on to college by grade rank, sex, and region of residence.

	Western Kentucky	Upper Michigan	Central Kentucky

Table 6. Percent going on to college by grade rank, sex, and region of residence.

	Western Kentucky		Upper Michigan		Central Kentucky	
Percent Planning College	Boys	Girls	Boys	Girls	Boys	Girls
Grade rank						
High	79.8	67.5	81.5	66.2	68.2	54.0
(N)	(114)	(166)	(57)	(65)	(110)	(187)
Low	42.6	26.7	36.8	27.3	28.3	14.9
(N)	(176)	(105)	(27)	(33)	(173)	(134)
Yule's Q	.68	.70	.77	.68	.69	.74

	Eastern Kentucky		Kentucky/W. Va.	
Percent Planning College	Boys	Girls	Boys	Girls
Grade rank				
High	63.0	50.0	62.9	47.0
(N)	(119)	(192)	(186)	(285)
Low	16.4	19.1	17.6	17.6
(N)	(195)	(115)	(272)	(165)
Yule's Q	.79	.62	.78	.61

regional environments or mileaus. That is, the meaning and importance of a specified grade rank vis-a-vis a youth's academic ambitions is interpretted and mediated in relation to his place in the regional social/opportunity structure.

Before positting multiple control and intra-regional causal models, we will now examine the influence of local residence place on career plans.

Local Residence Setting and Career Plans

Regional settings were selected to represent a wide range of rural socio-economic circumstances. Within all regions, however, community and neighborhood differences also exist, of course. The career patterns and life chances of young people from the more predominantly rural, isolated tracts (e.g., open country or farm) within a region may vary significantly from young people living in the larger towns or urban communities. In this section we wish to examine the effect of intra-regional residence context on educational ambitions and migrational plans.

As shown in Table 7, youth residing in one of the larger towns or cities of an area are more likely to plan on college than their more rural counterparts. Positive relationships hold for all areas except the copper/pulp region. Moderately high correlations exist for both boys in Appalachia and for boys and girls from the Central Kentucky bluegrass region, while somewhat lower associations hold for seniors in Western Kentucky and among Appalachian girls. Regional effects are most apparent among the "rural" segments of our study population. Seniors living in the rural areas of Western Kentucky are more oriented toward college than seniors residing in the mountain neighborhoods of Appalachia or in the farm/open country

Table 7. Percent going on to college and percent planning to migrate by local residence place, sex, and region of residence.

	Western Kentucky	Upper Michigan	Central

Table 7. Percent going on to college and percent planning to migrate by local residence place, sex, and region of residence.

	Western Kentucky		Upper Michigan		Central Kentucky	
Percent Planning College	Boys	Girls	Boys	Girls	Boys	Girls
Residence place						
Non-rural	62.4	57.0	46.6	42.6	52.4	49.6
(N)	(117)	(107)	(58)	(54)	(126)	(133)
Rural	52.5	47.7	50.0	63.3	36.5	29.3
(N)	(179)	(172)	(32)	(49)	(167)	(191)
Yule's Q	.20	.18	-.07	-.40	.31	.41
Percent Planning to Migrate						
Residence place						
Non-rural	59.8	63.6	63.8	74.1	66.4	66.9
(N)	(117)	(107)	(58)	(54)	(125)	(133)
Rural	43.8	46.2	71.9	75.5	43.1	50.3
(N)	(178)	(171)	(32)	(49)	(167)	(191)
Yule's Q	.31	.34	-.18	-.04	.45	.33

Table 7 (cont'd,).

	Eastern Kentucky		Kentucky/W. Va.	
Percent Planning College	Boys	Girls	Boys	Girls
Residence place				
Non-rural	60.9	44.2	53.3	45.2
(N)	(46)	(52)	(152)	(155)
Rural	29.1	36.5	26.5	30.1
(N)	(285)	(260)	(336)	(309)
Yule's Q	.58	.16	.52	.31
Percent Planning to Migrate				
Residence Place				
Non-rural	67.4	73.1	69.5	78.7
(N)	(46)	(52)	(151)	(155)
Rural	66.5	78.0	60.7	67.6
(N)	(284)	(259)	(336)	(309)
Yule's Q	.02	-.13	.19	.28

areas of Central Kentucky. Appalachian boys are especially hurt by a rural home origin.

Interestingly, however, young people living in the larger towns or villages, regardless of regional setting, manifest strikingly similar educational ambitions. Excluding Upper Michigan, the absolute percentage differences among the study regions varies only 10 percent for boys and 12 percent for girls. Viewing college plans from an intra-regional perspective seems to show that opportunities for upward educational mobility are more equitably distributed in Western Kentucky than in Central Kentucky or the Appalachian areas.

In the copper/pulp region of Upper Michigan an inverse relationship between rurality and college plans is evident. The relative isolation of the area and the absence of any sizeable towns in Ontonagong County[3] operate to equalize residence place differences and make the schools, in a sense, less localistic and more integrated on the regional level. Unlike Appalachia, concentrations of wealth and/or opportunities are not found in the largest town of the area (i.e., Ontonagon -- the county seat), but rather, what economic and social resources exist in the county tend to be rather widely dispersed.

Propensity to migrate is positively correlated with non-rural residence in Western and Central Kentucky (Table 7). In Appalachia and Upper Michigan, on the other hand, clear patterns do not emerge. As previously noted, the Appalachian areas and Upper Michigan are typified by extremely high out-migration rates. The findings from Tables 5 and 7 seem to indicate that because of the heavy exodus of young people, two of the more generally recognized predictors of migration plans (i.e., social class origin and local

residence place) exhibit little explanatory power in these areas. In the more prosperous areas of Western and Central Kentucky, however, both social class origin (Table 5) and residence place (Table 7) are linked with out-migration plans. Young people residing in the more rural environs of Western and Central Kentucky are less likely to leave the home region than their town/city counterparts.

Clearly, the greater the availability and accessability of employment opportunities in a region, the more likely a young person will be to find a satisfying career in the home area. However, when occupational opportunities are limited or lacking in an area, mass out-migration is a normal phenomenon. As the present study shows, this out-migration cuts across both class and residence lines. It appears that only in regions where the probability of migration is tempered by the chance of finding suitable employment nearby do other determinants such as social class and local residence place become important predictors of migration plans.

A summary of findings to this point provides a base upon which to build three and four variable causal models of career plans. Generally speaking, as hypothesized, regional circumstances tend to condition the manner in which career plans are formulated. The regional socio-economic environment and the balance between educational and work opportunities in a region shape and mold the relative importance of family and school based pressures in a career planning model.

Furthermore, the extent to which social and economic resources are evenly distributed throughout a region affects the life chances and career possibilities of a youngster. Regions such as Appalachia, where available opportunities and resources, though limited, tend

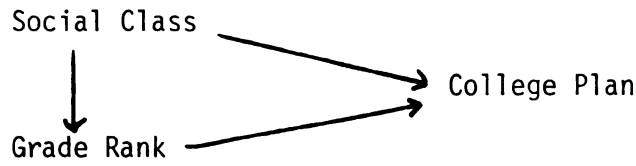
to concentrate in the larger cities and towns, reveal significant intra-regional differences in the patterning of career plans. Seniors living in the rural/isolated neighborhoods of Appalachia manifest considerable lower academic aspirations than their more "urban" cousins. In the heavily industrialized Western Kentucky area and the copper/pulp area of Upper Michigan, on the other hand, intra-regional resources are more equitably distributed. Consequently, local residence place distinctions, as determinants of educational plans, are less important.

THREE AND FOUR VARIABLE ANALYSIS BY REGION AND SEX

Having examined regional variations in a number of two variable relationships, we are now in a position to combine predictor variables (i.e., social class origin, grade achievement, and local residence place) into more interesting and complex three and four variable causal models. These models will be probed for regional effects using percentage differences observed in contingency tables and James A. Davis' method of non-linear causal modelling. It should be noted that in some instances, especially for the Upper Michigan study population, cell size becomes extremely small undercertain multiple control conditions; hence some of the effects noted may be of relatively low reliability. In these cases, only descriptive statements concerning the direction of the relationship can be made.

Model 1: Father's Occupational Status -- Grade Rank -- College Plan

The first set of interrelationships involve social class origin (father's occupational status), grade rank, and college plan. The causal model for all regions can be most simply diagrammed as follows:



Partial correlation coefficients (Yule's Q) from Table 8 reveal that in all regions social class origin and scholastic achievement have independent effects on educational plans. Although father's status is positively associated with grades, and hence the model suggests that grades may operate as an intervening variable between class and plan, only among two sub-populations (Western Kentucky girls and Central Kentucky girls) does grade achievement function to reduce the importance of class background on educational ambitions. Even among these sub-populations the reduction is very slight.

Although the above model is in large measure free of interactional effects and regionall consistent, careful examination of Table 9 yields some important relative and absolute regional differences and some interesting intra-regional (e.g., sex differences) variations. First, correlations between grades and educational plans are stronger for Appalachian boys and weaker for Appalachian girls than in other regions. An academically unqualified Appalachian boy, regardless of class origin, is significantly less likely to pursue a college education than similarly qualified boys from the more affluent regions (i.e., Western Kentucky, Central Kentucky, and Upper Michigan). "High" scholastic achievement, then, functions as a critical prerequisite for upward educational mobility among boys from Appalachia.

For Appalachian girls, however, grades are somewhat less important in the quest for college. This reversal phenomenon appears to be a function of the usually high level of college

Table 8. Three variable non-linear causal analysis: correlations (Yule's Q) among father's occupational status, grade rank, and college plan by sex and region of residence.

Western Kentucky

Table 8. Three variable non-linear causal analysis: correlations (Yule's Q) among father's occupational status, grade rank, and college plan by sex and region of residence.

	Western Kentucky		Upper Michigan		Central Kentucky	
Zero Order Correlation	Boys	Girls	Boys	Girls	Boys	Girls
Father's occupation and college plan	.57	.61	.66	-.02	.63	.68
Control Variable						
High grades	.41	.47	1.00	.22	.52	.54
Low grades	.58	.58	.44	-.53	.66	.74
Partial Correlation	.54	.48	.54	.08	.61	.57
Zero Order Correlation						
Grade rank and college plan	.66	.69	.77	.68	.68	.72
Control Variable						
Father nonmanual status	.52	.55	1.00	.90	.56	.49
Father manual status	.66	.66	.69	.58	.70	.71
Partial Correlation	.65	.65	.70	.62	.68	.69

Table 8 (cont'd,).

	Eastern Kentucky	Kentucky/W. Va.

Table 8 (cont'd,).

	Eastern Kentucky		Kentucky/W. Va.	
Zero Order Correlation	Boys	Girls	Boys	Girls
Father's occupation and college plan	.63	.35	.54	.62
Control Variable				
High grades	.59	.45	.75	.62
Low grades	.60	-.49	.24	.53
Partial Correlation	.57	.36	.52	.61
---	---	---	---	---
Zero Order Correlation				
Grade rank and college plan	.81	.60	.78	.56
Control Variable				
Father nonmanual status	.78	.92	.92	.61
Father manual status	.81	.50	.71	.52
Partial Correlation	.81	.52	.73	.53

Table 9. Percent going on to college by father's occupational status, grade rank, sex, and region of residence.

		Western Kentucky		Upper Michigan		Central Kentucky	
Grades	Father's Occ. Status	Boys	Girls	Boys	Girls	Boys	Girls
High	Nonmanual	87.8	80.7	100.0	73.3	82.5	72.1
	(N)	(41)	(57)	(8)	(15)	(40)	(68)
High	Manual	75.0	60.4	73.7	64.0	60.0	43.2
	(N)	(72)	(106)	(19)	(50)	(70)	(118)
Low	Nonmanual	69.4	54.5	57.1	12.5	56.8	46.7
	(N)	(36)	(11)	(7)	(8)	(37)	(15)
Low	Manual	37.7	24.1	34.0	32.0	21.3	11.4
	(N)	(130)	(87)	(50)	(25)	(127)	(105)

		Eastern Kentucky		Kentucky/W. Va.	
Grades	Father's Occ. Status	Boys	Girls	Boys	Girls
High	Nonmanual	82.1	69.4	89.6	73.1
	(N)	(28)	(36)	(48)	(78)
High	Manual	58.0	46.4	55.4	38.8
	(N)	(81)	(140)	(121)	(183)
Low	Nonmanual	36.8	9.1	25.0	40.0
	(N)	(19)	(11)	(36)	(25)
Low	Manual	12.8	22.5	17.1	16.8
	(N)	(148)	(89)	(181)	(107)

aspiration manifested by lower class girls. Similar findings have been noted (Schwarzweller 1973, 1974; Bogie 1970), though reasons for its persistence, at present remain unclear.

In contrast to the Appalachian case, percentage differences from Table 9 indicate that, in the industrialized Western Kentucky area, in the commercial farming area of Central Kentucky, and in the copper/pulp area of Upper Michigan, "high" grade achievement enhances the chances for college among seniors from both manual and nonmanual homes. However, unlike Appalachia, poor achievers in these more prosperous areas have surprisingly high academic expectations. We suspect that other normative and structural mechanisms exist in these non-Appalachian areas to keep more young people on the academic track.[4]

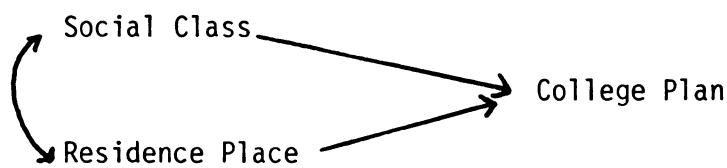
Secondly, the "normative climate" and economic realities associated with Appalachian life mediate against all but the most academically gifted and economically affluent young people (i.e., those boys and girls from nonmanual homes that are ranked in the top half of their graduation class) to supress academic aspirations. Interestingly, the educational ambitions of youth from the upper strata of Appalachia transcend regional boundaries. The magnitude of their plans is comparable to their non-Appalachian counterparts. However, in general, Appalachian youth who perform poorly in school, come from lower class thresholds, or both, manifest lower ambitions than comparable ranked young people in Western Kentucky, Central Kentucky, and Upper Michigan.

Clearly, then, regional variations exist in this three variable career planning model. Although the associations noted in Table 8 are similar in magnitude and direction for seniors in

all regions, absolute percentage differences suggest that regional mileaus manifest an influence which implicitly or explicitly affect a young person's career plans and ultimately his life chances. Furthermore, as evident in Appalachia, the regional opportunity structure may be perceived, interpretted, and reacted to differently by boys and girls.

Model 2: Father's Occupational Status -- Residence Place -- College Plan

The second model we will pursue concerns the independent and interrelated effects of social class origin and intra-regional residence place on college plan. Zero order correlations for the regions, in general, yield the following causal paths:



The search for regional variations in Model 2 requires introduction of local or intra-regional residence place (rural/town) as a possible explanatory factor of the relationship between father's occupational status and college plan (see Table 5). Conversely, since the relationship between class and residence is viewed as asymmetrical, the "effect" of class must also be partialled-out from the residence place/college plan relationship.

Turning first to the intervening influence of residence place, Tables 10 and 11 reveal that intra-regional residence variation has a negligible effect, in all regions, on the association between class and plan. In general, young people from nonmanual homes are more prone toward college, regardless of local community context, than young people from lower class backgrounds.

Table 10. Three variable non-linear causal analysis: correlations (Yule's Q) among father's occupational status, local residence place, and college plan by sex and region of residence.

	Western Kentucky		Upper Michigan		Central Kentucky	
Zero Order Correlations	Boys	Girls	Boys	Girls	Boys	Girls
Father's occupation and college plan	.57	.62	.45	-.01	.61	.68
Control Variable						
Non-rural residence place	.54	.54	.56	.54	.75	.75
Rural residence place	.57	.67	.00	-.62	.34	.45
Partial Correlation	.56	.63	.52	.04	.55	.61
---	---	---	---	---	---	---
Zero Order Correlations						
Residence place and college plan	.18	.20	-.07	-.40	.31	.40
Control Variable						
Father nonmanual status	.09	-.07	.38	.52	.57	.49
Father manual status	.13	.15	-.24	-.64	.03	.06
Partial Correlation	.12	.13	-.22	-.54	.11	.12

Table 10 (cont'd,).

	Eastern Kentucky		Kentucky/W. Va.	
Zero Order Correlation	Boys	Girls	Boys	Girls
Father's occupation and college plan	.63	.37	.54	.59
Control Variable				
Non-rural residence place	.43	.50	.50	.68
Rural residence place	.58	.32	.37	.44
Partial Correlation	.57	.33	.41	.53
---	---	---	---	---
Zero Order Correlation				
Residence place and college plan	.60	.10	.55	.28
Control Variable				
Father nonmanual status	.36	.22	.57	.37
Father manual status	.51	.02	.45	.03
Partial Correlation	.50	.03	.46	.08

Table 11. Percent going on to college by father's occupational status, local residence place, sex, and region of residence.

		Western Kentucky		Upper Michigan		Central Kentucky	
Residence	Father's Occ. Status	Boys	Girls	Boys	Girls	Boys	Girls
Non-rural	Nonmanual	80.0	75.7	68.8	64.3	79.6	74.6
	(N)	(40)	(37)	(16)	(14)	(49)	(59)
Non-rural	Manual	54.2	48.5	38.1	35.0	35.6	29.9
	(N)	(72)	(66)	(42)	(40)	(73)	(67)
Rural	Nonmanual	76.9	78.1	50.0	36.4	51.6	50.0
	(N)	(39)	(32)	(2)	(11)	(31)	(26)
Rural	Manual	47.8	41.0	50.0	71.1	34.4	27.4
	(N)	(134)	(134)	(30)	(38)	(131)	(157)

		Eastern Kentucky		Kentucky/W. Va.	
Residence	Father's Occ. Status	Boys	Girls	Boys	Girls
Non-rural	Nonmanual	73.7	63.6	73.1	70.5
	(N)	(19)	(11)	(52)	(61)
Non-rural	Manual	52.6	37.1	47.6	31.0
	(N)	(19)	(35)	(84)	(84)
Rural	Nonmanual	57.1	52.8	42.9	52.3
	(N)	(28)	(36)	(35)	(44)
Rural	Manual	26.3	36.4	25.8	29.8
	(N)	(224)	(198)	(246)	(215)

Reordering the independent variables so that social class is treated as a first order control reveals interesting and often complex interactional effects. In the case of Appalachian girls and Western and Central Kentucky boys and girls, Tables 10 and 11 show, for instance, that class related factors reduce the correlation between residence place and college plan. In other words, local residence conditions are relatively unimportant determinants of the educational ambitions among these study populations. However, for Appalachian boys and for boys and girls from the copper/pulp area of Upper Michigan, intra-regional variations persist or increase when class origins are controlled. Non-rural Appalachian boys, regardless of class origin, are significantly more likely to aspire toward college than their counterparts living in the more predominatly rural areas of the region (Table 11). A lack of educational opportunities and career alternatives in the more isolated rural neighborhoods of Appalachia appears to dampen the aspirations and expectations of boys from all social class levels. Interestingly, boys from the larger Appalachian towns and villages not only manifest higher educational ambitions than their rural cousins, but, they also posess ambitions comparable (or greater) than non-rural Western and Central Kentucky boys.

Looking somewhat more closely into the Appalachian case, we note that nonmanual/rural boys from the coal area are less likely to plan college than their non-coal counterparts. This is an enlightening and intriguing finding. However, although we suspect that occupational opportunities associated with the recent revitalization of industry in the coal fields may account for this difference, we will wait until the next section, where we examine migration

plans by class and local residence, to more fully probe and elaborate the career patterns of nonmanual/rural coal and non-coal boys.

In the copper/pulp area of Michigan, Table 11 reveals negative associations between residence place and college plan, and an increase in magnitude of these relationships when class origins are controlled. These high negative correlations are a function of the large number of rural seniors from blue collar families planning college (71 percent girls and 50 percent boys). The manual labor force in Ontonagon County, though concentrated primarily in two industries -- mining and paper -- is well trained and highly paid. Many manual class families are able to (and apparently do) provide the monetary resources for college. Thus, given the restricted job structure in the copper/pulp area, especially for girls, and the accessability of college, it is not surprising to find many blue collar seniors pursuing further academic training.

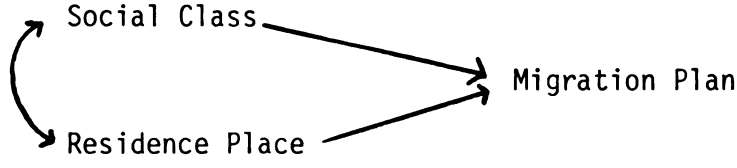
Model 2 alerts us to the fact that variations in a career planning model may exist at more than one contextual level. In other words, assurances of validity in regional research may be questioned if the assumption is made that geographical boundaries delineate homogeneous socio-cultural entities. Not only must regional differences be taken into account, but intra-regional residence variations (e.g., rural farm/rural non-farm/urban) must also be noted. In Appalachia for example, we found interesting and important independent intra-regional effects on career plans.

Rural residence in Appalachia significantly dampens college expectations. As we previously noted, the distribution of wealth, resources, and opportunities tends to be concentrated in the more "urban" areas of the region and subsequently facilitates "high"

academic aspirations among non-rural seniors. In Western Kentucky, Central Kentucky, and to a lesser extent Upper Michigan, on ther other hand, intra-regional economic and social homogeneity seems to foster a more "equalitarian" system of educational chances.

Model 3: Father's Occupational Status -- Residence Place -- Migrational Plan

The final three variable model we wish to examine deals with migration plan and the predictor variables -- social class origin and residence place. Although causal paths for this model are regionally unstable, in general:



Correlation coefficients reported in Table 12 generally indicate that both social class origin and intra-regional residence place are independent determinants of migration plan. The pattern of results found in Tables 12 and 13 are very similar to those previously noted in Tables 5 and 7. However, careful analysis of Table 13 allows us to describe somewhat more clearly the migration patterns for specific social class/residence place groupings.

In Western and Central Kentucky it is the nonmanual/non-rural seniors who are most prone to leave the home area. Not surprisingly, Table 11 shows this subpopulation to be the most upwardly educational mobile. It appears that the aspirations and life expectations of these highly motivated young people extend beyond the opportunities available in the home region.

Seniors least likely to leave Western or Central Kentucky come from rural, working class homes. Table 11 further shows these

Table 12. Three variable non-linear causal analysis: correlations (Yule's Q) among father's occupational status, local residence place, and migrational plan by sex and region of residence.

	Western Kentucky		Upper Michigan		Central Kentucky	
Zero Order Correlations	Boys	Girls	Boys	Girls	Boys	Girls
Father's occupation and migration plan	.30	.23	.00	.04	.42	.24
Control Variable						
Non-rural residence place	.25	.15	-.04	.16	.55	.12
Rural residence place	.28	.19	1.00	-.09	.13	.16
Partial Correlation	.27	.18	.02	.05	.32	.14
---	---	---	---	---	---	---
Zero Order Correlations						
Local residence place and migration plan	.33	.34	-.18	-.04	.44	.32
Control Variable						
Father nonmanual status	.28	.30	-1.00	.16	.65	.25
Father manual status	.31	.33	-.13	-.10	.28	.29
Partial Correlation	.30	.33	-.15	-.08	.33	.28

Table 12 (cont'd,).

	Eastern Kentucky		Kentucky/W. Va.	
Zero Order Correlations	Boys	Girls	Boys	Girls
Father's occupation and migration plan	.23	.17	-.13	.30
Control Variable				
Non-rural residence place	-.34	.60	-.32	.09
Rural residence place	.55	.06	-.08	.33
Partial Correlation	.49	.09	-.16	.26
---	---	---	---	---
Zero Order Correlations				
Local residence place and migration plan	-.01	-.08	.14	.32
Control Variable				
Father nonmanual status	-.63	.41	.01	.09
Father manual status	.23	-.19	.26	.33
Partial Correlation	.13	-.17	.24	.31

Table 13. Percent planning to migrate by father's occupational status, local residence place, sex, and region of residence.

		Western Kentucky		Upper Michigan		Central Kentucky	
Residence	Father's Occ. Status	Boys	Girls	Boys	Girls	Boys	Girls
Non-rural	Nonmanual	67.5	67.6	62.5	78.6	81.6	69.5
	(N)	(40)	(37)	(16)	(14)	(49)	(59)
Non-rural	Manual	55.6	60.6	64.3	72.5	56.2	64.2
	(N)	(72)	(66)	(42)	(40)	(73)	(67)
Rural	Nonmanual	53.8	53.1	100.0	72.7	48.4	57.7
	(N)	(39)	(32)	(2)	(11)	(31)	(26)
Rural	Manual	39.8	43.6	70.0	76.3	42.0	49.7
	(N)	(133)	(133)	(30)	(38)	(131)	(157)

		Eastern Kentucky		Kentucky/W. Va.	
Residence	Father's Occ. Status	Boys	Girls	Boys	Girls
Non-rural	Nonmanual	57.9	90.9	57.7	90.9
	(N)	(19)	(11)	(52)	(61)
Non-rural	Manual	73.7	71.4	72.6	77.4
	(N)	(19)	(35)	(84)	(84)
Rural	Nonmanual	85.7	80.6	57.1	77.3
	(N)	(28)	(36)	(35)	(44)
Rural	Manual	63.7	78.7	60.0	63.3
	(N)	(223)	(197)	(240)	(215)

young people to have low academic expectations. Most likely, the availability and accessability of a wide range of blue collar/ semi-skilled work opportunities in the area dampen both migration plan and the necessity of obtaining a college degree before entering the labor force.

In the copper/pulp region, although girls are somewhat more likely to leave the home area than boys, class/residence distinctions among migrants are relatively unimportant. As Tables 5 and 7 showed, Upper Michigan is typified by extremely high out-migration among its young people. The seniors that do leave, however, often plan on obtaining some college training before they enter the labor force (Table 4).

In Appalachia, with the exception of a few subpopulations of boys, seniors manifest migration patterns very similar to Michigan youth. Because few educational and/or occupational alternatives exist for upwardly mobile Appalachian youth, only by leaving the region can seniors, especially girls, measureably enhance their career expectations. Furthermore, the regional out-migration rate is generally so high that neither social class nor local residence place distinctions are useful indicants of a young person's propensity ot migrate.

The interesting case of nonmanual/rural boys from the coal area should be noted here. In the previous section, Table 11 revealed that this subpopulation manifested lower educational ambitions than their non-coal counterparts. From Table 13 we see that these boys, along with nonmanual/non-rural boys from both regions, have relatively low migration expectations. Combining the findings from Tables 11 and 13 leads us to speculate about the interrelationship of regional economic and opportunity structures and their effect on the career

plans of various subpopulations of Appalachian senior boys.

Earlier we suggested that the "opening-up" of occupational opportunities and employment chances in the coal fields has served to dampen somewhat plans for further academic training. From Table 13 it appears that this revitalization has also slowed the rate of regional out-migration. Furthermore, Table 13 suggests that it is the nonmanual Appalachian boys who are most likely to take advantage of opportunities in the home area.

Within Appalachia, then, a pattern emerges regarding the distribution and claim on occupational opportunities. Employment chances "filter" down through the stratification system. Nonmanual/non-rural boys have "first choice" among available jobs. Hence, the migration rate among these subpopulations is low. As the system "opens-up", additional opportunities are made available to other subpopulations (e.g., nonmanual/rural boys). It is the manual background youth who are most hurt in a poverty environment. These boys are ranked at the bottom of an unequal system of rewards and opportunities and are thus forced to leave the home region, though often ill equipped, to compete for jobs in the larger society.

Model 4: Father's Occupational Status -- Grade Rank -- Residence Place -- College Plan

The final model we will explore deals with the interrelated and independent effects of three independent variables (social class, grade achievement, and intra-regional residence place) on educational plans. This model is represented below. All relationships are asymmetrical with the exception of the association between residence and social class.

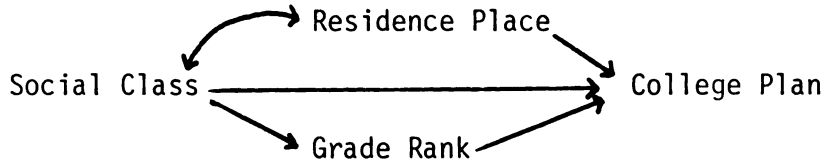


Table 14 presents the correlation coefficients necessary to cross-regionall analyze the four variable model. Since only social class is directly related to all variables in the model, multiple interactional effects emerge only when social class is treated as the zero order independent variable and local residence place and grade standing are introduced as controls. An ordering of variables such that either intra-regional residence place or grade rank is treated as the independent sero order variable would produce results identical to those presented in Tables 7 and 8.[6] Finally, to more fully understand and interpret Model 4, Table 15 presents the relative percentage differences in educational plans among young people ordered by social class, scholastic performance, and intra-regional residence setting.

Correlation coefficients for Model 4 (Table 14) show that social class origin exerts a rather strong and independent effect on educational plans in all regions. Even when scholastic performance and residence place are considered, second order partial correlations for boys range from .48 in the coal sector of Appalachia to .56 in the copper/pulp area of Upper Michigan. For girls the associations are somewhat weaker, though significant, ranging from .17 in Upper Michigan to .51 for girls for industrialized Western Kentucky.[7]

Though the correlations among the regions are similar in magnitude and direction, relative percentage differences (Table 15) reveal some interesting "universal" patterns as well as regional "specifications" in the educational ambitions of our study populations.

Table 14. Four variable non-linear causal analysis: correlations (Yule's Q) among father's occupational status, grade rank, local residence place, and educational plan by sex and region of residence.

	Western Kentucky		Upper Michigan		Central Kentucky	
Zero Order Correlation	Boys	Girls	Boys	Girls	Boys	Girls
Father's occupation and college plan	.57	.61	.66	-.02	.63	.68
Grade effect	.07	.20	.22	-.31	.04	.28
Residence effect	.01	-.04	-.05	-.18	.11	.20
Joint effect	.00	.07	-.04	.26	-.03	-.14
Second Order Partial	.53	.51	.56	.17	.55	.45
Zero Order Correlation						
Grade rank and college plan	.66	.69	.77	.68	.68	.72
Class effect	.04	.09	.17	.27	-.01	.09
Residence effect	.04	-.06	-.02	.05	-.05	-.04
Joint effect	-.05	.03	.00	-.22	.01	-.03
Second Order Partial	.68	.68	.71	.58	.70	.71

Table 14 (cont'd,).

Zero Order Correlation	Western Kentucky Boys	Western Kentucky Girls	Upper Michigan Boys	Upper Michigan Girls	Central Kentucky Boys	Central Kentucky Girls
Local residence place and college plan	.18	.18	-.01	-.39	.27	.41
Class effect	.15	.08	.28	.38	.41	.41
Grade effect	.02	.01	-.03	.12	-.18	-.18
Joint effect	-.01	.13	.56	.19	.05	.19
Second Order Partial	.10	.11	-.17	-.48	.15	.22

Zero Order Correlation	Eastern Kentucky Boys	Eastern Kentucky Girls	Kentucky/W. Va. Boys	Kentucky/W. Va. Girls
Father's occupation and college plan	.63	.35	.56	.61
Grade effect	.12	-.04	.06	.11
Residence effect	.18	.06	.22	.20
Joint effect	-.05	.09	-.04	-.18
Second Order Partial	.48	.34	.40	.50

Table 14 (cont'd,).

	Eastern Kentucky		Kentucky/W. Va.	
Zero Order Correlation	Boys	Girls	Boys	Girls
Grade rank and college plan	.81	.60	.78	.56
Class effect	.07	.27	.10	.07
Residence effect	.09	.06	-.04	-.11
Joint effect	-.15	-.03	.05	.04
Second Order Partial	.79	.50	.75	.57
Zero Order Correlation				
Local residence place and college plan	.60	.10	.54	.29
Class effect	.17	.15	.17	.42
Grade effect	-.05	.08	-.07	-.11
Joint effect	.05	.08	.05	.02
Second Order Partial	.52	.00	.50	.13

Table 15. Percent going on to college by father's occupational status, local residence place, grade rank, sex, and region of residence.

Residence	Grades	Father's Occ. Status	Western Kentucky Boys	Western Kentucky Girls	Upper Michigan Boys	Upper Michigan Girls	Central Kentucky Boys	Central Kentucky Girls
Non-rural	High	Nonmanual	86.4	76.7	100.0	72.7	87.5	80.4
		(N)	(22)	(30)	(8)	(11)	(24)	(46)
Non-rural	High	Manual	81.0	61.8	70.0	45.5	54.5	46.9
		(N)	(25)	(34)	(10)	(22)	(22)	(32)
Non-rural	Low	Nonmanual	72.2	66.7	50.0	----	70.8	58.3
		(N)	(18)	(6)	(6)	(1)	(24)	(12)
Non-rural	Low	Manual	39.1	33.3	31.0	20.0	25.0	14.3
		(N)	(46)	(30)	(29)	(15)	(48)	(35)
Rural	High	Nonmanual	89.5	85.2	----	75.0	75.0	54.5
		(N)	(19)	(27)	(0)	(4)	(16)	(22)
Rural	High	Manual	70.2	59.7	77.8	78.6	62.5	41.9
		(N)	(47)	(72)	(9)	(28)	(48)	(86)
Rural	Low	Nonmanual	66.7	40.0	100.0	14.3	30.8	----
		(N)	(18)	(5)	(1)	(7)	(13)	(3)
Rural	Low	Manual	36.9	19.3	38.1	50.0	19.0	10.0
		(N)	(84)	(57)	(21)	(10)	(79)	(70)

Table 15 (cont'd,).

Residence	Grade	Father's Occ. Status	Eastern Kentucky Boys	Eastern Kentucky Girls	Kentucky/W. Va. Boys	Kentucky/W. Va. Girls
Non-rural	High	Nonmanual	83.3	70.0	46.9	85.4
		(N)	(12)	(10)	(32)	(41)
Non-rural	High	Manual	100.0	47.8	71.4	58.3
		(N)	(7)	(23)	(35)	(47)
Non-rural	Low	Nonmanual	57.1	----	31.6	44.4
		(N)	(7)	(1)	(19)	(18)
Non-rural	Low	Manual	20.0	18.2	31.1	22.2
		(N)	(10)	(11)	(45)	(36)
Rural	High	Nonmanual	81.3	69.2	75.0	58.3
		(N)	(16)	(26)	(16)	(36)
Rural	High	Manual	54.1	46.2	48.8	39.0
		(N)	(74)	(117)	(86)	(136)
Rural	Low	Nonmanual	25.0	10.0	18.8	28.6
		(N)	(12)	(10)	(16)	(7)
Rural	Low	Manual	12.3	10.0	12.5	23.1
		(N)	(138)	(78	(136)	(71)

For example, neither regional setting nor intra-regional residence place influence the plans of academically superior nonmanual boys. Cross-regionally, over 75 percent of these boys expect to go to college. Also consistent cross-regionally for boys is the effect of a "low" grade standing and/or "low" social class rank on educational plans. In other words, lower class boys and/or boys with poor academic records are less likely to pursue a college education than seniors from higher class thresholds and/or high academic standing.

Table 14, however, also presents evidence of regional variability in the four variable model. The effect of local residence place on educational plans, for example, varies by region. There are fewer chances for upward educational mobility in rural Appalachia (and to a less extent Central Kentucky) compared with the rural sectors of Western Kentucky and Upper Michigan. The relationship is especially apparent among boys who perform poorly in school.

For girls, regional effects are manifested for all sub-populations except upper class, non-rural girls who perform well in school. This cohort displays remarkably similar educational ambitions. Among most other classifications, senior girls from the Appalachian areas exhibit lower ambitions than their counterparts in the more affluent Kentucky and Michigan regions.

To conclude this chapter we will briefly focus our attention solely on an intra-Appalachian (i.e., coal versus non-coal) comparison of career plans.

An Intra-Appalachian Note

Throughout this research we have generally found the two Appalachian study "regions" manifesting very similar career plan configurations. However, as stated in Chapter 2, the non-coal area

of Eastern Kentucky and the coal area of West Virginia and Kentucky represent two rather distinctive socio-economic modalities within what is generally recognized as "Appalachia." Our purpose here is to probe for patterned regularities and systemmatic differences in the structuring of career ambitions between high school seniors living in the predominantly coal area and seniors residing in the non-coal area.

In general, the "opportunity structure" and the balance between educational and work opportunities in Appalachia are not conducive for upward social mobility. The educational aspirations and expectations of all but the most talented and ambitious upper class youth are affected by the marginal economic structures and the normative climate associated with a rural/poverty environment.

Young people form manual/blue collar home are in an especially disadvantageous position when it comes to planning and implementing occupational and educational career goals. They have limited access to the normative and material resources that facilitate high educational attainment. Furthermore, the chances of finding viable unskilled or semi-skilled employment in the home area are indeed slim. Given the structuring of educational and work opportunities for lower class Appalachian youth, then, it is not surprising that a large proportion of these young people expect to leave the home area in search of employment.

Compared with boys, lower class Appalachian girls are even less likely to formulate high career aspirations in the home region. Our data indicate that boys seem to have "first call" on both educational resources and available jobs. Not surprisingly, the regional out-migration rates is higher for girls than boys.

Having briefly examined commonalities in career planning configurations for coal and non-coal youth, let us know examine patterned differences aming various intra-Appalachian populations. For example, nonmanual/rural coal boys are significantly less likely to pursue a college education and are also less likely to leave the home region than their non-coal counterparts. As noted earlier, we suspect that the recent revitalization of the mining industry in the coal area has created a more favorable occupational opportunity structure and consequently has provided a realistic alternative to continuuing on in school and/or eventually migrating in search of work.

Intra-Appalachian regional differences are also evident for senior girls. Specifically, upward educational mobility for Eastern Kentucky/non-coal girls (especially those from upper class homes) is contingent upon "good" grades. In the coal area, on the other hand, with few exceptions, college ambitions are not as tightly tied to academic status in the high school.

It appears that the reemergence of coal mining as a viable economic enterprise provides a material resource base upon which "coal" girls, regardless of academic credentials, can plan college. In the non-coal/subsistence agricultural area, on the other hand, economic resources are less available and when they are allocated to girls, seem to be given to the most talented, nonmanual segment of the population.

In conclusion, our findings seem to indicate that living in a rural/poverty environment has a dual effect on the process of career development: 1) it dampens the college ambitions of all but the most academically talented and economically advantaged young people; and 2) it amplifies propensity to migrate among all

subpopulations that have limited access to job opportunities in the home region.

Furthermore, our data suggest that career planning models, at least in the two Appalachian regions surveyed here, are relatively unaffected by modal economic structures, per se. The patterning of career ambitions seems to be more a function of the balance between educational and work opportunities within a region. Thus, although the coal and non-coal areas have different socio-economic bases, their "opportunity structures" are very similar and subsequently, career planning models closely resemble each other.

FOOTNOTES

Chapter 3

1. Again it should be restated that "plan to migrate" implies a move out of the home region and does not include intra-regional relocation.

2. A change in plans by two girls from "low" to "high" would increase the percentage planning college from 52.0 percent to 60.0 percent.

3. The village of Ontonagon, county seat and largest town in the area, has a population of only 2,432 (1972).

4. Researchers have suggested the importance of other determinants of educational aspirations. For example, parental attitudes toward education were probed by Sewell and Shah (1968), Schwarzweller and Lyson (1974). Value orientations were explored by B. C. Rosen (1956) and Alan B. Wilson (1959). Finally, the influence of peer group culture was examined by Alexander and Campbell (1964) and James A. Davis (1966). Research dealing with the interrelationship of regional circumstnaces and factors such as those mentioned above is clearly needed.

5. It should be reemphasized that under certain multiple control conditions, cell size becomes extremely small, and in some cases vanishes entirely. Thus, in certain instances, certainty of validity and reliability concerning the magnitude of associations may be low.

6. Appendix A contains complete computations for the four variable model. Results obtained by employing either grades or residence as the zero order independent variable are consistent with the three variable analysis.

7. Again the interesting case of Upper Michigan girls should be noted. Lower class girls from this area manifest unusually high levels of college ambition. Evidence from other studies in Ontonagon County (1957 and 1974) suggest that these results are both valid and reliable.

CHAPTER IV

SUMMARY AND CONCLUSIONS

This research was designed to explore the impact of regional contexts on the career planning configurations of rural high school seniors. We attempted to link social-psychological determinants of career ambitions to the more macro socio-cultural variables that characterize regional situations. In other words, regional circumstances and the balance between educational and work opportunities within a region were viewed as specifying conditions in the career development sequence. Specifically, our concern was with the manner by which (1) social class origin, (2) academic performance in school, and (3) local residence setting combine to form regionally distinct career plan "models."

SUMMARY OF FINDINGS

The main empirical findings are summarized in outline form as follows:

I) Seniors from the two Appalachian areas (coal and non-coal), on the whole, manifest lower college expectations than seniors from Western Kentucky, Central Kentucky, or Upper Michigan.

II) Proportionately more seniors from the Appalachian regions and from Upper Michigan plan to migrate away from their home areas than seniors from Western and Central Kentucky.

III) In Western and Central Kentucky and Upper Michigan, migrational plan is more tightly linked to college plan than in Appalachia. Conversely, the proportion of Appalachian seniors migrating without planning on a college education is much higher than in

the other three study regions.

IV) The zero order correlations between educational plan and father's occupational status, grade rank, and local residence place are, as follows:

A) Father's occupational status and educational plan:

1) Father's occupational status is positively associated with plans for college for all segments of the study population, except Upper Michigan girls.

2) Taking father's occupational status into account, absolute percentage differences reveal that Appalachian seniors manifest consistently lower levels of educational ambition than their regional counterparts.

B) Grade rank and educational plan:

1) Grade achievement is substantially correlated with educational plan among all regional study populations.

2) Taking grade rank into account, absolute percentage differences reveal that Appalachian seniors at all grade ranks are less likely to plan on attending college than their regional counterparts.

C) Non-rural residence (e.g., city or town) is positively associated with college plans for all areas except Upper Michigan.

V) The zero order correlations between migrational plan and father's occupational status and intra-regional residence place are, as follows:

A) Father's occupational status and migrational plan:

1) In Appalachia and Upper Michigan the association between father's status and migrational plan are low or negative.

2) In the two Kentucky regions the associations between father's

status and migrational plan are moderately high.

B) Local residence place and migrational plan:

1) Non-rural residence is positively assocaited with plans to migrate in Western and Central Kentucky.

2) In Appalachia and Upper Michigan, because of very heavy out-migration, clear patterns do not emerge.

VI) The relative and independent effects noted in Model 1 (social class, grade rank, and educational plan) are, as follows:

A) Both social class origin and grade rank exert independent influence on college plans in all regions.

B) Correlations between grades and educational plans are relatively stronger for Appalachian boys and relatively weaker for Appalachian girls compared to other regions.

C) In Appalachia the supressing effect of either a low social class standing or poor grades or both on college plans are more dramatic than in the other study regions.

VII) The relative and independent effects noted in Model 2 (social class, local residence place, and educational plan) are, as follows:

A) In all regions, local community context has a negligible effect on the association between class and college plan.

B) The original association between local residence place and college plan disappears among seniors in Western and Central Kentucky and, likewise, for Appalachian girls when class is introduced as an intervening variable.

C) The original association between local residence place and college plan persists or increases in Upper Michigan and for Appalachian boys when class is introduced as a control variable.

VIII) The relative and independent effects noted in Model 3 (social class, local residence place, and migrational plan) are, as follows:

A) Both social class and intra-regional residence place have independent effects in Central and Western Kentucky.

1) Nonmanual/non-rural seniors are the most likely to migrate from Western and Central Kentucky.

2) Manual/rural seniors are those least likely to migrate from Western and Central Kentucky.

B) In Upper Michigan and the two Appalachian areas class/residence place distinctions among seniors expecting to migrate are relatively unimportant.

IX) The relative and independent effects noted in Model 4 (social class, grade rank, local residence place, and educational plan) are, as follows:

A) Social class exerts a rather strong and independent effect on educational plans in all regions, even when the effects of grade achievement and intra-regional residence place are controlled.

B) "Low" grade rank and/or "low" social class origin dampen educational ambitions in all regions.

C) Career planning patterns for boys reveal:

1) Local residence place and regional setting are relatively unimportant in influencing the plans of academically gifted seniors from upper class homes.

2) Demonstrated academic competence is relatively more important vis-a-vis educational chances in Appalachia and Central Kentucky than in Western Kentucky and Upper Michigan.

3) Seniors in rural Appalachia, regardless of their grade achievement or class background, exhibit lower educational expectations than their counterparts in the other regions.

D) Career planning patterns for girls reveal:

1) Only upper class/non-rural seniors who perform well in school are unaffected by regional pressures.

2) Appalachian seniors, regardless of their qualifications or background, generally manifest lower ambitions than their regional counterparts.

X) An intra-Appalachian comparison of career planning configurations revealed few patterned differences between the coal and non-coal areas.

To briefly summarize: empirical findings from Tables 7 -- 16 clearly supported our exploratory hypotheses. The relative importance and predictive power of social class and/or grades and/or local residence place in a career planning model was contingent upon the distribution of opportunities within a given region. Although correlation coefficients often masked important relative inter-regional percentage differences, in general, regional effects were noted in zero order as well as multiple control relationships. Our research reached its greatest complexity in Models 3 and 4 (Tables 12 -- 15) where the influence of multiple career planning determinants were untangled and interpretted.

GENERAL CONCLUSIONS

One finding central to the raison d'etre of this thesis merits careful attention. It concerns a basic component of the career plan configurations: the allocation and distribution of educational chances cross-regionally. To meaningfully interpret our findings, however, it is necessary to return to the literature

for a moment and lay some additional groundwork. Specifically, we must examine recent developments pertaining to issues of social equality/inequality, achievement and the structuring of educational and occupational opportunities.

Seymour Martin Lipset hits at the heart of an ideological dilemna facing America today when he details the tension between the values we place on achievement and the somewhat contradictory values we place on equality. According to Lipset:

> We believe all persons must be given respect simply because they are human beings: we believe that the differences between high -- and low -- status people reflect accidental and perhaps temporary variations in social relationships .... Achievement is a corollary to our belief in equality. For people to be equal, they need to have a chance to become equal .... Achievement is a function of equality of opportunity. (Lipset 1967: 2)

Milner states the relationship in a slightly different manner:

> If anything equality is a derivative of achievement rather than vice versa. Our committment to achievement is primary, and our committment to equality is in large measure a result of the former. At the very least, achievement is on a par with equality. Moreover ... equality of opportunity is probably best understood as a mechanism for compromising and reconciling the contradictory aspects of equality and achievement. (Milner 1972: 12)

Most Americans resolve the tension between two partially contradictory basic ideals (achievement and equality) by affirming a belief in "equality of opportunity." The American social and economic system is oriented toward selecting and rewarding the most competent and talented individuals. (e.g., Scarce educational resources are allocated to the best academically qualified.) The system rests on the notion that, all things being equal, high status attainment in the educational and occupational sector is dependent upon how hard an individual "works." That is, achievement and "getting ahead" are seen primarily in terms of individual effort.

Again, Milner makes the point well:

> If people were given an equal chance at the beginning, their final destination would be determined by how hard they chose to work. How hard one worked was seen as a thing which each individual could control. Therefore, it was perfectly fair to reward those who chose to put out the most effort. (Milner 1972: 14)

This image of social justice, based on equality of opportunity, assumes an individual posses a high degree of freedom to choose among the alternatives confronting him. In reality, however, an individual's chocies are not free, but rather are dependent upon his location in the social environment. For example, in the quest for college, a young person's aspirations and expectations are influenced by his social class origin. High SES youth posess material and normative advantages not generally found in lower class homes.

Additionally, the larger social context (e.g., region) in which determinants operate must also be reckoned with. Not all regional mileaus are "equal." Social and economic conditions vary from one area or region to another and may act to dampen (or exaggerate) the effects of structural determinants such as class, grades, etc. on educational plans.

Having taken a cursory look at the structuring of social opportunities in American society, we have set the stage to add our findings to this body of theory and speculation. A tabular form of the Lorenz curve (Table 16) best illustrates the degree of regional inequalities in the distribution of educational opportunities. This form of measurement allows us to define a society that is completely free of regional inequalities, a society where gross regional disparities exist, or any degree of variation in between.

In general, Appalachian high school seniors manifest lower educational ambitions than their counterparts in the heavily

Table 16. "Lorenz Curve" -- educational "chances" for boys and girls by region and certain specified control conditions.

		Father's Occupational Status		Grade Rank		Residence Place	
Boys	All	Nonmanual	Manual	High	Low	Non-rural	Rural
Western Kentucky	25.9%	23.3%	26.6%	22.5%	30.0%	22.6%	27.0%
Upper Michigan	21.9	19.3	22.9	22.9	26.0	16.9	25.7
Central Kentucky	19.9	20.5	18.5	19.2	20.0	19.1	18.8
Eastern Kentucky	16.3	19.0	15.2	17.7	11.6	22.1	15.0
Kentucky/W. Va.	16.0	17.9	16.8	17.7	12.4	19.3	13.5
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Girls							
Western Kentucky	23.8%	24.7%	22.7%	23.7%	25.3%	23.9%	23.1%
Upper Michigan	24.8	16.4	27.6	23.3	25.9	17.9	30.6
Central Kentucky	17.5	21.3	14.7	19.0	14.1	20.8	14.2
Eastern Kentucky	17.6	17.5	19.2	17.5	18.1	18.5	17.6
Kentucky/W. Va.	16.3	20.1	15.8	16.5	16.6	18.9	14.5
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0

industrialized Western Kentucky area, the commercial farming are of Central Kentucky, or the copper/pulp area of Upper Michigan. With few exceptions, regional inequalities persist even when father's occupational status, grade achievement, or local residence place are considered. College expectations are especially depressed for manual status, low achieving, or "rural" coal and non-coal boys and for manual status or "rural" coal girls. These findings suggest that Appalachian high school seniors are ranked at or near the bottom of an unequal system of opportunities, which, ability and social origin notwithstanding, adversely effects their aspirations, expectations, and ultimately their life chances.

The interesting case of Central Kentucky girls must also be noted. Compared with other manual status, low scholastic achieving girls, or with girls living in the predominantly rural areas, Central Kentucky girls manifest extremely low educational ambitions. Reasons for this pattern point toward a differential assessment of regional career opportunities.

It is generally assumed that girls from blue collar homes, girls who perform poorly in school, or girls from rural areas have relatively limited normative and/or material resource bases upon which to plan college. Consequently, they generally opt for manual or low status white collar jobs in or around the home area.

In Appalachia and Upper Michigan, however, employment opportunities for girls are very limited. Economic necessity thus forces many of these less favored girls to reorder their career priorities and consider college as a "real" career alternative.

In Western Kentucku, on the other hand, extensive rural industrialization seems to enhance the quest for higher education.

The expectation patterns for all sub-groups of Western Kentucky seniors are high.

Of the regions surveyed here, only in the commercial agricultural area of Central Kentucky does it appear that educational plans are formed somewhat independently of the regional economic situation. That is, educational and occupational choices are less "determined" by the economic realities of the region. Rather, we believe, family and school based pressures are "freer" to influence plans. The relatively low educational expectations of manual status or poor achieving or rural Central Kentucky girls, compared with those in the other study regions can be explained by looking at characterisitics of the larger (regional) economic system. Bluegrass girls form their plans in a mileau free of those socio-economic pressures and conditions that tend to increase or inflate expectation patterns.

Overall, these findings suggest that, ability and social origin notwithstanding, when regional circumstances are considered, equality of educational opportunity is more myth than reality. Educational ambition is dependent not only upon an individual's position in the social order, but also upon the needs and socio-economic character of the immediate regional environment. In other words, the effects of social class origin or school achievement on educational ambitions are shaped by conditions unique to a given region.

An additional set of findings dealing with career development and notions of "equality of opportunity" must be examined. These findings concern the relationship of regional opportunity structure and propensity to migrate. To aid in this discussion, we will again employ a tabular form of the Lorenz curve.

Table 17 clearly shows regional imbalance in migration plans. Appalachian seniors and seniors from the copper/pulp area of Upper Michigan are significantly more likely to migrate than their counterparts in Western or Central Kentucky. This pattern holds regardless of social class origin or intra-regional residence place.

One must conclude that Appalachian and Upper Michigan youth are quite aware of the restricted occupational environment afforded them in their home region. In order for them to enhance their life chances in the career world and subsequently utilize their skills and abilities to an optimum extent, they must consider relocating in an area with a more favorable opportunity structure.

Although our data show that both Appalachia and Upper Michigan manifest very high out-migration rates, we believe that the reasons for leaving the home area may be quite different. In the economically depressed Appalachian areas families are often unable to provide financial support toward a college education and consequently there is a great pressure on young people to find work. This pressure is often felt even before high school graduation (and may be one of the major causes of the high drop out rate).

In the copper/pulp area of Upper Michigan, on the other hand, college is seen as more a "preparatory internship", an added boost, before a young person is forced to find work. Socio-economic conditions in the region are more conducive for upward educational mobility than in Appalachia. Thus, although propensity to migrate is "high". college ambitions are also "high."

In conclusion, although many Americans believe that career selection and advancement are based on principles of "equality of opportunity" and individual achievement, the fact remains that

Table 17. "Lorenz Curve" -- migration "chances" for boys and girls by region and certain specified control conditions.

		Father's Occupational Status		Residence Place	
Boys	All	Nonmanual	Manual	Non-rural	Rural
Western Kentucky	16.8%	18.5%	15.8%	18.2%	15.3%
Upper Michigan	22.2	20.3	23.2	19.5	25.1
Central Kentucky	17.6	21.0	16.4	20.4	15.1
Eastern Kentucky	22.2	22.7	22.4	20.6	23.3
Kentucky/W. Va.	21.2	17.5	22.2	21.3	21.2
Total Percent	100.0	100.0	100.0	100.0	100.0
Girls					
Western Kentucky	15.8%	16.7%	15.3%	17.8%	14.5%
Upper Michigan	22.4	20.8	23.1	20.8	23.8
Central Kentucky	17.2	18.1	16.7	18.8	15.8
Eastern Kentucky	23.1	22.7	24.1	20.5	24.6
Kentucky/W. Va.	21.5	21.7	20.8	22.1	21.3
Total Percent	100.0	100.0	100.0	100.0	100.0

ascribed attributes such as social class origin rather rigidly structure a person's choices and options. Furthermore, patterns of career development are shaped and molded by the needs of the regional social system. The regional context provides a framework of alternatives, a framework that encourages or discourages individual orientations.

Patterns of behvior, then, can be seen as affected by influences at two social levels: the individual (e.g., social class origin, academic achievement, etc.) and the contextual (e.g., community, region, society, etc.). The interrelationship of factors and conditions at both levels helps to delimit the range and scope of an individual's opportunites and ultimately his life achievement. Only when we understand the intricate and complex interaction between social structure and social context can we hope to formulate theoretically sophisticated and universally valid career planning models.

LIMITATIONS OF STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

Certain limitiations in this study should be noted here so that future research on the problems of career development may be strengthened.

One of the more important decisions we had to make in organizing this research was in defining and delimiting regional areas. For analytical purposes we considered a rural county or group of counties sharing similar structural/ecological configurations indicative or representative of a regional modality or setting. Region was viewed in terms of uniquely patterned opportunity structures and the balance between educational and work opportunites in the immediate area.

There are other ways of conceptualizing and operationally

defining region, of course, that may prove more useful in a study of this sort. Two alternatives come to mind. First, rather than defining region in terms of socio-economic/opportunity structures, emphasis could be placed on identifying and measuring normative climates. One could, for example, relate a youth's career plans and perceived life chances to the prevailing climate of opinion held by parents, teachers, peer groups, and other significant others in a region.

Second, one might examine "regional" patterns of school organization. Here the concern would be with the sensitivity of the school system to the developmental needs of the young people in the area. Factors such as the nature and type of school administration, curriculum content, school financing, guidance counselling, etc. could be correlated with educational and migrational plans.

A second limitiation of the study concerns the number of "regions" surveyed. We tapped only five sets of regilnal circumstances; numerous other mileaus in the United States, each characterized by a somewhat distinctive "opportunity structure", could be identified. Although the aim of this research is not to formulate a model for every identifiable region, the inclusion of additional regional settings would aid the search for universal generalizations by increasing the validity and reliability of our findings. Also, potentially helpful statistical techniques, such as analysis of covariance which allows the researcher to untangle the effects of a specific social structure (e.g., region) after controlling for individual inputs, can only be usefully applied in research employing more regions than we studied here.

Along this line, all of the regions we examined were drawn

from the United States. Variations in the organization of educational systems, methods of selection for higher education (e.g., contest versus sponsored systems), etc., were not taken into account. We believe that it would be very interesting and highly useful to replicate this study in different societal contexts where structural differences in the type of educational institutions and the nature of academic selection exist.

Another limitation of the study involves the social class variable. Because data for this study were collected in two uncoordinated projects, father's occupational status is the only indicant of social class origin that can be utilized with some degree of cross-regional validity. Unfortunately, a measure of this sort is closely tied to regional socio-economic circumstances. For example, a manual worker (e.g., miner) in the coal fields of Appalachia posesses certain values, a atandard of living, and a life style that is undoubtedly different, in some ways, from a manual worker (e.g., miner) in the copper/pulp area of Upper Michigan. In future studies it would be helpful to run a parallel analysis using indicants of social class that are somewhat independent of regional context (e.g., a combined scale of father's educational status and level of living).

THEORETICAL IMPLICATIONS

This study attempted to elaborate and clarify the importance of regional context as a conditional variable in the formation of career plans among rural high school seniors. Our research problem was somewhat atypical, especially for American sociology, where the cross-regional approach is seldom utilized. Implicitly or explicitly, sociologists in the United States seem to operate on

the premise of a "mass society." Although replication studies may be specifically designed to "tailor" some piece of sociological knowledge to local situational circumstances and thus elaborate hypotheses formulated from research in other areas of the United States, rarely are studies designed to anticipate regional variations in institutional configurations, socio-economic circumstnaces or culture. Because sociological research in the U. S. is not generally organized in the comparative vein, but rather as research seeking universal (e.g., national) generalizations about human social behavior, data necessary to explain regional deviations away from commonly accepted hypotheses is rarely made available.

Thus, according to Schwarzweller:

> We assume, even though our judgements often run counter to common sense, a certain functional uniformity or culture or of social circumstances within a geographic area. Currently, of course, we are paying more attention to regional variations, as for example, between the South and the North, between Appalachia and the North Central States. Nevertheless, American Sociology tends to cling to the operational assumption of a "mass society" ... (Schwarzweller 1968: 18)

It is somewhat of a bewilderment to note that, although the regional concept was first utilized successfully as a research tool in the early 1900's by Galpin and others, 60 years later it still has not gained wide spread recognition or acceptance as an important aid in reporting and interpretting sociological knowledge. For example, findings from a study of rural young people, say in Wisconsin, are accepted with few qualms as being generally valid and applicable elsewhere in the United States.[1]

In the present career plan research, regional setting was treated as a supra-control variable. Regional opportunity structures (i.e., the balance between educational and work opportunities in a

region) were viewed as specifying conditions which mediated the immediate pressures exerted by the family and school on educational and migrational plans. Clearly, our findings show that regional variations exist in the manner in which plans are formed and goals implemented. In short, we assume that differing institutional configurations, normative climates, and socio-economic circumstances on the regional level lead to different styles of ambition and the manner by which talent is selected to fill high status roles in the larger society.

Based on our research results, we suggest that the social context thesis, elevated to the level of regional analysis, merits further attention by American sociologists. It is incumbant upon the social researcher to be aware of and account for the effects of variations in regional social structure on the hypotheses, models, and theories he is testing. The usefulness and applicability of sociological generalizations is dependent upon specifying all conditions that account for a given behavior pattern. Clearly, region is one such specifying condition.

PRACTICAL IMPLICATIONS

Implicit in this research is a conception of the United States as a system of functionally interdependent regions. Although related to the needs of the larger national society, each study area is characterized by somewhat unique and particular socio-economic circumstances and institutional configurations. The circumstances and configurations are representative or indicative of "opportunity structures" which can facilitate or inhibit a young person's career ambitions and life chances.

From a practical standpoint, educational and developmental

programs aimed at helping young people make intelligent career decisions must reckon with, and be tailored to, the social conditions of the home region. Educational administrators, guidance counsellors, and other school officials should institute programs and curriculi that are sensitive to the intra-regional balance between educational and work opportunities and that prepare young people for satisfying and financially rewarding work careers in the larger society.

For example, vocational education programs organized to meet regional and/or national labor market needs should be emphasized. Students must be made aware of and trained in the skills that are readily transferrable to available jobs. Too often vocational offerings exist in fields with limited employment possibilities.

Along this line, it is important that Federal funds for vocational education be equitably distributed on an inter-regional basis. Branscome, for instance, notes: "Although Appalachia has 13 percent of the national enrollment in secondary vocational education, it receives only 7.3 percent of the federal funds available." (Branscome 1972: 226).

More importantly, perhaps, the intricate and complex interrelationships among regional context, locus of control of educational resources, and the structuring of career ambitons must be explored. In research that examines the above interrelationships from a cross-cultural perspective (Norway, Germany, and the United States), Schwarzweller notes:

> In American society, where emphasis is placed on local authority and local resources in developing educational facilities, rural industrialization enhances the quest for higher education and appears to coincide with the opening-up and modernizing of educational facilities. On th other hand, in areas of limited economic opportunity such as Appalachia, educational opportunities are also limited and, as a result, the upward educational mobility

> ambitons of lower class youth are markedly depressed. Since industrialization means that the entire system of opportunities is pushed upwards, the net effect of rural industrialization in American society may foster greater regional inequalities. (Schwarzweller 1973: 156)

Planning at the regional level that coordinates and supplements the efforts of state and local authorities is clearly needed. Young people from depressed or isolated rural areas such as Appalachia must obtain the knowledge and skills that allow them to compete on a par with young people from other more "affluent" areas.

FOOTNOTES

Chapter 4

1. See for example research on career plans, status attainment, etc., by Sewell, Haller and Strauss (1957), Sewell (1964), Sewell and Armor (1966), Sewell and Orenstein (1965), Burchinal (1961, 1962), and Michael (1961). Although the above researches have made important and significant theoretical and methodological contributions to American Sociology, the extent of cross-regional validity and reliability of their findings generally remains unanswered.

BIBLIOGRAPHY

BIBLIOGRAPHY

Alexander, Norman C. and Ernest Q. Campbell, "Peer Influences on Adolscent Aspirations and Attainments," American Sociological Review, 29 (August 1964), pp. 568-75.

Anderson, W. A., "Rural Sociology as Science," Rural Sociology, XII (Winter 1947), pp. 347-56.

Bertrand, Alvin L., Rural Sociology, New York: McGraw-Hill Book Company, Inc., 1958.

Bishop, Carol, et. al., "Vocational and Educational Goals of Rural Youth in Virginia," Bulletin No. 568, Blacksburg, Virginia: Virginia Polytechnic Institute, Agricultural Experiment Station, 1964.

Blau, Peter, "Structural Effects," American Sociological Review, XXV (April 1960), pp. 178-98.

Bogie, Donald W., "Sociocultural Differences Among Three Areas in Kentucky as Determinants of Educational and Occupational Aspirations and Expectations of Rural Youth," unpublished Ph.D. dissertation, University of Kentucky, 1970.

Bogue, Donald J., "Economic Areas as a Tool for Research and Planning," American Sociological Review, XV (Spring 1950), pp. 409-16.

Boocock, Sarane S., "Toward a Sociology of Learning: A Selective Review of Existing Research," Sociology of Education, XXXIV (Winter 1966), pp. 1-40.

Boyle, Richard P., "Community Influence on College Aspirations: An Empirical Evaluation of Explanatory Factors," Rural Sociology, XXXI (September 1966), pp. 277-92.

Branscome, James, "The Crisis of Appalachian Youth," in Appalachia in the Sixties, David Walls and John B. Stephenson (eds.), Lexington: University of Kentucky Press, 1972, pp. 224-31.

Burchinal, Lee G., "Differences in Educational and Occupational Aspirations of Farm, Small Town and City Boys," Rural Sociology, XXVI (June 1961), pp. 107-21.

Burchinal, Lee G., "Career Choices of Rural Youth in a Changing Society," Bulletin No. 548, Minneapolis: University of Minnesota Agricultural Experiment Station, 1962.

Burchinal, Lee G., et. al., "The Money to Get Started: What do Farm Boys Expect?" Iowa Farm Science, 17 (August 1963), pp. 3-5.

Davis, James, "The Campus as Frog Pond," American Journal of Sociology, 72 (Winter 1966), pp. 568-75

Davis, James, Elementary Survey Analysis, Englewood Cliffs: Prentice Hall, 1971.

Edwards, Alba M., "Comparative Occupational Statistics for the United States," Washington, D. C.: U. S. Government Printing Office, 1943.

Elder, Glen H., "Family Structure and Educational Attainment: A Cross-National Analysis," American Sociological Review, XXX (February 1965), pp. 82-96.

Empy, L. T., "Social Class and Occupational Aspirations: A Comparison of Absolute and Relative Measurement," American Sociological Review, XXI (December 1956), pp. 703-09.

Fisher, Joseph L., "Concepts in Regional Economic Development," Papers and Proceedings of the Regional Science Association, 1 (1955), W2-W20.

Fleege, Urban H. and Helen J. Malone, "Motivations in Occupational Choice Among Junior and Senior High School Students," Journal of Educational Psychology, XXXVII (1946), pp. 77-86.

Galpin, Charles, in Country Life Conference, University of Wisconsin Bulletin Series No. 472, General Series 308, Madison (February 1911), quoted in John H. Kolb and Edmund De S. Brunner, A Study of Rural Society, Fourth Edition, New York: Houghton Mifflin, 1952.

Gregory, C. L., "Advanced Techniques in Delineation of Rural Regions," Rural Sociology, XIV (March 1949), pp. 59-63.

Hall, R. B., "The Geographic Region: A Resume," Annals of the Association of American Geographers, 25 (1935), pp. 122-36.

Hawley, Amos H., Human Ecology, New York: The Ronald Press Co., 1950.

Heberle, Rudolf, "Regionalism: Some Critical Observations," Social Forces, XXI (March 1943), pp. 281-86.

Herskovits, Melville J., "The Cultre areas of Africa," Africa, 3 (1930), pp. 59-77.

Isard, Walter, "Regional Science, the Concept of Region, and Regional Structure," Papers, The Regional Science Association, II (1956), pp. 13-26.

Isard, Walter, "The Scope and Nature of Regional Science," Regional Science Association: Papers and Proceedings, Vol. 6 (1960), pp. 9-34.

James, Preston E., "Towards a Further Understanding of the Regional oncept," Annals of the Association of American Geographers, 42 (1952), pp. 195-222.

Kahl, Joseph A., "Educational and Occupational Aspirations of 'Common Man' Boys," Harvard Education Review, XXIII (Summer 1953), pp. 186-203.

Kaplan, Paul F., "The Region as a Unit of Analysis: Emerging Consensus," Cornell Journal of Social Relations, 1 (October 1966), pp. 135-54.

Kroeber, Alfred L., "The Culture-Area and Age-Area Concepts of Clark Wissler," in Methods in Social Science, Stuart A. Rice (ed.), Chicago: University of Chicago Press, 1931, pp. 248-65.

Kroeber, Alfred L., "Cultural and Natural Areas of Native North America," University of California, Publications in American Archeology and Ethnology, 68 (1939), pp. 1-242.

Kroeber, Alfred L., "Cultural Area," in Encyclopedia of the Social Sciences, E. R. Seligman (ed.), New York: The MacMillan Company, 1941, pp. 646-47.

Kuder, Frederic G., Kuder Preference Record Vocational, Chicago: Science Research Associates, Inc., 1960.

Linz, Juan J., "Ecological Analysis and Survey Research," in Quantitative Ecological Analysis in the Social Sciences, Mattei Dogan and Stein Rokkan (eds.), Cambridge: The M.I.T. Press, 1969, pp. 91-132.

Lipset, Seymour Martin, "Social Mobility and Urbanization," Rural Sociology, XX (September-December 1955), pp. 220-28.

Lipset, Seymour Martin and Reinhard Bendix, Social Mobility in Industrial Society, Los Angeles: UCLA Press, 1960.

Lipset, Seymour Martin, The First New Nation, Garden City, N. Y.: Doubleday, 1967.

Loomis, Charles P. and J. Allan Beegle, Rural Social Systems, New York: Prentice Hall, 1950.

Mangus, A. R., Rural Regions of the United States, Washington: U. S. Government Printing Office, 1940.

Marsh, Robert M., Comparative Sociology, New York: Harcourt, Brace and World, 1967.

Mathews, Robert G. and Lawrence W. Drabick, "Reasons for Selection of Expected Occupations by Race and Sex," Educational Research Series, Raliegh, N. C.: North Carolina State University Department of Agricultural Educationa and Rural Sociology, No. 7 (November 1965), pp. 10-14.

Michael, John A., "High School Climates and Plans for College," Public Opinion Quarterly, XXIV (Winter 1961), pp. 585-95.

Milner, Murray Jr., The Illusion of Equality, San Francisco: Josey-Bass Inc., 1972.

Murdock, George Peter, Social Structure, New York: MacMillan, 1949.

Nelson, Joel I., "High School Context and College Plans: The Impact of Social Structure on Aspirations," American Sociological Review, XXXVII (April 1972), pp. 143-48.

Odom, Howard W., American Regionalism, New York: Henry Hold and Co., 1938.

Odom, Howard W., Folk, Region and Society, Chapel Hill, N. C.: University of North Carolina Press, 1964.

Prezworski, Adam and Henry Teune, The Logic of Comparative Social Inquiry, New York: John Wiley and Sons, 1970.

Radcliffe-Brown, A, "On Social Structure," Journal of the Royal Anthropological Institute, 70 (1940), pp. 1-12.

Reiner, Thomas A., "The Region as a Unit of Social Analysis and Its Place in Development Planning," in Social Development, Manfred Stanley (ed.), New York: Basic Books, 1972, pp. 170-202.

Rieger, Jon H., J. Allan Beegel and Phillip N. Fulton, "Profiles of Rural Youth: A Decade of Migration and Social Mobility," East Lansing, Michigan: Michigan Agricultural Experiment Station, Research Report 178, 1973.

Rogoff, Natalie, "Local Social Structure and Educational Selection," in Education, Economy and Society, A. H. Halsey, J. Floud and C. A. Anderson (eds.), Glencoe, Illinois: Free Press, 1961.

Rosen, B. C., "The Achievement Syndrome: A Psychocultural Dimension of Social Stratification," American Sociological Review, 21 (April 1956), pp. 203-11.

Schapera, I., "Some Comments on the Comparative Method in Social Anthropology," American Anthropologist, 55 (1953), pp. 353-62.

Schuessler, Karl, "Covariance Analysis in Sociological Research," in Sociological Methodology 1969, Edgar F. Borgatta (ed.), San Francisco: Josey-Bass Inc., 1969, pp. 219-44.

Schwarzweller, Harry K., "Sociocultural Factors and the Career Aspirations and Plans of Rural Kentucky High School Seniors," Progress Report No. 94, Lexington, Kentucky: Agricultural Experiment Station, September 1960.

Schwarzweller, Harry K. and James S. Brown, "Education as a Cultural Bridge Between Eastern Kentucky and the Great Society," Rural Sociology, XXVII (Fall 1962), pp. 357-73.

Schwarzweller, Harry K., "Community of Residence and Career Choices of German Rural Youth," Rural Sociology, XXXIII (March 1968), pp. 46-63.

Schwarzweller, Harry K., "Comments on the Comparative Method," unpublished paper presented at the Second World Congress of Rural Sociology, The Netherlands, August 1968.

Schwarzweller, Harry K., James S. Brown and J. J. Mangalam, Mountain Families in Transition, University Park, Pennsylvania: The Pennsylvania State University Press, 1971.

Schwarzweller, Harry K., "Regional Variations in the Educational Plans of Rural Youth: Norway, Germany and the United States," Rural Sociology, XXXVIII (Summer 1973), pp. 139-58.

Schwarzweller, Harry K. and Thomas A. Lyson, "Social Class, Parental Interest and the Educational Plans of American and Norwegian Rural Youth," Sociology of Education, 47 (Fall 1974), pp. 443-65.

Sewell, William H., A. O. Haller and Murray A. Strauss, "Social Status and Educational and Occupational Aspirations," American Sociological Review, XXII (February 1957), pp. 67-73.

Sewell, William H., "Community of Residence and College Plans," American Sociological Review, XXIX (February 1964), pp. 24-38.

Sewell, William H. and Alan Orenstein, "Community of Residence and Occupational Choice," American Journal of Sociology, LXX (March 1965), pp. 551-63.

Sewell, William H. and Michael Armor, "Neighborhood Context and College Plans," American Sociological Review, XXXI (April 1966), pp. 159-68.

Steward, Julian H., Area Research: Theory and Practice, New York: Social Science Research Council, Bulletin 63, 1950.

Steward, Julian H., "Region -- An Heuristic Concept," Rural Sociology, XIX (Fall 1955), pp. 297-98.

Taylor, Carl C., Rural Life in the United States, New York: A. A. Knopf, 1949.

Turner, Ralph, The Social Context of Ambition: A Study of High School Seniors in Los Angeles, San Francisco, San Francisco: Chandler Publishing Company, 1964.

Vance, Rupert P., "The Regional Concept as a Tool for Social Research," in Regionalism in America, Merril Jensen (ed.), Madison, Wisconsin: University of Wisconsin Press, 1951, pp. 119-42.

Warren, Roland L., The Community in America, Chicago: Rand McNally and Company, 1963.

Whittlessey, Derwent, et. al., "The Regional Concept and the Regional Method," in Inventory and Prospect, Preston E. James and Clarence F. Jones (eds.), Syracuse: Syracuse University Press, 1954, pp. 21-68.

Williamson, Jeffrey G., "Regional Inequality and the Process of National Development: A Description of Patterns," Economic Development and Cultural Change, XIII (July 1965), pp. 3-84.

Wilson, Alan B., "Residential Segregation of Social Classes and Aspirations of High School Boys," American Sociological Review, 24 (December 1959), pp. 836-45.

Wissler, Clark, The American Indian, New York: Oxford University Press, 1922.

U. S. Bureau of the Census, Census of Population: 1970 General Social and Economic Characteristics, Final Report PC(1) C-19, Kentucky; C-24, Michigan; C-50, West Virginia; Washington D. C.: U. S. Government Printing Office, 1972.

Zimmerman, Carle C., Outline of American Regional Sociology, Cambridge, Mass.: Phillips Book Store, 1947.

APPENDIX

Complete Computations for Four Variable, Non-linear Causal Analysis

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST)

		Y		
	differs	tied	3 variable	Second order partial -.046
	tied .037	-.046	-.002	X effect .133
X				Y effect .084
	differs .195	.086	.144	
				Joint effect .024
	3 variable .107	.013	.063	

Q(SX)

		Y		
	differs	tied	3 variable	Second order partial .282
	tied .372	.282	.323	T effect .041
T				Y effect .090
	differs .357	.323	.341	
				Joint effect -.056
	3 variable .363	.301	.332	

Q(SY)

		X		
	differs	tied	3 variable	Second order partial .102
	tied .254	.102	.165	T effect .023
T				X effect .151
	differs .267	.126	.188	
				Joint effect -.010
	3 variable .261	.114	.177	

Q(TX)

		Y		
	differs	tied	3 variable	Second order partial .156
	tied .495	.156	.336	S effect .022
S				Y effect .339
	differs .511	.178	.355	
				Joint effect -.005
	3 variable .503	.167	.346	

Q(TY)

		X		
	differs	tied	3 variable	Second order partial .633
	tied .676	.633	.650	S effect .039
S				X effect .042
	differs .663	.672	.668	
				Joint effect -.051
	3 variable .669	.651	.659	

Q(XY)

		T		
	differs	tied	3 variable	Second order partial .529
	tied .596	.529	.565	S effect .013
S				T effect .067
	differs .606	.542	.577	
				Joint effect .002
	3 variable .601	.535	.571	

WESTERN KENTUCKY BOYS

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST)

		Y		
	differs	tied	3 variable	
	tied -.128	-.142	-.135	Second order partial -.142
X				X effect -.035
	differs .214	-.178	.064	Y effect .014
				Joint effect .377
	3 variable .042	-.157	-.043	

Q(SX)

		Y		
	differs	tied	3 variable	
	tied .596	.428	.515	Second order partial .428
T				T effect .029
	differs .504	.457	.486	Y effect .169
				Joint effect -.121
	3 variable .546	.441	.500	

Q(SY)

		X		
	differs	tied	3 variable	
	tied .559	.149	.352	Second order partial .149
T				T effect -.182
	differs .426	-.033	.195	X effect .410
				Joint effect .049
	3 variable .486	.049	.266	

Q(TX)

		Y		
	differs	tied	3 variable	
	tied .462	.178	.354	Second order partial .178
S				S effect -.164
	differs .476	.013	.299	Y effect .410
				Joint effect .178
	3 variable .469	.089	.325	

Q(TY)

		X		
	differs	tied	3 variable	
	tied .695	.702	.699	Second order partial .702
S				S effect -.049
	differs .653	.653	.653	X effect -.007
				Joint effect .008
	3 variable .673	.679	.676	

Q(XY)

		T		
	differs	tied	3 variable	
	tied .594	.551	.575	Second order partial .551
S				S effect .112
	differs .675	.663	.670	T effect .043
				Joint effect -.030
	3 variable .637	.613	.627	

CENTRAL KENTUCKY BOYS

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST)

		Y		
	differs	tied	3 variable	Second order partial-.424
tied	.365	-.424	.131	X effect .587
X				Y effect .789
differs	.562	.162	.439	
				Joint effect-.389
3 variable	.473	-.094	.301	

Q(SX)

		Y		
	differs	tied	3 variable	Second order partial .684
tied	.876	.684	.778	T effect .126
T				Y effect .193
differs	.793	.809	.798	
				Joint effect-.209
3 variable	.825	.735	.789	

Q(SY)

		X		
	differs	tied	3 variable	Second order partial .523
tied	.695	.523	.624	T effect-.051
T				X effect .172
differs	.692	.472	.592	
				Joint effect .047
3 variable	.693	.489	.604	

Q(TX)

		Y		
	differs	tied	3 variable	Second order partial .155
tied	.559	.155	.426	S effect .086
S				Y effect .405
differs	.619	.240	.502	
				Joint effect-.026
3 variable	.585	.190	.458	

Q(TY)

		X		
	differs	tied	3 variable	Second order partial .789
tied	.857	.789	.808	S effect .087
S				X effect .068
differs	.790	.876	.828	
				Joint effect-.154
3 variable	.828	.806	.814	

Q(XY)

		T		
	differs	tied	3 variable	Second order partial .481
tied	.602	.481	.561	S effect .185
S				T effect .121
differs	.733	.666	.708	
				Joint effect-.053
3 variable	,659	.569	.627	

EASTERN KENTUCKY BOYS

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST)

		Y		
	differs	tied	3 variable	Second order partial-.093
	tied .257	-.093	.116	X effect-.041
X				Y effect .351
	differs .533	-.135	.352	
				Joint effect .317
	3 variable .391	-.108	.219	

Q(SX)

		Y		
	differs	tied	3 variable	Second order partial .585
	tied .651	.585	.613	T effect-.090
T				Y effect .066
	differs .704	.495	.648	
				Joint effect .144
	3 variable .686	.554	.631	

Q(SY)

		X		
	differs	tied	3 variable	Second order partial .497
	tied .664	.497	.567	T effect-.074
T				X effect .168
	differs .636	.423	.526	
				Joint effect .046
	3 variable .646	.453	.541	

Q(TX)

		Y		
	differs	tied	3 variable	Second order partial .079
	tied .398	.079	.278	S effect-.125
S				Y effect .320
	differs .560	-.046	.396	
				Joint effect .287
	3 variable .496	.019	.345	

Q(TY)

		X		
	differs	tied	3 variable	Second order partial .750
	tied .845	.750	.781	S effect-.037
S				X effect .095
	differs .861	.712	.784	
				Joint effect .054
	3 variable .855	.733	.783	

Q(XY)

		T		
	differs	tied	3 variable	Second order partial .397
	tied .461	.397	.438	S effect .219
S				T effect .064
	differs .644	.616	.634	
				Joint effect-.036
	3 variable .570	.526	.555	

KENTUCKY/W. VA. BOYS

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST)

		Y		
	differs	tied	3 variable	
tied	-.158	----	-.090	Second order partial ----
X				X effect .449
differs	.597	.449	.534	Y effect -.158
				Joint effect .306
3 variable	.091	.145	.114	

Q(SX)

		Y		
	differs	tied	3 variable	
tied	.596	.859	.744	Second order partial .859
T				T effect -.002
differs	.955	.857	.914	Y effect -.263
				Joint effect .361
3 variable	.803	.858	.830	

Q(SY)

		X		
	differs	tied	3 variable	
tied	.111	-.168	-.101	Second order partial -.168
T				T effect -.033
differs	.642	-.201	.076	X effect .279
				Joint effect .564
3 variable	.416	-.184	-.013	

Q(TX)

		Y		
	differs	tied	3 variable	
tied	.667	.321	.542	Second order partial .321
S				S effect -.015
differs	.552	.306	.448	Y effect .346
				Joint effect -.099
3 variable	.620	.314	.501	

Q(TY)

		X		
	differs	tied	3 variable	
tied	.885	.711	.780	Second order partial .711
S				S effect -.019
differs	.866	.692	.749	X effect .174
				Joint effect -.001
3 variable	.877	.702	.766	

Q(XY)

		T		
	differs	tied	3 variable	
tied	.781	.565	.696	Second order partial .565
S				S effect -.049
differs	.687	.515	.614	T effect .217
				Joint effect -.045
3 variable	.742	.543	.661	

UPPER MICHIGAN BOYS

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST)

		Y		
	differs	tied	3 variable	Second order partial-.107
tied	-.008	-.107	-.053	X effect .204
X				Y effect .098
differs	.271	.097	.204	
				Joint effect .076
3 variable	.116	-.031	.054	

Q(SX)

		Y		
	differs	tied	3 variable	Second order partial .367
tied	.443	.367	.402	T effect-.021
T				Y effect .076
differs	.388	.346	.372	
				Joint effect-.034
3 variable	.413	.359	.388	

Q(SY)

		X		
	differs	tied	3 variable	Second order partial .108
tied	.186	.108	.142	T effect .007
T				X effect .078
differs	.326	.116	.209	
				Joint effect .132
3 variable	.262	.112	.178	

Q(TY)

		Y		
	differs	tied	3 variable	Second order partial .481
tied	.706	.481	.624	S effect-.001
S				Y effect .225
differs	.698	.480	.614	
				Joint effect-.008
3 variable	.702	.480	.619	

Q(TY)

		X		
	differs	tied	3 variable	Second order partial .676
tied	.766	.676	.711	S effect-.062
S				X effect .089
differs	.731	.615	.667	
				Joint effect .027
3 variable	.748	.649	.690	

Q(XY)

		T		
	differs	tied	3 variable	Second order partial .507
tied	.702	.507	.616	S effect-.044
S				T effect .195
differs	.724	.463	.604	
				Joint effect .066
3 variable	.713	.484	.610	

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST) Y

	differs	tied	3 variable
tied	-.108	-.203	-.159
X			
differs	.444	.009	.296
3 variable	.202	-.125	.057

Second order partial-.203
X effect .211
Y effect .094

Joint effect .341

Q(SX) Y

	differs	tied	3 variable
tied	.756	.660	.711
T			
differs	.731	.527	.662
3 variable	.742	.606	.688

Second order partial .660
T effect-.132
Y effect .096

Joint effect .108

Q(SY) X

	differs	tied	3 variable
tied	.627	.220	.448
T			
differs	.643	.044	.381
3 variable	.636	.128	.412

Second order partial .220
T effect-.176
X effect .407

Joint effect .192

Q(TX) Y

	differs	tied	3 variable
tied	.735	.549	.661
S			
differs	.660	.364	.559
3 variable	690	.450	.603

Second order partial .549
S effect-.185
Y effect .186

Joint effect .110

Q(TY) X

	differs	tied	3 variable
tied	.795	.710	.744
S			
differs	.726	.667	.700
3 variable	.754	.691	.721

Second order partial .710
S effect-.043
X effect .085

Joint effect-.026

Q(XY) T

	differs	tied	3 variable
tied	.739	.454	.606
S			
differs	.800	.653	.731
3 variable	.775	.574	.681

Second order partial .454
S effect .199
T effect .285

Joint effect-.138

CENTRAL KENTUCKY GIRLS

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST)

X \ Y	differs	tied	3 variable
tied	.198	.165	.181
differs	.432	.426	.430
3 variable	.278	.234	.257

Second order partial .165
X effect .262
Y effect .034
Joint effect-.028

Q(SX)

T \ Y	differs	tied	3 variable
tied	.305	.249	.276
differs	.293	.238	.270
3 variable	.299	.245	.273

Second order partial .249
T effect-.011
Y effect .056
Joint effect-.001

Q(SY)

T \ X	differs	tied	3 variable
tied	.149	.002	.054
differs	.310	.080	.159
3 variable	.223	.039	.103

Second order partial .002
T effect .078
X effect .147
Joint effect .083

O(TX)

S \ Y	differs	tied	3 variable
tied	.396	.143	.284
differs	.596	.389	.509
3 variable	.457	.214	.351

Second order partial .143
S effect .246
Y effect .252
Joint effect-.045

Q(TY)

S \ X	differs	tied	3 variable
tied	.770	.501	.577
differs	.799	.561	.643
3 variable	.779	.516	.595

Second order partial .501
S effect .060
X effect .269
Joint effect-.031

Q(XY)

S \ T	differs	tied	3 variable
tied	.302	.340	.321
differs	.454	.399	.425
3 variable	.348	.360	.354

Second order partial .340
S effect .059
T effect-.039
Joint effect .094

EASTERN KENTUCKY GIRLS

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST)

	Y: differs	Y: tied	Y: 3 variable
X: tied	-.223	-.199	-.209
X: differs	.104	-.345	-.072
X: 3 variable	-.056	-.250	-.150

Second order partial -.199
X effect-.146
Y effect-.024

Joint effect .473

Q(SX)

	Y: differs	Y: tied	Y: 3 variable
T: tied	.593	.517	.558
T: differs	.597	.438	.535
T: 3 variable	.595	.485	.548

Second order partial .517
T effect-.078
Y effect .076

Joint effect .083

Q(SY)

	X: differs	X: tied	X: 3 variable
T: tied	.547	.129	.345
T: differs	.418	.015	.221
T: 3 variable	.486	.075	.286

Second order partial .129
T effect-.114
X effect .418

Joint effect .015

Q(TX)

	Y: differs	Y: tied	Y: 3 variable
S: tied	.489	.244	.383
S: differs	.368	-.048	.205
S: 3 variable	.421	.092	.286

Second order partial .244
S effect-.292
Y effect .245

Joint effect .171

Q(TY)

	X: differs	X: tied	X: 3 variable
S: tied	.639	.572	.598
S: differs	.575	.464	.521
S: 3 variable	.603	.526	.560

Second order partial .572
S effect-.108
X effect .067

Joint effect .044

Q(XY)

	T: differs	T: tied	T: 3 variable
S: tied	.611	.501	.549
S: differs	.623	.696	.662
S: 3 variable	.618	.605	.611

Second order partial .501
S effect .195
T effect .110

Joint effect-.183

KENTUCKY/W. VA. GIRLS

APPENDIX

S=Residence T=Grades X=Social Class Y=College Plan

Q(ST) Y

		differs	tied	3 variable
	tied	-.278	-.011	-.176
X				
	differs	.351	.671	.500
	3 variable	-.091	.244	.046

Second order partial -.011
X effect .682
Y effect -.267

Joint effect .053

Q(SX) Y

		differs	tied	3 variable
	tied	.221	.259	.245
T				
	differs	-.181	-.256	-.216
	3 variable	.023	.083	.057

Second order partial .245
T effect -.516
Y effect -.039

Joint effect .114

Q(SY) X

		differs	tied	3 variable
	tied	-.221	-.062	-.480
T				
	differs	.096	-.480	-.309
	3 variable	-.065	-.539	-.393

Second order partial -.480
T effect .122
X effect .381

Joint effect .194

Q(TX) Y

		differs	tied	3 variable
	tied	-.084	.067	-.031
S				
	differs	----	-.073	-.034
	3 variable	-.050	-.006	-.032

Second order partial .067
S effect -.140
Y effect -.151

Joint effect .224

Q(TY) X

		differs	tied	3 variable
	tied	.853	.585	.708
S				
	differs	.681	.637	.650
	3 variable	.783	.615	.678

Second order partial .585
S effect .052
X effect .268

Joint effect -.224

Q(XY) T

		differs	tied	3 variable
	tied	-.143	.167	-.010
S				
	differs	-.064	-.015	-.039
	3 variable	-.111	.078	-.023

Second order partial .167
S effect -.182
T effect -.310

Joint effect .261

UPPER MICHIGAN GIRLS