DOCUMENT RESUME

ABSTRACT
                Data that were collected at various times during the
period 1952-1971 were brought together to portray some of the
important norms that guided the attitudes and actions of high school
and college students in Washington. Family culture and delinquency
data collected from 3,242 high school students in 1957, 1958, and
1959 dealt with teenage activities, aspirations, and attitudes.
Nearly all who responded admitted behavior that was illegal or
contrary to commonly accepted standards of morality. A rural study of
3,260 high school students (1964-1965) and a vocational study of
3,117 juniors and seniors (1965-1966) produced data relating to
educational and occupational interests and aspirations, peer group
influence, and extra-curricular activities. The rural study indicated
that peer groups were seldom constructive resources for socialization
of youth. The vocational study showed an upsurge in the proportion of
students who aspired to attain college, but did not indicate a strong
thrust toward the redefinition of female roles. High school girls
showed strong preferences for occupations traditionally considered
women's work. A follow-up study in 1971 of 717 persons indicated that
the great majority of young men and women had completed some college
work before entering the labor force permanently. Data concerning
military service were also obtained in three samples. (CM)

Bulletin 818
Walter L. Slocum

Walter L. Slocum. Fortunately, Dr. Slocum had completed
writing this monograph and approved the edited manuscript
before he died in August, 1975.

PREFACE

The Studies of high school and college students, from which the data for this publication have been drawn, extend over a period of almost a quarter of a century —from 1952 to 1974. Dr. Paul H. Landis, founder of the Department of Rural Sociology at WSU, studied some aspects of the lives of Washington rural youth before I joined the department in 1951. However, I have not made any specific use of his findings (36,37,38,39,40). My interest arose out of my own earlier experiences, especially my work in the Research Division of the Office of Vocational Rehabilitation and Education of the Veterans Administration, Washington, D.C., 1946-51, and other professional experiences at the University of Wisconsin and elsewhere.

The purpose is to bring together in one publication information that will portray some of the important norms that guide the attitudes and actions of high school and college students in Washington. I have not reprinted any published papers, although I have used some ideas from such sources.

The studies are not restricted to rural students because I have always believed that it is necessary to include urban students to permit comparison and contrast. When I was a graduate student in sociology at the University of Wisconsin, 1936-1940, my major professors, J. H. Kolb and G. W. Hill, called my attention to the impending convergence of rural and urban values, attitudes and behavior. In the intervening 35 years, most but not all of the traditional differences have disappeared. Today, rural versus urban residence is a relatively unimportant variable for most sociological studies.

Methodological details of various studies have not been repeated herein. In most cases, an adequate account is available in other publications for which citations are listed.

The data discussed in this monograph were collected at various times during the period 1952-1971. Consequently, it cannot be said that it presents a current picture. But time moves on in any case. Even data gathered in 1975 might be as much as 5 years old before they are fully analyzed. I believe that the information we present herein is valuable and interesting in its own right as a baseline for future comparisons and as a historical record of conditions at various dates during the period. Some of the data provide insight into reasons for major changes in norms and behavior of young people in the state.

The studies were all made in the state of Washington and therefore the findings are applicable primarily to that state. However, the people of Washington share a common cultural heritage with the people of the Pacific Northwest, and in fact, with most of the people of the U.S.A. Consequently, the information may be of wider interest.

This publication does not contain any comprehensive review of the many studies by others that have appeared since 1951. The 1974 edition of my book, Occupational Careers (66,67), reviews the major studies of educational and occupational aspirations and choice. Rural studies were reviewed by W. P. Kuvlesky in 1971 (35).

CONTENTS

JUN 9 1980

ACKNOWLEDGEMENTS

1. INTRODUCTION

Our society has been characterized as future oriented. In earlier societies, there was little change from one generation to another and traditional values and behavior norms were not often challenged. In contrast, we live in a period of rapid technological change and high mobility. We have learned to expect additional changes and we tend to believe that the best way to cope with the future is through knowledge, mainly knowledge gained through formal education, rather than wisdom gained through personal experience or from parents, grandparents or other older people.

We look to the educational system to prepare young people to meet the problems they will encounter when they become adults. Society has recognized its stake in a well educated population. Therefore, we use tax funds to support public education at all levels, and require children to attend school. In Washington, school attendance is mandatory for most children and adolescents between the ages of 6 and 18 unless they have completed the 9th grade or are 15 years old and gainfully employed.

The educational attainments of the population are quite high. In 1970, among persons 25 years old and over, the median number of years of school completed was 12.4. One out of every eight was a college graduate. However, not every citizen is well educated—in 1970; 7.6% of Washington adults had less than a grade school education. The educational level of the population has risen a great deal in the past 50 years. In 1970, median years of school completed was 12.9 for adult males under 25 years old compared to 8.6 for males 75 and over.

In comparison to the U.S. as a whole, Washington ranks high in educational attainment.

Washington was one of the earliest states to abandon the one-room rural school in favor of school consolidation. For more than 30 years, virtually all farm-reared children in grades 1-12 have been bused to schools in some central location, usually a small town or city. There is little doubt that the contacts with nonfarm children facilitated by school consolidation, and exposure to the mass media, have played a major part in bringing farm children into the mainstream of modern life at an early age. Few, if any, would fit the picture that emerged from Bird Baldwin's Iowa study in the mid 1920s—of the farm child as shy, intellectually retarded and provincial in outlook (6).

Population Origins

Understanding the aspirations of Washington young people, in my opinion, requires some familiarity with the social context in which they were reared. Consequently, it may be worthwhile at this point to note briefly some salient demographic characteristics.

The northern half of the United States of America was settled by successive waves of European immigrants and their descendents. The earliest settlers landed on the Atlantic coast and their descendents, joined by later immigrants, moved Westward, subjugating the Indians as they went. Most of those who came to what is

now the state of Washington were second or third generation Whites. Their place of origin was overwhelmingly the Middle West. Some persons of oriental ancestry arrived in the Seattle area in the early days of settlement, but their numbers have continued to be small (only 25,783 were of Asian stock in 1970). Substantial numbers of Spanish speaking persons, mainly of Mexican ancestry, came to Washington as migratory farm workers every year for a long time. Many of them eventually settled in the state, chiefly in central Washington. (There were 70,734 persons of Spanish language stock in 1970; most of them were classified by the Census as White.)

Few Blacks arrived prior to World War II, but since that time substantial numbers have settled in Seattle and other cities (71,308 Blacks in 1970). There were 33,386 persons who were classified as Indians in 1970; most of them have some Caucasian ancestry.

Since the total population was 3,409,169 in 1970, it is obvious that the population is overwhelmingly White; in fact, 95.4% were so classified. Most of the nonwhites (except Indians) reside in urban areas. The majority of the Indians still live on rural reservations.

Residence: Rural vs. Urban

Although Washington is a large state in which agriculture is an important industry, the population is preponderantly urban; 2,476,468, or 72.6% lived in urban areas in 1970 and 932,701, or 27.4% were classified as rural. However, only 133,000, or 3.9% of the total, lived on farms.

Sources of Data

Since the data were collected at various times and places, it may be desirable to describe briefly the methodology of the major studies.

Family culture and delinquency data

One type of data relates to family culture patterns and delinquent type behavior. The 3,242 high school students in this sample were from 6 areas of Washington: the Kelso, Longview, and Highline school districts and Columbia, Stevens, and Ferry counties. The study dealt with teenage activities, aspirations and attitudes. It was conducted in the first four areas in the spring of 1957 and in Stevens County in the spring of 1958 and in Ferry County in May, 1959. All students filled out identical anonymous questionnaires in the classrooms of their schools. Although all students present filled out questionnaires, the sample included only 40% of the Highline and Longview students, 50% of the Kelso students, and all students in the other areas.

Are the data valid? We have no external means of testing validity; but we took several steps to try to improve validity. For one thing, we made an effort to gain the confidence of the respondents. Each questionnaire was prefaced by a short letter that promised confidential treatment for the data and emphasized both the practical im-

portance and the scientific potential of the answers. The statement follows:

> We would like to find out what boys and girls do with their free time, what activities they take part in and what they are interested in doing. We also want to find out some things about family life. Your answers, when added to those of your classmates, will give us this information.
>
> Information concerning activities and interests will be summarized and given to community and school leaders. It may result in new activities for you and your friends. In addition, you will be helping to increase scientific knowledge about the forces that influence teenagers.
>
> Your answers are, of course, strictly confidential. There is no name on the questionnaire and you are not asked to sign it. Nevertheless, we do need the right answers to these questions and your cooperation will be greatly appreciated.

We eliminated the questionnaires of respondents who obviously sought to deceive us and the questionnaires of those who were obviously facetious; 5.5% of the available questionnaires were eliminated because the pattern of their answers indicated deceptive responses; less than 1% were eliminated because the pattern of responses appeared to be facetious.

It must be acknowledged that some respondents may not have understood the questions. However, while developing our data gathering instrument, we did try to test this matter. A number of items that appeared to be ambiguous or difficult for teenagers to understand were deleted (63). Insofar as opinions and attitudes are concerned, all of the data are subjective; consequently, external checks of validity are impossible. Within the limits set forth above, we believe that a substantial amount of truth is involved in these data.

Aspirations data

A second type of data were those relating to educational and occupational interests and aspirations, peer group influences and extracurricular activities. There were two major studies, which we shall refer to as the Rural Study and the Vocational Study.

The rural study, 1964-65 (65)

Data were obtained from 3,260 classroom questionnaires administered during December, 1964, and January, 1965, in a random sample of rural public high schools in Washington. Information was obtained from students in 30 of 36 high schools selected by the use of random numbers from a list of 228 located in places with less than 10,000 population as of 1960.

All sophomores, juniors and seniors who were present during the class period selected for administration of the questionnaire in their respective schools were asked to participate in the study. Nearly all agreed to do so, but not all of them answered every question.

This information was supplemented by personal interviews with 992 students. Counselors, administrators and teachers rated about 400 of the students in the interview sample with respect to scholastic ability and type of work best suited for. In addition, parents of the majority of the interview sample provided information, in response to a mail questionnaire, about incomes, values, and aspirations for their children.

The vocational study, 1965-66 (9)

This study obtained information from 3,117 juniors and seniors in a stratified random sample of 12 high schools, who filled out questionnaires in their classrooms during the 1965-66 school year. The study name was selected because the focus of the study was on the students who planned to pursue additional vocational training after high school graduation. Many who did plan on more vocational training were included because almost all students who were in class when the questionnaires were administered filled out one. The methodology closely resembled that used in the Rural Study. Supplementary information was collected from and about a subsample of students.

Attainment data

The third type of data were related to educational and occupational attainments. Information was obtained by means of a mail questionnaire from 717 persons who were members of the interview samples in the Rural Study and the Vocational Study.

Military service data

The fourth type of data concerned military service. Information was obtained from boys in the Rural Study described above, from a two-stage random sample of undergraduates at WSU in 1952-53 and from a systematic sample of 397 WSU undergraduates in 1970.

Plan of the Monograph

This monograph deals first with family and peer group culture which, in my judgement, is the immediate source of many adolescent values and behavior norms. Next come several chapters dealing with various aspects of education related interests, activities and attainments. Subsequent chapters deal with several different topics and the concluding chapter attempts to pull together in one place the major conclusions.

2. FAMILY VALUES AND BEHAVIOR NORMS

The conventional wisdom holds that the family of origin is a major source of values and norms. Many citizens are apparently ready to blame parents for deviance by their offspring from various social norms and laws. Freudian psychologists believe that the roots of adult personality disorders are to be found in parent-child relationships during early childhood. Some sociologists also hold the view that family culture patterns and childhood experiences are basic determinants of many types of conduct; others give little, if any, weight to family values and behavior norms.

My position on this issue is based partly on my own research and partly on work done by others; it is that experience gained through interaction with parents and siblings usually results in general acceptance of the values of the parents and substantial compliance with the family's behavior norms, at least while the individual lives at home with his or her parents. Furthermore, in my opinion, family culture patterns often have a continuing influence in later life.

Family Culture Patterns[1]

There are many types of values and associated behavior norms, so many that it would be difficult, if not impossible, for an investigator to study all of them. Encouraged by earlier research on the influence of family democracy by colleagues in the rural sociology department (39), Carol Stone and I decided to develop Guttman-type scales reflecting the values and behavior norms involved in cooperation among family members, fairness of discipline and affection among family members. We chose these scales and the Landis-Stone family democracy scale as indicators of four configurations of family culture. Then we investigated the impact of family culture patterns on selected attitudes, interests and behavior reported by adolescents. We used data collected in 1957 and 1958 from about 2,500 boys and girls who were then enrolled in the 9th and 12th grades in 6 Washington high schools: Highline, Longview, Kelso, Dayton, Golville, and Chewelah.

The methodology of the study has been described in detail elsewhere (63:6-9) so it will not be repeated here. Substantial proportions of students of both sexes perceived their families as having distinctive patterns in each of the four dimensions of sentiment and behavior for which the scales were developed. The differences, summarized in table 1, made it possible to analyze the association between a student's ratings of family democracy, discipline, cooperation or affection and attitudes, interests or behavior as reflected by answers to other questions.

Before making these analyses, we examined the relationships between scale scores and ratings on other indices of family background that we thought might exert an influence that would obscure the effects of family culture patterns as reflected in the scales. Nearly all the relationships turned out to be extremely weak. In fact, they were

so weak that I concluded that there was no justification for controlling for their possible influence in the analysis.

Influence on school-related interests and activities

The analysis revealed a fairly strong positive association between a high rating on each of the four scales reflecting family culture patterns and a high level of interest in school work. There was a positive but somewhat weaker association between the scales and scholastic achievement; the higher the rating on each scale, the more likely the students were to report that they had received high grades. All of the four scales also showed a positive influence on the level of participation in school sponsored extra-curricular activities.

There was not much evidence that family culture patterns, as reflected in the scales, influenced the selection of specific fields of study. However, boys and girls from families rated as highly democratic were slightly more likely than others to prefer scientific subjects. There was also a slight tendency for boys and girls from

Table 1. Family culture patterns

Family culture pattern[*]	Boys %	Girls %
Democracy		
Democratic	27.3	33.6
Intermediate	44.3	38.6
Undemocratic	28.4	27.8
Total	100.0	100.0
N	1281	1182
Affection		
Affectionate	32.6	29.5
Intermediate	44.3	40.4
Unaffectionate	23.1	30.1
Total	100.0	100.0
N	1268	1171
Cooperation		
Cooperative	36.1	29.2
Intermediate	35.7	31.8
Uncooperative	28.2	39.0
Total	100.0	100.0
N	1249	1165
Discipline		
Fair	38.0	37.7
Intermediate	40.0	35.8
Unfair	22.0	26.5
Total	100.0	100.0
N	1225	1168

*Based on scale scores. For details of scale construction, see (63).

---
[1] For details of the analysis of the influence of family culture patterns on the attitudes, interests and behavior of teenagers, see (63).

3

PERCENT INTERESTED IN
ALL OF THEIR SCHOOL WORK

0   10   20   30   40

DEMOCRACY

*DEMOCRATIC
21.6
27.1

INTERMEDIATE
15.7
17.6

NOT DEMOCRATIC
13.0
10.6

COOPERATION

COOPERATIVE
26.9
37.5

INTERMEDIATE
15.2
29.2

NOT COOPERATIVE
11.7
24.4

AFFECTION

AFFECTIONATE
24.1
35.6

INTERMEDIATE
16.6
31.0

NOT AFFECTIONATE
12.5
21.8

DISCIPLINE

FAIR
24.5
36.5

INTERMEDIATE
15.7
29.2

NOT FAIR
13.0
20.5

■ BOYS
□ GIRLS
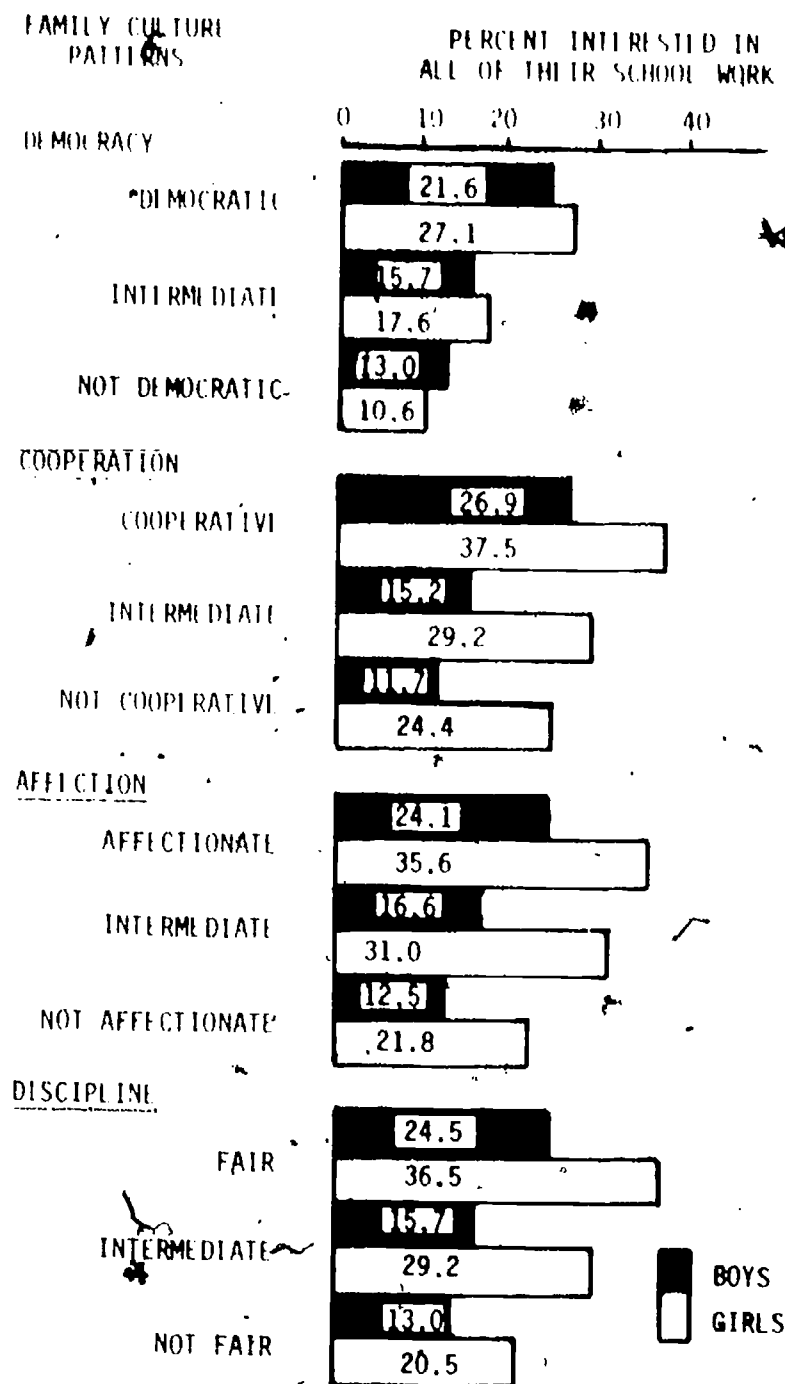
1. **Family culture patterns and reported interest in school work (63:15).**

families rated as very cooperative to prefer the humanities more often than those from families rated less cooperative.

High ratings on each of the four scales also were associated with studying at home after school.

These data support the hypothesis that family culture patterns do have a measurable influence on school-related activities, interests and behavior.

Influence on out-of-school activities

There was a weak positive association between each of the four scales reflecting family culture patterns and an index of participation in out-of-school clubs and groups. All four of the scales were also positively associated with participation by girls in interfamily visits. However, among the boys, only a high rating of the family on the affection scale showed a measurable influence on participation in such visits.

Delinquent type behavior as reflected by a five item scale was negatively associated with high ratings on each of the four scales of family culture patterns.

Little or no association was found between ratings on any of the four scales of family culture patterns and the level of participation in the following activities: informal interaction with a group of friends, riding in a car, dating, reading, watching television, playing records or radio, or hobbies.

It appears from these data that family culture patterns, as reflected in the four scales, measurably influence some types of behavior but not other types.

Agreement on Family Norms

Our research on the influence of selected patterns of family culture led us to wonder about the extent of agreement between teenagers and their parents concerning selected family norms. The rating of a family on one of the scales of family culture influenced some attitudes, interests and behavior but not other types, and not all teenagers were influenced to the same extent. Furthermore, we knew from our personal experiences as well as from the literature that parents had been socialized into a somewhat different culture in their own families of origin. Consequently, we anticipated that many mothers and fathers might not agree fully on all values and behavior norms. Furthermore, it appeared to us that since they are at a different point in the life cycle, the perspectives of parents might be somewhat different from those of their children.

In 1961, when we were considering this matter, we could not find much relevant information in the literature. It is an important question from a methodological as well as a substantive point of view. Methodology is involved because we often depend upon a single member of a family (usually the mother) as the source of our information about the family. Consequently, the question arises, "Can her perceptions of such subtle and sensitive areas as family norms and patterns of interaction be accepted as indicative of the perceptions of all members?" If her husband had answered, for example, would he have said something different? Or if the teenage son or daughter had responded, would they have seen the situation still differently, assuming always a frank and honest report and considering only differences in perception?

In 1961, the department of rural sociology conducted a survey in Pend Oreille County. Relevant information was obtained from almost all high school students in school the day questionnaires were administered, and from a probability sample of parents. These data at least partially answer the question of the extent to which reported perceptions of selected aspects of family life are in agreement. Responses were obtained from 54 pairs of boys and their parents and 51 pairs of girls and their parents. There were 23 families that contained more than one student; 19 of these included 2 high school students each and 4 families had 3 students each.

Democracy in family management

Answer categories for questions asked teenagers and their parents about family democracy were similar. Teen agers were asked "How do you rate your family or the family with which you live on democratic control by parents?" Parents were asked "How do you rate your family on democratic practices within the home?"

The responses for all teenagers and parents in the Pend Oreille County study indicate a high level of democracy. However, it is clear that parents tended to perceive their family management as more democratic than the teenagers did.

Comparison of the responses of family members with each other revealed enough disagreement to justify extreme caution in assuming the rating of any single person agrees exactly with the ratings of other members. The extent of agreement expressed as a percent of those who gave ratings was:

Pairs	Agreement %	No. of pairs
mother-father	48.5	66
mother son	26.2	42
father-son	48.7	39
mother-daughter	41.9	43
father-daughter	35.2	37
siblings	21.1	19

Where there was disagreement, parents tended to rate the family higher on democracy than the teenagers, except that daughters who disagreed with their mothers tended to rate family democracy higher. Where mothers disagreed with fathers, the latter tended to rate family democracy higher. In no comparison did both respondents *agree* that family management was undemocratic, although 10% of the boys, 7% of the girls and a handful of the parents reported that they regarded family management as basically undemocratic.

Affection

Both adolescent and adult respondents perceived families as quite affectionate. However, parents rated families higher on affection than teenagers did.

There was less agreement on rating of affection among family members than on rating of family democracy or cooperation.

The extent of agreement on family affection between specified family members expressed as a percentage of those who gave ratings was:

Pairs	Agreement %	No. of pairs
mother-father	34.4	99
mother-son	31.2	48
father-son	20.4	49
mother-daughter	44.9	49
father-daughter	28.6	49

In only one family was there agreement that there was little or no affection. Where there was disagreement, both sons and daughters tended to rate affection

higher than mothers but lower than fathers. When parents disagreed, fathers were much less likely than mothers to rate the family high on affection.

Cooperation

Questions asked teenagers and their parents on cooperation were almost identical and the answer categories were identical.

The responses given by those who participated in the Pend Oreille County study show that few perceived their families as basically uncooperative, but there was evidently some conflict also. As in the case of other ratings of the family, the parents tended to rate their families as more cooperative than teenagers did.

Considerable agreement on the cooperativeness of the family was found:

Pairs	Agreement %	No. of pairs
mother-father	53.4	90
mother-son	40.0	50
father-son	29.8	47
mother-daughter	39.6	48
father-daughter	40.5	42

In only one family was there agreement that family members were uncooperative. In cases of disagreement, the girls tended to rate family cooperation lower than either mothers or their fathers. The boys tended to rate it lower than their mothers but higher than their fathers. When parents disagreed, fathers tended to rate cooperation higher than mothers.

Happiness of home life

Questions on happiness of home life were similar, but not identical. The teenagers were asked to respond to the statement that "home life is very happy" as follows: yes, sometimes, no." Parents were asked to respond to the question, "how happy is your home life." The answer categories were " somewhat happy, very happy, not at all happy."

The majority of the respondents viewed their home life as very happy. However, as with previous questions, fathers and mothers tended to rate their family life as happier than did the teenagers.

There was considerable agreement between family members on whether home life was happy or not:

Pairs	Agreement %	No. of pairs
mother-father	80.0	90
mother-son	62.7	51
father-son	68.7	48
mother-daughter	50.0	48
father-daughter	51.3	41

Daughters were less likely to agree with parents than sons were. In such cases, daughters tended to rank family happiness lower than their fathers or mothers. This was also the tendency among boys who disagreed with parents on rating of family happiness.

Rules about evenings out

Similar questions were asked teenagers and parents. The question for teenagers was: "With regard to evenings out, my parents allow me":

( ) every evening out if I wish
( ) weekend evenings, some school nights
( ) weekend evenings, not school nights
( ) just an occasional evening out
( ) almost never allowed evenings out
( ) don't know

The parental questionnaire was worded: "With regard to 'evenings out' do you allow your teenagers":

( ) every evening out if they wish
( ) weekend evenings, some school nights
( ) weekend evenings, not school nights
( ) just an occasional evening out
( ) almost no evenings out

Data for all who responded in the Pend Oreille County study show that the most prevalent pattern was weekend evenings with some school nights, followed by weekend evenings but not school nights. A fairly substantial proportion of the parents had a rather restrictive policy; they checked the response "just an occasional evening out."

There was considerable agreement among family members on rules governing evenings out by teenagers:

Pairs	Agreement %	No. of pairs
mother-father	65.4	84
mother-son	39.1	41
father-son	37.9	37
mother-daughter	46.8	45
father-daughter	51.4	35

In cases of disagreement, parents tended to report the rules as more restrictive than did their teenage sons and daughters.

Dating hours

Similar questions were asked parents and teenagers. The question asked the teenagers read as follows: "What arrangements do you have with your parents concerning hours you come home from a date?"

1. Parents set a definite hour each time
2. Parents and I work out an hour to come home
3. Parents give me complete freedom as to what time I should come home from a date
4. I do not date

Parents were asked: "What arrangements do you have with your teenagers concerning what hour they come in from a date?"

1. We set a definite hour each time
2. We work out the hour they come home with the teenagers
3. We give them complete freedom as to the time they should come home
4. They do not date

The most frequent response was that parents work out the hour for coming home with their teenage sons and daughters. The next most frequent response was "no dates." In fact, this was the most frequent response for boys. There was considerable discrepancy in the response to the category "complete freedom" as to the time to come home from a date. Teenagers, especially the boys, took a much more liberal view (felt they do have more freedom) than their parents did. There was also considerable discrepancy on the response a definite hour each time." Parents considered this to be a a more frequent occurrence than teenagers did. This was especially true of fathers.

There was considerable agreement among family members on the arrangements with respect to the time to come home after dates:

Pairs	Agreement %	No. of pairs
mother-father	76.0	50
mother-son	45.0	20
father-son	45.0	20
mother-daughter	55.3	29
father-daughter	56.0	25

In cases of disagreement between teenagers and their parents, the teenagers tended to take a more liberal view of the arrangements than did the parents. This was also true of fathers, where mothers and fathers did not agree on the rules.

Conclusions

Agreement about norms

Considerable agreement about various aspects of family life was reflected in the answers examined. Nevertheless, teenagers and their mothers or fathers differed enough to warrant great care in accepting a teenager's responses as indicating anything other than his or her own perception of the situation. In most cases, these differences appear to be minor, but some are substantial. It would be interesting in cases where teenagers and parents are in substantial agreement to explore the consequences of such agreement for the conduct of the teenager and relevant attitudes.

In respect to the probable substantive influence of family values and norms, it appears that we should not expect teenagers to have exactly the same values or to follow the behavior norms prescribed by their parents.

Influence of family norms

The study confirms the hypothesis that families have important influences on adolescent interests and activities. The relative weakness of the associations observed in this study suggests, however, that the aspects of family culture patterns examined do not account for the bulk of the variation in teenage behavior reflected by the indices used in the study.

It appears that family culture patterns, at least those examined in our studies, do not provide a "blueprint" for behavior, although such patterns probably do provide reference points, even for behavior that diverges materially from parental norms.

The high incidence of family democracy suggests that

these adolescents were expected to develop independent judgments about issues and courses of action. Information to be presented later reveals that few boys followed their fathers' occupations. Moreover, the increased frequency of divorce shown by public records implies many girls have different perspectives about marriage from the ones their mothers had.

One can expect changes in behavior norms to arise in periods of rapid technological change such as Americans have experienced since World War II. No doubt the great increase in educational attainments that have occurred during the past 30 years has also played a major part in adaptations that have occurred.

I believe that early socialization in the family continues to be of great importance throughout life; but the extended period that now exists before a person enters the world of work on a permanent basis, which we call adolescence, has given a new importance to the school as an arena for the development of values, behavior norms, and social skills.

3. THE IMPACT OF PEER GROUP CULTURE

In the preceding chapter, we saw that family culture patterns had some influence on teenagers' attitudes, interests, and behavior. However, it was evident that other influences were also at work. It appeared possible that the values and behavior norms of other teenagers (the peer group) might have more influence than family culture patterns on certain types of attitudes, interests, and behavior.

Social scientists generally agree that culture is a principal determinant of the conduct of the members of a major society during a particular period in history. Cross-cultural comparisons of a relatively gross nature provide convincing empirical support for this proposition.

The corollary that the subculture associated with a particular concrete social system within a society influences the conduct of its members has also gained wide acceptance; in this case, however, we may be dealing with subtle rather than gross differences and empirical evidence is harder to get and to assess.

As we all know, most contemporary Americans are members of a number of concrete social systems. High school students are no exception. They may be members of families, cliques, clubs, athletic teams, and other social systems. Thus, potentially they may be influenced by the subcultures of multiple social systems. Social psychologists have noted that not all social systems are of equal importance to a person; the concept of normative reference group has been developed to deal with this phenomenon (44,52:149,58:161). In evaluating the relative weight a person attaches to the value position of a particular reference group in relation to other reference groups, it is necessary first to identify the reference groups. Then one must develop measures of the values presumed to influence the behavior in question.

James S. Coleman has taken the position that, insofar as certain types of behavior are concerned, adolescents are influenced more by their age peers than by adults. He suggested in 1961 that the greatest impact of the peer-group culture is upon behavior that has immediate relevance to the other adolescents. He suggested further that peer group values tend to downgrade intellectual activity (14).

In 1962, shortly before our 1964-65 study, Ernest A. Smith reviewed the literature pertaining to the values and standards of American youth (70). He concluded that there was actually a youth culture in America; he said "analysis of the distinguishing characteristics does not imply independent existence, for the norms and behavior patterns of youth culture are apt to be modifications or adaptations of those characteristic of adult culture." However, he also noted "since peer group norms take precedence over parental norms, the result is an increase in parent-youth conflict." Smith went further and said "youth culture has been shown to dominate youth behavior in those areas most seminal to peer relations and appearance. Youth culture initiates and perpetuates norms that preempt the loyalty of youth and pattern their sentiments and behavior, particularly in relation to sex activities" (70).

According to Smith, the literature revealed a substantial amount of conflict between parents and youth over values. Most of those conflicts apparently were of relatively minor importance, but Smith wrote that the "over-all effect is so impressive that many analysts assert that parent-youth conflict in America is typical and even structurally necessary in consequence in the existence of youth culture . . ." (70:18).

The analysis of the influence of family culture patterns on adolescent behavior summarized in the preceding chapter led to the suggestion that while family culture patterns are important in understanding adolescent aspirations, attitudes and behavior, ". . . peer-group standards and expectations may, in many cases, be more important and more powerful influences than family standards and expectations" (70:7).

In a paper dealing with mobility aspiration, William A. Rushing reviewed the literature up to 1964 dealing with the influence of adolescents' peer groups on occupational mobility aspirations. He concluded that the empirical evidence supported the validity of the concept of normative reference groups as a partial source of social mobility aspirations (52:159).

A. O. Haller and C. E. Butterworth studied 17-year-old boys in Lenawee County, Michigan in the spring of 1957. In 1960, they wrote that there was little or no support for the hypothesis that interaction with peers of the same age influenced levels of educational and occupational aspiration. However, the authors declined to be convinced by their own evidence and said, "but because experimental research has produced the same genetic phenomenon and because the weight of the nonexperimental evidence presented here tends to support at least one aspect of it (oc-

cupational aspirations), the writers believe that the hy-
pothesis is at least partially accurate" (28,295)

Many earlier studies showed that boys and girls from
farm families often have lower educational aspirations
than those from nonfarm families (71). Evidence from
census sources, however, particularly when viewed over
a long time perspective, indicates that these differences are
narrowing insofar as high educational attainments are
concerned. Higher percentages of all young people, re
gardless of residential origin, complete high school (74:2).

Daniel Solomon studied the perceived influence of
parents, peers, impulses and values on 4 types of decisions
by 372 Michigan high school students. He concluded
that the adolescents did not think that their parents were
as influential as their peers in these situations, but they
did not attribute a tremendous amount of influence to the
peers, either (71:393 395).

To obtain information for use in testing hypotheses
about the influence of peer group culture, we included
some questions on peer group values and norms in a
1964 65 statewide study focused on the educational and
occupational aspirations of students in 30 rural high
schools.

In this chapter, we shall review the results of our
analysis of the comparative influence on levels of educa
tional aspiration and expectation of the educational values
of two important reference groups, the student's family
of origin and his peer group. On the conceptual level,
we are dealing with the influence of values held by mem-
bers of two reference groups upon the educational aspira
tions of a member reported by him and presumed to rep

resent expectations of the group and thus conceived to be
normative in character

Hypotheses

The first hypothesis is that the higher the perceived
educational orientation of these reference groups, the
higher the level of educational aspirations and expecta
tions of the respondent

The second hypothesis is that if the perceived educa
tional values of family of socialization differ from the
perceived educational values of the peer group, the stu
dent's educational aspirations and expectations will tend
to follow the value position of the peer group rather than
that of the family.

Methodology

The measurement of the values and norms associated
with particular social systems is not easy. In this analysis,
the measurement of the educational values of the two
reference groups was based upon perceptions reported by
the respondents. They were asked to take the roles of
all the other members of the two reference groups with
respect to a series of statements about education and then
to report the extent of agreement or disagreement in each
group. The data were then scaled by the Guttman-Cornell
technique.

The family educational orientation scale was based on
responses to the following statements[2] (see box beginning
with statement 41),

[2] For description of the method followed in developing this scale,
see (63).

The reproducibility coefficient was 93%.

The peer group educational orientation scale was based on responses to the following statements (see box beginning with statement 65).

Findings

Hypothesis number one

The statistical analysis provided support for the hypothesis that the higher the perceived educational orientation of the reference group, the higher the level of educational aspirations and expectations of the respondent. The perceived levels of educational orientation of both reference groups were associated with educational aspirations and expectations in the expected direction (table 2). It appears that the influence was somewhat stronger when the educational values of both reference groups were substantially similar, which was the case for 41% of the students.

Further analysis showed that the same patterns of association between reference group educational values and educational aspirations existed for both boys and girls and for both farm and nonfarm students.

Table 2. Perceived educational values of reference groups and educational aspirations and expectations of high school students

Perceived educational values	Aspirations to graduate from college			Expectations to graduate from college		
	Family scale %	Peer scale %	Both scales %	Family scale %	Peer scale %	Both scales %
High	61.0	61.5	68.2	41.6	45.9	54.0
Medium	53.8	49.2	51.1	37.5	36.2	35.7
Low	34.0	38.7	25.9	25.9	28.5	21.8
N	2557	2557	1039	2439	2439	1000
Chi sq.	56.2	73.7	94.5	60.4	50.0	48.7
DF	3	3	1	3	3	1
C	.74	.82	.95	.77	.71	.837
P	.001	.001	.001	.001	.001	.001

Hypothesis number two

Discrepancies in perceived educational value positions of families and peers existed for 59% of the cases. Table 3 shows that, insofar as educational aspirations are concerned, there was support for the hypothesis that students tended to follow the peer value position more often than the family value position when the two value positions differed. The reverse was true for educational expectations. Thus, the hypothesis was only partially supported.

Table 3. Discrepancies between perceived educational values of reference groups and educational aspirations

Discrepancies in perceived educational values	Graduate from college	
	Aspirations %	Expectations %
Family higher than peers	47.5	52.5
Family lower than peers	65.1	37.2
N	1508	1249
Chi square	46.5	19.9
DF	1	1
P	.001	.001

Discussion

The findings provide further empirical support for the view that the value positions of reference groups as perceived by an actor have an influence, in this case a positive one, on symbolic behavior. Furthermore, it appears that convergence of the educational value positions of the family and the peer group strengthened the relationship.

Insofar as educational *aspirations* are concerned, the findings support J. S. Coleman's view that peer group value orientations have slightly more power than family value orientations. The contrary was found for educational *expectations*. It is not entirely clear why these differences should exist. Perhaps the answer lies mainly in the dependence of adolescents upon their family for financial support in college. Thus, if the family is perceived as placing relatively low value on a college education, the prospects for adequate financial support may look poor, and *expectations* may be scaled down.

The method of ascertaining the perceived value position of a reference group differs somewhat from approaches that tend to treat the reference group as monolithic. The method used here recognizes the findings reported earlier that varying degrees of agreement exist, even within a family.

We asked each respondent to take the roles of other members of his reference group and then to classify the group itself on the basis of his perception of how the members would respond to selected value statements. No claim is made for the superiority of the specific questions used in this study nor for the scales derived from them. But it seems possible that the approach may have wider applicability in ascertaining various value positions that respondents perceive to prevail in their normative reference groups.

B. EDUCATIONAL ASPIRATIONS AND ATTAINMENTS

When we first began our studies of the educational aspirations and plans of high school students in 1954-55, only 38% of the boys and 35% of the girls in our statewide sample of seniors planned to go to college the next year. Among those who lived on farms, the comparable percentages were 29 for boys and 35 for girls (60).

A decade later, in 1964-65, the situation had changed dramatically; 80.2% of the farm boys and 72.3% of the nonfarm boys in our statewide sample of 30 rural high schools aspired to go to college. Among the girls, 67.2% of the farm girls and 66.7% of the nonfarm girls expected to go to college (65).

In 1965-66, we made another statewide study which included metropolitan areas and found that 77.6% of the 3,059 juniors and seniors expected to go to college (9). In both studies, expectations were somewhat lower but still very high. In the rural sample, 71% of the boys and 60% of the girls expected to go to college; while in the vocational sample, the comparable proportions were 66% for boys and 63% for girls.

The nationwide study, known as Project Talent, which obtained data from 440,000 students, found that 53% of the boys and 46% of the girls who were high school seniors in the spring of 1960 planned to go to college the next fall and 56% of the boys and 35% of the girls actually did so (23). This indicates that the trend in this state was not unique.

We may well ask what happened that caused this extraordinary increase in educational aspirations, expectations and achievements. Review of the history of the period 1950-1970 does not reveal any dramatic events in the state or nation that appear to have been responsible. Evidently we must seek the explanation elsewhere.

It is difficult to avoid the conclusion that the increase was attributable to the acceptance by parents and students alike of the view that education "pays off." The increase in college enrollments was preceded by an earlier trend toward completion of high school, so a large reservoir of potential college students existed.

Widespread expectations that a college degree would

be an infallible passport to a good job were dashed for many in the early 1970s. At that time, elementary school enrollments began to drop because of the earlier drop in the birth rate; consequently, fewer new teachers were needed. Furthermore, the requirements of business, industry, and government for college-trained personnel failed to keep peace with the expanding supply. In addition, the end of the Vietnam conflict resulted in a sharp decline in the manpower requirements of the military and eventually an end to the draft. All of these events led to a decrease in college enrollments. There is some evidence that this decline was temporary, since fall 1974 college enrollments were up again at most colleges and universities in the state and college enrollment in the U.S. as a whole reached a new high of 8.8 million persons in 1974, up 8% from 1973.

The past 10 years or so have seen renewed interest in vocational education below the college level and also in the community colleges. Recognition of this concern led us in 1965-66 to study the characteristics of high school students with a vocational orientation. Later in this chapter we shall discuss some information from that study, called the *Vocational* study even though it included a cross section of all high school juniors and seniors in the state.

Farm boys' rising educational aspirations

In the 1954-55 study, we found that the educational aspirations of farm boys were substantially lower than those of nonfarm boys, although even then the aspiration levels of farm girls were similar to those of nonfarm girls. Comparable studies in other parts of the United States found the same phenomenon. A. O. Haller, in a paper delivered at the 1963 National Conference on the Problems of Rural Youth, concluded, on the basis of review of several studies, that boys who plan to farm "have much lower levels of educational aspirations than farm-reared boys who planned nonfarm careers" (29).

To obtain information that we hoped school counselors and others could use to raise the levels of educational aspiration of farm boys, especially those who were planning to farm, we made a statewide study in 1964-65. This work was financed in part by the U.S. Office of Education. Contrary to our expectations, analysis of the returns showed that the situation had changed since 1954-55. In 1964-65, a higher proportion of farm boys (80.2%) than of rural nonfarm boys (72.7%) aspired to go to college. Furthermore, we found that 81% of the boys who were planning to farm aspired to go to college. These results were so different from our expectations that we made a special hand tally of the questionnaires to make sure that the computer had not made an error. The results turned out to be valid.

What is the explanation? After studying the data more closely, we found a number of clues. Part of the explanation may be the fact that the parents of the farm students in our sample tended to be better educated than the parents of the nonfarm students. Another farm versus nonfarm difference was that among students with low grades, those from farms tended to have higher educational aspirations and expectations than those who were

not from farms. This suggests the possibility that relatively more of the farm students were unrealistic about their chances of success in college. As we shall see later, the 1971 follow-up study supports this hypothesis.

Another phenomenon that may have some explanatory value is the secondary effect of the great migration from farms to cities between 1940 and 1974. We may infer that the message concerning the need to leave the farm to find employment had been heard and understood by the farm boys in our sample who did not plan to farm. Apparently, the word that a college education is the favored channel to occupational success had reached both farm and nonfarm youth.

What about the farm boys who were planning to farm? In our study, 8 out of 10 aspired to go to college. A plausible explanation for the change from the situation found by earlier studies is that commercial agriculture in Washington is science-based; thus, a sophisticated education is required to keep abreast of technical developments. Consequently, college education is increasingly functional for successful farming. We concluded that this message had reached those boys, perhaps through their vocational agriculture teachers, county extension agents, or parents.

Educational Goal Attainment

The rural (1964-65) and vocational (1965-66) studies showed clearly that our respondents had very high aspirations and expectations. We turn now to the question of the extent to which these ambitions had been realized about 5 to 6 years later.

In the follow-up study we asked our respondents to report their educational attainments since leaving high school. We compared attainments with the aspirations they indicated to us while in high school. On the basis of this comparison, we established three categories: goal achieved, goal overachieved, and goal not achieved. A summary of data from the 1971 follow-up study (table 4) shows that educational aspirations reported to us while in high school in 1964-66 had been attained in 1971 by 40.4% of rural males, 50.7% of males in the vocational sample, 41.2% of rural females and 54.4% of females in the vocational sample. In addition, educational aspirations were *overattained* by 11.2% of rural males, 9.3% of males in the vocational sample, 7.4% of rural females, and 7.2% of females in the vocational sample.

Considering the exceptionally high level of aspirations, the record of goal attainment is remarkable. More than half of our respondents had attained or overattained their educational aspirations; only among the rural girls was the proportion less than half and it was not much lower for them (46.8%). A substantial minority of the respondents were still in school in 1971. Among the males, 27.7% of those in the Rural study and 28.2% of those in the Vocational study were still in school full time. Among the females, the comparable percentages of full time students were 16% in the Rural study and 14.8% in the Vocational study. These data indicate that the ultimate record of educational attainments will be even higher.

11

18

Item	Aspiration				Expectation			
	Male		Female		Male		Female	
Goal attainment	Rural	Voc.	Rural	Voc.	Rural	Voc.	Rural	Voc.
Goal attained	40.4	50.7	41.2	54.4	43.7	58.4	47.6	53.6
B.A.	30.3	34.5	21.8	29.1	27.9	34.7	18.6	27.6
Some college	5.3	10.8	11.6	21.3	10.4	16.3	17.1	18.9
Voc-tech	2.7	3.4	4.6	2.4	1.6	2.7	7.6	3.2
No more school	2.1	2.0	3.2	1.6	3.8	2.7	4.3	3.9
Goal overattained	11.2	7.4	9.3	7.2	15.3	6.9	15.2	10.2
Some college	5.9	4.7	5.6	2.4	6.6	4.8	7.6	3.9
Voc-tech	3.7	2.0	0.9	3.2	2.7	0.7	3.8	3.9
No more school	1.6	0.7	2.8	1.6	6.0	1.4	3.8	2.4
Goal not attained	48.4	41.9	49.5	38.6	41.0	36.7	37.1	38.2
B.A.	43.1	33.1	37.5	28.4	33.3	26.5	25.7	24.4
Some college	5.3	8.8	12.0	10.2	7.7	10.2	11.4	11.8
Number	188	148	216	127	183	147	210	127
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The quest for higher education was most pronounced for men who had already obtained their first college degree by 1971; 37% of them were still in school on a full-time basis. Among the women who were college graduates, 15.7% were still full-time students. These men and women were preparing to enter one of the higher professions that requires an advanced degree (M.S., Ph.D., or equivalent) or a professional degree (M.D., D.V.M., D.D.S., or comparable degree).

Very few of those who had not entered college for the first time before 1971 were full-time students, but many respondents who had begun their college work earlier were still in school; 28.6% of the men and 19.6% of the women who had some college prior to the 1971 follow up said that they were full-time students.

It is true, however, that not everyone attained his goal (aspiration). Consequently, it seems worthwhile to examine the data more closely to learn, if possible, what factors influenced the outcome.

Enrollments in institutions of higher learning have increased so much that it appears that these goals have been substantially achieved. The 1970 census tends to confirm this view, although it is clear that more start than finish. Among Washington residents 18 and 19 years of age, 60.1% were enrolled in school; of those 20 and 21 years of age 31.1% were enrolled. Of all persons 25 years of age and over, 27.3% had completed at least 1 year of college and 12.8% were college graduates.

High School Performance and Later Educational Attainment

Some boys and girls have more receptive attitudes toward the academic aspects of school than others. Some receive better grades than others, and some are most interested in extracurricular activities of various kinds. Educators tend to believe that some of these orientations help to explain success or failure in attaining the educational goals of a student.

Our follow-up study provides some evidence concerning the types of school-related attitudes and behavior that appear to "pay off" in terms of attainment of educational aspirations.

Academic ability

The indicator of academic ability we relied upon in our studies was self-reported grades. This, of course, measures performance rather than intelligence. However, the correlation between I.Q. scores and self-reported grades in the vocational study was 0.40.

As it turned out, academic ability as reflected in grades proved to be quite a good predictor of the probability of success in attainment of educational goals for boys. Boys who were straight-A students in high school all wanted to graduate from college. In the Vocational sample, 87% of them reported in 1971 that they had done so; the comparable percentage for the Rural sample was 71.

Among the boys with lower grades, the probability of success in achieving stated educational goals tended to decline as the level of grades decreased (table 5). However, the correlation was obviously far from perfect. Some boys with excellent high school grades failed to graduate from college. Others with much more modest high school grades surpassed their stated educational goals.

The influence of high school grades on aspirations and subsequent educational attainments of girls was much less potent. The girls tended to have higher grades than

Table 5. Percent who attained or surpassed their educational aspirations, by level of self reported grades

Self reported grades	Vocational sample		Rural sample	
	Boys	Girls	Boys	Girls
As	86.7	72.7	70.6	65.8
As and Bs	57.0	58.6	62.2	54.1
Bs	73.9	56.7	36.3	55.5
Bs and Cs	61.1	60.7	58.1	38.8
Cs	43.3	57.2	40.0	47.1
Cs and Ds	29.4	83.4	40.0	33.3
Ds*				

* Too few cases to tabulate.

boys in high school about one grade higher on the average yet relatively fewer became college graduates. Why this outcome? For one thing, more of the girls chose more modest educational objectives such as "some college" or vocational-technical training. Another factor is that the societal pressure for marriage by girls is greater and once married, children and housekeeping chores are likely to depress educational aspirations. The basic reason, in my opinion, is cultural. If this is the correct explanation, we may expect to see a change if the women's rights movement expands, as now seems probable. As a result, more women probably will graduate from colleges and compete in the professions and other occupations formerly regarded as men's work.

Leadership in school activities

Information on leadership in school activities as reflected in offices and membership in the "leading crowd" was obtained in the rural study only. More than half of the students, 61.9% of the boys and 55.4% of the girls, had held more than one office and 40% claimed they were members of the "leading crowd."

The leadership experiences gained through office holding may help enhance personality development. However, there appears to be relatively little carryover into educational goal attainment. This was also true of membership in the "leading crowd." Differences in educational goal attainments of members and nonmembers of the "leading crowd" were not statistically significant.

There is therefore little support in our study for the idea that holding office in organized extracurricular activities will enhance attainment of educational goals by either boys or girls. This should not be interpreted as meaning that such activities are without merit.

Encouragement from teachers to go to college

In the Rural study, but not in the Vocational study, we asked if the respondent had been encouraged by a teacher to go to college. About half of both sexes reported that they had received such encouragement. Only 5 individuals out of 384 said that a teacher had told them they should

not go to college. The remainder said they had received no counseling from their teachers on this matter.

The follow up study shows that teachers' recommendations on college attendance may have had some influence on educational goal attainment. Among the boys, 41.4% and among the girls 49% of those who received teacher encouragement achieved or overachieved their college goals compared to 33.7% of the boys and 29% of the girls who did not receive such encouragement.

The very small amount of negative feedback and the high level of "no recommendation" on this subject that we may infer from student responses suggests that many teachers had little interest in the educational careers of their students.

Interest in school work

In both studies, we included the question: "How much of your school work are you interested in? All, Most, Some, Little, None." The responses implied a high level of interest. In the Rural sample, 72% of the boys and 84% of the girls stated an interest in most or all of their school work. The proportions for the Vocational sample were similar.

Our earlier analyses showed a strong positive relationship between level of interest in school work and levels of educational aspirations and expectations (9:4). Consequently it seemed reasonable to anticipate that interest in academic work would have a positive effect on educational attainments.

The follow-up studies show that interest in school work is less useful as a predictor of subsequent educational goal attainment than self-reported grades. In the Rural sample, almost half (47%) of the young men and 36% of the young women who said that they were interested in most or all of their school work and aspired to a B.A. degree failed to attain this goal. In the Vocational sample, goal attainment was higher but there was not a strong positive relationship between level of interest in high school work and attaining educational goals.

We do not have an empirical basis for explaining these findings. It is possible that the favorable attitudes toward school work reflected in the answers were due to the local situations in various schools rather than to a scholarly orientation on the part of many students.

Family Influences on Educational Goal Attainment

Although schools and colleges provide the arena in which educational goals are attained, the family in many, if not most, cases is also involved. Parents and sometimes other relatives provide encouragement and financial support. In addition, and sometimes more important, is the influence of family values. We tend to blame the family for delinquency and we should give it at least some of the credit for exceptional achievement.

It is widely believed by educators and others that family values and socioeconomic status are major determinants of educational (and occupational) orientations and achievements. Even conflict theorists who challenge the educa-

13

tional system charge that it is dysfunctional for children from culturally different homes because it is said to be easier for children from middle class homes (with middle class value orientations toward education) to succeed (7, 16, 32). But, in fact, there is little quantitative evidence that tests the major hypothesis that the children of those who are successful will succeed. Nor have we much data on subsidiary questions about which specific aspects of family culture are most effective in producing the types of behavior that lead to goal attainment.

Parents' education

The first question that we shall consider is whether the educational level of father or mother is a major influence. The evidence from both studies indicates that the level of parental education was not a strong positive influence on goal attainment. We had been led to expect it would be by the conventional wisdom and by our own earlier findings of a relatively strong positive relationship between level of parental education and level of educational *aspirations* while in high school.

As a matter of fact, in both samples, educational goal attainment by both boys and girls tended to be inversely related to the level of parental education, although these relationships were weak.

We do not have empirical evidence that fully explains these findings. The relevant statistical measures were as shown in the box.

Study	Mother's Education vs. Educ. Goal Attainment				
Rural	Boys Gamma	12	Girls' Gamma	- 38
Voc	Boys Gamma	20**	Girls' Gamma	- 15**
	Father's Education vs. Educ. Goal Attainment				
Rural	Boys Gamma	19	Girls' Gamma	- 22**
Voc	Boys Gamma	19	Girls' Gamma	- 10
* Sig. at 05		** Significant at .01		

However, as we noted above, more than half of both sexes in both samples attained or overattained their educational goals.

The educational attainments of the parents were quite high. In the Rural sample, more than half of the fathers of farm students and more than 60% of the fathers of nonfarm students had at least a high school education, and the mothers were even better educated. In the Vocational sample, more than 70% of the fathers and nearly 80% of the mothers had at least a high school education.

Furthermore, remember that the question is whether the student had attained, overattained, or failed to attain his or her own educational goal. For many, the goal was not a college degree but 1-3 years of college, some vocational or technical training, or even (for less than 3%) no further education at all after high school.

It appears that in Washington, at least, we do not have anything approaching an educational caste system with only the sons and daughters of college educated parents attaining a college education. It appears rather that the ambition to attain a college degree or at least some college training is quite general; there may be an element of "catching up with the Joneses" here—that is, parents with modest educational attainments may put more pressure on their children than those who have high educational attainments. However, it is apparent that attainment or overattainment of educational goals depends on a number of factors other than the educational attainments of parents.

Family socioeconomic status (SES)

Economic support from parents while in college or other post high school educational institution is regarded as a necessity by nearly all girls and many, if not most, boys. Consequently, it is reasonable to expect a strong positive relationship between indicators of family socioeconomic status and educational goal attainment.

During the original studies, we obtained some information from students about father's occupation. We also asked students to tell us their perceptions of relative income or wealth. From the parents of our special sample of students in the Vocational study we obtained information about family income. We shall now examine the relationships between these indicators and educational goal attainment.

Perceived family income or wealth

In the Rural study, students compared their family's income with that of other families in their community. Contrary to our expectations, there was no clearcut relationship between this measure of socioeconomic status (SES) and educational goal attainment for either sex.

In the Vocational study, we asked about students' perceptions of the relative wealth of their families. Again, we found no clearcut relationship between this measure of family SES and educational goal attainment. However, there was evidence of some influence of family economic status on educational goal attainment by young men in the Vocational sample. By 1971, those whose parents reported 1965 incomes of $10,000 or above were somewhat more likely to have attained or overattained their aspirations (67%) than those whose fathers reported 1965 incomes below $10,000 (56%); P .001. The comparable percentages for the young women were 69% and 72% respectively, which is neither statistically nor substantively significant.

We may conclude therefore that among the young men and women who responded to our follow up questionnaire, there is insufficient evidence to justify a sweeping indictment of the educational system on the basis set forth by the conflict theorists cited above, namely that it is "stacked" in favor of the well-to-do. However, our response rate was lower than we had hoped to obtain. There is some chance that many of the nonrespondents had dropped out of school as well as out of range of our efforts to communicate with them and were from low income families. If this happened in many cases, it would tend to minimize any negative effects of schooling. It is my opinion that any bias due to underrepresentation in the following study of low income persons is minimal.

Parents' attitudes

During the course of the Rural study, we obtained information about the attitudes of parents toward college

education for their children by mail questionnaire. In our analysis of the original data from the Rural sample, we found a positive association between the intellectual orientation of the family as reflected in a Guttman type scale based on student responses and the level of educational aspiration of the student (58:13). At this point, we shall examine the data to learn if parental attitudes had any relationship to post high school educational attainments.

As a relatively high proportion of the young men and women in the Rural sample did go to college, it is no surprise to find that the attitudes of parents toward a college education were overwhelmingly favorable. In fact, 80% of the mothers who responded said that they regarded a college education as essential for a girl. An additional 16% said it was desirable. Among the fathers, 69% said that college was essential for a girl and an additional 23% said it was desirable.

Fathers were somewhat less enthusiastic about college for a boy: 28% classified college as essential and an additional 48% said it was desirable. Among the mothers, 33% said that college was essential for a boy while 54% said it would be desirable.

With respect to college for their own high school daughter, 13% of both mothers and fathers said that they would insist that she go to college while 72% of mothers and 78% of fathers said they had encouraged her to go to college.

Parents took a much more positive view of college for their own high school son than they did for boys in general; 23% of the fathers and 22% of the mothers said that they would insist that their son go to college. An additional 72% of the fathers and the same proportion of the mothers said that they had encouraged their son to go to college but would leave the decision up to him.

On the basis of the foregoing information, it seems reasonable to expect that parental wishes concerning college for their own sons and daughters would have more than a casual influence. This expectation was supported by the analysis. Both sons and daughters attained more of their college aspirations when their father said that he would insist that they go to college (table 6). The same

type of influence was observed between mothers and daughters but not between mothers and sons.

It appears from the data (even though the cases were few) that strong parental encouragement, especially from a father, is associated with a higher level of attainment of college goals. We may perhaps interpret a parent's statement that he or she would insist that a son or daughter go to college as a reflection of high family valuation of college. If this is a valid inference, the response is merely an indicator of a family value configuration that may operate in a more subtle manner than an authoritarian relationship between parent and child.

Influence of Role Models

In the original questionnaire used in the Rural study, students were asked to identify their role models, if any, by checking one of the following list of categories: father, mother, older sister or brother, friends, teacher, other adult, no one. The category most frequently checked was "no one" (27%), followed by "other adult" (24%); "father" was named by 28% of boys and "mother" by 18% of girls. A teacher was regarded as a role model by 4% of girls and 8% of boys. Analysis of the data indicates that role model had some influence on educational goal attainment.

Among the categories with substantial numbers of students, the attainment of a bachelor's degree or graduate degree, the highest percentage of young men who had attained or exceeded their college aspirations (49%) was among those who said that their role model was an "other adult" followed by those who named father (43%). Next were those who claimed they had no role models at all (40%).

Among the young women, the highest level of attainment or overattainment of college aspirations was among those who said that a friend was their role model (50%). Then came those who said that a teacher inspired them (44%), then those who nominated other adults (43%) and those who said that they had no role models (34%). Only 31% of the young women who said their mother was a role model attained or exceeded their college goals.

These data show that there is no consistent pattern

Table 6. Parental encouragement vs. college goal attainment, 1964-65

	Degree of parental encouragement about college and percent who attained goal			
Relationship	Insist	Encourage	Doesn't matter	Shouldn't go
Father to:				
Son	41.3 (29)*	32.2 (89)	0 (5)	100 (1)
Daughter	58.8 (20)*	38.8 (107)	29.9 (13)	75.3 (9)
Mother to:				
Son	40.6 (28)*	46.0 (91)	---- (4)	0 (6)
Daughter	50.0 (20)*	41.0 (117)	40.0 (5)	20.0 (9)

*Number of students in parentheses.

for both sexes that can be explained readily on theoretical grounds. At the same time, it does appear that role models exert some influence on educational goal attainment. Whether this has any practical significance in terms of possible direct intervention in goal selection and achievement processes by counselors, or others may be open to question since selection and emulation of a role model appears to be a subtle subjective process that perhaps is not affected by direct advice.

Discussion

Perhaps the most interesting finding from the 1971 follow-up study is that these data gave little support for the view held by some sociologists (16,32) that children of college educated and prosperous parentage have a clear-cut advantage in the competition for high educational (and occupational) status. It is true, of course, that our samples did not have enough representatives of ethnic minorities to permit us to evaluate the relative progress of such minorities. There was some bias in the composition of the 1971 follow-up of the Rural sample insofar as education of parents is concerned; those whose mothers and/or fathers had not graduated from high school were under-

represented (in the original sample of students, 30.1% reported that their fathers had less than a high school education compared to 24.4% in the follow up study. The comparable figures for mothers were 30.6% and 22.1% respectively); however, the discrepancy is not large enough to warrant the conclusion that the data are seriously biased. The distribution of the 1971 follow up of the Rural sample on perception of family income (made in 1964-65) was practically identical with that of the original sample. Consequently, there is no basis for concluding that the distribution of returns in the follow up study was economically biased.

Since the surveys did not address this question specifically, it is not possible to identify the factors that were responsible. I believe that a major part of the explanation is to be found in the widely held belief that upward educational and occupational mobility is possible. This belief was reflected in the high educational and occupational aspirations of our respondents in the mid 1960s.

Although it is true that the educational system does operate as a screening device, encouraging those who do well in school, it does not actively discourage those who do not make good grades.

5. FACTORS ASSOCIATED WITH DIFFERENT EDUCATIONAL PLANS[a]

Though the majority of the high school respondents in the middle of the 1960s planned to go to college, many had other plans. Furthermore, not all of those who were college bound planned to get a degree. In the Vocational study, we obtained information from juniors and seniors about their post high school plans (expectations) and about various factors that might help us understand why one type of educational plan was chosen rather than another. The distribution of students according to educational expectations is in table 7.

The characteristics of those who were planning on vocational education after high school have been discussed elsewhere (9). In this chapter, we shall look at the factors associated with other types of educational plans, with special emphasis on those who were uncertain about their plans and those who planned to take no further education.

Analysis of the social characteristics of these students should be useful to educators and counselors in understanding their problems. The number of students in these two categories is relatively small. However, those who are uncertain or plan to drop out after high school may be of special importance because in a sense they have been failed by the educational system.

High School Experiences and Attitudes

In my opinion, some of the experiences students have in high school have some effect on their ability to function in the occupational sphere and the larger social environment. If students have not gained a satisfying, self-

Table 7. Educational plans of high school juniors and seniors, by sex, 1965-66

Educational plan	Boys		Girls	
	No.	%	No.	%
College graduate	692	45.6	585	39.3
Some college	269	17.6	298	20.
Business training	73	4.7	218	4.7
Vocational training	285	18.6	174	11.4
High school only	127	8.3	136	9.
Uncertain	79	5.2	76	5.1
Total	1525	100.0	1487	100.0

fulfilling experience in high school or if they have developed negative attitudes towards education and the patterns of behavior demanded by society, they may be greatly inhibited in making satisfactory adjustments in the occupational world and in the rapidly changing larger society.

Grades

The data imply that high school has been a different experience for students who have different plans for post high school vocational training. Each respondent was asked what grades were received on the most recent report card. Girls more often reported good grades than boys. Students who planned to graduate from college and those who planned to do some college work most frequently reported grades of B or better (table 8). Following them

Table 8 Percent of students reporting "Mostly B or Better" grades, 1965-66		
Educational plan	Boys	Girls
College graduate	53	78
Some college	28	50
Business training	10	29
Vocational training	11	24
High school only	6	20
Uncertain	9	19

were the business training and vocational training categories. Those who least often reported good grades were the "high school only" and "uncertain" students. In both of these categories, boys reported that they received good grades less than half as often as the girls.

It is possible that students who are uncertain about further education do poorly in high school because they lack direction in life in general and have no definite post high school vocational plans. Furthermore, receiving poor grades may cause uncertain students to have a low self-appraisal of their academic ability. If low self-appraisal of one's academic ability is generalized to the total self concept, a vicious circle of defeatism may be set into operation.

Interest in school work

Students were asked how much of their school work they were interested in. Fairly large proportions of all categories reported that they were interested in all or most of their school work. Expressing the most interest in school work were persons of both sexes who planned to go to college. About half of the boys planning business training, vocational training and those who were uncertain about further education expressed a high level of interest in school work.

Girls who were uncertain about further education and boys who planned no additional education after high school were the least interested in school work (table 9).

In general, these findings suggest that students who plan to continue their education are more likely than others to be highly interested in their school work. The 46% of the uncertain boys who said they were interested in all or

Table 9. Percent of students interested in all or most of their school work, 1965-66		
Educational plan	Boys	Girls
College graduate	80	92
Some college	65	78
Business training	49	71
Vocational training	50	71
High school only	31	56
Uncertain	46	20

most of their school work may have hoped to continue their education. These boys were probably aware that playing the male role adequately in today's society requires a good education.

Dissatisfaction with school

To measure more precisely the amount of dissatisfaction with school among students in the sample, an index of dissatisfaction with school was constructed. The respondents marked whether they would agree, neither agree nor disagree, or disagree to statements such as: "I like school very much; Most of my teachers are very helpful; Lunch time is the most enjoyable time of the day." For each student, a total score was obtained and designated as high, medium, or low on the index. Negative attitude toward school was indicated by a high score on the index.

There were some differences between boys and girls. But overall, students who were uncertain, or planning business or vocational training were more likely to be dissatisfied with school than those planning some college or college graduation. However, students the least satisfied with school had no plans for education beyond high school. It seems likely that their alienation was a major reason for their plans to stop their formal education after completing high school (table 10).

Table 10. Percent of students having a low level of interest in school work, 1965-66		
Educational plan	Boys	Girls
College graduate	32	19
Some college	47	32
Business training	63	46
Vocational training	59	47
High school only	74	60
Uncertain	60	51

Scholastic self-image

To obtain an index of scholastic self-image, the respondents were asked to compare themselves to their fellow students on a series of skills necessary for successful scholastic attainment in high school. They were classified as scoring high, medium, or low on this index. The uncertain students scored higher than those in the high school only, business training and vocational training categories, but not as high as those who planned to go to college (table 11). This suggests that the uncertain students perceived themselves as comparing fairly well with their classmates in regard to skills in school.

Intellectual self-concept

To establish a measure of intellectual self-concept, an index was developed. The index consisted of several continuums with polar adjectives at each end. Students were asked to place themselves on each of the following:

24

Intellectual 1 2 3 4 5 Not Intellectual
Sharp 1 2 3 4 5 Dull
Fast 1 2 3 4 5 Slow
Alert 1 2 3 4 5 Not Alert
Successful 1 2 3 4 5 Unsuccessful

Respondents were scored high, medium, and low. Table 12 shows the proportions scoring high on the index.

Table 11. Percent of boys and girls scoring high on the scholastic self-image index, 1965-66

Educational plan	Boys	Girls
College graduate	58	68
Some college	24	42
Business training	11	23
Vocational training	10	19
High school only	5	17
Uncertain	14	24

Table 12. Percent of boys and girls scoring high on the intellectual self-image index, 1965-66

Educational plan	Boys	Girls
College graduate	55	56
Some college	30	34
Business training	25	22
Vocational training	22	16
High school only	16	15
Uncertain	14	24

Among boys, those in the uncertain category were least likely to score high. However, the uncertain girls were more likely to score high than those who planned to finish high-school only, those who planned vocational training, and those who planned business training. As might have been anticipated, boys and girls who planned to go to college, especially those who expected to earn a degree, were most likely to score high. As noted before, students with high grades were more likely than those with lower grades to plan on college. It appears that this is due in part at least to having a higher self-concept. Those who had the least ambitious educational plans tended to have a lower intellectual self-concept.

Academic orientation

In order to classify the respondents according to academic orientation, two indexes were devised, a vocational index and an academic index. The vocational index included subjects such as agriculture, business, home economics, and shop. The academic index included biology, chemistry, foreign language, history, mathematics, physics, and social studies. A score on each index was obtained by

totaling the number of semesters the student planned to take of each type of subject before graduation, and scores were classified as high, medium or low on each index.

The uncertain respondents were nearly as likely as the high school only, business training, and vocational training categories to score high on the vocational orientation index (table 13). Those who expected to graduate from college were least likely to score high on this index.

Table 13. Vocational orientation: percent of boys and girls scoring high on the index of vocational subjects, 1965-66

Educational plan	Boys	Girls
College graduate	24	26
Some college	44	37
Business training	43	59
Vocational training	73	39
High school only	69	53
Uncertain	60	44

On the index of academic orientation, uncertain, high school only, vocational training, and business training groups scored much lower than the some college and college graduate categories (table 14).

Table 14. Academic orientation: percent of boys and girls scoring high on the index of academic subjects, 1965-66

Educational plan	Boys	Girls
College graduate	62	53
Some college	41	33
Business training	14	4
Vocational training	11	11
High school only	10	9
Uncertain	20	13

Extracurricular activities

To measure involvement in social activities, an index of extracurricular activities was constructed. Respondents were asked whether they (1) did not participate, (2) were not very active, (3) were quite active, or (4) were very active in organizations listed on the questionnaire. In general, girls were more active than boys in extracurricular school activities (table 15). Similarly, girls were more likely than boys to have held two or more high offices (table 16).

These data suggest that extracurricular activities were most likely to have been dominated by the college bound, especially those who planned to graduate from college. This was also true of student organizations. Perhaps those

Table 15. Percent of boys and girls scoring high on the extracurricular activity index, 1965-66

Educational plan	Boys	Girls
College graduate	40	65
Some college	23	51
Business training	17	30
Vocational training	17	33
High school only	12	24
Uncertain	20	25

Table 16. Percent of boys and girls saying they held two or more high office positions, 1965-66

Educational plan	Boys	Girls
College graduate	42	53
Some college	26	42
Business training	15	34
High school only	16	21
Vocational training	16	22
Uncertain	16	26

who were not college bound did not participate as much in school activities or hold high offices as often because they received lower grades, were less interested in school work, were more dissatisfied with school, and had lower scholastic self-images and academic self-images.

Summary

Compared with those with definite plans for more education, students who were uncertain about their post high school plans and those who planned no further education:

1. Apparently had not had very satisfactory high school careers.
2. Generally had lower grades.
3. Were less interested in all or most of their school work.
4. Had lower intellectual self concepts.
5. Were less active in extracurricular activities and leadership.
6. Were less active in school activities and organizations. Those with business training and vocational plans were also not very active.

Family Backgrounds

Many sociological studies have shown that characteristics of one's family influence one's perceived relationship to the larger society—including one's educational plans. Therefore, we would expect students with different post high school educational plans to have different family backgrounds.

Occupation of father

Sons and daughters of professional men were more likely than those whose fathers had other occupations to be college-bound. Sons of other white collar workers were more likely than sons of blue collar workers to be college bound and less likely to be planning on vocational training or to be planning on no further education after high school. A similar pattern existed for girls, except that more girls than boys planned to take business training after high school.

Education of parents

It appears from tables 17 and 18 that there was some association between the educational attainments of parents and the educational plans of students. Boys and girls who said they were college bound were much more likely than others to have a father or mother who had completed 1 or more years of college.

Table 17. Percent of students saying their father had completed one or more years of college, 1965-66

Educational plan	Boys	Girls
College graduate	56	54
Some college	39	46
Business training	24	25
Vocational training	20	21
High school only	10	24
Uncertain	8	27

Table 18. Percent of students saying their mother had completed 1 or more years of college, 1965-66

Education plan	Boys	Girls
College graduate	49	49
Some college	34	43
Business training	19	21
Vocational training	16	20
High school only	14	10
Uncertain	15	25

Family Income

The respondents were asked if they perceived their family income to be considerably above average, somewhat above average, somewhat below average, or considerably below average. The data (table 19) show that the uncertain boys and girls were more likely to report above-average incomes for their families than were those who planned to finish high school only and those planning on vocational training. However, those planning business training, some college, and college graduation were most likely to report above average family incomes.

These data imply that the parents of many students were

able to help finance the post high school education of their sons and daughters.

Table 19. Percent of students thinking their family had above average income, 1965 66

Educational plan	Boys	Girls
College graduate	55	52
Some college	42	44
Business training	39	33
Vocational training	28	29
High school only	20	19
Uncertain	31	28

The students' were asked which types of post high school ventures they thought their parents would be willing to help finance. The choices were farming, college, vocational schooling, setting up a business of my own, none of the above. The respondents were invited to mark more than one category if applicable (table 20).

More than half of the uncertain boys indicated that their parents would be willing to finance college or vocational school. Also, nearly half of the uncertain girls said that their parents would be willing to help finance a college education and more than half said they could get financial help for a vocational education. As might be expected, those who were college bound most often reported that they could expect financial help from their parents for a college education. Likewise, those with vocational training plans most often reported that their parents would be willing to help finance a vocational education.

Educational orientation of family

The respondents were asked how many members of their family agreed with the statement, "they expect the younger members of the family to get all the education they can." Table 21 shows the percentages of students' responding "all of them" to this question. There was a

definite bias in favor of boys, except among those who said they planned to graduate from college. However, it is clear that most students, regardless of their own plans, perceived their families as having high educational expectations.

Table 21. Percent of students saying all of the family expects younger members to get all the education possible. 1965 66

Educational plan	Boys	Girls
College graduate	76	73
Some college	69	57
Business training	74	50
Vocational training	59	50
High school only	52	46
Uncertain	64	55

Summary

Family backgrounds had some influence on college plans but not very much on other types of educational plans. Sons of professional men were more likely than sons whose fathers had other occupations to plan to get a college degree. Among the girls, those with professional fathers were most likely to plan on a college degree, closely followed by the daughters of farmers. There was no clear relationship between father's occupation and plans to discontinue formal education after high school or between father's occupation and uncertainty about further education. Parental education had a positive influence on college plans but not on other types of educational plans. Family income as perceived by students also had a positive influence on college plans. More of the college bound than those with other plans said that their families had incomes that were above average. Those who planned no further education were most likely to think that their family incomes were not above average. Most of the respondents perceived their families as having high educational expectations for younger members. The level of expectations was higher for boys than for girls.

Table 20. Percent of boys and girls saying parents would be willing to help finance college or vocational school, 1965-66

Parental financing	Educational plan					
	College grad.	Some college	Business training	Vocational training	High school only	Uncertain
Boys						
For college	92	85	61	40	35	54
For vocational school	24	30	33	72	28	58
Girls						
For college	94	89	50	41	37	46
For vocational school	30	38	64	85	47	56

Peer Group Influence

Educational plans of friends

One question was, "How many of your friends have dropped out of high school before graduating?" Relatively small percentages of any category reported that one or more of their friends had dropped out (table 22). However, the uncertain boys and girls, those with business and vocational training plans, and those who planned to go no further than high school responded affirmatively much oftener than did those who were college bound. This suggests that students interact with other students with similar plans, supporting the old adage "birds of a feather flock together."

Table 22. Percent of students saying that one or more friends had dropped out of high school, 1965-66

Educational plan	Boys	Girls
College graduate	5	6
Some college	11	8
Business training	18	22
Vocational training	22	17
High school only	30	23
Uncertain	21	17

The respondents were asked what proportion of their friends planned to attend college — all of them, most of them, about half of them, only a few of them, none of them.

Table 23 gives the results. Among boys, those in the uncertain category more often said that all or most of their friends planned to attend college than did those who planned on high school only and those who had vocational training plans. Among girls, the uncertain group ranked third behind the college graduate in the "some college" groups.

These figures suggested that the uncertain boys may have received more peer group support for continuing their education than did those in the high school only and the vocational training categories. The uncertain girls may have received more peer group support for continuing

Table 23. Percent of students saying all or most of their friends plan to attend college, 1965-66

Educational plan	Boys	Girls
College graduate	84	83
Some college	63	70
Business training	57	40
Vocational training	34	44
High school only	17	26
Uncertain	42	47

their education than all other girls except those who were college bound

Students were also asked what proportion of their friends planned to attend vocational school after high school. On this question the focus is upon students who responded "none." The percentages of students replying negatively are relatively small for all categories (table 24). For both boys and girls, those who had vocational training plans least often said "none." Among boys, the uncertain students ranked about the same as the some college, business training, and high school only categories. Among girls, the proportions responding negatively were roughly the same for the uncertain, high school only, some college, and the business training categories. Most frequently responding "none" for both boys and girls was the college graduate category. These data also suggest that students tend to interact with peers who have similar educational plans.

Table 24. Percent of students saying none of their friends plan to take vocational training, 1965-66

Educational plan	Boys	Girls
College graduate	31	28
Some college	15	16
Business training	12	17
Vocational training	4	2
High school only	12	17
Uncertain	11	19

Many writers have suggested that a student's educational plans are affected by his peers and that the attitudes of one's peers influence one's own attitudes; see chapter 3. If this is true, one could expect students planning post high school business and vocational training to be more favorable to the idea of offering more business and vocational courses in high school than those planning on college.

To test this hypothesis, an index of perceived attitudes of friends toward vocational education was constructed. Students were asked how many of their friends had the feelings expressed in a series of statements. Some of these statements were:

1. The high school curriculum should be more directly related to specific jobs.
2. There should be more emphasis on vocational and technical courses and less on college preparation.
3. Shop courses are good preparation for the kind of work many students will be doing.

Respondents were scored as high, medium, or low on this index.

Students planning to take vocational or business training or to end their education at the high school level were more likely to score high on this index than were those planning to attend or graduate from college; in the middle

were the uncertain students (table 25) These data further support the hypothesis that students tend to be friendly with others with similar plans

In response to the question "How many of your close friends expect the members of your group to get all of the education they can?" relatively large percentages of all categories replied "all" or "most" (table 26). Evidently many students highly value education, regardless of their own personal educational plans. Boys and girls in the college graduate category were most likely to have said "all" or "most." Among girls, those who were uncertain ranked nearly the same as the some college category and among boys, those not sure about post high school education ranked about the same as the business training category. Least often responding "all" or "most" were the students who planned to stop their education with high school.

Relationship of Educational Plans and Occupational Expectations

If a student plans to enter a certain occupation, he or she may commit himself or herself to the type of education that will permit entry into the chosen line of work. However, some students plan for a specific occupation but have totally incompatible educational plans.

Analysis of the data revealed that the type of education planned and type of occupation a student expected to pursue were relatively compatible. However, there were some marked discrepancies. Among the uncertain boys, 44% expected to become craftsmen and 27% said they expected to become professionals. Among the uncertain girls, 15% expected to become professionals and 19% said they would become clerical workers. In addition, 66% of the boys and 27% percent of the girls who planned 1 to 3 years of college expected to become professionals. These expectations appear to be unrealistic in view of the educational requirements for professional occupations.

Discussion

It appears that students who were college bound were scholastically more successful than those with other educational plans. They were also more active in extracurricular activities and other school affairs. There was some evidence that the college bound students formed friendships more often with other college bound students. The other students those who planned to drop out of the educational competition after high school, the uncertain and those with business or vocational training plans lagged behind. We found evidence that many were dissatisfied with school, had thought little of their academic ability, and this opinion apparently was reinforced by low grades. In general, they got less and apparently expected less of school and they had lower educational and occupational expectations than the elite those who were college bound.

Table 25. Percent of students scoring high on the index of perceived friends' attitudes toward vocational education, 1965 66

Educational plan	Boys	Girls
College graduate	15	16
Some college	26	22
Business training	43	38
Vocational training	42	40
High school only	41	51
Uncertain	30	31

Table 26. Percent of students saying close friends expect them to get all of the education they can, 1965 66

Educational plan	Boys	Girls
College graduate	70	73
Some college	61	60
Business training	57	57
Vocational training	51	60
High school only	50	45
Uncertain	56	59

6. ACADEMIC INTERESTS AND SCHOLARSHIP

Specialization is an important feature of modern life. This can be seen most clearly in occupations, but specialization is also found in nonwork activities. The courses of study pursued by students in high school have considerable relevance for occupational choice and subsequent performance. In addition, the quality of academic performance (scholarship) may have a bearing on subsequent educational and occupational achievements.

In this chapter we shall examine some data from the 1964-65 study of rural high school students pertaining to academic interests and scholarship as reflected by grades.

Academic Interests

School attendance is mandatory for most Washington children and adolescents, as already noted. In addition, social pressure to complete high school and to attend (but not necessarily to finish) college is strong. Some high school students drop out before graduation and others, if allowed to decide for themselves, would undoubtedly do the same thing. Consequently, answers to questions relating to academic interests do not necessarily tap the entire range of potential alternatives but only those available to a person who is not really free to leave the school system at will.

Amount of school work interested in

We asked how much of their school work students were interested in. The responses to this question may provide some indication of the relative importance of school work to students. In the rural study, only 13.3% said that they were interested in all of their school work but 57.8% were interested in most of it. Girls were slightly more likely (15.6%) than boys (11.1%) to be interested in all of their school work. The same small sex differential was found with respect to those who were interested in most of their school work.

Grades

Further analysis revealed a strong positive association between self-reported grades and interest in school work.[4] In fact, 35% of those who reported all As and 21.8% of those who reported As and Bs on their most recent report card said that they liked all of their school work, compared with 11.9% of those who reported mostly Bs and Cs and 75% of those who reported mostly Cs. These data support

4 C 404; Chi square 689.6 with 20 d.f.; P< .01.

the view that those who like their studies get better grades.

However, remember that a high grade can be regarded as a reward, and, of course, most people tend to have favorable attitudes toward activities for which they are rewarded.

Subjects liked best in high school

Through exposure to educational processes in primary and secondary school, students inevitably develop stronger intellectual interests in some fields of study than others. Many factors may contribute to the development of interest in a particular field of study: family values, an excellent teacher whose treatment of a subject has inspired and stimulated the student, or a prominent adult figure in a scholastic field who may have strongly influenced the student's intellect. We are not able to trace the sources of interest at this time, but must be satisfied with noting which subjects are favorites. Table 27 presents the findings.

The most heavily endorsed subject for boys was physical education; 54.3% said this was their favorite subject. English, with 52.2%, received the highest percentage for girls among the subjects listed. Shop, at 51.3%, was in second position for boys; home economics, 49.7% endorsement, was second among the girls. The popularity of

Table 27. School subjects liked best by high school boys and girls, 1964 65*

Subjects liked best in high school	Boys				Girls			
	Grade level				Grade level			
	All	10	11	12	All	10	11	12
	%				%			
Agriculture	22.6	20.9	25.4	21.4	0.8	1.0	0.9	0.5
Algebra	31.5	32.6	30.6	31.2	22.9	23.9	25.1	19.8
Art and music	25.4	20.4	26.2	29.4	45.2	43.2	47.4	45.3
Biology	40.1	46.9	38.1	35.5	35.7	43.1	33.9	29.4
Business	11.8	8.4	10.9	16.2	35.4	25.5	39.7	42.2
Chemistry	18.9	13.3	22.1	21.1	9.6	4.5	9.3	15.5
English	26.2	29.8	27.5	21.4	52.2	55.6	51.9	48.7
Foreign languages	11.5	13.5	12.9	8.2	24.3	20.5	29.9	23.0
Geometry	25.5	30.4	23.3	22.9	13.0	14.5	12.9	11.4
History	39.0	38.7	42.8	35.5	32.8	31.1	35.2	32.4
Home economics	1.4	1.2	1.5	1.5	49.7	52.3	49.2	47.4
Physical education	54.3	62.0	49.7	51.3	41.7	53.4	35.9	34.4
Physics	10.5	6.2	9.6	15.7	2.1	2.3	2.4	1.8
Shop	51.3	51.2	51.6	51.0	3.4	3.7	3.1	3.2
Social studies	12.4	11.5	11.1	14.7	11.6	7.7	8.2	19.1
Trigonometry	10.0	6.6	8.0	15.5	3.1	1.9	2.9	4.5
No. students responding	1834	608	614	612	1730	620	549	561
No. students not responding	20	8	4	8	9	2	4	3

*Percentages do not total 100 as more than one response could be marked by the respondent.

these areas was similar to the findings reported by Carol Stone in a study of rural students in Pend Oreille County in 1961 (72).

Table 27 reveals that students' academic interests extended to all subjects. The distribution shows that preferences of many rural students included what some educators call "solid" courses: algebra, geometry, English, art, history, and so on. There was, however, an interesting attrition in mathematics; if we align mathematics courses in the order of their usual progression in most high school curricula algebra, geometry, and trigonometry in that sequence it can be noticed that there is a progressive decrease in the percentage who endorsed these areas. For boys, 31.5%, marked algebra as among their favorite subjects; geometry attracted 25.5% but only 10.0% tagged trigonometry as a favorite. A similar decline was found for girls: 22.9, 13.0 and 3.1% respectively. Such attrition is common in education, for each course in a sequence serves as a screen for the next one. The data indicate more boys than girls prefer mathematics.

The preferences of the boys seem largely consistent with those of previous studies. In her earlier research on rural youth in Pend Oreille County, Stone found that 53.6% of the boys placed math and science as a favorite, while only 29.4% of the girls did the same (72:65). In a 1963 study that included both rural and urban student respondents, I found a similar sex distribution. Nearly twice the percentage of boys as of girls put science among their favorite subjects (63).

That mathematical and natural sciences were favored by many students seems compatible with the heavy emphasis on occupations requiring technological and scientific training. It seems likely that this tendency would be measurably increased if the statistical analysis had been run on only those planning to attend college.

Vocational training in high school

Students in the sample were asked to report what types of additional vocational training they would like to get at their own schools. Vocational subjects, while they may seem more relevant to those who do not plan to attend college, are not necessarily barred from the interests of college oriented students. Shop, a type of industrial arts, was previously noted as a favorite subject among boys in general; business, both its secretarial and other aspects, was a major concern for noncollege and college-oriented girls alike. Additional business courses were recommended by nearly 37% of the girls (table 28). More home economics courses were recommended by 21.6% of the girls. A fourth of the boys suggested additional training in electronics and 19.5% wanted more industrial arts.

Only 7.8% of the boys and 7.5% of the girls felt that their schools offered enough vocational training. If we can assume that this figure represents the sum of students satisfied with the types of courses presently offered, then roughly 92% of the sample felt that there should be additional vocational training courses in their schools. The magnitude of this figure makes it clear that a sizable number of college-bound students also have an interest in vocational training. Thus rural high school administrators and school directors might evaluate the possibilities of expanding their vocational offerings.

Additional courses in careers and vocations were suggested by a significant percentage of the students in the sample; 54.8% of the girls and 37.5% of the boys apparently thought they could profit from such an orientation. Vocational counseling, while available in many of the schools in the sample, also appeared important to many students; 26.3% of the males and 34.4% of the females indicated an interest in this area. In both categories, girls are represented by a larger percentage than boys.

Table 28. Types of additional vocational training wanted in the school of rural high school girls and boys

Types of vocational training wanted in high school	Boys Grade level				Girls Grade level			
	All	10	11	12	All	10	11	12
	%				%			
More agriculture	16.6	18.2	17.0	14.8	1.1	1.0	1.4	1.1
More home economics	1.6	1.9	1.2	1.8	21.6	24.1	21.4	19.0
More industrial arts	19.5	15.1	20.2	23.2	6.4	7.1	5.7	6.2
More business training	16.6	13.9	16.8	19.0	36.3	33.7	35.4	40.0
Electronics	25.7	25.8	24.3	26.8	1.1	1.5	1.3	0.5
Course in careers	37.5	36.3	38.0	38.1	54.8	54.0	54.7	55.6
Vocational Counseling	26.3	21.0	29.9	28.0	34.4	32.1	36.6	34.8
None - school has everything	7.8	9.6	7.1	6.5	7.5	8.8	6.2	7.2
None - get it elsewhere	11.9	12.7	9.3	13.6	7.0	6.6	7.2	7.2
No. students responding	1766	581	589	596	1682	602	528	552
No. students not responding	88	35	29	24	57	20	25	12

*Percentages do not total 100 as more than one response could be marked by the respondent.

The findings suggest that while academic and scientific education is becoming increasingly important to our society, vocational courses still appear attractive to most students.

School as preparation for work

Because one of the manifest functions of high school is preparation for work, respondents in both samples in the 1971 followup study were asked, "What high school offerings best prepared you for the world of work?"

Young men were more likely than young women to rate mathematics and science as the most helpful field while the order of priority was reversed for the language arts (table 29). These priorities stem from the occupational culture: men are more likely than women to enter science or other occupations where mathematics and scientific knowledge are required; conversely, women are more likely than men to be found in nursing, social work and other occupations that stress social relationships. These ratings are also consistent with the findings of this and earlier studies that girls are more likely than boys to prefer working with people while boys are more likely to be interested in working with things.

General Evaluation of Curriculum

Because we thought that recent graduates might be expected to have a good basis for appraisal of their high school experiences, we asked them to give us their opinion of the general thrust of curriculum in the school they attended.

Contrary to expectations, only 19.4% indicated that the curriculum was best designed for students going to college while nearly half (47.8%) checked the response "it was well balanced for all students regardless of their intentions toward further education or training." A few

> In the rural study, 80% of the girls and 47% of the boys indicated a preference for working with people while 23% of the girls and 59% of the boys liked to work with things. Thirty-five percent of the boys and 25% of the girls said they liked to work with ideas. These percentages do not add to 100 because more than one preference could be indicated.

(5.2%) complained that the curriculum was not well designed for students who were going to college. Another minority (7.1%) complained that it was not well designed for students not going to college. Thus, the overwhelming appraisal was favorable.

Scholarship

A major assault has been made on the selection function of the educational system in the name of equal rights. However, it is still true, I think, that the schools identify and encourage gifted students and discourage others. This is done through the mechanism of the grading system. As we said in an earlier publication (69):

> The grading system is central to both selection and rejection. It is used to identify and reward the good scholars. In our achievement oriented society, a good scholar has a bright occupational future if he continues his education. If persistent and industrious, he can obtain an advanced degree. Then he may become a successful practitioner of an elite occupation. This is true even if he comes from a blue collar family.
>
> The situation is reversed for those who do not get good grades. Those who barely pass and those who drop out of school are relegated to the unskilled, poorly paid occupations, if they are able to find work at all. There is good reason to believe that educational attainments, including grades, will be even more important in the future. Development of effective programs for motivating scholastically inferior students to perform more effectively requires the identification of the barriers to such achievement.

We know from other studies cited by David Lavin that intelligence is one of the major determinants of academic performance (42). We also know that other factors are involved, since some persons with a very high IQ sometimes get low grades. We examined the relationship between grade level and selected factors and found:

1. a slight tendency for both boys and girls from more prosperous families to report higher grades

Table 29. Preparation for the world of work: evaluation of high school fields of study, 1971 follow-up study *

Field of study	Males					Females				
	a	b	c	Total	N	a	b	c	Total	N
Language arts	31.4	41.5	27.2	100.1	287	50.9	36.4	12.7	100.0	330
Math & science	50.8	35.4	13.8	100.0	311	39.9	46.3	13.8	100.0	356
Vocational	22.4	40.8	36.8	100.0	277	37.9	36.2	25.8	100.0	298
Health & P.E.	18.2	39.6	42.2	100.0	303	14.5	33.4	52.0	99.9	344
Social studies	13.7	44.7	41.6	100.0	293	16.9	43.3	39.8	100.0	337
Fine arts	10.4	26.5	63.1	100.0	249	10.8	31.4	57.8	100.0	325
Foreign language	4.1	26.7	69.3	100.1	270	7.5	24.6	67.9	100.0	305
Industrial arts	22.7	39.9	37.4	100.0	273	9.0	26.1	64.9	100.0	211

* Includes only those who evaluated each field.

** Key: a = helped considerably; b = some help; c = of questionable value or no help.

2. a moderate tendency for students' grades to be correlated with educational attainments of parents

3. a moderate tendency for students from families with high ratings on educational values to have high grades

4. a moderate tendency for students with peers who valued education highly to have high grades

5. a fairly strong positive association between level of self-reported grades and level of interest in school work and

6. a moderate positive association between the level of participation in organized school activities and self-reported grades.

On the basis of these findings, we concluded that the better students as identified by self-reported grades tended to be more deeply involved than others in school subjects and activities. Furthermore, they tended to have parents whom the students perceived as somewhat more prosperous, better educated, and placing a high value on education.

With respect to the implications of these findings we said (69):

The top scholars were very much involved in school. They liked most of their school work and were active in school related activities, especially athletics. They were more likely than poorer stu-

dents to have discussed their educational and occupational plans with one or more teachers or counselors.

With few exceptions, those who reported top grades indicated that they were college bound. They were apparently fully aware of the occupational importance of a college degree.

There is, of course, a gloomier side to this picture. The poor scholars tended to come from disadvantaged homes, to be alienated from their studies, to participate little in the program of organized extracurricular, school sponsored activities, and to have relatively low expectations for education beyond high school.

None of this is surprising. However, it does add support to the position that special programs and method are required, even in small schools, to meet the educational problems of children who are not making good grades. We believe that the importance of family and peer group value orientations needs to be taken into account. If possible, educational programs and methods should be developed that will elicit support rather than indifference or hostility from important reference groups.

In our view, educators need to give much more attention to social and cultural factors than has been the case in the past. It makes little sense to construct elaborate programs aimed specifically at inducing desired change in an individual student if the social context within which he lives is ignored.

7. PARTICIPATION OF RURAL HIGH SCHOOL STUDENTS IN ORGANIZED EXTRACURRICULAR ACTIVITIES

The school, it is often said, should provide opportunities for students to participate in organized extracurricular activities. This, it is hoped, will provide training for citizenship, keep students busy and out of mischief, and help to develop well rounded personalities. Most American public high schools sponsor a wire range of extracurricular activities.

In spite of the importance of extracurricular activities, there appear to have been few systematic studies of participation patterns prior to the date of our study (1964-65). A notable exception is James S. Coleman's *Adolescent Society*, which presents a sophisticated analysis of many facets of the patterns of the social activities of students in ten high schools in northern Illinois (14).

This chapter does not replicate Coleman's study, but examines relationships between the level of participation in organized extracurricular activities in a random sample of 30 rural Washington high schools and a number of variables that have sociological relevance.[6] These variables include selected indicators of family backgrounds and of behavior plus educational and occupational aspirations and expectations.

Answers are sought to the following questions:

1. What is the influence on level of participation in organized extracurricular activities of residence and socioeconomic status?

2. What relationships exist between level of participa-

tion in organized extracurricular activities and other facets of behavior?

3. What relationships exist between level of participation in organized extracurricular activities and education and occupational aspirations?

The nature and extent of participation in extracurricular activities was reported by 1,819 boys and 1,710 girls, approximately 98% of the total sample. This information was combined into a participation index.[7]

_____

[7] The basic question was phrased as follows: "In which of the following organized school activities do you participate? (Mark each one according to how active you are in it: very active, quite active, not very active, not at all.)" The activities listed were: athletics, music, dramatics, debate, school paper or annual, student government, Future Farmers of America and Future Homemakers of America (FFA or FHA), hobby clubs, others.

Weights from 1 to 4 were assigned to the responses and the weights were summed to find the basic participation score. This ranged from 10 to 40. Leadership roles were taken into account by adding to the basic score an additional sum computed as follows:

Number of leadership positions	Weight
0	1
1	10
2	15
3	20
4	25
5 or more	30

The range for the final index was from 11 to 70.

Table 30. Level of participation in extracurricular activities, by sex

Participation	All Students		Boys		Girls	
	No.	%	No.	%	No.	%
Very high	391	11.0	186	10.2	205	11.9
High	563	15.9	269	14.8	294	17.2
Medium	1491	42.3	749	41.2	742	43.4
Low	922	26.1	506	27.8	416	24.4
None	162	4.7	109	6.0	53	3.1
Total	3529	100.0	1819	100.0	1710	100.0

Levels of Participation

Perhaps the most significant finding is that by far the great majority of the students participated to some extent in at least one extracurricular activity. Only 162 students, 4.6% of the 3,529 who provided information, reported no activities whatever (table 30). It is true, of course, that many were not very active. An additional 922 or 26.1% of the respondents had low scores. Girls tended to be somewhat more active than boys, except in athletics (table 31).

It is clear from table 31 that boys and girls differed substantially in patterns of participation. More than half of the boys were active in athletics. Other specific activities reported by 10% or more of the boys were music, student government and future Farmers of America (FFA). Girls were less often active in athletics than boys but more of them were active in most of the other specified activities. More than half of the girls and more than a fourth of the boys participated in activities other than those named in table 31.

Relationships between background characteristics and participation

Residence

As mentioned earlier, a study of Iowa farm children in the early 1920s found a tendency toward shyness (6). In the present sample, there was no evidence of any consistent residential differences in level of participation for either sex.

Socioeconomic status

Even a casual review of the voluminous literature on socioeconomic status (SES) indicates that students from lower SES homes are likely to be less active socially than those from middle or upper SES homes.

Relationships between the participation index and three indicators of socioeconomic status were in the expected direction, but the relationships were not strong. These results suggest that the SES of students' families does not determine participation levels, although it is important.

Father's occupation: Information was obtained from 73% of the boys and 71% of the girls. Analysis reveals a weak but statistically significant relationship in the ex-

Table 31. Participants in specific extracurricular activities, by sex [a]

Activity	Boys		Girls	
	No.	%	No.	%
Athletics	1008	55.4	693	40.5
Music	379	20.8	689	40.3
Dramatics	170	9.3	219	12.8
Debate	91	5.0	64	3.7
School paper or annual	171	9.4	436	25.5
Student govt.	266	14.6	245	14.3
FFA or FHA	334	18.4	283	16.5
Hobby clubs	115	6.3	135	7.9
Other activities	481	26.4	950	55.5
No. reporting	1819	**	1710	**

[a] Participants are defined for this table as students who reported that they were either "very active" or "quite active" in a specified activity.

** Percentages will not add to 100 because many students participated in more than one activity.

pected direction.[8] Higher rates of participation than would have been expected on the basis of chance were reported by sons and daughters of professionals and farmers and by daughters of managers, officials or propietors. Lower rates than would be expected by chance were reported by sons of factory, mill and mine workers and by boys who did not report their father's occupations.

Perceived family income or wealth: Students were asked to give their subjective evaluation of the relative economic status of their family in response to the following question: "In terms of income or wealth of families in my community, I think my family is: (a) Considerably above average, (b) Somewhat above average, (c) Average, (d) Somewhat below average, (e) Considerably below average."

There was a weak positive relationship in the expected direction for both boys and girls. That is, students who

---

[8] For boys, $X^2 = 95.3$, d.f. = 40, $P < .001$, $C = .229$. For girls, $X^2 = 72.7$, d.f. = 40, $P < .01$, $C = .207$.

34

thought their family income or wealth was above average tended to participate more.[9]

Parents' education: Other studies have shown that educational attainments of adults are positively correlated with socioeconomic status. Consequently, we can use parental education as an indicator of SES. Another weak positive relationship was found that between the education of the parents and the level of participation in extracurricular activities. The relationship was statistically significant for both parents for both sexes.[10] However, the relationship with father's education was somewhat stronger than that with mother's education.

Relationships with selected behavior patterns

The next question is whether meaningful relationships exist between the levels of participation in extracurricular activities and other behavior patterns.

Dating

Do students who are relatively inactive in organized extracurricular programs tend to be more deeply involved in pair relationships with a member of the opposite sex? Two indicators of this were obtained by asking, "How many times did you date last month?" and "Are you going steady?"

In reply, 78.4% of the boys and 67% of the girls reported less than 4 dates during the preceding month. Among the boys, there was no discernible relationship between the level of participation in extracurricular activities and frequency of dating. Girls showed a very small positive relationship; that is, the girls who were active in extracurricular activities tended to date somewhat more often.[11]

Boys who were the most active participants in extracurricular activities tended to report that they were going steady. The evidence for girls was inconsistent. No clear-cut pattern emerged.

Thus there is no support for the hypothesis that low participation in activities is due to involvement with a member of the opposite sex.

Membership in the "leading crowd"

Students were asked whether they were members of the "leading crowd" in their high school. Analysis reveals a rather strong positive relationship (P .01) between level of participation in extracurricular activities and membership in the "leading crowd." For example, among the boys, 65% of those in the most active category reported membership, compared to 7.5% of those who were not active at all in extracurricular activities. The comparable percentages for the girls were 67.2% and 2.2% respectively.

Desire to participate in organized groups

All students were asked which, if any, of a list of organized activities they would like to participate in. The

[9] For boys X² 54.4, d.f. 20, P .001, C .173. For girls, X² 46.3, d.f. 20, P .001, C .164.
[10] P .001 by the X² test.
[11] This relationship for girls was statistically significant at the .01 level but the relationship was relatively weak, C .125.

responses show a substantial backlog of interest in organized activities; but there was a rather clear-cut tendency, among the boys, for those who were least active to be least interested in joining. For example, 62.1% of the boys who were not active in extracurricular activities indicated that they were not interested in joining and participating in any of the listed activities. In contrast, among the students who were the most active, more than half did indicate an interest in participating in one or more of the listed activities. There was somewhat more interest among the girls; slightly more than half (52%) of the girls who were inactive indicated an interest in participating in one or more of the listed activities. This can be compared to 51% of the girls in the highest activity category.

Grades

What is the relationship between scholastic achievement as reflected by self-reported grades and level of activity? Does high activity tend to be associated with higher grades? The evidence is affirmative. The better students, as identified by self-reported grades, definitely tended to be more active in extracurricular activities than those who received low grades. This was true for both boys and girls.[12] This should not be interpreted to mean that level of grades is necessarily unaffected by the level of activity. No doubt particular students could obtain higher grades if they were less active in extracurricular activities. However, the data seem to mean that it is the better students who are most active.

Access to cars

For some adolescents, ownership of an automobile is believed to indicate that use of the car is a dominating type of activity. Consequently, the question arises whether ownership of an automobile or access to one is related to amount of participation in extracurricular activities. The data indicate no consistent patterns of influence between car ownership and level of activity.

With respect to access to cars owned by others, there was a definite and clear-cut relationship between level of activity and access to a car. The magnitude of the difference is shown by the fact that 72% of the most active girls said that they had access to a car compared to 23% of those who reported that they were not active at all in extracurricular activities. In comparison, 74% of the most active boys had access to a car compared to 51% of the least active boys.

Discussion of plans with school counselors

Both boys and girls who were the least active tended to report that they had not had any discussions of their educational and occupational plans with the school counselor. Furthermore, among those who did report having had contact with counselors, the inactive students were considerably more likely than the others to report that they had not been influenced.

[12] For boys X²=185.1, P .001, C=.306; for girls, X²=163.5, d.f. 35, P .001, C .296.

Discussion of plans with teachers

The situation with respect to discussion of plans with teachers was similar to that reported for school counselors. There was a marked and consistent relationship for both boys and girls. The least active students were much less likely to have reported that they had had any discussion of their plans with teachers. Furthermore, among those who had discussed their plans with teachers, the inactive students were considerably more likely than the active ones to report that they had not been influenced by their teachers.

Relationships among educational aspirations, expectations and attainments

There was a moderate, statistically significant, and positive relationship between the level of participation in extracurricular activity as reflected by the index and the levels of educational aspirations *and* expectations. Deviations from the distribution that would be expected by chance were especially pronounced for the two extremes of participation. For example, 55% of the boys and 73.5% of the girls who did not participate in any extracurricular activities also expected to get no more education after high school. In contrast, in the highest participation category, all but 16% of the boys and 17.2% of the girls had post high school educational plans. In fact, 53.6% of these boys and 44% of these girls said they expected to graduate from college and many of them also expected to obtain advanced degrees.

The 1971 follow up study indicates that office holding may have a positive effect on educational attainments for males but not for females; 55.6% of the men who had held at least one office but only 45.9% of those who had held no offices had attained or overattained their educational goals. There were no significant differences for females. Being part of "the leading crowd" had a slight beneficial effect on educational attainment for both sexes.

Occupational career aspirations

Students were asked their occupational aspirations in the following question: "What occupation do you think you would like best when you are thirty years old?" Occupational status level in the study was allocated in terms of the occupational code used by the U.S. Census Bureau. As might be expected from the educational aspirations and expectations, there was a positive statistically significant relationship of moderate strength between occupational status level aspired to and the level of participation in extracurricular activities. The relationship was found for both boys and girls but was somewhat stronger for the boys than for the girls.

The 1971 follow up study did not provide convincing evidence that this relationship had a continuing beneficial effect on occupational status goal attainment; however, there was a slightly higher probability of goal attainment for both men and women who had held one or more offices in school related activities or were members of "the leading crowd" while in high school, or both.

The majority of boys (59.1%) and 45.2% of the girls preferred the professions. Among the boys who were most active, 68.4% aspired to a professional occupation compared to 40.8% of those who were completely inactive. Among the girls, the comparative proportions were 54.6% for the most active and 23.9% for the least active.

Discussion

The data reviewed in this chapter indicated rather clearly that students who were relatively inactive in extracurricular activities tended:

1. to be poorer students
2. to be somewhat less likely to be involved in pair relationships with the opposite sex
3. to have less access to automobiles
4. to have less contact with teachers and counselors in relation to their occupational and educational planning.

Furthermore, many of the inactive students were not much interested in participating in organized extracurricular activities.

The evidence suggests that the students who tend to not participate in extracurricular activities also tend to be marginal in other respects. We can speculate that they are less well adjusted emotionally, although we have no direct evidence of this. It is clear, however, that they tend to be out of the mainstream of events, not only with respect to participation in extracurricular activities, a major feature of the high school, but also with respect to other school activities and involvements.

Another inference from the analysis is that male students who are quite active in extracurricular activities will probably be more successful in college and possibly in competition on the job than those who are relatively inactive.

From a larger perspective, it appears that most rural high school students represented by the sample considered participation in organized extracurricular activities to be normal and desirable. These activities were part of the school culture, an accepted and valued aspect of school life.

The fact that the better students were more likely to be active participants raises some questions about the meaning of low activity. Many of the organized activities are competitive. Membership on the school football team, for example, may require a high degree of muscular coordination and strength. Even membership in lesser teams may require considerable skill of various types. We have seen that students with low participation scores tend to be marginal in other respects. It is possible that organized activities for the inactive minority are arenas for potential defeat rather than for recognition of achievement. I do not mean to deprecate the positive contribution that successful participation undoubtedly makes to those who receive adequate recognition for their achievements. I do wish to raise a question about what, if anything, might be done by the schools to provide opportunities for recognition for those who do not participate to any great extent.

The current emphasis on retaining and motivating school dropouts tends to be centered on making classroom experiences more rewarding. It may be that a comparable effort to involve inactive students in organized extracurricular activities would be justified.

8. SOCIAL DETERMINANTS OF DISCREPANCIES BETWEEN EDUCATIONAL ASPIRATIONS AND EXPECTATIONS[13]

Wayne L. Larson and Walter L. Slocum

The literature in the social sciences, particularly in sociology and social psychology, has an abundance of references to dissonant, contradictory, unexpected or incongruent situations in which individuals give verbal responses that:

1. appear to contradict other verbal responses made by the same individual

2. are incongruent with actions associated with the same referent

3. or are contrary to the researcher's intuitive expectations about responses to questions involving choice situations.

Many "explanations" have been presented for the apparent or observable discrepancy between responses or between responses and actions for a given individual. A classic "explanation" in sociology was presented by Merton in his discussion of social structure and anomie (45: 131-160). The relevant point is that some people do not have a fully integrated system of values and norms but sometimes follow one set of norms and at other times, another set.

Anthropological literature has included the concepts of the "real" and the "ideal" cultures. Those who use these concepts hypothesize that there are two cultures in most societies; the first type of culture is the "ideal" culture, or the kind members think they have. The second type is the "real" culture or the kind they actually have (8:158-160).

The literature of social psychology and psychology has many references to discrepancies between the "ideal" and "real" (or "actual") self and its relationship to a lengthy list of social and psychological variables (75). Research on occupational choice contains many examples of differences between the occupation that an individual thinks is most desirable or the occupation he would most like to have and the one he actually expects to follow (50).

Most writers who describe situations of cognitive or behavioral discrepancies postulate that the individual has the "ideal" situation as a positive hope or desire and contrast this with his evaluation of the actual situation. After evaluating the situation, the individual may change the form of his aspirations to fit the real situation more closely. Or he may rationalize and assert that he didn't really value those particular goals, or indicate in other ways that a discrepancy doesn't exist.

In studying educational choice, we find the same kinds of discrepancies. Many individuals say that they want a high level of education but expect to attain only a lower one. The reverse of this discrepancy may also occur; individuals may say that they want a low level of educa-

tion but expect to get a higher level than that to which they aspired.

Research concerning educational choices is usually focused on aspirations (sometimes called desires, goals, or wants) or plans (sometimes called expectations). A few studies include both aspirations and expectations, but up to 1966, very few had tried a systematic analysis of the quantitative lowering or raising of level of aspirations with respect to educational planning' (21). However, many studies had identified some of the variables that affect educational aspirations and/or expectations. We would expect that the same variables enter into discrepancies between aspirations and expectations. Some of the known correlates of educational aspirations are:

1. the individual's perception of the opportunity structure

2. the value systems of the family

3. peer groups

4. other reference groups and the larger society

5. reality factors such as family socioeconomic position

6. self appraisal of aptitudes and ability

7. factors in the school or community that inhibit or enhance the individual's chances of achieving the education he wants (21, 30, 41, 55, 56).

Values have been cited often as correlates of educational aspiration (21). Rosenberg used the concept of values as a central explanatory concept in explaining how an individual arrives at choices through a process of progressive delimitation of alternatives (50). He suggested, however, that choosing an occupation is not directly the effect of holding particular values because "values are not only determinants of action but are themselves determined by actions that are patterned on the basis of one's position in society" (50:24). He indicated that values have more influence on changes in occupational choices than on the initial choice (50:22). Schwarzweller, reporting on educational aspirations and plans of high school students, suggested that:

> In a choice situation, such as choosing an occupation or the level and type of education, all the factors determining behavior come together. An individual orients himself in the situation on the basis of certain standards, which function as his criteria for evaluating alternatives (53:247-249).

S. M. Miller was rather skeptical of the research that had been done up to 1964 on educational aspirations. He maintained that:

> Aspirations result from experience and expectations as well as influencing them. . . . I just do not understand the results of aspiration studies and I suspect them to be largely artifacts of sociological research production today (47:123-134).

Others, while not claiming to have final answers, have presented conceptual frameworks for dealing with aspirations (that they suspect may be merely daydreams or fantasies) which include, in addition, the expectations or what the student actually expects to do. When individuals are asked what they expect to do or plan to do, reality factors play a more important role. Out of 24 high school boys (in Kahl's study on "common man" boys) who had enough intelligence to enter college, only 50% chose to do so (34).

Abrahamson suggested that lower class boys and girls are often viewed as troublemakers or are overlooked and this negative evaluation of them persuades them to look elsewhere for rewards (1:8-15). Havighurst and Rogers state that money and motivation influence the decision to attend or not attend college (30).

A 1959 Florida study by Middleton and Grigg indicates that residence may be a crucial variable in educational aspirations in some areas. White males from urban areas had higher educational aspirations and occupational aspirations. White females from urban areas had higher educational aspirations than females from rural areas (41). (The Washington studies reported in this monograph reveal a substantial decline in rural urban differentials during the period covered.)

In a 1962 study in Utah, the reason given by most boys for not going to college was lack of finances. Those who were planning to go to college were more likely to perceive their family income as above average (13). An Illinois study in 1964 showed that the socioeconomic status of the families of boys and girls who planned to go to college was higher than that of those who did not plan to go (43).

An analysis based on the same sample as this chapter indicated that "poverty" had a significant influence on type of course work taken (41). Two major types of course work orientation were identified: *vocational orientation* —agricultural, shop, business and home economics courses beyond required courses and *academic orientation*—physics, chemistry, foreign language, trigonometry beyond required courses. In another analysis of the same data, we found that low grades and lack of finances were reported to be important reasons for not attending college by a majority of students. This was a 1964-65 study on educational aspirations and expectations of high school students in the State of Washington. Three other important reasons given for not attending college were lack of ability, dislike of studying and failure to follow a precollege high school curriculum (64).

Alexander and Campbell's 1964 study on peer influences on educational aspirations and attainment revealed that friendship is related to educational aspirations, expectations and plans of students. The relationship was strongest when sociometric choices were mutual (2).

From our review of the literature and our own research we concluded that there are many correlates of both aspirations and expectations. Choice of the variables to be considered in analyzing the discrepancy between educational aspirations and expectations was made primarily on the basis of our theoretical orientation.

One of the often stated propositions in sociology is that the values of individuals are shaped by the people with whom they interact. The more they interact with the same people, especially in a/primary group situation, the more probable it is that the values of the individual resemble those of other members of his primary reference groups. Further, the values of the reference group members in many instances reflect the value system of the larger society. Therefore, the individual's choice in a given situation may be affected by values of his reference group and values of the larger society and by "reality" factors that restrict the reflection of values in the final choice of goals.

Many combinations of values and reality factors might affect the student's choice of educational goals. This analysis tries to gain more understanding about how much discrepancies between educational aspirations and expectations are affected by the following types of attributes or variables:

1. educational values of the student
2. the student's perception of educational values of members of his reference groups
3. reality factors such as reasons for going to college, means of support in college, kind of financial help that parents will give the student in getting started in a career, the student's perception of family income
4. school factors such as amount of discussion of educational and occupational plans with counselors and teachers, interest in school, grades, type of course work that student has taken or anticipates taking, whether student has been encouraged in his plans for college
5. parental factors such as how much education mother and father have, extent to which parent discusses educational plans with son or daughter, and the parents' feelings about education in general.

The data used in this analysis were from the 1964-65 Rural Study described in chapter 1. Some of the information about family values was obtained from a questionnaire designed to get at educational and general values, as well as feelings about college training for their sons and daughters, that was sent to the parents of all students in the interview sample.

The "dependent" variable in this analysis is the discrepancy between educational aspirations and expectations classified into four categories of discrepancy scores. Level of educational aspirations was measured by asking the student to choose the level of education that best described his or her desires for further education. Level of educational expectations was measured by asking the student to choose the level of education he thought he would actually attain. The levels of education were identically stated for aspirations and expectations. The discrepancy categories are based on the difference between student's levels of educational aspiration and educational expectation.

There are four categories of discrepancy scores. The first category includes all those cases in which a discrepancy between desires and expectations is zero; that is,

31

the level of aspirations minus the level of expectation is zero. Two categories of positive discrepancy scores were made. One includes all cases in which the student aspired one or two levels above his expectations. The other category includes all cases with aspirations three or more levels above expectations. The one negative category includes all students who expected to attain more education than they desired.

To avoid the awkward task of restating the operational definition of each discrepancy category each time we refer to it, we use the terms listed below:

Category name	No. of students
Expectation much lower than aspiration	116
Expectation lower than aspiration (1 or 2 levels)	879
No discrepancy	1,523
Aspiration lower than expectation	308

The initial step in the analysis of discrepancy data was to determine if a relationship existed between the discrepancy in educational aspirations and expectations and the "independent" variables. Chi square tests were computed for all possible combinations as a first step in the analysis of data. Sex and residence were controlled for all combinations and grade in school for some comparisons.

We expected the following attributes or variables to be significantly related to discrepancy scores between educational aspirations and expectations.

1. the value that students place on "hard work" and "sucess and achievement" conceptually, this is an evaluation of the degree of allegiance to the Protestant work ethic

2. the student's perception of the educational values of members of two reference groups his family and his closest friends

3. reality factors such as comparative level of family income as reported by the student, financial support in college, student's assessment of his ability, and types of occupations or education that the student believed parents would be willing to help with financially

4. school factors such as grades in school, interest in school work, type of course work taken, amount of discussion of educational plans with teacher or counselor and whether or not teachers had encouraged the student to go to college

5. parental factors such as the level of educational achievement of mother and father, extent to which parents discuss educational plans with student, and the parents' general attitudes toward education.

On some questions, the data were analyzed by inspection to determine if the discrepancy categories differed in consistent patterns on the sex, residence, and grade in school breakdown. Only the most outstanding differences will be reported in this chapter and particular attention will be given to the "aspiration lower than expectation" category and the "expectation much lower than aspiration" category.

Findings

Some of the attributes cross tabulated with discrepancies between educational aspirations and expectations were multiple response questions. Chi square statistics were not computed for cross tabulations involving this type of item. This was the case for "reality" factors.

1. important reasons for *not* going to college
2. important reasons for going to college
3. ventures in which the students thought their parents would help them financially
4. the students' plans for financing a college education if they said they planned to attend a college or university.

Most students who said they were planning to attend a college or university also responded to a question on their plans for financing college. The most outstanding differences between discrepancy categories were for students who indicated that "family support" would be a means for financial support in college. Students whose expectations were *much lower* than aspirations were least likely to report "family support" as a means of financing a college education. Students in both this category and in the category in which aspirations were lower than expectations were more likely to state that they did not know how they were going to finance their college education.

Students were asked, "In which of the following would your parents be willing to help you financially?" (farming, college, vocational schooling, setting up a business of your own, or none of the above). Respondents whose expectations were *much lower* than aspirations were least likely to indicate "setting up a business of your own." Students whose aspirations were *lower* were least likely to indicate "college."

Students with *much lower* expectations than aspirations were more likely to rate themselves low on "academic self" than students in other categories. This was true for farm as well as nonfarm students. When the students were asked to indicate reasons for not attending college, "grades too low" was the most important reason for boys in this category. When students were asked to give the most important reasons for going to college, boys who had *much lower* expectations than aspirations chose "more money" as a reason more often than boys in other discrepancy categories. This was more characteristic of farm than nonfarm boys and especially true for senior farm boys and girls.

Data on the values of the student and his perception of the values of the members of his reference groups were collected. Perception of family educational values was significantly related to type of discrepancy. Students who had lower aspirations than expectations were more likely than other students to rate their families low on educational values.

School factors were associated with type of discrepancy at a high level of significance for senior students, even when sex and residence were controlled. This was most evident for reported school grades, followed closely by amount of interest in school work and whether teachers encouraged

the student to go to college. Students whose aspirations were lower than their expectations were most likely to report below average grades, this pattern persisted when differences in sex, residence, and senior class standing were controlled

A similar pattern was evident in the distribution of responses for "little or no" interest in school work for such students. In addition to having low grades and little interest in school work, these students, like the students whose expectations were *much lower* than their aspirations, were also less apt to have taken college preparatory courses such as foreign languages, physics, chemistry, and trigonometry. They also were more likely to have taken, or planned to take, vocational type courses such as shop, agriculture, home economics, and business than students in other discrepancy categories. Moreover, they had the lowest percentage of respondents in the category of perceived parental support for a college education. However, the mothers and fathers of boys in this category were disproportionately distributed in the categories that indicated a very favorable attitude toward education and frequent discussion of educational plans with a son.

One might infer from this that students whose aspirations were lower than their expectations were less perceptive of the values that their family placed on education, or that their parents "push" their educational values to the extent that the son reacts negatively to pressure to get a college education without the prospect of adequate financial support from home. We find some students enrolled in college whose test scores and high school grades suggest they should not have been admitted, but when they fail are faced with parents who cannot understand why they can't be readmitted. This attitude places a heavy burden on the student, since we know most parents tend to be significant others in the educational process. Viewed from this perspective, the students are very realistic in their evaluation of parents' values. Furthermore, some may be reacting positively to parental influence rather than negatively.

The evidence from this analysis indicates that many of the students whose aspirations were lower than their expectations did not have the qualifications to continue formal education beyond high school, even though many rated themselves equal to or higher on "academic self" than other students.

We were somewhat puzzled by these findings because they imply incongruence between the student's report on his academic performance as measured by grades received in school and his appraisal of his "academic self." Students whose expectations were *much lower* than their aspirations tended to report low grades and also to rate themselves low on "academic self." This rules out the possibility of attributing incongruence to lack of unidimensionality for the

two measures of academic performance. Our best speculative "explanation" would be that these students are "underachievers."

Students whose expectations were much lower than their aspirations did not differ appreciably from other students in their perception of their family's educational values, in their reported interest in school work, or in their scholastic performance as reflected in average reported grades. However, they showed a consistent pattern of financial problems in addition to a rather negative appraisal of their ability as students or future employees. They were more likely to indicate that:

1. They could not expect to get "family support" for financing a college education.
2. They wanted to go to college to make "more" money."
3. Their family's income and wealth was not above the average of families in the community.
4. Their "grades were too low" was a reason for not going to college.
5. They had "little or no" discussion of educational or occupational plans with teachers or counselors.
6. They had not taken and did not plan to take "college preparatory" courses in high school.
7. They rated themselves low on "academic self."
8. They had a low self-appraisal of their ability to work in the occupation of their choice.
9. Their families would not be willing to set them up in their own business.

Discussion

The analysis of the data on the relationship between indicators of values, school factors, "reality," parental influence and the several types of discrepancy categories indicates that school factors are more closely related to discrepancy types. However, the other three general factors were also related to discrepancy types to some extent. It may be, as Schwarzweller stated, that all the factors determining behavior come together when a student is placed in a choice situation (53). The data from this study imply that this is probably the case but that some factors are given more weight than others.

High school students in this sample, at least those whose expectations were much lower than their aspirations, appeared to be quite knowledgeable of the requirements for continuing their formal education beyond high school. But they were pessimistic about their chance for attaining their educational aspirations. The data support the inference that some of the students in this category are from homes that are economically underprivileged.

9. OCCUPATIONAL STATUS LEVELS: ASPIRATIONS AND EARLY ATTAINMENTS

Occupational aspirations of students still in high school were quite high.[14] In the Rural study, 60% of the boys and 45% of the girls who named a career choice specified a profession. In the Vocational study, 59% of the boys and 33% of the girls named a profession as their preferred occupation. This is a substantial increase from the 36% who aspired to a profession in our 1954-55 study.

It may be worth noting that 21% of the Rural girls and 40% of the girls in the Vocational sample preferred to be homemakers. This discrepancy may be more apparent than real, since many of the rural girls probably were oriented toward the homemaker role but did not regard it as an occupation and hence did not name it (14% of the total did not name an occupation).

Many other studies of occupational preferences of high school students made during the 1960s also found that their respondents overwhelmingly preferred the professions (57,66,67).

Project Talent, a nationwide survey of the aspirations of more than 400,000 high school seniors made in 1960, found that 62% of the boys and 52% of the girls hoped to enter a profession (23).

Exectations concerning career occupations are lower than aspirations in some cases; and of course, most young people realize that entry into the world of work almost always involves lower status than is held by experienced workers. In the Vocational study, 57% of the boys and 32% of the girls said that they expected to be in a profession. These are almost the same proportions that had professional aspirations. In the Rural study, less than half of the respondents (46% of the boys and 47% of the girls) said that they expected to be in their preferred occupation when they reach age 30, a drastic reduction.

Thus, it is evident that there was a great deal of uncertainty about occupational choice among our respondents when they were in high school. This is understandable. Few had yet worked much and most of them had relatively little tested information about the nature of the occupations that might be open to them.

In addition, we may infer from what they told us about their contacts with counselors that not many had taken vocational aptitude tests. Relatively few acknowledged contact with or assistance in occupational planning from a counselor. Consequently, we may conclude that not many really understood what is involved in the professions they said they preferred. Probably in many cases the choice was based on the presumed high status, high salary, and other supposed benefits of professional occupations.

We had some doubts about whether the preferences stated in the Rural study represented firm commitments. Consequently, we decided to test the hypothesis that many of the boys and girls who indicated a preference for one of the professions might also be interested in lower status occupations. We did this by including in the Vocational study a list of 61 occupations that spanned the occupational status scale from high to low. We asked our

respondents to rate each occupation, using the following categories:

1. I would *like* this *very* much
2. I would *like* this *fairly* well.
3. Indifferent.
4. I would *dislike* this a *little*.
5. I would *dislike* this *very* much.

Since the results have been published (66), it is not necessary to reproduce the detailed ratings. However, the general findings are relevant to our present inquiry. The data firmly support the hypothesis stated above. We found that a much wider range of occupations was apparently of interest than might have been inferred from questionnaire data concerning occupational preferences. This proved to be true for both sexes, although there were distinctive sex-related patterns of occupations that were attractive and also sex-related patterns of occupations that were unattractive.

As an aside, note that if the culturally determined patterns of men's and women's work are breached by the current movement for equality between the sexes in occupational matters, these data may be of interest as a historical benchmark reflecting the values prevalent among Washington adolecents in the middle 1960's.

This background information suggests that it would not be reasonable to expect that the specific career preferences of 1964-66 would have been attained by many of our respondents by 1971. It is not feasible to look at expected entry occupations as occupational goals, because they tend to represent a convenient means of access to the labor force rather than a calculated first step in a specific occupational career. Furthermore, a high proportion failed to name such an occupation (in the Rural study 44% of the boys and 33% of the girls did not name an entry occupation).

Consequently, it was decided that preferred and attained occupational status *levels* would be compared, rather than specific occupations. The categories used were (1) professional and managerial, (2) white collar, and (3) blue collar. The broad categories rather than one or another of the occupational status scales in the literature were necessary. The main reason was that the heavy concentration of preferences for professional and managerial, clerical and craftsman types of occupations left too few for analysis of more detailed categories.

A summary of occupational status level aspirations and expectations in 1964-66 as related to attainments in 1971 appears in table 32. More than half of the young men in both samples and of the young women in the Vocational sample who were employed had attained or over-attained the occupational status level they had aspired to reach while in high school.[15] The poorest record of occupa-

[14] We accept the concept that some occupations rank higher than others.

[15] As noted in chapter 4, only 57.0% of the men and 59.0% of the women were in the labor force in 1971. Of these, 12.7% of the men and 15.9% of the women were unemployed. Table 40, chapter 12, has information about those who were not in the labor force.

Table 32 Occupational aspirations and expectations while in high school in 1964-66 related to 1971 attainments*

Goal attainment	Aspiration				Expectation			
	Male		Female		Male		Female	
	Rural	Voc	Rural	Voc	Rural	Voc	Rural	Voc
				%				
Goal attained	52.8	30.6	36.1	40.8	47.8	41.5	35.4	44.0
Professional managerial	32.8	15.3	22.5	10.0	40.0	27.0	22.9	16.6
White collar	2.6	5.1	1.7	17.9	1.5	3.3	0.8	13.0
Blue collar	17.4	10.2	11.9	12.9	6.3	11.2	11.7	14.4
Goal overattained								
- White collar—Prof./mgr.		23.6		12.1		9.9		6.5
Goal not attained	47.2	45.9	64.0	47.2	52.2	48.7	64.6	49.6
Professional white collar	8.2	4.5	20.8	-13.6	5.9	7.9	21.7	18.0
Professional blue collar	39.0	15.9	43.2	20.7	46.3	34.9	42.9	23.7
White collar blue collar		25.6		12.9			5.9	7.9
	(.)							
Total %	100.0	100.1	100.0	100.1	100.0	100.1	100.0	100.1
Number	195	157	236	140	205	152	240	139

*Includes only persons who aspired to a specific occupation while in high school and were employed in 1971.

tional status goal attainment was that of the young women in the Rural sample. Only 36% of them had attained their stated goals. The record of attainment of occupational status level expectations, is similar. As in the case of educational goal attainments, our analysis of factors associated with occupational status attainment will be restricted to aspirations.

Influence of School on Occupational Status Goal Attainment

As we have already noted, a substantial part of the explanation, for the tremendous rise in educational aspirations since the middle of the 1950s is wide acceptance of the belief that a successful educational career is a prerequisite for a successful career in a high status occupation. There is a great deal of evidence that this belief is well founded (57:289-298). Consequently, it is to be expected that educational attainments and subsequent occupational attainments will be related. It is undoubtedly true that all young professionals are college graduates and all young teachers are certified graduates of an accredited college of education. Yet it does not follow that all college graduates enter a profession nor that all graduates of a college of education become teachers. Intervening factors such as availability of positions, family requirements, college grades, recommendations, etc., explain the outcome in individual cases.

At this point we shall look at various school-related factors.

High school grades

In chapter 4 we showed that the level of high school grades was a major determinant of educational goal attainment. We now consider whether this influence carries over into occupational goal attainment.

In the Rural sample, 71% of the young men who reported straights As had attained their occupational goal, a professional or managerial occupation. There was no clear association between grades and occupational status level for young men with lower grades, except that none of those who reported Cs and Ds had attained professional status, even though 72% of them had such aspirations. Among the young women, there was no association between self-reported high grades and occupational goal attainment. Attainment of occupational goals with lower status (white collar and blue collar) was not associated with high school-grades.

In the Vocational sample, 60% of the young men who reported straight As in high school had attained professional status by 1971. Except for this, there was no clear pattern for either sex.

It appears that, except for young men who received straight As, grades in high school and occupational status level goal attainment were not closely associated. Evidently, qualifications other than grades are influential. In the case of young women, the interfering variable is probably cultural. Women usually enter lower status occupations, often on a part-time basis. As we learned earlier, a large proportion of the high school girls said frankly that their chief aspiration was to be a homemaker. In the case of young men, it seems probable that high ambition coupled

35

with hard work may have paid off for many whose high school academic records were not outstanding

Interest in school work

The idea that interest in school work might have some influence on occupational status level goal attainment rests upon the relationship, already noted, between successful educational careers and high status occupations. Following this line of reasoning, we would expect that those with a high interest in school work would be more likely than those less interested in their studies to be in a professional or managerial occupation.

The Rural sample showed a weak positive association for young men but not for young women between level of interest in school work and attainment of a professional or managerial occupation aspired to while in high school. If the analysis is restricted to those who had a professional or managerial position in 1961 without regard to 1964-65 aspirations, the association is much stronger for males but not for females.

In the Vocational sample, neither sex showed an association between degree of interest in school work while in high school and occupational status level goal attainment.

This analysis leads to the conclusion that degree of stated interest in high school work—like self-reported grades, is not a major determinant of occupational status level goal attainment in either sample.

Leadership in school activities

Extracurricular activities are often defended on the ground that participation, especially leadership in such activities, develops social skills that will be useful in later life. As already noted in the preceding chapter, we obtained information in the Rural study concerning office holding and membership in the "leading crowd."

Inspection of the data failed to show any evidence of a relationship for either sex between office holding while in high school and occupational status level goal attainment. The proportion of young men who had held no offices (51.2%) who attained their occupational status level goal was not significantly different from the comparable proportion for all young men in the sample (52.8%). The situation for young women was similar: 35.2% of those who had held no offices and 38% of the total had attained their occupational status level goal.

Membership in the "leading crowd" appeared to have been a positive factor for young men but had no effect on young women. Among the young men who said they were members of the leading crowd while in high school, 60.5% attained their occupational status level goal. Only 44.1% of those who were not members of the leading crowd did so. This suggests that membership in the informal groups that regarded them as leaders did help many young men in their quest for occupational status.

Perhaps this positive association is due more to the development of self-confidence and social skills than to one member of the high school leading crowd's helping another get a job, although this may have occurred in some cases.

Family Considerations

Many aspects of family life, including socioeconomic status, work-related values, and parental advice or support, might influence occupational choice and attainment either positively or negatively.

In the Rural study, relative level of family income as reported by the respondents did not have any consistent relationship with occupational status level goal attainment for either sex. In the Vocational study, we obtained information about the relative wealth of the family from respondents; this measure also failed to show any consistent relationship with occupational status level goal attainment. Information on family income obtained from parents in both studies also failed to support the expectation of positive influence.

Another measure of SES sociologists often use is father's occupational status level. We know from census studies that there is not much occupational inheritance in the USA except that nearly all farmers are sons of farmers. However, these studies also show that a minority of farmer's sons become farmers (67:217-233).

In the Rural study, the young men who were most likely to attain their occupational status level goals were also most likely to be sons of managers, officials, or proprietors (69.2% success rate), mill, factory, or mine workers (70% success rate), unskilled laborers (71.4% success rate), sons of farmers (60% success rate), craftsmen and foremen (58% success rate). They were least likely to be sons of service workers (13.4% success rate) or professionals (46.1% success rate).

Marked differences occurred among the young women also. Success rates ranged from 5.5% for daughters of mill, factory, or mine workers to 66.6% for daughters of male clerical workers; some other rates were: daughters of farmers, 40.7%; daughters of craftsmen or foremen, 33.5%; daughters of managers, officials, and proprietors, 46.1%; and daughters of professional men, 60%.

These data show that the success rates for both sexes followed a pattern that cannot be explained by reference to the concept of occupational stratification. Consequently, we are forced to conclude that the differences in rates are probably due to chance. However, the numbers in some occupational categories were so small that no inferences can be drawn.

Self Concept

One of the basic ingredients of success in any venture would seem to be a favorable self concept. A person who evaluates his own ability as high and expects to attain his occupational goal offers evidence of such self-esteem.

In the Rural sample, self-appraisal of ability failed to show a meaningful pattern of association with occupational status level goal attainment for either sex. This was also true in the vocational sample for self-appraisal of intellectual ability for both sexes and for young women for self-appraisal of ability for the occupation preferred.

However, there was a fairly substantial association for young men in the Vocational sample. Success rates (attained or overattained the occupational status level of the occupation they aspired to while in high school) were 66.6% for those who said their ability for the occupation was very much above average, 55% for those who said their ability was above average, and 38% for those who said their ability was average.

In the Rural study, students were asked to rate their chances of being in the occupation they preferred most, while in the Vocational study, students were asked how certain they were that they would actually attain their preferred occupation. In neither sample was there any association for either sex between these self-appraisals and the attainment of occupational status level goals.

Role models

The occupational status level goal attainments of young men in the Rural sample were associated with their role models. Those who named teachers had the lowest success rate (35%). Those who said their father was their role model also had a low success rate (42%). The highest rate of success (64.7%) was among those who named an older brother, followed closely (64.5%) by those whose role model was an adult other than father, teacher, or brother. Among young men who said they had no role models, the success rate was 49%.

Differences among young women who named various categories of role models were relatively slight, except that half of those who said that a teacher was their role model attained their occupational status level goal. The numbers were too small (only 8 persons) in this category to draw any inferences.

It appears that role models had more influence on young men than on young women, perhaps because of the cultural norms concerning participation in the labor force.

Type of work liked best

The original questionnaire completed by the Rural sample in the fall of 1964 asked students whether they liked best to work with things, people, or ideas. The follow-up study in 1971 reveals that among young men, this expression of interest had some predictive value: 76.9% of those who said that they liked best to work with things named a professional or managerial occupation and only 11.5% attained this goal. Most of these young men (76.9%) reported that they were employed on a blue collar job in 1971. For these persons, the type of work preferred predicted future occupation more accurately than stated occupational preference.

Type of work preferred apparently was not a good predictor of occupational status level goal attainment for other young men nor for young women. Only 39.5% of young men who said they liked best to work with ideas attained professional status, though 75.3% had aspired to it. The comparable percentages for young women were 19.0 and 75.9 respectively.

Conclusions

Since only 57% of the men and 59% of the women in the combined samples were in the labor force and unemployment was high among those who were in the labor force, conclusions about early occupational attainments must be very tentative. However, these data do not provide much support for the ideas, held by many, that family SES is the major determinant of early occupational attainments. The occupational system does, of course, require certain educational achievements for entry into the professions and some other occupations. But it does not follow that persons who have these qualifications, even those who made high grades, are assured of attaining high occupational status.

10. SOCIAL CHARACTERISTICS OF POTENTIAL TEACHERS, SECRETARIES AND NURSES[10]

Introduction

One high school girl imagines a crisp white uniform, quiet efficiency and service to the sick. Another envisions herself arriving, smartly dressed, at her office where she takes dictation and types letters. A third sees herself surrounded by second graders. Nurse secretary teacher each has made a decision. What social influences and personality characteristics led to each choice?

Data collected at 30 different rural high schools in

Washington show significant differences among girls who named these three careers as their occupational preferences. The information was obtained from answers to a student questionnaire administered to about 3,600 high school students and from interviews with a selected sample of some of these students. (See chapter 1 for a description of the study.)

Some of the major characteristics of girls in all three categories of teacher, nurse, and secretary will be presented in this chapter; also see (17).

The occupations of teacher and secretary were selected for comparison prior to analysis of the data and were not meant necessarily to represent the most popular choices of the girls. However, excluding those naming homemaking as their only preferred career, the most popular choices in order were teacher, secretary, and nurse.

This order differs slightly from that reported by a

nationwide study (Project Talent) made in 1960. That research reported that these three careers were selected in the following order: secretary or typist, teacher, and nurse.[23] Furthermore, Project Talent reports that the most popular occupations were not these same three, but those of glamour and adventure: airline hostess, decorator, designer, etc. Other occupations that ranked high in Project Talent were social worker, beautician and actress. For the present report, all of these, together with other choices, have been combined into a residual category termed "Other occupations". At times figures for this diverse group will be compared to those for the prospective teachers, nurses, and secretaries.[17]

Of the 1,493 female high school students who marked an occupation they thought they would prefer at age 30, 139 or 9.3% chose nursing. The percentages selecting teaching and secretarial work were 15.9 or 12.9, respectively. Thus teaching was most popular. Furthermore, teaching gained in popularity over nursing and secretarial careers as the girls matured. More 12th graders than 10th or 11th graders chose teaching as a career. However, in naming expectations, secretarial work (15.8%) gained a slight edge over teaching (14.1%) among the seniors. Nursing, like teaching, lost several girls, with 8.2% of the seniors expecting to become nurses.

Residence does not seem to be a significant factor in differentiating among the career choices of teacher, nurse, or secretary. The only exception seems to be that small city girls were slightly more likely to choose secretarial work rather than nursing or teaching. This could be due to the greater availability of jobs and easier access to business colleges right in their own city.

Relatively more secretarial aspirants were found in the cities. This result may reflect the influence of greater employment opportunities in cities.[18]

Interoccupational Comparisons

Influence by others

Choosing a career is an important decision influenced by various factors which a person may or may not recognize. Two questions in the student questionnaire sought to measure the amount of influence particular persons had exerted, as these girls perceived it. Students were asked whether teachers, school counselors, parents, and peers had influenced them in their job choice. The first question asked students to check all persons who had ever assisted them with job planning; the second asked them which person's advice about careers they would seek first.

Parents figured prominently among the circle of influential persons for all three career choices. However,

[17] In the discussion that follows, the girls are generally referred to as teachers, nurses and secretaries rather than as prospective holders of these occupations. This has been done to avoid excessive repetition even though it is realized that a vast difference exists between aspiration and achievement.

[18] No city of over 10,000 was included in this study. Therefore, reference to city girls means those residing in a city of 2,500 to 10,000. A population of less than 2,500 is a town in this project.

nurses and teachers tended to credit parents with more influence than did secretaries. Mothers were perceived as more helpful than fathers, but for girls this would be expected. The largest percentage of nurses and secretaries would turn to their mothers first for career advice, but more teachers would turn to their teachers instead of their mothers.

About a fifth of the respondents in each occupational category reported having received no assistance, but nearly all indicated the type of person to whom they would turn first if such advice were ever desired.

About the same proportions reported assistance in job planning from school counselors: secretaries, 15.1%; teachers, 14.1%; and nurses, 13.3%. However, the girls' perceptions of the influence of teachers differed markedly. About 40% of the prospective teachers reported assistance from their teachers compared to 18.2% of the secretaries and 12.6% of the nurses. This, together with the evidence that prospective teachers would turn to their teachers first more often than to mothers, shows that school teachers are role models in the career choice of high school girls electing to become teachers.

This latter finding also helps support the hypothesis that the greater the influence of school teachers on educational and occupational plans as reported by students, the higher the educational aspirations of the students. Teaching nearly always requires more education and ranks higher in the occupational status hierarchy than secretarial work. However, nursing is also regarded as a professional career, yet fewer nurses than secretaries reported that they were influenced by their teachers.

More secretaries than teachers were influenced by their peers, while nurses fell in the middle this time. As already noted, more parents did aid teachers and nurses than secretaries.

However, to point out that more secretaries derived assistance from their peers does not necessarily lead to the conclusion that this advice is in opposition to that of their parents. Our data show that fewer families of secretaries than teachers or nurses agreed that family members should get all of the education possible. Also, the secretaries tended to come from homes with less educated fathers. Peer values such as less striving for grades would probably be more prominent where they create the least amount of conflict with family expectations.

If more secretaries are amenable to peer influence, it might be expected that more would also report higher intentions of consulting their friends when they needed advice in areas other than job planning. However, this is not borne out by the available data. In fact, teachers were more likely than secretaries to seek a friend's help with a dating problem. No clear, understandable pattern emerged from an examination of the figures showing various percentages of teachers, secretaries and nurses who would consult their friends about other problems listed in the questionnaire. More secretaries than nurses or teachers would consult friends about five out of eight of these problems. However, the differences often are not great and never exceed 6% between the highest and lowest

45

response. It seems that nurses were least likely to ask friends for advice in these particular areas.

Attitudes towards education

Success in these three traditionally feminine careers does not require equal amounts of education. Teaching most often demands extensive formal education, frequently requiring formal education beyond the baccalaureate degree. Nursing may have similar requirements for certain positions, but a person can become a Registered Nurse by completing 4 years of college, by training for 3 years in a hospital, or by attending a community college for 2 years and then gaining hospital experience. Secretaries or typists need less advanced education than either teachers or nurses. While some may earn a college degree, many attend a business college or take several vocational night courses in preparation for their job. Others simply rely on skills learned in high school courses.

Inherent in any occupation are certain characteristics that generally must be valued by an individual if that occupational goal is to be reached and satisfactorily performed. For instance, secretarial work invariably involves typing skills, while nursing requires specific knowledge about human physiology. Thus, a career choice has within it certain implicit commitments to other values.

We would expect persons who choose careers that require extensive education to regard such education as important. The questionnaire and interview both included measures of individual reaction to education.

Considering that more education is required to become a nurse or a teacher, we would expect that potential nurses or teachers would value scholastic achievements as reflected by grades, honors, etc. more highly than would potential secretaries. Actually, a higher percentage of secretaries agreed that scholarly achievements were important than did nurses or teachers. Nurses were lowest in agreement while teachers and other occupations fell in the middle. These responses were significantly different at the .05 level of probability.

How does this finding compare with the self-reported grades, which should reflect actual scholastic achievement? Analysis revealed that the two measures are contradictory. The secretaries, who value scholastic achievement more than nurses or teachers, reported the poorest grades of the three occupations. Three times as many secretaries were in the C, D, and F bracket compared to teachers, while two-thirds of the teachers were receiving straight Bs or better compared to about 41% of the secretaries. Nurses fell in the middle for all three categories of grades. The discrepancy suggests that the idea of educational status may be valued more by the secretaries as a prestige symbol than by teachers and nurses. This idea will be discussed further when the items related to prestige are examined.

Respondents were asked to name their favorite school subjects. The answers indicate areas of interest as well as educational values, since some subjects are harder than others. Overall popularity for all girls, including those in the category of "other occupations," was accorded to English. Chosen by 53% of all girls, it was also selected most often by future teachers. Other favorite subjects for

all respondents in descending order were: home economics, art and music, physical education, business, biology, history, foreign language, algebra, geometry, social studies, chemistry, shop, trigonometry, and physics.

Without further analysis, this list indicates little except the usual sex related pattern of educational preferences. Girls commonly rank science and math courses toward the bottom of their list and our study confirms this again. However, meaningful findings are derived by comparing the preferences of teachers, nurses, secretaries and other occupations.

As mentioned, English was the favorite of most teachers. Nearly half of them also expressed high interest in history compared to relatively low rankings by the other occupations. Many teachers also preferred foreign languages. Although mathematics ranked relatively low on the list for all girls, teachers did lead the three categories in choosing mathematics (algebra, geometry and trigonometry). However, their preference for mathematics was not much greater than that of nurses.

Biology was a favorite of 70% of the nurses contrasted to 20% of the secretaries. In addition, nurses led all categories in preference for the other two sciences, chemistry and physics.

Business was selected more often than any other subject by the secretaries (68%) but received fairly low endorsement from both teachers (23%) and nurses (19%). Of the three occupations, secretaries least often preferred many subjects, including foreign languages, algebra, geometry, social studies, chemistry, trigonometry, and physics.

By examining their subject matter preferences, it becomes apparent that nurses favored the biological and physical sciences, while teachers preferred English, history, and mathematics, the basis of most elementary school curricula and much of high school. The secretaries expressed more interest in business and about half also liked English (somewhat related to business), home economics and physical education. Secretaries had relatively low interest in academic courses such as science and math. In view of the education required for their respective fields and the subject matter which each of these areas concerns, the findings are what one would expect. They definitely show that those who wish to be secretaries do not generally have the academic orientation which is usually considered desirable for college attendance.

Presumably, students who do well in school are those who satisfactorily complete assignments given them by their teachers. Respondents were asked to agree or disagree with the statement that "homework assignments are an infringement by the school on time that should be available for other activities, including work." A third of the secretaries agreed with the statement but only about a fifth of the teachers and nurses shared this belief. The difference between nurses (19%) and secretaries (33%) was significant at the .01 level. Over a third of the nurses were undecided, while about one-fourth in each of the other two categories could not make up their minds about this issue.

The pattern for disagreement with the statement was slightly different. Just over half of the teachers disagreed.

Such a response probably was prompted by their commitment to the school system for their life's work. Other dissenters in rank order were nurses and secretaries. It is tenable that secretaries would be least inclined to approve of homework, since they are not planning to be professionals who must master and use a body of theoretical knowledge. (Such knowledge is often partially obtained by doing homework.) The pattern is also consistent with self reported grades. Teachers reported better marks and also regarded homework as less of an infringement on their activities than did the others.

About half of all the girls in each occupational category agreed that people should be interested in education for its own sake rather than as a means to some other end (job, social prestige, money, etc.) There were no significant statistical differences in the responses but, as might be expected, secretaries did show the least amount of agreement and the most disagreement with the statement.

Responses to the statement, "if a person can get a job without formal education, there is no real purpose in formal education beyond high school" were similar. Again, the teachers comprised the highest percentage in disagreement and the lowest percentage in agreement. Nurses were in the middle and secretaries showed the most agreement and least disagreement. However, the differences were not statistically significant; in fact, 80.6% of all respondents disagreed with the premise while only 9.8% agreed. Thus, most of the girls had accepted the belief that education is to be valued as an end in itself, even if they themselves did not desire extensive formal education.

Another statement, related to the previous one on the value of education, was "girls should go to college only if they plan to use their education on a job." As before, the most disagreement was voiced by the teachers (76%) followed by nurses (72%) and secretaries (60%).

The findings would be expected, since teachers are most likely to value any education, including college, for its own sake. However, though secretaries may see quite a bit of value to the abstract idea of education for its own sake (as shown by the previous question), they may value it less in a more concrete situation, such as reference to college. Since they had poorer grades than nurses and teachers and did not need a college degree to enter their chosen field, more secretaries probably did not plan to attend college. In fact, their chances of being admitted were probably less. But a college education is accorded a high value in our society. To counteract the inferiority feelings that may arise, many prospective secretaries may have developed the rationale that one should not attend college unless it is essential to one's planned career.

The next question sought reaction to the statement, "girls should go to college because the country is going to need more trained women to fill important jobs." As would be anticipated, teachers had the most agreement, 57%, compared to 55.6% for secretaries. This slight difference is not statistically significant, yet it is a change in the pattern. The difference between teachers and nurses is significant at the .05 level of probability.

Respondents were also asked whether or not a college education is necessary in order to earn a good salary or to be a community leader. Nearly half the teachers did not believe it was; percentages of nurses and secretaries with this same belief were 41.3 and 39.6 respectively. Thus, the very persons who value education most highly and who were most likely to attain a high degree of education to meet the requirements of the careers as teachers, rejected the idea that this education is a necessary prerequisite for success in finances or leadership. How do we account for this? A possible explanation was hinted at earlier.

We have mentioned that secretaries seemed to be more interested in prestige than teachers and nurses were. The suggestion is advanced that teachers and nurses may be more satisfied with the prestige of their anticipated occupations compared to secretaries.

If this is true, perhaps education was seen more as a necessary requirement for attainment of an occupational goal than as a prestige symbol. In this case, nurses and teachers would probably have less tendency to view education as the golden key to financial success or community leadership. However, the secretaries, who may feel somewhat dissatisfied with the prestige value of their occupation, might attribute financial success and community leadership to a higher level of education.

Respondents were asked to react to the statement, "success in life depends upon ability and effort, not how much education one has." The response pattern was similar to the last question. More teachers (44.5%) tended to agree with the premise than nurses (37.5%) or secretaries, 36.5%. Rank order of disagreement was secretaries, 37%, nurses, 31.9%; teachers, 29.3%. Again we have those most likely to attain a high level of education supporting the belief that education is *not* the major determinant in success. Again the explanation might be related to prestige factors.

To clarify this, we must distinguish between prestige and esteem. The difference can be seen by citing an example. Graduate students have more prestige than undergraduates; however, a particular undergraduate may have higher esteem based on a comparison of his grades with those of other undergraduates.

As noted previously, teachers and nurses may be more satisfied with the prestige value of their chosen occupation than are secretaries. Furthermore, education may be viewed by them as a prerequisite to goal attainment rather than a way to gain prestige. Also, the educational requirements are reasonably comparable for nursing and teaching. After earning a teaching certificate or passing a state examination, nurses and teachers are usually on a relatively equal level with their peers. Hence, ability and effort become the chief means of achieving success over and above that of their peers.

But secretaries are not generally required to have an equivalent amount of education. Those with high school education may feel inadequately trained compared to other secretaries who may have attended business college or a university. Also, they may feel that additional education would have opened the door to other occupations. If their interest is in increasing prestige, higher education may be seen as an important way to get it.

Respondents were also asked to classify the degree

of consensus in their family regarding the desirable amount of education the children should receive. Only 45.6% of the secretaries reported 100% family agreement that the children in the family should get all the education possible. In contrast, 60.1% of the teachers made such a classification. This difference is statistically significant at the .05 level. Nurses reported a family position similar to that described by the secretaries. In part, the greater agreement in teachers' families may be because teachers tended to come from families whose fathers had more formal education than other fathers. Thus education may be a stronger value in these homes. The effects of these attitudes have already been discussed to some extent in the section on influence, but it seems worthwhile to note here that family attitude toward education is related to the attitudes expressed by the girls.

Father's education

Father's education has been shown to be positively related to the levels of educational and occupational aspirations of students. Consequently, we might expect prospective teachers to have the most highly educated fathers, followed by the fathers of nurses and secretaries. This expectation is borne out by the data. Of those aspiring to be teachers, 28.5% had fathers with at least some college education, compared to 27% and 17% for nurses and secretaries, respectively.

The difference is especially marked when comparing the proportions of fathers who actually graduated from college. Also, well over half the fathers of teachers had attended or graduated from high school as opposed to not quite half of the secretaries' fathers and 38.3% of the nurses' fathers. Only 14.9% of the teachers' fathers had ended their education with eighth grade or less, while 20.6% of the nurses' fathers and 32.8% of the secretaries' fathers had stopped at that stage.

Work-related attitudes

An attempt was also made to distinguish between teachers, nurses and secretaries on the basis of attitudes toward work. However, their responses did not differ significantly at the .05 level. Despite the apparent variance in socioeconomic status among the three occupations, as reflected in the relationship between education of father and daughter's occupational choice, their values regarding work were quite similar. Perhaps this reflects the prevailing American attitudes toward work. The majority of the girls' expressed attitudes toward work seem to be highly congruent with the values of the Puritan work ethic.

For example, in response to the idea that "everyone who possibly can should work," those expressing agreement or strong agreement were: nurses, 66.7%; teachers, 65.3%; secretaries, 63.8%. Disagreement or strong disagreement were checked by the following: nurses, 13.8%; teachers, 8.2%; and secretaries, 14.1%. The others remained neutral.

When this same thought was rephrased, however, to read, "it is a person's duty to work," consensus was not so high. Those agreeing or strongly agreeing were: nurses, 39.7%; teachers, 34.4%; and secretaries, 31.4%. Dis-

agreement or strong disagreement was noted by the following: nurses, 27.5%, teachers, 18.4%, and secretaries, 31.5%. It is possible that this reflects the tempering of the Puritan Ethic (work is man's duty) by the social ethic (e.g., that work is important because it is a means whereby the individual can gain a sense of belonging).

Another attitude toward work was expressed by the statement, "a person who has never worked has missed a valuable experience." Again, there was a high degree of concurrence: nurses, 75.9%; teachers, 83.9%; and secretaries, 79.3%. Disagreement was quite low. Percentages for the two combined categories of disagreement were: nurses, 6.5%; teachers, 4.1%; and secretaries, 3.8%.

Still another statement read, "if I were financially well off, I think I could lead a perfectly happy and satisfying life without working." Again, the responses favored the principles of the Puritan Ethic. Only 21.9% of the nurses, 22.7% of the secretaries and 25.9% of the teachers agreed or strongly agreed. Analysis of the disagreement expressed found nurses somewhat lower (46.7%) in comparison to teachers (50.4%) and secretaries (52.4%).

Even fewer agreed when a similar idea was expressed in the statement, "if a person can live the way he wants to without working, there is no reason for him to work." Figures for agreement were: nurses, 1.7%; secretaries, 13.7%; teachers, 23%. Disagreement was high: nurses, 48.2%; teachers, 45.6%; secretaries, 52.2%.

From the responses to these questions, it is apparent that nearly all these girls placed a high value on work. These feelings strikingly substantiate the opinions voiced by some social scientists who feel that increasing automation requires an attitude adjustment on the part of the American working force. They suggest that many Americans may have to find other avenues for securing the satisfactions they apparently now achieve by working.

Among the interviews conducted with a sub-sample, 111 girls indicated career orientations toward teaching, nursing or secretarial work. These girls were asked if they would prefer to work when they had reached the age of 30. About half wished to be still employed. This further indicated the value placed on work, even to the extent of desiring employment during the family-rearing period.

It is to be expected from the data presented previously that more secretaries would report a lesser commitment to work than the other groups. This expectation was confirmed in the interviews. Over 60% of the secretaries preferred not to work at age 30, in contrast to 39% of the teachers and 46% of the nurses.

The girls were also asked to give reasons explaining their reaction to work at age 30. The most frequent negative reason was that a mother should be free to take care of her children. Nearly equivalent proportions of teachers and secretaries gave this reason (about 42%), but only 35% of the nurses did so. Almost a quarter of the secretaries said that a woman's place is in the home. Reasons favoring continued employment at 30 included earning extra income and pursuing an outside interest.

Interviewees were asked to list the specific occupations they would prefer their husbands to be engaged in when the girls reached age 30. The majority named professional

48

occupations. Approximately 60% of aspiring nurses and teachers preferred their husbands to be professionals. Expressing even higher hopes, 71% of the secretaries selected an occupation classifiable as professional. The higher percentage of secretaries preferring professional occupations for their husbands can be understood in light of the findings that these girls tend to be more interested in acquiring material things. Although not all professionals have a greater earning power, their potential earning capacity usually exceeds that of most other occupational categories.

The next question sought a more realistic response by asking the girls what they actually expected their husbands to be doing rather than the preferred occupation. About half of the nurses and teachers maintained the choice of professional. This is not a large reduction from their aspirations. However, secretaries had an extremely large reduction. Only 20% of them actually expected to be wed to a professional when they were 30. Thus, nurses and teachers were very high compared to "other occupations" while secretaries were low.

Nurses showed some striking differences from the other groups in naming aspirations and expectations. While they were similar to teachers in the percentage desiring professional husbands, they were quite dissimilar in the proportion preferring a mate in the managerial, official and proprietor category (excluding farm). While about 15% of all other groups preferred a husband in these jobs, only 4.5% of the nurses made this selection. On the other hand, over a quarter of the nurses wished their husbands to have working-class occupations involving manual skills compared to a range of 5.3 to 8.6% for the other categories of girls. Yet only 11.2% of these nurses felt their husbands would actually be engaged in these trades.

More secretaries expected than preferred to marry husbands from lower status occupations. Teachers and nurses, in expressing the opposite tendency, exhibited an unusual pattern that is not easy to interpret.

All of the findings in this section should be cautiously evaluated and treated as tentative. One important reason for such caution is that some of the girls may have responded to the question in terms of their estimate of the occupational prospects of a particular boy. For example, if a boy had expressed aspirations toward a particular occupation, it is reasonable to expect that his girl friend might then report hopes of marrying someone in that same occupation. However, this preference or expectation might be affected if the pair ended their relationship. During high school, many of these relationships can reasonably be considered transitory. Another reason is the relatively few cases on which some of the percentages are based.

Yet it should also be noted that 61% of the girls preferred a professional husband. This figure is quite similar to the proportion (67%) of 454 boys in the interview sample who preferred to be professionals at age 30.

Values

Differences among aspiring nurses, teachers and secretaries were examined further by comparing their answers to questions on the student questionnaire that pertained to certain values.

One of these explored feelings about material conveniences. Nurses led the three groups in desiring work saving conveniences to make life easy but the others were quite close behind. The occupations did not differ much in the proportions wishing an expensive car and home either, but less than a fifth of any category considered this either very important or important. However, a fifth of the secretaries did wish to be provided with many luxury items, compared to about 13% of nurses and 13% of the teachers.

All three categories rated service to others high. For all three parts of the question, the same pattern prevailed. More teachers ranked service to others as important or very important followed by nurses and then secretaries. The responses indicate that assisting a charitable organization has less appeal (for groups) than directly offering personal help.

While responses toward service to others do not seem significantly different, the picture changes when we review the distribution of those who rated such services as very important. Although a differentiation between important and very important sometimes adds little, in this case it does help focus the results. Fewer secretaries than teachers and nurses considered service to others to be very important. Not only that, but nurses ranked these values higher than teachers did. More nurses than teachers considered it very important to do something in life that would benefit many people and to be able to do something for others on the job.

Nearly all teachers, nurses and secretaries ranked the opportunity to work with friendly people as important or very important. Arranging life to have plenty of time for association with good friends was also regarded highly by all three occupations. However, the nurses were considerably below the other two groups. Perhaps they realized that as a nurse, one is often not able to arrange schedules to suit oneself. Often, nurses are on duty when other people are eating, sleeping or playing. On the other hand, more nurses than any other girls wanted to avoid situations where they thought their feelings would get hurt.

While placing high value on good social relationships, most of the girls would not avoid jobs or situations that would separate them from their best friends. Secretaries were most likely to say they would consider friendship ties, with about a third desiring to avoid separation (from best friends).

Dating patterns also reflected in part the attitudes of these girls toward other social relationships. As might be expected from the previous data, secretaries dated the most. In the month prior to answering the questionnaire, 59.1% of the secretaries had dated three times or more; the percentages for nurses and teachers were 36.9 and 35.8, respectively. More teachers had dated once or twice than had nurses or secretaries, while nurses led those having no dates. Far fewer secretaries than teachers or nurses had not dated at all in the past month. A similar tendency was reported by those who were going steady. The

proportions teachers, 22%, nurses, 25.2%, secretaries, 33.9%.

These dating patterns further support the picture of the secretaries being more oriented toward sociability than teachers or nurses. Not only did secretaries date and go steady more often, but they were also more reluctant to leave their friends in favor of a new job location. Furthermore, their poorer grades and greater resentment of homework appear to be consistent with their more active dating.

Also indicative of social relationships is leadership in school sponsored extracurricular activities. Teachers had the highest rate of leadership positions. Secretaries had the lowest percentage and nurses were the middle group.

Why is this pattern the reverse of the dating pattern? The finding is congruent with the hypothesis that the educational aspirations of students who are leaders in school will be higher than the educational aspirations of students who are not. It is possible that there is a difference in quality between this type of social relationship and the type related to dating. Such leadership positions usually involve responsibility and it might be that the same types of students who work hard for high marks and who hope to achieve high levels of education also seek leadership positions.

Earlier it was suggested that secretaries seemed more prestige-conscious than teachers or nurses. This inference is based on several indicants. In one measure of prestige, 43.5% of the secretaries reported that it was important or very important to them to have themselves and their family considered the best in the community. Only 34.6% of the teachers and 31.1% of the nurses answered in this way. More teachers than secretaries thought it meaningful to be one of the most important members of their school's "leading crowd," at their high school. While 48.9% of the teachers said they were part of the "leading crowd," only 31.8% of the nurses and 19% of the secretaries made this claim. This pattern seems plausible in light of the figures that show that teachers held more leadership positions in school activities. However, not all teachers desired to be part of the "leading crowd." Among those who indicated that they weren't part of this "crowd," an unclear picture emerges. Among the unaffiliated, a greater percentage of secretaries than teachers desired this affiliation, but a smaller percentage of nurses than teachers wanted to be "in."

It will also be recalled that more secretaries than nurses or teachers placed a high value on scholastic achievement while at the same time they earned poorer grades than the nurses or teachers. This could be interpreted as a desire to have such achievements for their prestige value. In addition, a larger proportion of secretaries wished to marry professional men, a career status that is generally accorded high prestige in our society. Furthermore, they seemed more oriented toward luxury items and other material things.

However, other factors besides desire for prestige could be influencing these tendencies. Furthermore, it is possible that differences may exist between the kind of prestige desired in high school and that desired in adult life. This may account for some of the contradictory tendencies noted above. Therefore, the occupational differences in the value of prestige do not appear to be easily interpretable without additional data.

Many kinds of satisfactions are offered by any career. In one measure, subjects were to indicate their feelings about the influence of three nonmaterial satisfactions. More teachers than nurses or secretaries felt these items influenced their chance to be creative and original, the chance to have power and authority, and the presence of freedom on the job.

These findings support the notion that teachers react more positively to the nonmaterial satisfactions inherent in their career while nurses and secretaries, though similar to one another, respond quite differently from teachers. But these findings are not unusual, as it is apparent that teaching would offer somewhat greater chances for power and authority than would nursing or secretarial work, which are founded on routine.

The above items cover only a limited number of the available nonmaterial satisfactions, so excessive generalizing is not warranted. It has already been pointed out that nurses rank highest in their desire to be of service to others. Another measure showed that 91.7% of the nurses compared to 85.6% of the teachers and 81.9% of the secretaries said they chose their occupation because it sounded interesting. Furthermore, proportions reporting that they always wanted to enter that occupation were: Nurses, 81.9%; teachers, 64.2%; secretaries, 61.7%.

Also providing support for the possibility that non-professional fields are attractive because of material rewards are the responses to item "I chose my occupation because the pay is good." Secretaries selected this value in greater proportions (63.2%) than nurses (33.3%) or teachers (23.6%).

Additional evidence along these lines was gathered during the interviews, which have been described earlier. These 111 girls indicated what they wanted most from their life's work. Tendencies regarding service to humanity, money and pleasant associates, previously discussed, were supported by the interviews. Nurses most often chose the first, while secretaries more frequently named the latter two values. Most of the girls chose the item "interesting work," the range falling between 80.5 and 81.8%.

On the other hand, so few interviewees consciously chose prestige as an important factor that no conclusion is warranted regarding it. More secretaries, followed by nurses and teachers, felt job security was important while the order regarding importance of freedom was teachers, secretaries, and then nurses.

When this same sample was asked which *one* of these features was the most important, the most frequent choices were service to humanity, interesting work and job security. For teachers, interesting work and service to humanity were chosen most often; the votes were almost equally divided (40.0 and 42.5%, respectively) with service having a slight edge. Secretaries too were divided almost evenly between their two top choices: interesting work ranked first (36.4%) followed closely by job security (34.1%). But nurses overwhelmingly chose service to

43

humanity (5...%) their second most frequent choice, interesting work (19.2%), fell far below their first choice.

Responses to this question also showed that more nurses than secretaries chose money, while no teachers named this item as most important. We might have expected more secretaries than nurses to choose that item. Nurses also had the largest percentage selecting pleasant associates as most important while the secretaries surprisingly had none. This partially contradicts the information from other measures that showed more secretaries desired money and prestige, more considered good pay in choosing their career, and more hoped to have pleasant associates.

Summary Profiles

Prospective teachers

Girls aspiring to be teachers ranked first in many of the attributes considered desirable for success and prestige in our society today. For example, they reported higher grades than nurses or secretaries and also held more leadership positions in extra-curricular activities at school. This picture supports the expectation that students with higher grades will also have higher rates of participation in school activities.

These prospective teachers aspired to a position that demands more education than is necessary for secretaries and perhaps more than that required of many nurses. However, these girls were probably equal to the demand, since many factors favor the likelihood of college attendance for most of them. Their high marks and interest in academic subjects help insure college entrance, as does the encouragement they receive from parents and teachers. They had the most highly educated mothers and fathers, and more teachers than nurses or secretaries expected financial aid from their parents for a college education. More of their families agreed that their children should get all the education possible. Furthermore, teachers placed higher value on education than did either nurses or secretaries.

Though their own scholastic achievements appeared to be higher than those of nurses or secretaries, teachers placed less value on such accomplishments. They did not strongly support the idea that a college education is necessary to earn a good salary or to be a community leader. More of them than nurses or secretaries subscribed to the idea that success hinges on ability and effort, rather than on education. These findings suggest that teachers are less concerned about prestige and are more likely to see their education as a prerequisite to a desired occupation rather than the golden key to success.

Satisfactions that teachers desired in their career included the chance to be creative and original, the chance to have power and authority and the freedom on the job. They chose service to humanity and interesting work as the most important features of their prospective occupation.

More teachers received help from their parents in job planning than did secretaries, and significantly more future teachers also received such aid from their teachers.

Furthermore, teachers were more likely than nurses or secretaries to name a teacher as the person they most wanted to be like and as the person who would expect most from them. Thus it appears that teachers served a significant role models to girls planning a teaching career.

Peers did not wield as much influence on teachers in career choice as they did on secretaries or nurses. But friends were important to these girls in other ways. For problems with dating, family or religion, more teachers than nurses or secretaries would turn to a friend for help. Furthermore, more teachers planned to arrange their future schedules to include time for association with their friends.

Though more teachers than others reported membership in the school's "leading crowd" and participated in many activities, they did not date as much as secretaries and had the lowest rate for going steady.

More teachers than secretaries or nurses hoped to be still employed at age 30, thus combining the careers of homemaking and teaching. Two-thirds of them wanted to marry a man who would be in a professional occupation at age 30 and half of them actually expected to do this.

Prospective nurses

Much has been said recently about the desire for money which often appears to have replaced concern for humanity as a doctor's prime objective; the same cannot be said of girls who aspired to be nurses. Although teachers, secretaries and nurses all overwhelmingly preferred to work with people rather than things or ideas, this orientation best describes those high school girls aspiring to be nurses. Service to humanity ranked as the most important job satisfaction expected by these girls. The choice of working with people was viewed as an opportunity to be helpful to others.

While fewer nurses than teachers or secretaries felt that work is a valuable experience, a higher percentage of them subscribed to the notion that it is a person's duty to work. Slightly less than half of the nurses preferred not to be working at age 30, a figure less than that for secretaries but more than for teachers.

Girls choosing nursing decided upon it at a much younger age and felt more influence from TV and movies than did their peers planning for other occupations. More nurses than others had always wanted to have such a career. Almost a third had worked at related jobs and found them satisfying. More nurses than other girls reported that their parents influenced them to make this choice or approved of the decision. In contrast, the influence of school personnel and friends was minimal. Other factors influencing this occupational choice seem to be the large number of available openings and the accompanying job security.

In comparison with teachers and secretaries, nurses most often fell in the middle range. At times they were more like secretaries, at other times more like teachers. Their self-reported grades were average. Although not as academically oriented as teachers, they were interested in biology and the physical sciences. They did express quite high educational values. This would be expected, since

many nurses earn a college degree and some even do post graduate work.

Nurses were most like teachers in their relatively high aspirations and expectations regarding the choice of a husband who would be engaged in a professional occupation. However, they also had some striking differences from the others. Compared to others, very few nurses wanted to marry men in the manager, official or proprietor category, a category of relatively high status. Nearly a quarter of them desired to marry a manual laborer. However, only 11 thought they would actually do so. This desire is difficult to explain, but the aspirations and expectations regarding husbands are so tentative for teenagers that more substantial data are needed to interpret this unusual desire of many nurses.

It appears that nurses were less inclined than many teenagers to oppose the traditions of certain social institutions. For example, they overwhelmingly agreed that the school has a right to give homework, embracing this concept more than any other girls.

Nurses seemed more inclined to engage in social activities with a single friend than an entire group. They seldom reported a large number of close friends (five or more). Furthermore, they seemed less willing to take problems to friends than did teachers or secretaries.

In accord with this lesser commitment to peers, nurses dated the least of the three groups, although more of them than of the teachers were going steady.

Prospective secretaries

Many prospective secretaries had high aspirations, but their achievements, plans, and expectations often were not consistent with their desires. Although they stressed the importance of scholarly achievements, they did not attain high marks. While eager to have luxuries and prestige, they did not aspire toward a career or a level of education that is likely to bring it to them. They hoped to marry professional men, but did not really expect to do so.

Secretaries often ranked at the bottom in comparison to teachers and nurses. More of them reported the lowest grades and the least preference for most subjects other than business, English, home economics, and physical education. Though many of them recognized the importance of a college education, they valued education less than nurses and teachers did.

At the same time, they were most likely to express the belief that education is necessary for success and that it

counts more than effort and ability. It is possible that this results from some rationalizing on their part. Most of them do not need a college education for their job. Some may not even be able to meet college entrance requirements. Thus they may attribute any shortcoming they foresee in themselves to lack of education.

Secretaries seemed to come from less privileged homes than nurses or teachers. They tended to have the least educated parents and were far less likely to expect financial help for college. Also, there was less family agreement about the importance of education. They were ahead of either nurses or teachers in reporting homes broken by divorce. About a tenth of them had divorced parents compared to 4% of the teachers.

Perhaps this relative deprivation among secretaries had sparked daydreams of great things. They appeared to be more prestige-conscious than nurses or teachers, which may partially explain the importance they attached to scholarly achievements. Two-thirds of them chose their occupation because it would bring good pay, a much greater percentage than nurses or teachers who considered this angle in their job choice. Job security ranked second only to interesting work as the single most important satisfaction secretaries expected from their careers.

Furthermore, secretaries outranked teachers or nurses in aspiring to marry professional men. Nearly three-fourths of them hoped to do so. Yet only a fifth had such expectations compared to a much less drastic drop for nurses and teachers. Despite their high hopes for wealth and prestige, nearly two-thirds preferred not to work at age 30. Their most frequent reason was commitment to family. Yet if they do not marry professional men, their own added income may be the only way they can obtain at least some of the wealth and prestige they seemed to value.

Secretaries seem quite socially inclined. Though many did not belong to the leading crowd in school, many of them would have liked to. Many would be reluctant to leave friends for a new job. Money and pleasant associates were selected by more secretaries as important job satisfactions than were other rewards.

In keeping with their social inclinations, more secretaries than others were influenced in their job choice by friends. They also said they would probably consult friends about other problems more than teachers or nurses too, but this pattern was not clear-cut and needs further substantiation.

11.   DELINQUENT-TYPE BEHAVIOR[19]

Introduction

This chapter is not about juvenile delinquency as ordinarily defined. The information presented was not obtained from boys and girls who had been convicted of criminal behavior and subsequently officially classified as delinquents. Rather, it reports the incidence of admitted violations of certain social conventions, moral standards and laws by 1,674 boys and 1,568 girls who completed a

questionnaire while they were enrolled in public high schools in a number of localities in the State of Washington during the period 1957-1959.

We have used the concept *delinquent type behavior* because many of the confessed acts would have resulted in a judgment of delinquency if officially known to law enforcement agencies. Perhaps this term is too strong. At some points we use the terms misbehavior or misconduct as synonyms for delinquent type behavior.

The respondents were in the ninth through the twelfth grades in six widely separated areas of the state. Our statistical advisor advised us to make it clear at the outset that the information is not necessarily representative of all teen age youngsters in Washington. Even though the sample of individuals is large enough for this purpose had it been selected properly, the information cannot be so interpreted because the localities in which these youngsters were enrolled in school were not selected with the idea of obtaining information that could be used for making generalizations about the whole state. Furthermore, we cannot be certain that the information would necessarily represent adequately the situation in the sample locality now more than 15 years later.

For one thing, no large urban center was included. We have no information from Seattle, Tacoma, Spokane, or other large urban areas. In addition, from a purely statistical standpoint, it is important that not all individuals enrolled in high schools in Washington had a chance of being included in the sample. In view of these limitations, it is not valid to generalize this information for the state as a whole. However, since the number of cases is fairly substantial, we believe that the information has some historical value and it might be useful as a benchmark for later comparisons.

Theoretical Orientation

All societies and lesser social systems have norms or standards for guiding and judging a member's behavior. Sociologists and anthropologists regard these group-shared expectations of behavior as aspects of culture. Several terms are used in discussing these norms. These include folkways, mores and laws. The folkways are the "right" ways of behavior as defined by a social system but these norms can be violated without stringent punishment. The mores have strong moral meaning; violation is regarded as a threat to the social system. Consequently, punishment of violators is severe. Laws can be regarded as norms that have been given official standing and are enforced by agents of the state. Criminal law deals with offenses against the public peace, morality or order (76:581).

It is our view that social control is maintained primarily through the inculcation of group-shared norms in social systems that are important enough to be regarded as primary points of reference. Thus, the person who violates the mores will bring shame and discredit to his reference group as well as to himself. The most important of these reference groups is unquestionably one's own family, but there may be others, including cliques and school-related groups.

The behavior norms of different social systems often reinforce each other. However, sometimes the norms of a particular group differ from the norms of other systems, including the state government. In a particular family,

for example, shooting deer out of season may be approved behavior. In a few families, parents may actually teach their children to beg or steal. A child who becomes a member of a gang of juveniles may be guided by a complex set of anti-social but group shared norms.

The existence of such subcultural variations may cause mental conflict for a person who is torn between a desire to be a law abiding citizen in all respects and a desire to follow the norms of his family or other reference group. It would probably be easier for such a person to violate the law than for one whose reference group norms conform to the legal norms.

Because most families share the general culture and help to transmit it to their younger members, one can expect that a person who rebels against the norms of his family will be likely to rebel against societal norms.

We consider that violation of societal and family norms constitutes delinquent-type behavior, even though the violator may not be classified officially as delinquent.

Proceeding within this theoretical framework, we examined some empirical data relevant to the hypothesis that some types of family subculture as reflected in selected indices is associated with delinquent-type behavior as we have defined it. In addition, we sought evidence of association of delinquent-type behavior with the values of certain other groups.

We wish to emphasize that we are not offering a single-cause explanation for delinquent-type behavior. Rather, we tried to identify some of the configurations of family and peer-group culture that seem to be associated with delinquent-type behavior. If such behavior is a prelude to delinquency defined as "delinquents being those who have an official record," then a look at the culture patterns that tend to produce such behavior should be meaningful and enlightening.

Incidence of Delinquent-Type Behavior

Others have demonstrated that most normal adults have at one time or another violated one or more laws (18,19, 48:390-392). The same is true of the unwritten social norms. Consequently, we should expect to find some violations among teen-agers. We could not make a comprehensive inquiry on this matter, but we did have space for a few questions. Our interest in delinquent-type behavior had been stimulated by our colleagues Dr. Ivan Nye and Dr. James Short who had made a study in a three-city area in the state (48:326-221). The nine questions we included were based on the work of Nye and Short, although we did not follow their approach exactly. They had an item on sex relationships that we did not include and we modified the wording of some of the questions we did use.

We prefaced our request for information on misconduct with the following statement:

Everyone breaks some rules and regulations during his lifetime. Some break them regularly, others less often. Below are some frequently broken. Check those that you have broken since beginning grade school. (You can be sure that no one will find out from this questionnaire that you did any of these things.)

The questions and the responses by boys and girls are presented in figure 2.

All of our respondents said that they had told lies and disobeyed their parents. In almost every other case, boys were far more likely than girls to have violated the moral or legal norms relevant to the behavior covered by the questions. The extent of admitted violations indicated that typical behavior may differ from the ideal.

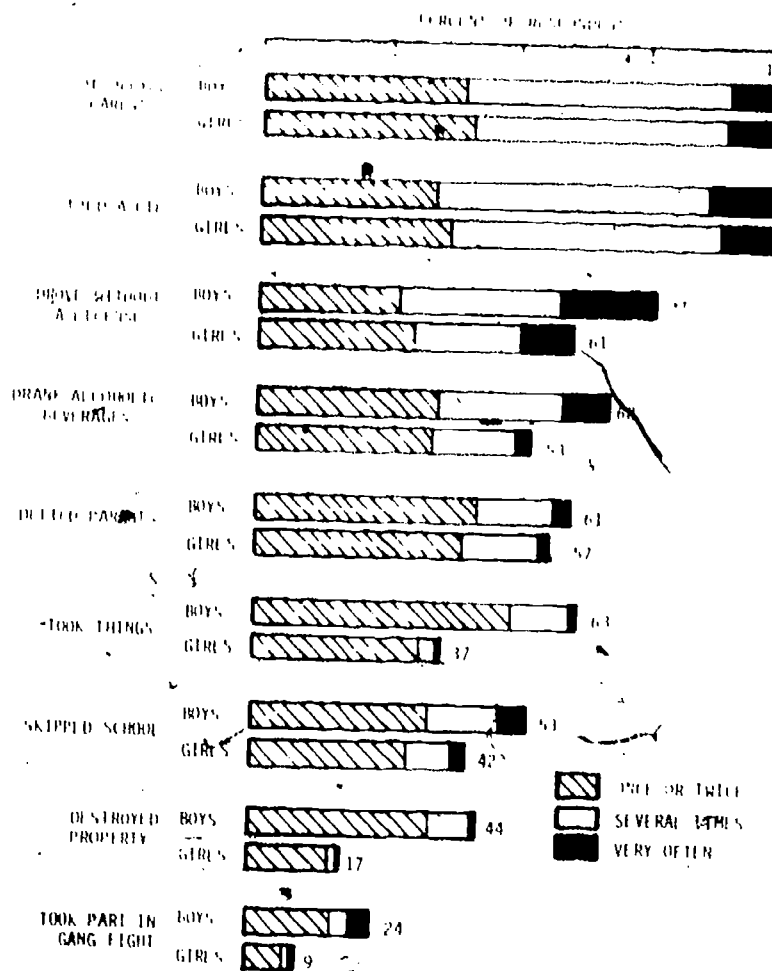## Scaling of Delinquent-Type Behavior

Figure 2 shows the incidence of specific acts of misbehavior but gives no indication of the extent to which delinquent-type behavior tends to be characteristic of different types of individuals. Previous investigators have found that more or less consistent patterns of behavior tend to be characteristic of individuals; in fact, it is possible on the basis of responses to a set of related questions to classify individuals into categories according to the pattern of their responses (27,68). Following the Guttman procedure (27,68), we developed a scale of delinquent-type behavior using the following five items from the original list of nine presented in figure 2: (1) drank beer, wine or liquor, (2) told your parents that you would not do what they ordered you to do, (3) took things that did not belong to you, (4) skipped school (no legitimate excuse), (5) purposely damaged or destroyed public or private property that did not belong to you.

The sequence or patterning of responses for the scale of delinquent-type behavior is presented graphically in figure 3. Note that drinking beer, wine or liquor was the most frequent type of misbehavior among these respondents. Telling parents that they would not do what they had been ordered to do was the next most frequent type of misbehavior. Taking things that did not belong to them followed in third place, skipping school was fourth, and purposely damaging property that did not belong to them was the least frequent of the delinquent-type acts included in this scale.

Generally, only those who had performed the other four delinquent-type acts would also have destroyed property. Conversely, those who had destroyed property had generally also committed the other types of misconduct listed. This is a general property of a Guttman-type scale. If one knows the scale type, it is possible to predict the behavior on all questions included in the scale.

It was possible to classify each of the 3,242 respondents into a scale type. There are some limitations to the scale of delinquent-type behavior used in this work. One of the chief limitations is that the scale includes only five of many possible delinquent-type acts. The order developed from the data, as set forth in figure 3, could have many other types of misbehavior acts interspersed between the five shown or on either end of the five shown.

Another shortcoming of the scale is that the items fell into the order established in figure 3 in only 86% of the cases. Thus, prediction of behavior from knowledge of scale type would be accurate 86% of the time. Guttman set the lower limit of reproducibility (or level of prediction) at 90%, so this scale does not quite meet the criteria of a Guttman scale. It can, however, be considered a

2. Misbehavior reported by teen-agers.
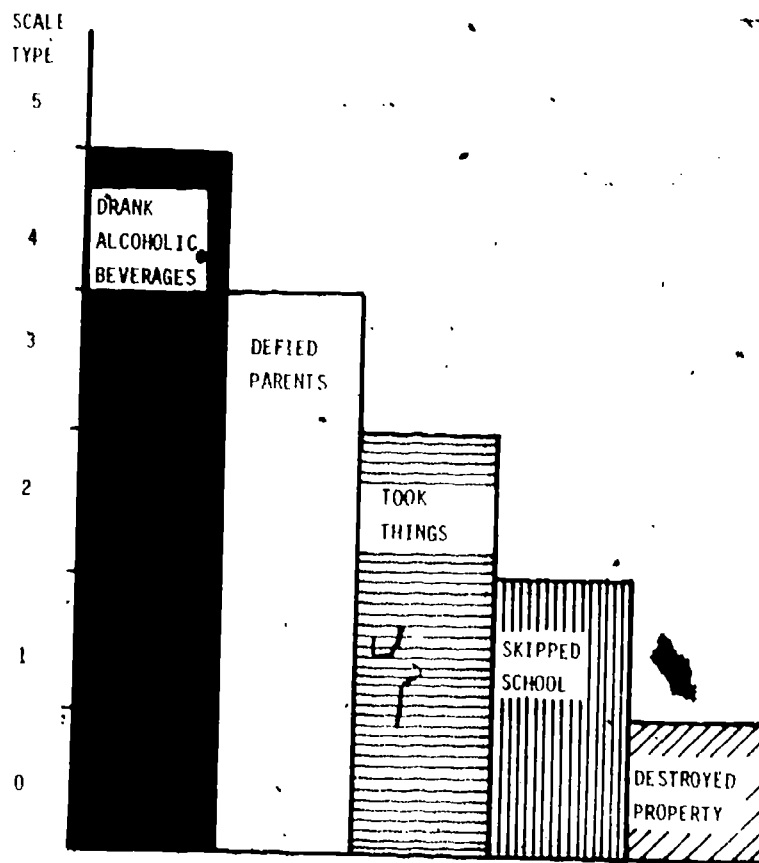
3. Sequence of responses for ideal scale of delinquent-type behavior.

47

quasi scale and still be useful in classifying respondents into scale types, keeping in mind that some respondents did not fall into the perfect types set up in the chart

For instance, some of the respondents may have said that they have defied parents but did none of the other delinquent type acts included in the scale. The respondents who fell into that category have been grouped with those who had defied parents and also drank alcoholic beverages. Through our scaling techniques, we were able to classify the respondents according to the scale type most nearly like them.

Identification of configurations of delinquent type acts such as those in this and other such scales could at least partially answer a question asked by Deutscher at the 1960 National Conference on Social Welfare. He was pointing out some areas of needed research, and asked "What kinds of misbehavior lead to other kinds that eventuate in a sequence of behavior that may be identified as a delinquent career?" (18:37). The delinquent type acts identified in this chapter may not necessarily lead to delinquent careers, but those who have a consistent pattern of misbehavior involving all five acts would appear to be headed in the direction of delinquency.

The official delinquency rate among boys is higher than the rate among girls (19:33). This also proved to be true for *delinquent-type* behavior as reflected by our scale (figure 4). At the top of the chart are those who reported that they had not committed any of the acts listed. As can be seen, 28% of the girls but only 17% of the boys fell into this group. At the bottom of the scale, less than 10% of the girls and 27% of the boys had committed all the acts of the scale.[20]

---

[20] The sex breakdown has been maintained throughout the study, since boys and girls did differ appreciably on the delinquency type scale. However, sex differences are pointed out only in instances in which the variation seemed significant.

One might assume from looking at the chart that more girls than boys defied parents, since there were so many more girls in scale type three. However, remember that in the instance of defying parents, for example, it is not just the respondents of scale type three who committed that act, but rather all the respondents from three down to the bottom of the chart. Considerably more boys than girls had defied parents, as is true of all the other acts of the scale.

The scaling process yielded six categories. However, we felt that this breakdown was too detailed. Therefore, we compressed the six categories into three: the most delinquent-type category includes scale types zero and one, the intermediate category includes scale types two and three, and the least delinquent type category includes scale types four and five. In the discussion of findings, we shall compare the two extremes, referring to one as *delinquent-type* and to the other as *conformist*. The latter category includes those teen-agers who said they had done none of the delinquent type acts included in the scale, and those who had drunk alcoholic beverages. Thus, except for drinking alcoholic beverages, the conformists, according to their own reports, had complied with the moral and legal norms relevant to the items in our scale.

Multiple Influences

It is clear from a review of the literature that many factors influence both conforming and nonconforming behavior (48). As sociologists, we tend to focus our attention on the influence of culture and social interaction. However, we recognize that in fact, complex inter-relationships among multiple factors influence any specific individual in a specific act of the type we have classified as delinquent-type behavior. Among these are the following factors that were associated with misbehavior as reflected in our scale.
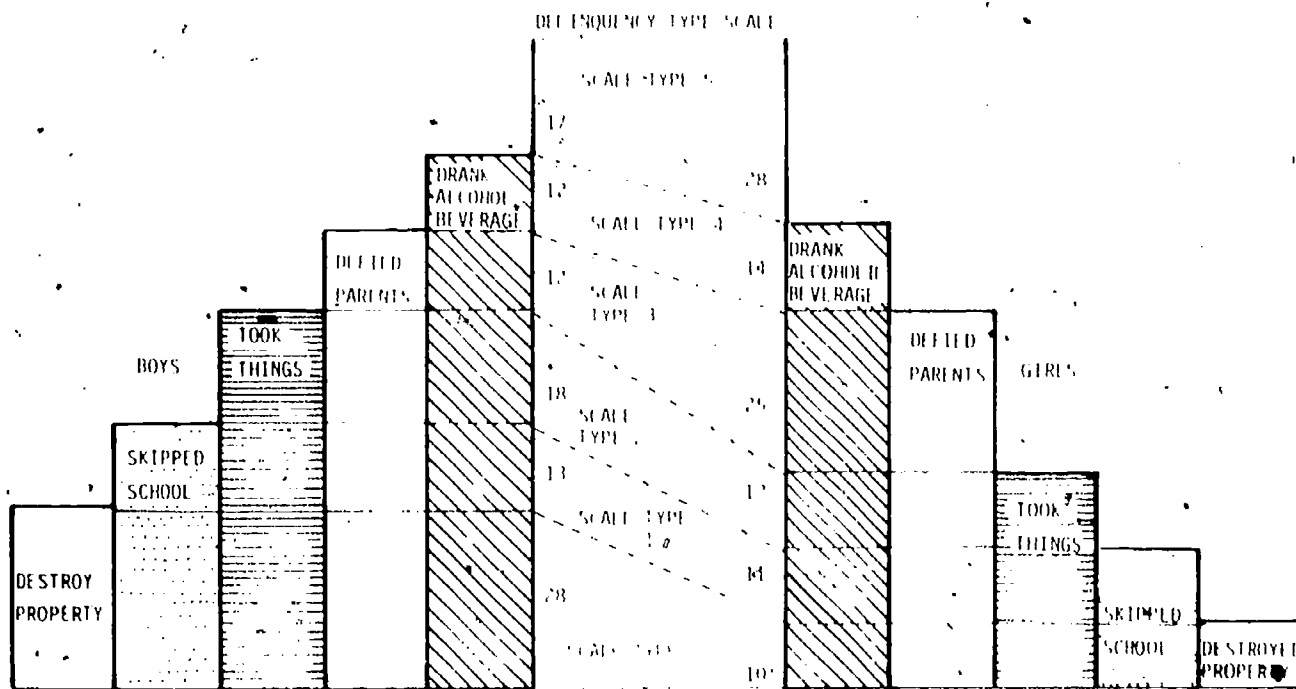
4. **Distribution of boys and girls on delinquency-type scale.**

1. *Age.* Older respondents were much more likely to be in the delinquent-type category.

2. *Color.* Delinquent-type behavior was more likely to be a characteristic of the nonwhite respondents.

3. *Scholastic Achievement.* Poor grades in school were more characteristic of the delinquent-type respondents.

4. *Farm-Nonfarm Residence.* Relatively fewer of the farm teenagers were in the delinquent-type category. This is consistent with previous studies, which have generally found higher delinquency rates among nonfarm than among farm young people.

5. *Sex.* Boys were much more likely than girls to follow a pattern of delinquent-type behavior (already noted).

Family Culture Patterns and Delinquent-Type Bahavior

We were not able to classify the families of respondents with respect to all possible family culture pattern variations in this most important reference group. However, we did obtain what we consider to be significant indicators of select aspects of family culture patterns. Before the data were collected, we had been working on this approach, attempting to devise measures that would help us to at least partially evaluate the theory that reference groups are effective agencies of socialization. We have discussed elsewhere the detailed steps in developing the four scales we present here as reflecting family culture patterns (68).

For present purposes, it may suffice to note that we were able to develop Guttman-type scales permitting us to classify families of respondents according to the practice of democracy, fairness of discipline, degree of affection and degree of cooperation within the family. These are based on the perceptions or images of the individual respondents. Consequently, one cannot validate the scales through the use of objective external criteria. We tried to meet the problem of validity through the use of statements having apparent face validity that were at least partly verified through the use of teen-age and young adult judges. Other aspects of validity in this study were discussed earlier.

Democratic management of the family was negatively associated with delinquent-type behavior. Teen-agers in democratic families were more likely than those in undemocratic families to be conformists.

The same relationship was found when comparing teen-agers' behavior and cooperation in the home. Students in the cooperative homes were more likely to be conformists. Boys and girls in the uncooperative homes were more likely to be in the delinquent-type category.

Fairness of discipline was also associated with conforming behavior. This was especially true of the girls. One who considers family disciplinary practices to be unfair may tend to reject his family and seek to injure it through his misbehavior.

Remember that the rating of the family was based on the teen-agers' evaluation of the situation. A nonconforming teen-ager may have a different attitude toward what is fair and what is unfair discipline from the teen-ager who does not venture from the standards set by society, his family and his peer groups. On the other hand, disciplinary measures may differ in a family with a youngster who misbehaves regularly. Parents may think stricter discipline is needed to keep the youngster in line.

Delinquent-type behavior also varied among families with different affection patterns. Students in the more affectionate families were most likely to be conformists. Students in unaffectionate families were more likely to be delinquent type.

We collected information on such factors as occupation of father, education of parents, number of children and marital status of parents. These categories can be interpreted as rough indicators of family culture patterns. We also have some information on family standards relating to specific types of behavior other than that reflected in the four scales discussed earlier.

Young people whose fathers held white collar jobs were slightly more likely to be in the conformist-type category than were those whose fathers were blue-collar workers (table 33). Differences were not so apparent among the boys, but were quite striking among the girls.

As with most research, the data show tendencies and trends; the data do not, for instance, indicate that all children in white-collar workers' families were conformist nor that *all* children in blue-collar workers' families took part in delinquent-type behavior. Rather, the data do show a slight tendency for misconduct to be more prevalent among teen-agers (girls especially) in families of blue-collar workers than those from professional, managerial or clerical/sales families.

It was also possible to look at the distribution of delinquent-type behavior among the various educational levels achieved by the mothers of the respondents. No information was available about father's education. Misbehavior was somewhat less prevalent among the students whose mothers were college graduates than among students whose mothers had less education (table 34). The highest proportion of students in the delinquent-type categories was found in families in which the mother had only a grade school education.

The broken home has also received a great deal of attention in delinquency studies. "The home is the matrix of the child's development, and a child from a broken home might be expected to have greater difficulty in adjusting to the social norm . . ." (19:50). The same relationship was found in this analysis (table 35). Over half of the boys from broken homes (this includes all types of broken homes, whether broken by death, divorce or separation) fell into the most delinquent-type category as compared to only 39% of the boys from complete homes. A similar situation was found among the girls.

Family size also seems to be somewhat associated with delinquent-type behavior (table 36). Misconduct was more prevalent among the larger families than among the smaller families.

Put another way, the median number of brothers and sisters was highest for the more delinquent-type categories. The difference was especially large among the girls.

49

Table 33. Relationship of delinquent type behavior to father's occupation

Father's occupation	Delin quent type %	Interme diate %	Conform ists %	Total %
Boys				
Professional and technical	38	31	31	100
Managers, officials, proprietors	39	29	32	100
Clerical and sales workers	33	41	26	100
Farmers and farm managers	34	28	38	100
Craftsmen, foremen and kindred workers	47	29	24	100
Operatives and kindred workers	47	30	23	100
Service workers, laborers	39	30	31	100
Total	41	30	29	100
Girls				
Professional and technical	17	40	43	100
Managers, officials, proprietors	18	43	39	100
Clerical and sales workers	15	39	46	100
Farmers and farm managers	19	29	52	100
Craftsmen, foremen and kindred workers	22	37	41	100
Operatives and kindred workers	23	41	36	100
Service workers, laborers	29	38	33	100
Total	21	37	42	100

Table 34. Relationship of delinquent-type behavior to education of mother

Mother's education	Delin quent type %	Interme diate %	Conform ists %	Total %
Boys				
Grade school	50	27	23	100
Some high school	44	30	26	100
High school graduate	41	31	28	100
Some college	41	34	25	100
College graduate	33	36	31	100
Total	41	30	29	100
Girls				
Grade school	26	40	34	100
Some high school	22	33	45	100
High school graduate	20	38	42	100
Some college	24	42	34	100
College graduate	14	44	42	100
Total	21	37	42	100

50

Delinquent-type behavior was associated with freedom to go out evenings (table 37). Students whose parents, allowed them every evening out were more likely to be classified as delinquent type. Those who were allowed only an occasional evening out or almost never allowed out were more likely to be conformists.

Also indicative of family culture patterns of these teen-agers is their pattern of family activity after school and their work patterns at home. For instance, respondents in the conformist category usually went directly home after school; those in the delinquent-type category were more likely *not* to go directly home after school.

Chores at home may require some students to go directly home after school. The conformist youngsters did more work around home than did the delinquent-type youngsters, as shown by their responses to a list of twenty-two chores. The students reporting little or no misconduct reported doing more chores than those who misbehaved a lot.

Family culture patterns, as measured by the items in our questionnaire and the scales developed from the items, were related in various degrees to delinquent-type behavior in these six areas of Washington. The relationships from these data suggest that parental responsibility for delinquent behavior may be more deep-rooted than financial responsibility or keeping the teen-agers home evenings. The entire interaction patterns of the family and the atmosphere of understanding and cooperation within the family seem to have some bearing upon deviant behavior.

Peer Group Influence

The family holds a very important position in determining the norms and standards that guide the behavior of adolescents, but peer group influence cannot be overlooked as another determining factor. A great deal of a teen-ager's time is spent with peer groups, both in school and out. These associations should also be examined closely for possible relationships with delinquent-type behavior.

One of the objectives of adults who sponsor clubs and

Table 35. Relationship of delinquent-type behavior to marital status of parent

Parents' marital status	Delin-quent type %	Interme-diate %	Conform-ists %	Total %
Boys				
Living together	39	32	29	100
All others	51	26	23	100
Total	41	30	29	100
Girls				
Living together	20	39	41	100
All others	29	34	37	100
Total	21	37	42	100

Table 36. Relationship of delinquent-type behavior to number of brothers and sisters

No. of siblings	Delin-quent type %	Interme-diate %	Conform-ists %	Total %
Boys				
0 and 1	39	34	27	100
2 and 3	41	31	28	100
4 and 5	46	28	28	100
6 or more	47	25	28	100
Total	41	30	29	100
Girls				
0 and 1	17	40	43	100
2 and 3	20	39	41	100
4 and 5	27	35	38	100
6 or more	34	35	31	100
Total	21	37	42	100

51

Parents' attitude toward evenings out	Delinquent type %	Intermediate %	Conformists %	Total %
Boys				
Every night out if I wish	55	26	19	100
Weekend evenings, some school nights	43	30	27	100
Occasional evening out and almost never allowed out	31	35	34	100
Total	41	30	29	100
Girls				
Every night out if I wish	37	36	27	100
Weekend evenings, some school nights	22	39	39	100
Occasional evening out and almost never allowed out	16	35	49	100
Total	21	37	42	100

organized activities for young people is to get the participants to conform to norms that would minimize delinquent-type behavior. If this objective is attained, teen-agers who are busy in club work should have little time or inclination for mischief and misconduct.

A composite measure of social participation was developed on the basis of answers to several activity questions in the questionnaire. The measure included the number of school activities, number of out-of-school activities, the intensity of participation in these activities, and whether the respondents spent time in school activities or club meetings after school or in the evenings. Figure 5 compares delinquent-type behavior of students classified on this measure of social participation. Although differences are small, the active boys tended to be slightly more conforming than the inactive boys. There was little relationship between participation in organizations and delinquent-type behavior among the girls.

A further question concerned their desire to take part in some club or group that they did not currently belong to. Some of the delinquent-type youngsters (30% of the boys and 40% of the girls) wished to join some club or group. Such a desire was even more prevalent among the conformists.

Those in the delinquent-type category spent less time doing chores, spent less time in organized activity and, incidentally, did not hold part-time jobs any more often than the conformists. Consequently, the question arises, how did the delinquent-type youngsters spend their free time? We know from the responses to a question about free time that teen-agers with time on their hands and nothing to do were more likely than busy teen-agers to be delinquent-type. Half of the boys who did not know what to do with their free time were classified as delinquent-type and only 18% as conformists. In contrast, 30% of those who were too busy were classified as delinquent-type and 29% as conformists. Among the girls with considerable free time, 29% were delinquent-type and 34% conformists, as compared to 18% of the overly busy who were delinquent-type and 40% who were conformists.

Friendship associations were important to most of the respondents, but those who spent time in *unorganized* activity were more likely to be in the delinquent-type category. Boys who dated frequently were more likely than those who seldom or never dated to be delinquent-type. The pattern for girls was similar.

A check-list of activities after school and evenings revealed that the delinquent-type students spent less time studying and about the same time watching television as the conformists. However, the youngsters who spent time

BOYS	DELINQUENT TYPES	INTERMEDIATE	CONFORMIST
INACTIVE	46	30	24
INTERMEDIATE	40	32	28
ACTIVE	38	31	31

GIRLS			
INACTIVE	22	33	45
INTERMEDIATE	22	41	37
ACTIVE	21	37	42
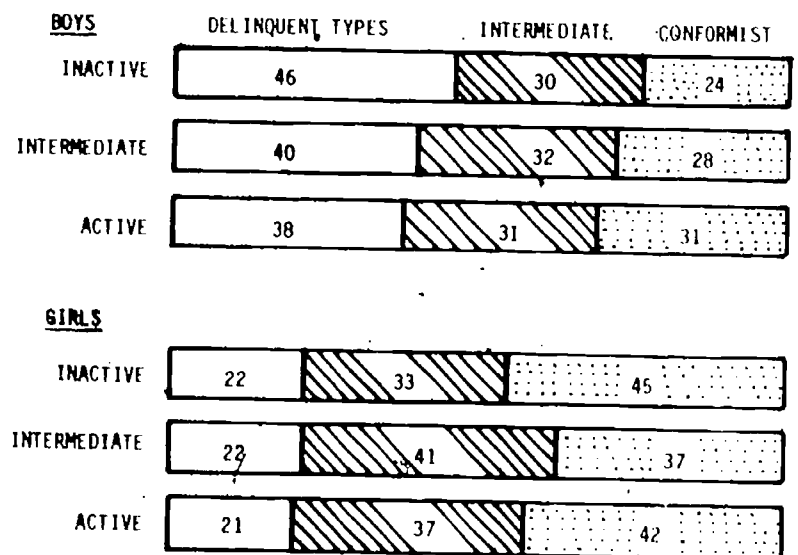
5. Relationship of delinquent-type behavior to social participation scores of teenagers (based principally on organized activities).

after school and evenings "riding around in cars" and in "running around with a group of friends and doing whatever seems interesting at the time" were more likely to be delinquent type than those who did not spend time in such activity.

Even though "running around with friends" was directly associated with delinquent type behavior, those who were classified as delinquent type had no more friends than the conformists. A question about the number of schoolmates liked by the respondents was asked. A large majority in all categories like most all of their schoolmates. However, those who liked all schoolmates were somewhat more likely to be classified as conformists than those who had fewer friends.

The pattern of peer group associations appears to be directly associated with delinquent type behavior in the Washington sample. The data imply that some of those classified as delinquent type might have liked to change their activity patterns and join some clubs or groups. Others were not interested in additional activities and would have preferred to keep the status quo.

Family and peers groups are closely interrelated, since both compete for some of the same leisure time of young people. The data suggest that if the family takes precedence over unorganized peer group activity in demanding time of a young person, he is less likely to misbehave.

Discussion

We must again caution that our data do not permit any sweeping generalizations about all Washington teenagers. On the other had, we definitely can regard the findings as hypotheses subject to verification or rejection on the basis of further research.

The great majority of our respondents acknowledged having committed one or more delinquent type acts at least once.

Many had committed many such acts many times. Considering all five acts in combination, we found that we could classify our respondents into categories with characteristic patterns of delinquent-type behavior.

We found substantial differences between boys and girls. Boys were much more likely than girls to be in the delinquent type category. We found that proneness toward delinquent type acts tended to increase with age. We found more conformity with societal and family norms among those with white collar fathers and highly educated mothers. We found more delinquent type behavior among those from broken homes and among those from larger families. We found somewhat more conformity with the norms among those from farms than among those from nonfarm homes.

We found evidence that family values and standards are related to delinquent-type behavior. Specifically, we found more conformity with the norms among those from highly democratic homes, from homes characterized by much affection, a high degree of cooperation and fairness of discipline as perceived by our respondents. We found evidence too that those who were active in teen-age groups and organized activities were generally somewhat more likly to be conformists. The delinquent-type students, on the other hand, were more likely to spend time with their friends in unorganized activity such as riding around, or doing whatever seems interesting. We interpret these relationships to mean that the data support our basic hypothesis, which is that the behavior of teen-agers is influenced by the standard of their families, their peer groups and other reference groups.

12. MALE AND FEMALE ROLES

In contemporary American society, as in all societies for which we have information, a fundamental differentiating characteristic is sex. In western countries, in earlier times (and even today in most families) men were expected to work for pay or profit while women were expected to be wives, mothers, and housekeepers- unpaid roles. In the U.S.A., work outside the home for compensation was not common among women prior to the 20th century. Although the majority of women now participate in the paid labor force during their adult lives, the role of paid worker tends to be intermittent for most married women; it is usually a secondary role undertaken to obtain supplemental income for family needs rather than a career commitment.

We cannot discuss the women's rights movement in any detail but it would be appropriate to keep its objective of equality between the sexes in mind as we examine the information we have collected over the years.

All of our studies indicate that substantial sex differences still exist in norms and patterns of behavior of adolescents and youths. It appears that Washington families still socialize their younger members to accept and prepare for traditional sex roles. This orientation is reinforced by schools and peer groups. Most young women are still oriented toward homemaking. When they express occupational preferences, they choose occupations that traditionally have been regarded as women's work. The boys are also oriented toward traditional occupational roles; they overwhelmingly reject such occupations as nursing and choose occupations generally dominated by men.

The Situation in the Early 1950s

In 1956, we examined the differences in occupational planning between young men and women, using data from a 1954 statewide high school sample and a 1952 sample of Washington State College students (62). Some of our major findings were:

1. Girls tend to excel boys scholastically, both at high school and undergraduate college levels, even though there is no evidence that females generally have greater intellectual capacity than males. The supe-

nor academic performance of girls seems paradoxical when compared with their occupational achievements. While girls tend to excel in school, women are rarely found in positions of administrative authority or in policy-making roles.

2. Nearly half of the high school senior girls said that they were quite certain that they were going to attend school the following year. There was a marked relationship between plans of high school girls for further education and the socioeconomic level of the family. The higher the socioeconomic level, the higher the probability that they were planning to go on to school. Those whose parents had achieved higher levels of education were also more likely to plan to continue in school.

3. Girls infrequently sought a higher education solely for the sake of obtaining an education. The overwhelming majority, as was the case with the boys, indicated that the most important reason for going or for wanting to go to college was to prepare for an occupation. There was evidence in the responses of both the high school and college girls, however, that girls more than boys tend to look to college for a broad general education.

4. It might seem that girls would have been less advanced in occupational planning than boys of the same age and grade level because of uncertainty about whether to prepare for marriage or a career. However, the data did not substantiate this expectation. In fact, high school girls apparently were more advanced in their planning than the boys. The differences between college men and women were not statistically significant. Only 28% of the high school girls and 14% of the college girls were classified as exploratory with respect to stage of occupational choice. All of the rest had narrowed their thinking to one occupation, and more than half of those who had crystallized their choices had already determined what specific job within the occupation they were most interested in.

5. The great majority both of high school and college girls preferred occupations traditionally regarded as women's work. Only a small handful, relatively speaking, were interested in competing in areas customarily regarded as men's work. Clearly, the occupational choices of females in our society are still strongly influenced by tradition and custom.

The Situation in the Mid 1960s

There was not much change in the attitudes and behavior patterns of high school boys and girls between 1954 and 1965-66, as reflected by responses to questions asked in the Vocational study (3,117 juniors and seniors from 12 high schools).

Grades

As was the case a decade earlier, girls tended to get better grades than boys; 52.8% of the senior girls but only 34.8% of the senior boys said they got mostly As or As and Bs or Bs on their last record card. There is no reason to believe that this difference is due to biological differences. It is much more likely that it is cultural, due primarily to

different sex related expectations for academic and non academic performance.

School courses

Girls tended strongly to prefer different subjects from boys (table 38). Boys were more likely than girls to prefer mathematics, science and physical education. Girls were more likely than boys to prefer art and music, English, foreign languages, home economics and business subjects (bookkeeping, typing and secretarial work). These preferences undoubtedly reflect the different occupational orientations of boys and girls to be discussed later.

Attitudes toward school

To obtain information about attitudes toward school, students were asked to respond "agree," "disagree" or "neither agree nor disagree" to a series of statements depicting attitudes toward school. The pattern of responses shows substantial agreement between boys and girls on some questions but not others.

Both boys and girls recognized utilitarian aspects of school. Nearly all of them agreed with a statement that education is important in preparing for a job. Girls were considerably more likely than boys to say they liked school very much. Fewer girls than boys agreed with statements that portrayed the school in a negative light.

Most students displayed positive feelings about school by agreeing with the statement, "I appreciate the opportunity to learn more." Substantially more of the senior girls than senior boys agreed with this statement. Less than half of the students agreed to the statement "I like school very much" but slightly more than half of the senior girls and only 34.7% of the senior boys agreed with it. A few students felt that the diploma was the most important thing that one gets from school; among these were more senior boys than senior girls.

These responses show that most of the students in the sample recognized the importance of education and a substantial proportion derived some satisfaction from it. Only a minority gave responses implying that they were severely alienated from school. However, this minority was large enough to be of concern to school authorities.

Participation in extracurricular activities

In addition to emphasizing intellectual learning, the high school is also designed to provide certain examples that emphasize interpersonal relationships that develop into social skills and presumably, character. This is done largely through organized extracurricular activities, including athletics, music, dramatics, debate, the school newspaper, and clubs and organizations.

Students were asked the extent of their participation in activities of various types. Except for church youth groups, all of the organized activities listed in table 39 are normally sponsored by most high schools. Table 39 shows the percentages of boys and girls who were either very active or quite active in various activities.

We also looked at the number of school activities in which the students participated. Girls were more likely than boys to be active in two or more activities. Boys were

61

Table 38 School courses liked best by sex and grade, 1965-66

Course	Percent who choose specified subject as "best"			
Preferred by more boys	Junior boys	Senior boys	Junior girls	Senior girls
Algebra	35.5	34.1	21.1	18.9
Chemistry	23.2	22.6	8.2	13.8
Geometry	29.2	23.6	13.3	12.5
History	51.6	49.2	43.3	36.0
Physical Education	50.2	47.9	39.0	33.2
Physics	9.9	15.0	1.5	1.7
Shop	38.0	22.1	1.5	1.8
Trigonometry	9.9	16.1	2.7	6.8
Preferred by more girls				
Art and Music	22.0	26.4	47.0	49.9
Business	12.8	16.2	32.4	32.1
English	26.5	21.1	50.8	46.4
Foreign languages	15.7	9.7	27.8	24.5
Home Economics	1.8	2.8	47.6	47.9
Social Studies	12.9	25.4	14.7	26.1

Table 39. Participation in organized activities, 1965-66* —proportion "very active" or "quite active"**

	Boys		Girls		
Activity	Juniors	Seniors	Juniors	Seniors	Total
Athletics	53.7	53.2	41.4	34.1	46.7
Music	19.9	20.0	33.5	29.8	25.8
Dramatics	5.1	8.5	16.8	12.3	10.7
Debate	4.2	5.7	5.1	3.7	4.7
School paper or annual	7.0	9.0	15.0	18.1	12.2
Student gov	15.1	25.3	19.8	25.4	21.2
FFA or FHA	4.6	3.6	3.5	2.8	3.7
Hobby clubs	13.2	14.4	13.6	15.3	14.1
Pep club or pep rallies	35.8	30.1	63.5	58.0	47.4
Church youth groups	30.7	29.8	50.7	48.4	40.0
Hi-Y or Tri-Hi-Y	7.0	7.2	15.7	18.1	11.8

*Based on responses to question 18 in form A of the student questionnaire.

**Percentages are based on responses of students who reported the extent of participation in each activity listed.

more likely than girls to say that they did not participate in any organized activities (24% of the junior boys, 20% of the senior boys, 13.9% of the junior girls and 8.2% of the senior girls participated in no organized activities.) This interesting finding is consistent with the fact that girls are substantially more likely to indicate an interest in working with people than are boys.

Relationships with member of the opposite sex

Since high school education is coeducational in Washington, boys and girls, of course, have many opportunities to get to know each other. In view of the general emphasis in the culture on romantic love as a basis for selecting a mate, it would be strange if no romantic alliances were to develop. We know of course that mate selection in our society is not restricted to high school classmates. We also know that there is a well developed pattern of rating of members of the opposite sex and that much dating occurs. Form B of the questionnaire was administered in a separate sample of 14 high schools. In it, we asked respondents to report their relationship with persons of the opposite sex.

The responses show that the great majority of both boys and girls were interested in members of the opposite sex. However, this interest had not yet crystalized in the form of concrete plans to marry in most cases. The pattern of responses does suggest somewhat more interest on the part of girls than of boys. A total of 9.2% of the total sample said they were formally engaged or had a definite understanding to be married. Among the senior girls, 17.7% gave one of these answers. Twenty percent of the

sample reported that they were going steady; again, girls were somewhat more likely than boys to give this response. About one fourth of the sample had no dates or only a few dates. The junior boys were most likely and the senior girls least likely to say that they did not date.

Form A of the questionnaire included a question to probe the relationship between homemaking and paid employment as future goals for girls. We did this because the number of women working outside the home had increased markedly since 1940.

Only 3.8% of the girls said they did not want to marry. Nearly three fourths (72.7%) said that homemaking would be their major interest. Other responses are in table 40.

It appears from these data that marriage and family life were strong values for adolescent girls in the mid 1960s. However, few wished to spend all of their lives at home. Only 12.1% said that they would not want to work at all after marriage. Girls were more likely to see themselves combining family life with occasional part time work than they were to think of any other combination. In view of the actual pattern pursued by contemporary young adult women, this appears to have been a realistic appraisal. However, 44.4% of the girls would like to work much of the time.

Evidently, a substantial minority in the sample had reservations about a wholehearted commitment to the traditional role of homemaker.

Educational aspirations and expectations

Nearly all of our respondents of both sexes expected to graduate from high school and most of them also hoped

Table 40 Homemaking and work interests of girls, by grade, 1955-56*

Responses		Junior Girls	Senior Girls	Total
All homemaking, no work	No.	98	82	180
	%	12.2	12.0	12.1
Mostly homemaking, some work	No.	335	311	646
	%	41.8	45.5	43.5
Homemaking major interest, yet much work	No.	123	131	254
	%	15.4	19.2	17.1
Work major interest, yet much homemaking	No.	182	128	310
	%	22.7	18.7	20.9
Mostly work, some homemaking	No.	25	14	39
	%	3.1	2.0	2.6
All work, no homemaking	No.	38	18	56
	%	4.7	2.6	3.8
Respondents	No	801	684	1485
Nonrespondents	No.	25	23	48

*Based on responses to question 23 in form A of the student questionnaire.

to obtain some kind of post high school education. Six and one half percent wanted to end their education with high school graduation and 8.5% expected to do so. Over three fourths of our respondents aspired to attend college (77.6%) and nearly as many (75.9%) expected to do so.

The differences between boys and girls were not statistically significant with respect to either college aspirations or expectations. This suggests some weakening in the strength of the traditional view that higher education is less important for girls than for boys because they presumably will become homemakers rather than join the work force on a career basis. However, more boys than girls expected to go on to graduate or professional schools (18.6% of the senior boys as compared to 10.4% of the senior girls had such plans).

Occupational aspirations and expectations

Our high school respondents, both boys and girls, overwhelmingly preferred professional careers. However, we found very substantial differences between the sexes in respect to the types of occupations that were attractive (66).

Boys showed much interest in business careers; 45% would like to be factory managers; 40.7% would like to manage a department store, and 33.4% said that they would like to own or operate a small business.

Sixteen percent of the girls said that they had clerical aspirations, but 34.2% would like to be bookkeepers, 31.4% would like to be bank tellers, and 29.6% said being a hotel/motel clerk would be attractive. Some 62% liked a secretarial job even though only 11.7% had career aspirations to be a secretary. Although only 13.4% aspired to become craftsmen, substantially higher percentages of boys said specific craftsman type occupations would be attractive to them. Forty-four percent reported that they would like to be mechanics, 39.8% electricians, 33.5% factory foremen, and 29.3% carpenters. Plumbing was apparently not well regarded, since only 7.6% found this occupation attractive, and a bare handful, 3.2%, found the occupation of tailor-dressmaker attractive.

Service occupations that were attractive to boys were police officer, 33.4%; truckdriver, 31.1%; automobile salesman, 19.9%; and farm operator, 20.1%.

Among the girls, 39.1% would be interested in a job as a salesclerk in a retail store, even though only 3% indicated this was their preferred occupational goal. Also, 14.9% of the girls indicated aspirations to become a service worker. It was interesting therefore to find that two of the service occupations included in our list were very popular among girls; 76.1% said they would like to be an aide in a childcare center and 70.7% would like to be an airline stewardess. Other service occupations rated as attractive by many girls were: hairdresser or cosmetologist, 58.0%; nurse's aide, 45.1%; restaurant hostess, 43.4%; waitress, 33%; and restaurant cook, 26.6%.

These data indicate that for both boys and girls, many occupations other than those chosen by them as their preferred occupational goal were considered attractive enough to interest them in performing the roles involved.

We also asked our respondents which types of occupations they *disliked*. The boys' responses here show a substantial degree of compliance with traditional definitions of men's and women's work: restaurant host or hostess, 66.0%; waiter or waitress, 71.2%; dietician, 72.8%; home demonstration agent, 77.2%; hairdresser or cosmetologist, 83.5%; tailor or dressmaker, 78.1%; secretary, 77.8%; nurse's aide, 84.0%; and registered nurse, 84.3%.

Conversely, high proportions of the girls said they would dislike occupations that traditionally have been defined as men's work, including the professions of engineer, county agricultural agent, dentist, agricultural research scientist, and minister, priest, or rabbi. Among the other traditional male occupations rejected by substantial percentages of girls were: farm operator, 74.9%; mechanical draftsman, 76.6%; taxi driver, 79.8%; factory manager, 76.3%; life insurance salesman, 76.3%; automobile mechanic, 82.2%; electrician, 81.3%; truckdriver, 83.8%; carpenter, 82.6%; machine operator in a factory, 84.0%; automobile salesman, 83.1%; foreman in factory, 80.9%; salesperson of farm supplies, 81.7%; janitor, 88.6%; welder, 89.4%; plumber, 88.8%; warehouse worker, 87.1%.

These responses suggest that at least in the mid 1960s, the image of "Rosy the welder" or "Susy the engineer" had not gained favorable recognition among high school girls. Nor were occupations traditionally pursued by women regarded by the boys as at all attractive.

Summary

We may conclude then, on the basis of the evidence from our high school respondents, that in the mid 1960s, traditional sex roles for men and women were still accepted as desirable models. The majority of the young women aspired to careers as homemakers; most of them expected to get married and have children; and while they also expected to participate in the world of work, it is clear that for most of them, this was a secondary rather than the primary objective.

Among the boys, it appears that the traditional expectations of participation in the world of work were strong. The boys were oriented toward professional occupations and especially toward occupations both professional and nonprofessional that have traditionally been regarded as men's work.

Data from Young Adults. 1971

In 1971 we obtained information from 721 young men and women who had been interviewed while in high school during 1964-66. Our inquiry focused upon educational and occupational achievements since leaving high school, but we also asked questions about other subjects.

Table 41 shows the labor force status of the combined Rural and Vocational samples in 1971. A surprisingly high proportion of both sexes were still in school in 1971; there was, however, a marked difference between the sexes. 27.8% of the men and 15.7% of the women were still in school. Nearly all of these students were attending college. Many of them apparently were in graduate or professional schools. A fourth of the women were full time housewives and 15.1% percent of the men were in military service.

Unemployment was quite high among those who were in the labor force: 12.7% percent of the men and 15.9% percent of the women in the labor force were unemployed.

Educational achievement

It will be recalled that while in high school these young men and women overwhelmingly aspired and expected to go to college. Most of those who responded to our follow-up questionnaire apparently continued their education beyond high school. Only 17.3% of the young men and 8.4% of the young women in the Rural sample had ended their education with graduation from high school. In Chapter 5 we discussed in some detail the extent to which members of the two samples attained or failed to attain their educational aspirations.

Thus it appears that educational objectives were attained by young men somewhat more often than by young women. Further, both young men and young women in the Vocational sample, which included urban as well as rural schools, more often attained educational objectives than those in the Rural sample, which was restricted to schools in places with populations of 10,000 or less.

However, the differences between the sexes are somewhat smaller than might have been anticipated in view of:

1. the traditional orientation of women in both samples toward homemaking

2. the finding in our original study that about 95% percent of both sexes apparently regarded education as preparation for work.

It is possible that the returns were biased in favor of those who finished college, especially among the women. This possibility is reinforced by the increased difficulty of tracing the addresses of married women, since they nearly always take the surname of their husband.

Future educational plans

We asked our respondents whether they had plans for further education. While the great majority of both sexes stated that they did have, substantially more young women than young men said they had no further educational aspirations. The proportions of the young men who had no further educational aspirations were 14.1% in the Vocational sample and 14.8% in the Rural sample, compared to 23.2% of the young women in the Vocational sample and 29.6% of the young women in the Rural sample. More young women than young men were hoping to do university work and more young men than young women were interested in vocational courses in community colleges.

Evidently, most of these young men and women had concluded that more education of various kinds would be useful or interesting.

Occupational status

The general occupational categories of the jobs held by those who were employed are shown in table 42. Since these young men and women were closer to their entry level positions than to the positions they may hold later in mid career, these data do not necessarily show what their ultimate occupational achievements will be. Still, it is interesting to note that 16.8% of the men and 12.6% of the women were in professional occupations. This can be compared to 16.3% and 9.9% respectively for Washington men and women in 1970 according to the U.S. census. A little over 46% of college graduates of both sexes were in professions and 17.3% of the male college graduates were in management. It may disappoint women to find that 26.7% of the female college graduates were in clerical occupations.

Table 41. Labor force status, 1971, in percent*								
Labor force status	Total		College grad		Some college		Below average	
	Male	Female	Male	Female	Male	Female	Male	Female
In school	27.8	15.7	37.1	26.8	31.4	19.6	6.3	1.8
Housewives (full time)		25.4		11.0		31.6		27.0
Military service	15.1		12.1		18.3		12.5	
In labor force	57.1	59.0	50.9	62.2	50.3	48.7	81.3	71.2
Employed	87.3	84.1	88.1	88.2	85.2	88.3	89.1	77.2
Unemployed	12.7	15.9	11.9	11.8	14.8	11.7	10.9	22.8
Total No.	371	351	116	82	175	158	80	111
%	100.0	100.1	100.1	100.0	100.0	99.9	100.1	100.0

*All usable responses from follow up studies of Rural and Vocational samples.

Table 42. Relationship of education and occupation, 1971*

Occupation	Total		College grad		Some college		Below average	
	Male	Female	Male	Female	Male	Female	Male	Female
Professional	16.8	12.6	46.2	46.7	6.7	1.5		
Managerial	13.0	1.1	17.3		14.7	2.9	6.9	
Clerical	3.8	47.1	5.8	26.7	4.0	57.4	1.7	50.8
Sales	4.3	8.0	3.8	8.9	6.7	10.3	1.7	4.9
Service	.5.4	9.2	1.9		6.7	4.4	6.9	21.3
Craftsman	16.8		3.8		17.3		31.0 .	
Operatives	11.9		1.9		17.3		13.8	
Laborers	15.7		7.7		9.3		31.0	
All others	12.4	21.8	11.5.	17.8	17.3	23.5	6.9	23.0
Total No.	185	174	52	45	75	68	58	61
%	100.1	99.8	99.9	100.1	100.0	100.0	99.9	100.0

*All usable responses from follow up studies of Rural and Vocational samples.

Occupational status level attainment

In the original survey, we asked our respondents to name the occupation they would like to have as their life's work. In the follow-up study, we asked those who were employed to name their current occupation. However, we did not consider it feasible to compare directly the desired and attained occupations for two reasons. First, our respondents were all young and therefore most of them had not advanced far beyond their entry position. In fact, as already noted, a substantial minority had not yet entered the labor force on a regular basis. Second, with more than 23,000 different occupations in the American economy, it did not seem feasible to match up specific occupations. Instead, we decided that we would accept an original preference as an indication of occupational status level objective. Then we would interpret the 1971 occupation listed as an indication of occupational status level attained. The categories we used were professional, managerial, white collar, and blue collar. These are of course very broad categories, but we were advised to use them because the heavy concentration in our sample of preferences for professional and managerial, clerical, and craftsman types of occupations left too few numbers for analysis of more detailed categories.

Even though occupational aspirations were high, more than half of the young men in both samples and of the young women in the Vocational sample had attained or overattained the occupational status level they had aspired to when we interviewed them while they were in high school. The poorest record of occupational status goal attainment was that of the young women in the Rural sample. Only 36% had attained their stated goals. This is a very favorable record of occupational achievement for young people only 5 or 6 years out of high school.

Church membership and attendance

All of the respondents in the Rural sample indicated a preference for one religion or another. In the Vocational sample, which included urban as well as rural schools, 20.1% of the young men and 12.2% of the young women indicated that they had no religious preference.

About one-fourth of the young women but only a seventh of the young men said that they were regular churchgoers. The largest response category for both men and women was "Seldom." This included roughly a third of the young women and about 45% of the young men. In the Vocational sample, 12% of the young men and 6.7% of the young women said they never attended church.

Significantly more young women than young men were married: 60.1% of the young women in the Vocational sample and 66.4% of those in the Rural sample were married compared with 36.9% of the young men in the Vocational sample and 47.3% of the young men in the Rural sample. These statistics reflect the well known tendency for women to marry younger than men. In fact, American society seems to average a difference of about 2 years between spouses.

Male and female roles in family life

In the follow-up questionnaire we included several questions dealing with selected aspects of the roles of husbands and wives. We have analyzed the answers given by those who were married.

Our interest in this topic was stimulated by participation in an earlier study on family roles conducted in Yakima by the Rural Sociology department (49). We were particularly interested in learning whether the role expectations and behavior of these young men and women differed in any significant respect from the traditional

norms accepted by most older members of society

In contemporary American families, spouses often share the role of provider. In the Yakima sample, 44.4% of the wives and husbands were both employed. In the follow-up study of younger men and women, 55.2% were both employed. This may not reflect a permanent tendency for a higher rate of labor force participation by women among the members of the follow-up group, because fewer of them had children than was true in the Yakima sample. Also, there is a well-known tendency for young women to work, even though married, until the arrival of the first child. After that, many of them withdraw from the labor force until all of their children are in school, and in some cases, until they have finished school.

Who should provide?

To ascertain normative expectations of sharing by wives of the provider role, we asked both men and women to answer the question, "With reference to your own family, who do you think should provide the income?" The pattern of responses in the two studies suggests that there was greater acceptance of wives sharing the provider role in the follow-up study than in the Yakima study, especially among wives who were employed in 1971.

Of special significance is the fact that 30.6% of these wives said either that the husband and wife had equal responsibility or that it doesn't matter who provides income as long as it gets done. This may show an emerging trend toward greater equality in performance of the provider role by wives. However, caution should be observed in accepting this interpretation: these responses may not reflect the long term view of these young women. Many of their husbands were still in college or professional school and the question was phrased so as to make it clear that the expectations applied to their own family.

Normative attitudes toward women's working

Two questions dealing with attitudes toward women's working were included in both studies. One question was, "Should a wife work if her husband makes an income about equal to your income and they have children in school but no preschool children?"

In the follow-up study, a much higher percentage of husbands and wives checked the response category, "It is up to her whether she works or not," than was true of the Yakima sample. However, significantly higher percentages of the younger husbands than of the younger wives indicated that such wives should work; this suggests that many of the men may prefer to have working wives.

Normative attitudes toward work by a woman with preschool children but no husband

The question was, "If a woman with no husband has preschool children and good day care services provided without cost if she takes a job, should she (a) stay home and accept Aid to Dependent Children support, (b) take

the job, placing her children in a day care center, (c) do whatever she personally prefers?" A generally more permissive attitude was indicated by the response of young men and women in the follow-up study. More than half stated that she should do whatever she personally would prefer. In neither study was there support for acceptance of Aid to Dependent Children.

Evaluation of a husband's competence as a provider

Wives in the follow-up study of young men and women did not rank their husbands as better than average providers as often as the husbands did. And, follow-up study husbands were not as well satisfied with their performance as were the husbands in the Yakima sample. The difference in overall evaluation is doubtless due in part to the fact that many of the younger people were not yet well established in a career. In fact, a substantial minority of the husbands were unemployed.

The discrepancy between evaluations of husbands and wives may also be at least partially attributable to the fact that many of the younger people were not yet well established in a career. Furthermore, in the Yakima study we obtained information from both husbands and wives in intact families. In the follow-up study, we obtained information only from one member of the family.

Income management

In both studies we obtained information concerning income management. The dominant pattern, especially in the follow-up study, was for money to go into a joint fund to be spent both by husband and wife. There was not much support for the view that responsibilities should be allocated solely to husbands or that the latter should control the family purse strings.

If we can accept these answers as valid, the modern family, especially the younger family, is likely to be highly democratic where money management is concerned. However, it may be well to refrain from generalizing these answers to specific purchase decisions, since we asked only one question and a very general one at that. Both members of younger families apparently have access to the money in most cases. Therefore, in many families there may be a division of responsibility for expenditures for certain goods and services.

Summary

Review of the responses to various questions by young men and women in the follow-up study suggests that traditional attitudes and behavior patterns tend to be followed in many aspects of life. However, a trend toward greater participation by young women in higher education is emerging. We also see more tendency for women to share the provider role. Perhaps there is also a greater tendency toward equality between the sexes in other aspects of family life, although we do not yet have definitive information on this matter.

13. ATTITUDES OF MALE STUDENTS TOWARDS MILITARY SERVICE

Mandatory military service has been a possibility for young men since enactment of the law setting up the Selective Service System in 1941. The possibility of forced induction is not very great now (1975), since the Armed Forces now depend exclusively on voluntary enlistments for personnel. But the Selective Service System still exists and young men are required to register when they reach their eighteenth birthday.

During the Korean War and the Viet Nam conflict, many young men were drafted. During the unpopular Viet Nam conflict, many thousands of young men left the USA to avoid the draft and other thousands deserted after induction (12).

We obtained some information about attitudes toward military service during the period 1952-72.

1952-53 College Data

Information was obtained from a two-stage random sample of male undergraduates at the State College of Washington in 1952-53. The probable impact of enforced military service on occupational planning was not of great concern to most students (59).

In response to the question "Has the possibility of military service affected your occupational plans?" only 36% answered in the affirmative. Individuals who answered "yes" were asked "In what ways has this possibility changed the course of your actions with regards to occupational choice? . . . *underline* the most significant to you!" Answers to the question were as follows:

Delaying the decision of occupational choice until after service	23%
Hastening definite occupational choice	23%
Changing occupational plans	12%
Don't know	13%
Other (specify)	29%

In answer to the question "Do you think experience gained in military service will help or hinder your occupational future?" 48% replied that they thought this experience would help their occupational future, 11% said they expected it to hinder their occupational future, while 41% were undecided.

Male students who had served in the armed forces were asked "How would you say experience in the service affected your occupational plans, present and future?" Of 100 veterans who responded to the questionnaire, 55 stated that their experience in the military service had hindered it, 27 indicated that it had no influence, 3 were undecided and 1 provided no information.

The findings reported above are generally consistent with the findings reported by Suchman, Williams, and Goldsen. On the basis of a study of male undergraduates in eleven universities, they stated, "On the whole, most students do not expect military service to be a serious disruption. Only one out of four (26%) believes that military service will cause a major disruption in my life.' An equal proportion (26%) states that they think 'I will

have to change my plans very much as a result of military service' " (73).

1964-65 Data from Rural High Schools

These data were collected when the USA was not engaged in any wars; consequently, draft calls were low, military service was not particularly hazardous, and we did not have the reluctance to serve that developed later during the Viet Nam conflict.

Perceived influence of military service on educational plans

In the mid-1960s, it was necessary for every able-bodied male student to think about his military obligations as he approached the end of high school. Federal law then as now required that each American male citizen register with the U.S. Selective Service Board when he became eighteen. In their late teens, young men have to make a number of decisions regarding their plans. In the mid-1960s, a high school graduate could elect to fulfill his military obligation immediately following high school graduation, or he could defer this duty until he completed his higher education.

Some high school students appear to have been influenced more than others by their military service obligation, or at least they perceived service as an influence on their plans. In such instances, military service was likely to occupy a more central position in their planning; they may have planned when or how they desired to fulfill this duty. In any case, for those who had taken account of their military obligation and what it might mean for them, the prospect of military service was likely to influence their course of action.

The male respondents were asked if the possibility of military service had affected their educational plans. The answers are summarized in table 43. Two-thirds of the boys felt that military service had not influenced their educational plans; the remaining one-third said it had. There appears to have been a differential perception of military service influence among high school males in

Table 43. Effect of military service on the educational plans of rural high school boys, 1964-65

Responses to the question:		Grade level		
Has the possibility of military service affected your educational plans?	All %	10 %	11 %	12 %
Yes	32.4	35.0	32.9	29.3
No	67.6	65.0	67.1	70.7
No. students responding	1743	575	581	587
No. students not responding	111	41	37	33

different grade levels. The replies show that military service had influenced the educational plans of 35% of the tenth graders, 32.9% of the juniors, and 29.3% of the seniors.

The general finding that two-thirds (67.6%) of the boys did not perceive military service as affecting their educational plans seems in line with the contemporary emphasis on attaining a college education. A sizable majority of students in 1964-65 were likely to place their military obligation in the background because draft calls were few at that time. That military service was relegated to a secondary position in the life of the college-bound or college oriented male does not necessarily mean that it is totally dismissed from his planned course of action. Rather, it seems more tenable that for many boys, the influence of military service was not felt (or perceived as an influence) until a later age or until the boy had attained more education.

Military service as an opportunity for training

The data in table 44 suggest that nearly two-thirds of the high school males in the sample perceived the military as a potential opportunity for vocational training or education. In relation to the previous findings about the influence of military service on a boy's plans, it seems reasonable to conclude that while the majority of boys did not perceive military service as having affected their educational plans, they did recognize that military service is a potential source of vocational training and education. Whether the nature of the military's vocational training and education was attractive to these boys is, of course, another matter; recognition of these possibilities for training does not necessarily reveal the nature of an individual's feelings.

The percentage of those who perceived military service as an opportunity for training declined as year in school increased. (Compare with table 43.) While 69.0% of the sophomores viewed the military in this positive perspective, only 67.3% of the juniors and 60.6% of the seniors embraced this same view.

Plans for military service

Table 45 presents the plans of male members of the sample for fulfilling military obligations. The three most popular means of joining the military were: to await draft call (23.2%), enlist after college graduation (20.7%) and enlist in a branch of the military following completion of high school (19.0%). Together, these three categories constitute 63.0% of the male sample.

Note that 6.3% either embraced pacifist beliefs or considered themselves ineligible for military duty because of a physical disability. These boys thus eliminated themselves from potential affiliation with the armed forces. In another finding, slightly less than 51.0% indicated that they intended to fulfill military obligations either during their college enrollment or immediately following their graduation.

The data, then, suggest that while a majority of rural high school boys did not believe military service had affected their educational plans, most of them had seriously

thought about how they would meet their military obligation.

Table 44. Perception of military service as an opportunity to obtain vocational training or education as viewed by rural high school boys, 1964-65

Responses to the question

Do you consider the military service as an opportunity to obtain vocational training or education?	Grade level			
	All	10	11	12
	%	%	%	%
Yes	65.6	69.0	67.3	60.6
No	34.4	31.0	32.7	39.4
No. students responding	1733	571	578	584
No. students not responding	121	45	40	36

Table 45. Military service plans of rural high school boys, 1964-65

Plans for military service	Grade level			
	All	10	11	12
	%	%	%	%
Quit high school to enlist	0.8	1.1	1.1	0.2
Enlist after high school	19.0	23.9	20.7	12.4
Work for commission in college	11.9	12.9	12.7	10.2
Enlist after some college	8.8	8.6	9.0	8.8
Enlist after graduate from college	20.7	21.0	19.3	21.9
Enlist in reserves, continue school	9.3	10.1	9.1	8.6
Register as conscientious objector	1.8	2.0	1.6	1.9
Not eligible - physical disability	4.5	3.1	5.8	4.7
Wait until I am drafted	23.2	17.4	20.7	31.3
Number of students responding	1697	557	569	571
Number of students not responding	157	59	49	49

Undergraduate Washington State University Men—1970[21]

The draft created uncertainty for young men and indirectly for young women in varying degrees at different periods. The probability of being drafted rises in periods,

[21] David Martin, a former assistant professor of sociology at WSU, was coauthor of the original paper on which this section is based.

62

such as the Korean War, when the manpower needs of the military services are high and is usually lower at other times. The Viet Nam conflict, with its relatively heavy casualty rates and relatively little public support in the United States, greatly reduced the attractiveness of military service. At the same time, the manpower needs of the services expanded materially and draft calls increased. It is widely believed that many young men sought refuge in college during the Viet Nam conflict, since the deferment policies of the Selective Service System frequently allowed a college student in good standing to avoid the draft, sometimes until he obtained a Ph.D. degree. An educational deferment, of course, merely postponed the date of service, since one who received a deferment for educational purposes became subject to the draft upon completion or with drawal from college. Thus, the uncertainty extended through a large age range and unquestionably contributed materially to student unrest.

The draft became a political issue in the 1968 presidential campaign. In the fall of 1969, an amendment to the Selective Service Act substituted a lottery for the former system. The lottery reduced the uncertainty period to 1 year, ultimately, the 19th. It also selected men by chance rather than on the basis of judgment made by local boards. This lottery was held December 1, 1969.

Immediately after passage of the draft lottery amendments, speculation concerning the impact of the change upon the educational and occupational plans of college men was prevalent. Some young men initially had the impression that if they received high numbers in the draft lottery they had little chance of being called, whether or not they were in school. Discussions with undergraduate men in the classes of the writers were held in November, 1969. There was widespread expectation that a substantial proportion of men who received high numbers would probably withdraw from college, since the students believed that many of these men were actually in college to avoid the draft.

The sample

A systematic random sample of 397 WSU undergraduates was selected from the 1969-70 student directory. Of these, 364 or 91.7% were eligible, and usable returns were obtained from 316 or 86.8% of the eligible respondents.

Draft status of respondents

More than two-thirds (68%) of the respondents reported that they had an educational deferment; 6.9% had physical deferments (4F). More than 1 out of 10 were active members of some reserve component; 8.9% were members of the Army or Air Force ROTC and 1.9% were members of the National Guard. Only 3.8% reported that they were veterans and 6% were classified 1-A. The remainder reported other classifications.

Only 30.9% said they were definitely sure or almost sure that would be called. An additional 8.9% said that they would probably be called, and 13.6% indicated that their chances of being called were about 50-50. A sur-

prisingly high percentage (42.3%) thought that their chances of being called were less than 50%.

Impact of the draft lottery on educational and occupational plans

In response to the question, "has your number in the draft lottery changed your college plans?" the great majority of respondents (84.1%) replied that their plans had not changed at all. A few (0.9%) said that they already had quit; 0.3% said that they would drop out after the end of the academic year. A somewhat larger minority (3.5%) replied that they would try harder than before to stay in college. Only a few (0.2%) had plans to join the service and continue their education later under the G. I. Bill. Miscellaneous changes (probably related to changes of educational objective) were reported by 5.7%.

Most of the small minority who were planning to drop out said their withdrawal from the University would be permanent (3.7%) and 0.3% would return. The great majority (85.8%) believed the lottery would have no effect whatever on occupational plans; only 2.9% intended to take full-time jobs at the end of the school year, and only 0.9% said they would take a full-time job immediately. A more substantial minority (7.6%) indicated other changes, probably related in most cases to change of occupational objective. Only 2.2% indicated that the draft lottery had any effect on marital plans.

Attitudes toward war and the draft

Several questions were asked about attitudes toward war and the draft. First, respondents were asked their attitudes toward war: only 3.8% replied that they were conscientious objectors to any war; 14.2% checked the response, "I object to the war in Viet Nam, but might serve in a different war" and 15.2% checked the response, "I would serve if a genuine military emergency existed." The largest single response (47.8%) was, "I will serve if I am called." A substantial minority (18%) expressed other attitudes toward war (these attitudes have not been further analyzed at this time).

With respect to the fairness of the draft lottery, a bare majority (52.2%) felt that the lottery was fair. A very substantial minority (36.7%) did not think it was fair and 8.5% were undecided whether it was fair or not. Respondents were asked to give reasons for their attitudes with respect to the fairness of the draft, but these have not yet been analyzed.

With respect to the possibility that deferments for college students might be abolished by Congress, the most frequent response, given by 49.9%, was, "I am definitely opposed"; 28.8% were undecided and only 20.5% said, "I think this would be a good idea."

To probe attitudes toward the draft in general, students were given a list of possible responses. Clearly, positive attitudes were expressed by those who checked the following statements: "It is a duty every young man ought to do for his country" (23.1%); "it is a privilege to bear arms for one's country and every young man should welcome his call" (6.6%); "military service builds character, so it is,

a good thing" (76%) Since respondents could check more than one of these responses, these responses cannot be summed However, at least 73.1% had a positive attitude toward the draft

At the other end of the attitude spectrum, at least 27.9% had a negative attitude This proportion checked the response category, "it is a shameful thing to force anyone to do what he does not want to do"; 22.5% checked "it is unfair to call some and leave others to do what they please; it would be all right if everyone had to serve"; 8.2% checked "it is a means of political discrimination against those whom the system does not like."

Relatively ambivalent responses were given by some students; 61% checked the "middle-of-the-road" response, "it is an unfortunate but necessary way to provide for the defense of the country." Since at least 51% checked a hard core positive or negative response, at least 14% were not entirely consistent.

An additional probe concerning attitudes was made using the question, "which, if any, of the following would you do rather than serve in the armed forces? (Assume you could be sure not to serve; check all that apply.)" The following percentages of students checked various responses. (Please note that these are not mutually exclusive; that is, a student could check more than one response.)

%	Response
42.7	nothing at all solely to avoid serving
24.7	change my job plans to a deferred job at about the same salary level
12.3	change my job plans to a deferred job at a lower salary level
8.9	fake an illness or injury
6.0	arrange to be genuinely ill or injured
2.2	lie about my religious or moral beliefs
9.5	leave the United States for life
.4	commit a crime and go to jail or prison (to get a criminal record; this does not refer to the crime of draft-refusal)
6.9	go to jail for draft-refusal
23.1	stay in college as a permanent student

The replies show that more than half of these young men would take evasive action of one type or another if they could be sure that it would result in exemption from service. However, the largest proportion to check any single category (42.7%) checked "nothing at all solely to avoid serving." The other responses ranged from a few who would even be willing to commit criminal acts to a substantial number who would change their occupational plans, and an almost equal number who would be willing to become permanent college students.

Discussion

There was definitely considerable ambivalence about the draft as it existed in 1971, and considerable opposition to it. If popularity is a necessary condition of a "satisfactory" social element, then the military draft is unsatisfactory. On the other hand, most of these students appeared willing to obey the draft law, if not to like it.

The lottery appears to have been slightly more popular than the draft system it replaced. It did not have overwhelmingly endorsement, however. Opposition to it seems to have been opposition to a draft per se rather than opposition to this kind of a draft.

We concluded on the basis of our 1971 study that there was little chance that the elimination of the draft would substantially cut college enrollments. Our study convinced us that "draft avoidance" was a minor reason for college attendance, which actually influenced only a few marginal students (where marginality may refer either to motivation or to capability) who probably were getting less from college than most others.

College enrollments have continued at a high level since the end of the draft, which tends to support our conclusion. At the same time there is little doubt that participation of the USA in the unpopular Viet Nam conflict was one of the major causes of student unrest on major university campuses. The changed social and political climate that has followed withdrawal of American forces from Viet Nam attests to the validity of this conclusion.
14. Strategies ofr sociological research in ed. systems

14. STRATEGIES FOR SOCIOLOGICAL RESEARCH IN EDUCATIONAL SYSTEMS[22]

In recent years, many sociologists have conducted research in educational systems, especially in secondary schools (67:184-299).

It may be anticipated that the number and scope of sociological investigations in the field of education will continue to expand. As this occurs, we can also expect that more sociology courses will be incorporated into the curricula of colleges of education. This may lead to the incorporation of sociological perspectives and methods into researches conducted by professors of education and by candidates for advanced degrees in education.

A description of some of the strategies that have been developed and used with reasonable success by rural sociologists at Washington State University may interest readers who plan to conduct sociological research in educational systems.

Relations Between Investigator and Respondent

Most studies in school systems use questionnaires. The use of a questionnaire for obtaining or recording information may be conceptualized as a simple dyadic (or pair) relationship between a single investigator and an isolated respondent, a relationship that is repeated for each re-

spondent. Most samples are drawn on the premise that respondents are independent of each other. This is sometimes but not always the case.

Where there is a dyadic relationship between investigator and respondent, reasonably free from extraneous influences, it is possible to maximize the rate of response by following a strategy suggested in an earlier article:

It is suggested that motivations to respond can be increased, if not maximized, by conscious effort on the part of the researcher to:

1. establish an image of social utility of the survey in terms of the value system of the society, group, and/or community under study,
2. emphasize the special role of each respondent in making possible the attainment of the maximum social utility by the survey (9).

Following these principles and using at least two follow-ups, my colleagues and I consistently obtained responses to mailed questionnaires ranging from 70% to 99%. Response rates in interview studies were generally from 90% to 95%.

An experience with a questionnaire mailed to a sample of the Washington State University faculty in May 1962 provided dramatic evidence that the dyadic model is not always applicable when survey research is attempted within social systems where the intended respondents are in interaction with each other. Of course, it should be obvious to a sociologist that this is true, but sometimes we do not apply our sociological concepts when we function as statisticians. In our study of the WSU faculty, we selected our sample by taking the name of every second faculty member from a list (after a random start), plus all deans and department chairmen. We asked our respondents to answer the questionnaire without conferring with any other faculty member. The questionnaire dealt with a number of facets of university policy and practice as well as attitudes toward various aspects of higher education. On page 2 a question asked faculty members to rank the schools and colleges of the university in terms of prestige. The questionnaire was a group product, but it went out over my signature. We had taken the precaution of clearing the study with the Dean of Faculty and the President of the university, but we did not ask them to endorse it. Our letter to the faculty members simply stated that the administration knew that the study was being made.

As soon as the questionnaire reached the faculty, the phone began to ring. Some professors called my dean. Some deans called the President and I received a number of letters of protest, most of which objected to the question on prestige of schools and colleges. It was evident that many faculty members did not honor our request that the questionnaire be answered without consultation with others.

The conceptual model clearly should have been that professors are members of small social systems (e.g. departments) and that many of them interact frequently. Three groups of professors associated with three deans evidently reached group decisions, for all declined to respond. I was told by a friend that the faculty of one department discussed the questionnaire and, as he put it, "the decision was close, but we decided that we would respond."

After two follow-ups, we eventually obtained completed questionnaires from 77% of those to whom the questionnaire was mailed. This experience indicates clearly that we cannot sample members of a social system as if they were independent one from the other like the red and black balls in the classic urn. We need to apply sociological concepts in sampling and in data collection as well as in the formulation of our substantive hypotheses.

Relationships with Public School Systems and Their Communities

When we make studies involving the use of questionnaires or interviews within a public school system, it should be obvious that we are not dealing solely with the relationship between the investigator and a student, although this relationship is certainly of central importance. We are also involved with the school and we cannot afford to be insensitive to the probable impact of the study on relationships between the school system and its community. Subsystems that are involved include the school board, various organizations concerned with educational policy and practice, and, of course, the parents of the students who will be asked to respond.

In designing our strategies, we conceptualized school administrators as gatekeepers. We knew that to have access to students in the school setting, it was necessary to gain their consent and explicit approval. In Washington, as in most states, the superintendent serves at the pleasure of the school board. He does not have tenure in his position. Consequently, he is likely to be apprehensive about any investigation that delves into intimate details of family relationships, obtains names of students, requires access to confidential school records, or has any other features that may give rise to controversy. Consequently, in designing a study, an investigator should consider the probable reactions of the gatekeeper. In some cases it may be necessary to give superintendents, principals, research officers or others an opportunity for prior review of the questions.

The apprehensions of school administrators are not without foundation. In the late 1960s, a concerted nationwide attack was made on mandatory psychological tests. Many individuals and some organizations, including the Washington State Grange, supported legislation to prohibit mandatory psychological testing in the public schools. In the nomenclature used in the public schools, a questionnaire is a test. Little, if any, distinction is made by teachers between psychological and sociological investigations. In our experience, school administrators generally were not opposed to tests or questionnaires; they use them for various purposes, and usually object only if they think the tests or questionnaires might get them into trouble in the community.

An experience with an aroused group of citizens, including members a right-wing group in an eastern Washington community in 1963, illustrates rather dramatically some of the problems that may be involved in doing sociological research in school systems.

This community is in a county that had been selected as a "pilot" county for the Rural Resources Development Program sponsored by the federal government and Washington State University. We had made a study in this county in 1958 that involved interviews with approximately 10% of all families and administration of a questionnaire to all the high school and junior high school students ((grades 7-12 inclusive). The questionnaire dealt mainly with activities and interests of students but it also included a substantial number of questions dealing with various aspects of family life. This questionnaire was anonymous. No difficulty was encountered in either aspect of this study. The data were analyzed and reports prepared. These reports were used by the county resource Development Council in preparing plans for development and the Council formally requested us to repeat the study after 5 years.

The 1963 restudy also involved interviews with sample families and the administration of a questionnaire in high schools. The questionnaire resembled the earlier one in some respects but differed in that it asked for names of respondents.

In the interim between the two studies, a factional dispute had developed over scholarship standards in one high school. One faction argued that standards should be raised and the other was opposed. As a result of this dispute, the dissident faction, those who opposed the introduction of higher standards, circulated a petition for the recall of the school board and the school board was recalled. The County Superintendent then appointed an interim board.

When I went to the county to make arrangements for the restudy I learned about the controversy. I asked the county extension agent and the local school administrators if they thought any problems would result from administration of the questionnaire in the high school. They both said that they did not foresee any difficulty, although the school administrator did ask for a justification for obtaining the names of students.

The administration of the questionnaire went smoothly and I personally picked up the completed questionnaires as well as all blank copies.

On Friday, two days after my return to Pullman, I received a long distance telephone call from the county extension agent informing me that the local PTA would like to sponsor a discussion of the study and had scheduled a meeting for the following Wednesday evening. He asked if I could attend and I agreed to do so.

Prior to the public meeting, the county agent and I agreed that we would present some charts showing factual information that had been obtained from the 1958 study and indicate how it had been used by the Resource Development Council. The meeting was held in the school gymnasium and about 100 people attended. We presented the factual information and things seemed to be going very smoothly.

After we finished the presentation, the fireworks began. Several people rose to condemn the collection of information that they regarded as subversive to the authority of the parents over their children. Others expressed the view that this study might be a prelude to communism. Still others sought to determine who authorized the study; they attempted to find out exactly when this was done and in what manner.

Next the questioning shifted to the subject matter and I indicated in general terms the broad subject areas which were included in the questionnaire. However, I declined to discuss the details of the questionnaires at that time, explaining that I had only a limited number of the questionnaires with me and that I did not think that it was possible to have a rational discussion of detailed questions with a hundred people. However, I did offer to meet with a delegation elected or appointed by those in attendance or with small groups of 5 or 6 on the following day on Friday morning. Further efforts were made by some persons to persuade me to enter into a discussion of the details of the questionnaire that night. One person made a proposal that one of the three clergymen present be asked to read the questionnaire question by question. However, I again declined to enter into any such arrangements and repeated the offer to meet with small groups the following day.

During the course of the meeting, various persons arose and quoted questions listed in a reprint from the Congressional Record for October 10, 1962, that they considered objectionable. Following this, one individual read a series of statements copied from our 1958 questionnaire that he considered extremely undesirable. I informed the group that the specific statements that he read were not included in the 1963 questionnaire.

Most of the members of the audience were silent. However, the school principal and the superintendent both defended the survey as being of potential value to the community and to the advancement of science. One citizen made a statement deploring the attack on me; he pleaded for moderation, tolerance and support for the survey on scientific grounds. I learned later that he was a local business man.

However, his statements had no immediate influence on the tone of the meeting. Two persons hinted broadly that the questionnaire was probably inspired by communists. They asked if those responsible for the study were building a file of information to be used later for sinister purposes.

The question was then raised as to whether the identification cards of students could be returned if parents requested it. I indicated that might be possible. At this point one of the ministers said, "I am not saying that we can't trust this man, but I want to point out that it would be quite easy for duplicates to be made of the cards before being returned."

A motion that a delegation be appointed to meet with me the next day was voted down almost unanimously. At this point, someone insinuated that I might change the questionnaires prior to such a meeting. Further efforts were made by members of the group to arrange for a discussion of the details of the questionnaire that evening and these proved to be of no avail. Then it was proposed that a copy of the questionnaire be given to the PTA president so that I could not "change the ques-

tions overnight" and that persons who were interested in discussing the questionnaire in detail with me on Thursday or on Friday morning should sign up as to what time they wanted to meet with me. The meeting was formally adjourned and this was done.

I met with two small groups on Thursday evening. The line of questioning to which I had been subjected at the public meeting was continued but with less vigor and I was given an opportunity to explain why certain questions had been included in the questionnaire. One man brought a tape recorder to make a record of the discussion. I declined to be a party to this procedure and the man did not insist after I told him I didn't trust him. Few of those who came to the small group meetings on Thursday said that they were offended by the content of the questionnaire after they reviewed it. However, some said they were quite concerned about the possibility that someone at a later date might ask the students questions that were more objectionable.

On Friday morning at 8 o'clock, I met with four members of the school board. This meeting was also attended by one of the local ministers who had been an active participant in the general meeting Wednesday evening. The members of the board apologized to me for the treatment I had received from persons at the public meeting. They also expressed the view that the information requested was valuable and that they did not feel that the questionnaire represented a threat to anyone. The minister, however, continued the type of questioning that he had pursued at the public meeting, stating that he believed that many of the questions raised doubts in the minds of students about the adequacy of their parents. Much of this conference was devoted to an acrimonious interchange of opinions between members of the board and the local minister. At one point they asked him if he thought that he was their conscience.

During this conference, one of the board members said he thought some parents would try to gain possession of the questionnaires filled out by their children. This warning led to a decision to destroy the name cards and to inform the cooperating school that this had been done. The destruction was accomplished in the presence of witnesses. This action was taken primarily because I concluded, after discussing the matter with the county extension agent, the school board and other responsible people that we had not got an adequate clearance for obtaining names in this particular study. I reported the incident and the decision to destroy the name cards to my dean and to the President of the university because I felt that they should be informed in case someone subsequently reported some aspects of it to them out of context.

We drew two lessons from this experience. First, we concluded that it is sometimes essential to make contact with community leaders and to obtain their consent for a study. However, as outsiders, we do not ordinarily have access directly to school boards or community leaders, and usually find it necessary to make our approach through the school officials. Where a division of the type I have described already exists in a community it might be advisable to avoid the community for the time being.

Second, we decided that in the future studies we would give greater emphasis to the voluntary nature of the responses made by the students. In 1964-66, we conducted two statewide studies in 57 schools and encountered no problems, even though we obtained names of all participants in both studies.

Relationship with Superordinate Systems

We may find ourselves involved with other social systems that have an interest in education. These include other departments of the university, the State Department of Public Instruction, professional associations, and the U.S. Office of Education. Within each of these social systems, we have had to deal with one or more individuals, some of whom have supported us fully while others have been hostile. Still others have been friendly but apprehensive.

James S. Coleman and his colleagues made a nationwide study that formed the basis for the report *Equality of Educational Opportunity*. They were able to gain the cooperation of only 56% of the school systems selected for study (14). This poor record was achieved in spite of the fact that the survey was authorized by an act of Congress.

Apparently, a substantial number of educational administrators and school boards were antagonistic toward federal involvement in public education. Objections raised by superintendents in various parts of the United States induced the president of the National Association of School Administrators to send a telegram to all of the participating schools stating that the National Association of School Administrators did not specifically endorse the study and was leaving the question of participation to the judgment of individual school administrators. This action certainly did not increase the rate of response.

In a statewide study in 1964-65, we cleared our questionnaire with the office of the State Superintendent of Public Instruction and his research officer indicated interest in the findings. At one point, the research officer said he might ask the State Superintendent to write a letter endorsing the study, but this never materialized. We concluded that the potential benefits from the letter were probably perceived to be less than the potential risk.

In another statewide study in 1965-66, our contract with the Office of Education required us to submit our questionnaires to their Washington, D.C. headquarters for approval under the Federal Reports Control Act. It took about 5 weeks to get clearance, and the Office of Education objected to a few of the questions. Our time schedule was such that we were unable to present a defense of the questions they challenged and persuade them to reconsider; one of the challenged questions was "Who was your mother's favorite child?"

Since the challenged questions were not central to the main thrust of our investigation, we simply deleted them and went ahead. We learned later through informal channels that some officials of the Office of Education were also apprehensive about the possibility of adverse

community reaction to some of our other questions that dealt with family values and relationships. As it turned out, we met no problems of this sort, nor any other unusual problems in the administration of this particular questionnaire.

The point is that it is often necessary, when doing sociological research in educational systems, to obtain approval from officials of superordinate social systems.

Administration of Questionnaires and Interviews within School Systems

Some investigators prefer to administer their classroom questionnaires themselves. We tried this a couple of times. Our experiences indicate that there are advantages to using classroom teachers for administration of questionnaires that are filled out by substantially all students of a particular class, grade, or school system. The most important advantage is the fact that the teacher is already in charge and is able to communicate effectively with students. Another advantage is that costs are lower and many students can be contacted simultaneously. We once administered 5,000 questionnaires during a single class period.

Several years ago, we tried administering classroom questionnaires ourselves, but ran into some very difficult problems. In one school in 1963, all students were brought together in the school auditorium and our representative tried to explain the questionnaire and get the cooperation of the students. The school authorities stepped aside—in fact, they weren't even in the room—and the result was bedlam. Students threw spitballs and misbehaved in other ways.

Another disadvantage of outside administration is the amount of manpower required. My conclusion is that it is desirable wherever possible to have the questionnaires administered by regular classroom teachers in lieu of their class for a particular period.

In administering a questionnaire in a classroom, we ordinarily provided a statement for each teacher to read. Among other things, the statement made it clear to the individual students that they were not required to participate in the study unless they wished to do so. In this statement and also in the letters that we wrote to the prospective respondents, we made a case for participation following the two principles cited earlier.

In the 1964-1966 studies, which were supported financially by the U.S. Office of Education, we paid an honorarium to the principal or to someone designated by the principal to act as our representative. We mailed this representative the questionnaires, together with a set of instructions to give to the classroom teachers. We also had this person collect the name cards and the completed questionnaires and mail them back to us. This arrangement helped us to penetrate the social systems of the school by making use of its own personnel and its own channels of communication.

Since one cannot be certain that all participating school personnel will be enthusiastic about the study, there is, of course, some risk in this. There is always a possibility

that use of the power structure of the school may lead to response problems. Unless steps are taken to convince students that teachers will be unable to identify the questionnaires of specific students, responses to certain questions may be faked.

In one school, we learned that a low response rate was due to the communication to students of a negative appraisal of the study by a teacher. We attempted to meet this problem as follows: we did not provide much latitude for comment by the classroom teacher and we always included with the questionnaire a letter addressed to the student in which we explained the probable value of the study and made a plea for cooperation, following the two principles mentioned earlier.

We attempted to assure the gatekeepers and the respondents that the information obtained by the questionnaire or by interview would be kept confidential. We developed special techniques for handling data to insure confidentially. We used a punch card that bore the same identification number as the questionnaire. Students were asked to enter their names and addresses and pass the card to the front of the room where they were placed in an envelope which was then sealed. We first used this technique in 1961 and except for the reaction in one community described earlier and a misunderstanding in a nearby school in 1965, we had no problems in obtaining names; neither were we requested by irate parents or others to divulge the responses made by individual students.

To honor the pledge of confidential handling of responses made to the student, we decided that we would refuse to divulge answers by a student to a parent or to school officials. If we had such a demand from a parent, we would agree to destroy the student's questionnaire in the presence of a witness as the WSU Education Department did in their Spokane Dropout Study.

In defense of this position, I would argue that while a parent *may* have a *legal* right to know what his child has said, I do not consider that a parent has a *moral* right to inspect answers to a questionnaire obtained by university social scientists under promise of a confidential handling.

This is an area without explicit legal safeguards. Under current laws, sociologists cannot claim that the information they obtain from individuals is entitled to be regarded as "privileged" in the same legal sense as information obtained by doctors, lawyers, and certified psychologists.

We frequently obtained sociometric information in our interviews. We justified our request for names by asking for information about the persons named. This procedure worked very well. One deficiency is that, since we usually interviewed only a sample, we were unable to obtain sociometric data for all respondents and this made it impossible to identify all members of any small group or organization.

When obtaining information from school records, we also made use of the school organization and personnel. We asked the superintendent or principal to designate some trustworthy individual and we paid this individual for copying the desired information from records in the

75

files. Ths appears to have been a satisfactory arrangement for all concerned parties.

Feedback

If we are to develop a long range program of research involving school systems, it is obviously of great importance to supply school administrators, teachers, and others who are concerned with the schools with timely information relevant within their own conceptual frames of reference.

To fulfill this obligation, we routinely supplied the superintendents or principals and sometimes the counselors in each cooperating school with a report based on findings from the study. Such reports were descriptive and included statistical information showing the distribution of responses made by all students and by the students in the particular school system to selected questions. Usually we were able to supply this information within a few months after completion of the field work. In addition, we supplied comparable information to officials of the State Department of Public Instruction, to the administrative officials of universities and colleges and to others. Ordinarily, reprints of scientific papers or technical publications were not sent to school administrators.

---

15. EDUCATIONAL POLICY AND RURAL REDEVELOPMENT[23]

Since the beginning of the industrial revolution about 200 years ago, the USA and other Western nations have emphasized industrial and urban development. The phenomenal growth of science and technology was a central factor. Applied to manufacturing, this development created a great demand for labor in urban centers. Applied to commercial agriculture, it decreased production labor needs. One of the consequences was a tremendous shift of population from the country to the city (54). In the USA during the last 50 years, about 40,000,000 people made the move on a permanent basis, one of the largest migrations in human history.

Educational policies, mostly implicit, facilitated the migration by placing professional occupations and college training on a pedestal, and in other more subtle ways. The mass media have had an impact too. But before radio and TV, when ideas were communicated largely via personal contact and the written word, the school probably had more influence by raising literacy and planting the seeds of discontent with farming and rural life.

Throughout the period there have been advocates of rural life, including Gifford Pinchot, Kenyon Butterfield and other notables who served on Theodore Roosevelt's 1907-9 Country Life Commission. Some others were Ralph Borsodi, O. E. Baker and other rural fundamentalists who advocated a return to the land during the 1930s. The Congress of the United States has enacted a great deal of legislation intended to help preserve the family farm. The Preemption Act of 1841, the Agricultural Adjustment Act of 1933 and subsequent measures to support farm prices, the Rural Electrification Act of 1936, Farm Credit, Soil Conservation, etc. are among such laws. The family farm was viewed as a desirable way of life and "the seed bed of the nation's population" as well as the basic source of our food and fiber.

Historically, the formal educational drive to modernize the nation's agriculture began with the establishment of the land grant colleges by the Morrill Act of 1862. These colleges, including Washington State Unviersity, have played major roles in the development and dissemination of agricultural innovations. The Cooperative Extension/Services handled a major share of the educational aspects of the diffusion process. Other aspects of diffusion were handled by the resident teachers in the colleges of agriculture, by high school vocational agriculture teachers, by other public agencies and by private firms.

Regardless of declared intent, the net effect of these laws, programs and activities and, in fact, of the technological revolution as a whole, has been to increase the efficiency of agricultural production and concurrently the economic risks of commercial farming. These developments have greatly accelerated the flight from the land.

Recently, due in part to automation, which some social scientists regard as the third phase of the Industrial Revolution, the labor requirements of industry have failed to keep pace with the expanding labor supply. Thus, urban jobs are not as plentiful as in the past. Also, a burgeoning interest in environmental quality has evidently caused many metropolitan residents to have second thoughts about the desirability of living in congested places. Consequently, there appears to be a renewal of interest in the countryside. Up to the present time, this has been reflected, as far as residence is concerned, mainly in second homes at recreation sites, rural retirement residences and a few country communes. In spite of efforts by some members of the Congress to promote the decentralization of industry to rural areas, no comprehensive legislation has been enacted and relatively little progress toward rural resettlement has been achieved.

The rural schools have been quite effective in promoting the assimilation of the descendants of northern European immigrants, many of whom settled on farms. Such schools have been less effective in helping to bring about the assimilation of Spanish speaking people, many of whom are farm workers, and perhaps least effective in the attempt to assimilate American Indians who live on rural reservations.

It is my impression, based on personal experience, research reported in the bulletin, and research reported in the professional literature, that except for high school courses in vocational agriculture few, if any, public schools in rural areas have provided (or now provide) any training that is only applicable to rural living or farm work.

76

A generation or so ago, some of the land grant colleges operated secondary schools of agriculture. I attended one myself for three winters in lieu of high school. But these "aggie schools" have disappeared. The Co-operative Extension Services conduct conferences, short courses and workshops for farmers and rural homemakers; extension also operates the 4-H Club program. Nothing comparable to the Danish Folk School has been established on a continuing basis in the USA.

An Appraisal of Rural Education

There is widespread consensus among educators that the quality of rural education has long been substandard. Robert Isenberg said at the May 1969 Workshop on the Quality of Rural Living, "In view of the direct relation-ship between the quality of education and the quality of living, it can be asserted that rural people have a history of being short-changed" (3). Dr. Isenberg stated that great improvements have been made but the results of the 1969-70 National Assessment of Educational Progress of Young Americans (ages 9, 13, 17 and 26 to 35) sponsor-ed by the Education Commission of the States showed that residents of remote rural areas ranked below the national average in scientific knowledge and skills, although they ranked above residents of the inner city (4).

Note that these negative appraisals are based upon urban standards. There is an implicit assumption, perhaps based upon the history of rural to urban migration, that rural schools should prepare young people for urban life and nonfarm work. There is little doubt that most rural schools have been more effective in persuading youngsters that they will have to migrate than in prepar-ing them to cope with the problems they will encounter in urban environments (25).

But the rural schools do not effectively prepare chil-dren to live in rural areas either. As I pointed out earlier, only the high school courses in vocational agriculture deal with farm work and no formal course work covers rural living as such.

The deficiencies in the quality of rural education noted earlier are attributable partially to personnel problems. Rural teachers tend to be poorly prepared and to have high turnover rates due in large part to low salaries and poor prospects for promotion. Rural school budgets tend to be low because the property tax does not yield enough revenue. This in turn is due to low property values and to reluctance on the part of taxpayers to support expensive facilities, high salaries or expensive educational innovations. It may fairly be said, in my opinion, that it has long been the established policy of most rural school boards to keep expenses low.

Rural redevelopment

At this point, we need to examine critically the concept of rural redevelopment. Parallel to the American indus-trial and agricultural development and large scale migra-tion from the country to the city has been the progressive erosion of traditional rural values, the decline of many small towns and the disappearance of many open country neighborhoods. Blue jeans, once the distinctive apparel

of the farm worker, have been adopted as a status symbol by urban adolescents. Urban amenities including TV, automobiles, and other conveniences are ubiquitous.

There are myriad symptoms of the virtual disappear-ance in the USA of any distinctive rural way of life. To the extent that existing differences in life style are attributable to rural or urban residence, they reflect mainly differences due to settlement patterns (e.g., isolated farm-steads and small towns), to inadequate community facili-ties, and to the relative poverty of the rural dweller which prevents him from buying the same quantity or quality of goods and services as the urbanite (24). Of course, there are subcultures within both rural and urban areas with their own distinctive life styles. Both rural and urban are heterogeneous rather than homogeneous cate-gories.

If it is true, as I believe, that there is not much dif-ference between rural and urban dwellers in life styles or values, what directions should rural redevelopment take? In my opinion, we cannot reconstruct or recapture any essential part of the past. Like humpty-dumpty, the parts cannot be put together again in the old pattern. Shall the new rural community be like scrambled eggs, an amorphous mass, without any distinctive structure?

To a marked degree, government sponsored efforts to promote rural development in the USA have dealt with the use of land and other natural resources. The main thrust has been economic. The creation of jobs through exploitation of natural resources has been stressed. Re-cently, a countervailing interest in conservation of re-sources through more careful management has appeared.

In my opinion, rural redevelopment in the USA (and other industrial countries) should involve:

1. establishment of a viable economic base
2. institution building to provide adequate community facilities and services
3. providing more adequate bases for personal growth —vocational and avocational skills, better nutri-tion practices, self expression, etc.

Educational Policy Changes Needed for Rural Redevelopment

The question at this point is "What changes in educa-tional policies are needed to achieve these objectives?" Let us consider each objective separately, even though we recognize that they are interdependent.

The economic base

There is not much chance that production agriculture will provide more jobs unless energy shortages should force a return to use of draft animals and labor-intensive practices. It is much more likely that there will be fewer production jobs on farms although the jobs that will exist are likely to require skilled rather than unskilled labor. Higher wages and greater job security will characterize the jobs that remain. But there will be fewer commercial farms and fewer jobs for seasonal unskilled workers. There may be more jobs in agricultural processing and other types of agribusiness.

Recreation development may be expected to flourish, especially in areas endowed with attractive natural resources such as sea coasts, lakes, rivers, forests or mountains.

As I noted earlier, many proposals to decentralize industry have been made. The efforts to promote the relocation of industry to rural settings that have been made under various federal programs have met with limited success. The resistance to rural industrial development, including recreation facilities, may be due in part to lack of local understanding of the alternatives. This could be remedied to some extent through appropiate adult education, some of which is already underway.

Institution building in rural communities

As noted earlier, many community facilities and services have disappeared like those in Oliver Goldsmith's *Deserted Village* (and for similar reasons). Writing about the effects of rural depopulation caused by the "Enclosures" he said,

"Down, down they sink, and spread a ruin round
E'en now the devastation is begun,
and half the business of destruction done;
E'en now, me thinks, as pondering here I stand,
I see the rural Virtues leave the land."

Unlike the situation at the time of the "Enclosures" it is no longer essential for every small community to have a full complement of economic and social institutions, if the residents have convenient access to such institutions as stores, churches, hospitals and schools.

Changes in educational policies are probably not crucial to the revival or construction of community service institutions at convenient locations, although education concerning community organization procedures might be helpful. Consequently, the major emphasis in the remainder of this chapter will be on improvement of the quality of education in rural communities.

Improving the quality of education in rural communities

Adult education programs

This is an aspect of redevelopment to which rural sociologists and other university social scientists could contribute directly. This can be done by educating change agents to understand the nature of change in social systems so that the power structures involved can be identified. One needed change in education policy then would be for the Cooperative Extension Services to provide, on a systematic basis, short courses and conferences dealing with this aspect of development.

Structural changes needed in public schools

We should consider changes in policies needed to raise the quality of education in rural areas. These matters are relevant to rural redevelopment in general terms on the premise that an educated citizen can contribute more than one who is not educated. If there is agreement that rural redevelopment should include human resources (people) as well as natural resources, the relevance of education is more specific.

Changes in tax policies

Improvement of the quality of education in rural areas by providing the same types of teachers, school buildings, extracurricular programs and curriculum now available in suburban areas would be expensive. In fact, it would cost more per student than in urban areas. It cannot be accomplished without massive financial assistance from state and federal sources (3). In the state of Washington, a necessary first step would be to stop the current heavy reliance on annual special levies.

This change can be expected to improve the quality of education because it would remove much of the resistance to innovations that tend to be expensive. Our research indicates that most rural parents have high aspirations for their children and most of them realize that their children will have to compete for urban occupations. In many rural communities, however, decisions on tax levies are decided by property owners who do not have any children in school; since increased taxes may seriously reduce the amount of money available to older citizens for family living, they are likely to vote against such tax levies.

Changes in personnel policies

At the present time, teacher turnover in rural schools is exceptionally high. Many rural teachers leave teaching entirely. Most of those who continue to teach soon move to larger schools that provide higher salaries. It is my judgment that we should follow the practice of some other countries and establish a state-supported educational organization to employ all public school teachers and assign them to various locations.

This state school organization should provide salaries, career lines, and fringe benefits on the basis of qualifications and performance rather than size of school. Such a system could remove the economic penalties now involved in teaching in rural schools. If necessary, it would be possible to require all teachers to serve in rural areas for a specified period.

A somewhat comparable model is the Australian Teachers' Service. This national organization provides educational services in the "Outback" as well as in urban areas.

Establishment of a uniform salary scale with appropriate incentives for upgrading of qualifications and for satisfactory performance should improve the quality of instruction, counseling and related work. It should also promote long-term commitments to the teaching profession.

Organization changes

Under the federal constitution, education is a state responsibility. Every American state has a chief school officer who is in charge of a state department of education that is responsible for certification of teachers, curriculum, allocation of state revenues to local districts and some aspects of teacher training. These departments do not have jurisdiction over colleges and universities. The states have delegated many responsibilities to regional, county and local school districts.

Intermediate school districts have been established in Washington. These regional service agencies have super-

seded county school superintendents. These agencies provide specialized services such as instruction materials, diagnostic clinics, data processing, curriculum and staff development programs, vocational and technical education programs (3:73-74). In this way, some of the disadvantages of rural location are being overcome.

As a matter of policy, local school directors in Washington (and throughout the USA generally) have the authority to hire and fire teachers. Although local boards do not have much jurisdiction over the core courses in the curriculum, they do have authority with respect to optional courses and extracurricular programs. Furthermore, and this is very important, local boards have authority to approve budgets. (Budgets are subject to voter approval in the case of expenditures that require local property tax levies that exceed specific limits.)

If the local property tax base becomes of minor importance, as suggested earlier, and if local control over hiring and firing of teachers and administration is surrendered to a state education agency, local boards will lose most of their power. They would probably be retained as advisory bodies, perhaps with veto power over certain types of actions.

Curriculum changes

There is rather wide agreement in the USA that one of the principal functions of the school system is to prepare young people for the world of work. It is not expected, however, that elementary schools or even secondary schools will prepare students to do complicated technical work. Preparation for technical, professional and managerial work is therefore obtained in vocational/technical schools; institutions of higher learning; or in the case of certain occupations such as the construction crafts, through apprenticeship. The public schools *are* expected to provide students with occupationally relevant communication skills and some training in problem solving. In addition, students may be given some assistance in choosing a suitable occupation.

Students of rural to urban migration have found that better educated young people are more likely to migrate than the poorer students. Many years ago, Dr. E. A. Ross noted this loss of leadership. He said (51:57),

... natural leaders are key persons. Not only is it they who start good things, but they keep up to the mark the various agencies which minister to the higher life of the community, such as the church, the school, the debating society, the grange, the rural club. Often one notes a sad slump in the religious, social and recreative life of the neighborhood after a few families of unusual ability have moved away. ... one comes upon communities which remind one of fished-out ponds populated chiefly by bullheads and suckers.

I cannot agree with the view that the people who are left behind have no capacity for leadership, since I believe that most people can perform local leadership roles if given an opportunity. However, this "purple passage" dramatizes an important issue. For adequate development,

rural communities do need competent occupational specialists, including government officials, teachers and organizational leaders. We must look to the educational system to provide much of the necessary training.

An essential aspect of the process of occupational development for males and females who are going to enter the paid labor force is early selection of a suitable occupational field. This must be followed by relevant education. Existing policies to provide occupational guidance are seldom adequately implemented. This especially true in rural school systems, which may not have full-time or adequately trained vocational counselors. A possible solution to this problem is an approach that might be called occupational guidance through the curriculum in all grades K-12 (31). This approach draws virtually all teachers into the guidance process by encouraging them to emphasize the occupational relevance of their subject.

Such an approach should be coupled with the view discussed in detail later, that ability is not severely restricted by genetic factors but is created in response to opportunity and encouragement by "significant others" and developed through experience. This approach and belief have the potential for rescuing and rehabilitating many school failures and converting them into effective workers and citizens.

Economic aspects of development are affected greatly by the range of trained occupational specialists and community leaders available to perform useful work. It is reasonable, in my opinion, to take the position that Robert E. L. Faris did in his presidential address to the American Sociological Association in 1962—that universal education in the USA has added a whole new dimension to our national capacity. In his words (22):

... the nation is quietly lifting itself by its bootstraps (through education) to an importantly higher level of general ability — an achievement, which though less dramatic than a space voyage to the moon and less measurable than the Gross National Product, may mean more to the national future than either.

To the extent that rural communities resemble the fished-out ponds that E. A. Ross wrote about, human resources are not being developed adequately. There is no fundamental reason, so far as I know, why the quality of education or of life generally should have to be inferior in any community, rural or urban. The courts have held that equality of education is a national policy required by the constitution. The problem is that the policy has not yet been put into effect in much of rural America.

Educational policies affecting personal development

As a society, Americans have not given much attention to the processes of personal development. We have been and continue to be more interested in the development of technology and the exploitation of natural resources.

There are some indications, however, that we may have reached a major turning point. Technological change is no longer automatically classified as progress. Environ-

mental protection has become a paramount issue. Consumer protection, following the lead of Ralph Nader, has become ubiquitous. Sociology and the other social sciences are popular on college campuses.

Arthur Jensen (33) recently provided considerable support for the widely shared view that the principal determinant of intelligence (defined as abstract reasoning ability) is heredity. Nevertheless, the contrary view, that environmental factors are more important, appears to be gaining. It will not be possible here to discuss the details of this controversy, but since it is relevant, I will make my position explicit. In my judgment, genetic factors do establish rather broad limits to personal development. However, I also think that environmental factors, especially the social environment, are of paramount importance in determining the extent and nature of personal development, including the ability to handle abstract concepts. The social psychology of George Herbert Mead as applied to education by Brookover and Erickson (11) provides a challenging theoretical perspective for stimulating personal development through the conscious efforts of teachers and other socially significant persons.

However, I believe that it is not only possible but desirable to go beyond dyadic (pair) exchanges and to involve, at the cognitive level, the collective power of reference groups to direct and control the behavior of members. The model that I have in mind is the traditional farm family in which father, mother and children all collaborated in mutual socialization of all members. I see no reason why school-related groups should not do essentially the same thing. According to Urie Bronfenbrenner, the Soviets have built this type of socialization into their educational system. He says that the Soviet schools are able to use the power of the peer group in a constructive way. Thus, whenever groups of children are together, they are likely to be engaged in constructive activities. In contrast, American unsupervised juvenile peer groups are likely to get into mischief (19). Most Americans have been taught to abhor the values and practices of communism, but this should not cause us to believe that all of their innovations are without merit.

James Coleman (14) suggested more use of peer groups in ways supportive of the educational process. He subsequently designed some learning games to accomplish this objective.

So far as personal development potential is concerned, I do not see any fundamental difference between rural and urban schools. The goal of such development, so far as the educational system is concerned, should be to encourage and assist individuals to develop their abilities so that they can win recognition for achievements valued by society, by their reference groups and by individuals who are important to them.

Following this line of thought I would like to suggest two things. The first is that parents, especially parents of very young children, should be encouraged to participate more actively in education by giving recognition for educational achievements of their children.

Research by sociologists and others indicates that educational values and achievements of children are positively influenced by favorable recognition (rewards) from parents and other persons (significant others) who are important to them.

Many children are apparently defeated during the first year or two in school. Subsequently they view themselves as unable to succeed as scholars. Consequently, it seems imperative that major efforts be made to provide additional social reinforcement at that time.

My second suggestion is that teachers be encouraged to make more use of immediate recognition and other rewards (operant conditioning) as a means of stimulating children to greater achievement. Experimental work by Dr. Bruce Chadwick in this state with children from farm worker families and with American Indian children showed that even children from disadvantaged families can be motivated to higher levels of educational achievement within a system that provides immediate tangible rewards for such achievement.

Concluding Remarks

What I am arguing for is parity with suburbia. As I indicated earlier, I do not favor a neo-agrarian policy. Paraphrasing a TV commercial on driving, "let's make rural living a good thing again," but not by trying to return to the horse and buggy. I was reared on a farm where the main power sources were horses and men. Some people may be nostalgic about such farms. I am not. I remember the hard, monotonous dirty work. There must be a better way.

16. RETROSPECT AND PROSPECT

When I was young the conventional wisdom about human development was frequently expressed thus, "The boy is father to the man," meaning that early socialization determines subsequent behavior tendencies. Since the advent of the women's right movement we might have to revise the statement to remove its sexist tone and say that a child develops into an adult. However phrased, the basic idea that adult behavior is influenced by early socialization in the family, the peer group and the school has wide acceptance.

Our studies have not provided any substantial basis for challenging the view expressed above, but neither do they support the extreme view that family, peer group or school influences are the sole or even the principal determinant of subsequent behavior. Instead, it appears that the values, knowledge and behavior norms that are transmitted by family of origin, adolescent peer group *and* school should be regarded as important but partial guidelines. Other important guidelines are transmitted by the media (especially TV) from diverse sources, nearly all of

which are external to specific families, peer groups or schools. For adults, spouses, children, interest groups and organizations, work organizations and other individuals and social systems may influence current attitudes and behavior more than do the sub-culture of family of origin, adolescent peer groups or schools. One who seeks to understand human behavior cannot afford to disregard salient aspects of the general social climate (illustrated by the complex configuration of events called to mind by the Viet Nam conflict, the so-called sexual revolution, Watergate, recession, and the equal rights movement) or the specific economic or social situations to which a person must react.

Thus, we cannot find the specific sources of the student unrest of the late 1960s and early 1970s in the early socialization of the college students involved. We could not have predicted what happened during this unsettled period either from our studies of high school students in the mid 1960s or from our observation of the behavior of earlier cohorts of college students. The unrest appears to have been triggered by resistance to the Vietnam conflict, which in turn was precipitated by the draft, which plucked many young men from their normal pursuits and sent them off to fight and perhaps to die in an unpopular war.

Another precipitating factor in student attacks on "the establishment" apparently was the civil rights movement, which developed a cadre of experienced organizers and identified a cause. However, it is highly probable that an important background factor is the widespread practice of family democracy documented by our studies. Such families led young people to expect an active role in many decisions outside their own families.

Another important source of discontent with established procedures, statuses and allocation of privilege, in my opinion, is the educational system and ultimately science as an institution. The basic approach of the scientist is to test the validity of presumed scientific laws or principles. The colleges and the public schools have disseminated this approach widely. The result is that a person socialized in our educational system is trained to be skeptical about the validity of traditional norms. In my opinion, this skepticism has been extended to all traditional norms. This attitude has been reinforced by encounters with norms of people of different ethnic backgrounds.

Contrast this with the results of socialization by a society with a central dogma that cannot be questioned without personal risk. Ancient, Medieval and even contemporary societies provide many examples of such dogma ranging from Catholicism during the Spanish Inquisition to National Socialism under Hitler and Communism under Stalin.

There was a tremendous upsurge in the proportion of high school students who aspired to attend college during the decade 1954-64. Subsequent data on college attainments from the 1971 follow-up study indicate that the majority of the 1964-66 students who aspired to attend college eventually did so, although many had not graduated by 1971. By 1974-75, college enrollment had reached such a high level that the great majority of young men

and women in Washington, as in many other American states, will have had some college work before they enter the labor force on a full time basis. Many do not graduate, but there are more people with high educational qualifications than positions that require such qualifications. This is especially true of teaching and other social service occupations. Medicine and engineering apparently are not overcrowded.

Most people now work for organizations, especially large organizations and the demand is for specialists rather than for generalists. There are still a few opportunities for self employment. However, the Census of 1970 reports that less than 10% of the Washington labor force was self employed. In our 1971 follow-up study, nearly all of the employed persons who responded were employees rather than entrepreneurs.

Increased longevity, fewer hours of work, early retirement and other developments all suggest that the educational system will probably be expected to provide avocational as well as vocational training for persons of all ages. This already occurs to some extent; the community colleges provide many such courses, even in remote locations.

The follow-up study did not provide much support for the view vociferously expressed by Randall Collins, Ivan Illich and a number of other opponents of "the establishment." They say that the educational system favors students who come from middle class and upper class families (3). It appears that for those who enter college, the depressing effect of low family SES tends to disappear. It is true, however, that some young people from low income families are apathetic about school. However, many were more optimistic about their chances for success than would be expected (41).

We found considerable evidence in our studies that many teachers apparently took relatively little interest in the educational or occupational career prospects of their students (65). To some extent this was probably due to large classes and heavy teaching loads. But in my opinion, it was partially attributable to an emphasis by high school teachers upon communicating factual information to students rather than helping them, to develop as persons.

In the Rural study, we found considerable support for the view that the values and norms of adolescent peer groups strongly influence certain types of behavior. These peer groups are seldom regarded as constructive resources for socialization of young people in our society. This is unfortunate. The experience of the U.S.S.R. reported by Bronfenbrenner (10) and the suggestions for using peer groups for constructive purposes made by Coleman (14) should not be disregarded if and when early socialization programs are redesigned.

The study of delinquent-type behavior reflected by 1958-61 data showed that nearly all of the boys and girls who responded admitted that they had engaged in overt behavior that is illegal or contrary to the standards of morality presumably endorsed by adults in our state and nation. We did not repeat these studies, but there is little doubt in my mind that the behavior of today's

adolescents would not conform more closely to current laws and moral standards.

The data suggest that those who are labeled by the courts as delinquents or criminals do not differ in kind from their peers; rather they are the ones who are caught and convicted. Perhaps they lack protection provided by a prestigious parent. It appears that early socialization by the family of origin, peer groups, schools, churches and by other informal groups or organizations does not produce enough conformity to legal and moral proscriptions to remove the need for external agencies of social control such as police, courts and prisons.

Our studies fail to show any strong thrust toward the redefinition of female roles along the lines advocated by the leaders of the women's rights movement. In the mid 1960s, high school girls in our studies showed little interest in competing with men for traditionally male occupations. In fact, they overwhelmingly rejected many of these occupations and showed strong preferences for the occupations that traditionally have been regarded as women's work such as nursing, secretarial work and elementary teaching. Very high proportions indicated that their basic orientation was toward marriage and a subsequent career as a wife and mother.

The 1971 follow-up study revealed that a high proportion of these girls were already married by that time. Not many of these young married women showed any interest in assuming the main provider role. However, many of them were employed part time or full time, and thus shared the provider role.

After reflecting on the successes and failures of the public secondary school system of the state as reflected in these studies, it seems to me that the record is generally very constructive. However, there is some room for improvement and I have offered some concrete suggestions in chapter 15.

Prospects

We have every reason to expect that rapid technological changes will continue in the future, although the emergence of energy shortages and environmental concerns makes it probable that we cannot expect continued expansion of high energy technology. It is more likely that American levels of consumption will shrink. If this should happen, it will have profound consequences for occupational careers and other aspects of our life styles.

Woman will probably continue to enter the labor force in increasing numbers. Many of them will compete more vigorously than in the past for high status occupations and high level organizational positions. If the economy should fail to expand, there will be fewer desirable places in the world of work for men. Essentially the same employment consequences are likely to result from the current drive for true equality in employment for Blacks, Chicanos, and native Americans (Indians). The ramifications of the women's rights movement are likely to be the most profound, for the redefinition of women's roles affects not only the world of work but also many aspects of family life.

The full consquences of developments such as those mentioned in the two preceding paragraphs cannot be predicted accurately on the basis of research such as we conducted during the last quarter of a century. Then why do it? I would suggest two reasons. First, the findings of survey research can sometimes be used in the formulation of policies by specific social systems such as universities, school districts or state school departments. Second, the information obtained can be helpful in understanding the attitudes and behavior of the respondents as an age cohort, both while they are in school and later. In this connection, I would urge organizations and individuals who are concerned about education, work and society to make longitudinal studies to ascertain how persons who have been socialized into various subcultures or have had certain educational and other experiences develop as they move through the life cycle.

During most of the time that I conducted sociological research, social experiments were taboo. There is evidence now that some experimentation is permissible. In my opinion, this opens up a whole new vista of opportunities for sociologists to participate actively in building new social structures and in developing more desirable educational and other procedures. As I see it, the opportunities that are now appearing at least potentially permit sociologists:

1. to join with other social scientists in designing more desirable alternatives based on social theories
2. to participate in evaluation studies designed to test the effectiveness of such theories.

LITERATURE CITED AND REFERENCES

1. Abrahamson, Stephen. 1952. School rewards and social class status. Education Res. Bull. 31. P. 8-15.
2. Alexander, Norman C. & Ernest Q. Campbell. 1964. Peer influences on aspirations and attainments. Amer. Sociol. Rev. 29 (Aug.): 569-575.
3. Agricultural Board, Ntl. Research Council, Ntl. Academy of Sci. 1971. Proc. workshop on the quality of rural living. Washington, D.C.
4. Amer. Assn. for the Advancement of Sci. 1972. Bulletin. Feb.
5. Backrack, Stanley B. & Harry M. Scoble. 1967. Mail questionnaire efficiency: controlled reduction of non response. Public Opinion Q. (Summer):265-271.
6. Baldwin, B. T., Eva A. Fillmore & Lora Hadley. 1930. Farm children. Appleton-Century.
7. Berg, Ivar. 1970. Education and jobs: the great training robbery. Frederick A. Praeger, New York.
8. Bierstedt, Robert. 1957. The social order. McGraw-Hill, New York. P. 158-160.
9. Bowles, Roy T. & Walter L. Slocum. 1968. Social characteristics of high school students planning to pursue post high school vocational training. Wash. Agr. Exp. Sta. Bull. 702.
10. Bronfenbrenner, Urie. 1970. Two worlds of childhood. U.S. and U.S.S.R. Russell Sage Foundation, New York.
11. Brookover, Wilbur B. & Edsel L. Erickson. 1969. Society, schools and learning. Allyn & Bacon, Boston.

12. Buchman, Jerald G. 1971, 1973. The draft, military service, and national unity. Ch. 12 of David Gottlieb [ed.] Youth in contemporary society. Sage Publications, Beverly Hills, Calif.

13. Christiansen, John R., James D. Cowhig, & John W. Payne. 1962. Educational and occupational aspirations of high school seniors in three central Utah counties. Brigham Young Univ. Social Sci. Bull. 1

14. Coleman, James S. 1961. The adolescent society. The Free Press, Glencoe, Ill.

15. ——— et al. 1966. Equality of educational opportunity. U.S. Govt. Printing Office, Washington, D.C.

16. Collins, Randall. 1971. Functional and conflict theories of educational stratification. Amer. Sociol. Rev. 36(6).

17. Congalton, Athol A. & Walter L. Slocum. 1972. Social characteristics of potential nurses. Australian Nurses J. 68 (April).

18. Deutscher, Irwin. 1960. Some relevant directions for research in juvenile delinquency. In Casework Papers, 1960. Family Service Assn. of America, New York.

19. Drown, Frank S & Thomas Moynahan [eds.]. Forty-sixth annual report of the municipal court of Philadelphia, 1959.

20. Duncan, O. D. & Peter Blau. 1967. The American occupational structure. John Wiley & Sons, New York.

21. Elder, Glen H., Jr. 1963. Adolescent achievement and mobility aspirations. Chapel Hill at North Carolina, Inst. for Research in Social Sci. 1962. Achievement orientations and career patterns of rural youth. Sociol. of Educ. 37(II).

22. Faris, Robert E. L. 1961. The ability dimension in human society. Amer. Sociol. Rev. 26(6).

23. Flanagan, John C. et al. 1964. The American high school student. Project Talent Office. Univ. of Pittsburgh, Pittsburgh.

24. Ford, Thomas R. & George A. Hillery, Jr. 1968. Rural community institutions and poverty with special reference to health and education. In Rural poverty in the U.S. U.S. Govt. Printing Office, Washington, D.C.

25. Fuller, Varden. 1970. Rural worker adjustment to urban life, an assessment of the research. Policy papers in human resources and industrial relations, 15. The Inst. of Labor & Industrial Relations, Univ. Mich., Ann Arbor.

26. Ginzberg, Eli, et al. 1951. Occupational choice. Columbia Univ. Press, New York.

27. Guttman, Louis. 1950. Measurement and prediction. In Samuel A. Stouffer et al. Studies in social psychology in world war II, vol. iv. Princeton Univ. Press.

28. Haller, Archie O. & C. E. Butterworth. 1960. Peer influences on levels of occupational and educational aspirations. Social Forces 38(4).

29. ——— 1963. Educational and occupational choices of farm youth. Ntl. Committee for Children & Youth. Washington, D.C.

30. Havighurst, Robert J. & R. Rogers. 1952. The role of motivation in attendance at post high school educational institutions. In Byron S. Hollingshead, Who should go to college. Columbia Univ. Press, New York.

31. Hilverda, Eva & Walter L. Slocum. 1970. Vocational guidance through the curriculum in a small rural school system. Vocational Guidance Q. Sept.

32. Illich, Ivan. 1971. The alternative to schooling. Sat. Review (19) June.

33. Jensen, Arthur. How much can we boost IQ in scholastic achievement?

34. Kahl, Joseph A. 1953. Educational and occupational aspirations of 'common man' boys. Harvard Educa. Rev. 23 (summer).

35. Kuvlesky, William P. 1971, 1973. Rural youth: current status and prognosis. Chapter 13 In David Gottlieb [ed.] Youth in contemporary society. Sage Publications, Beverly Hills, Calif.

36. Landis, Paul H. 1942. Six months after commencement. Wash. Agr. Exp. Sta. Bull. 420.

37. ——— 1944. High school graduates in the first war year. Wash. Agr. Exp. Sta. Bull. 435.

38. ——— 1945. Washington high school graduates in depression and in war years. Wash. Agr. Exp. Sta. Bull. 463.

39. ——— & Carol L. Stone. 1952. The relationship of parental authority patterns to teenage adjustments. Wash. Agr. Exp. Sta. Bull. 538.

40. ——— 1953. The broken home in teenage adjustments. Wash. Agr. Exp. Sta. Bull. 542.

41. Larson, Wayne L. & Walter L. Slocum. 1969. The impact of poverty on rural youth. Wash. Agr. Exp. Sta. Bull. 714.

42. Lavin, David E. 1965. The prediction of academic performance. Russell Sage Foundation, New York.

43. Lindstrom, D. E. 1964. Educational and vocational needs of rural youth: a pilot study. Ill. Agr. Economics 4, July.

44. Merton, Robert K. 1957. Social theory and social structure (rev. ed.). The Free Press, Glencoe, Ill.

45. ——— 1964. Social theory and social structure. The Free Press, Glencoe, Ill. P. 131-160.

46. Middleton, Russell & Charles M. Grigg. 1959. Rural-urban differences in aspirations. Rural Sociol. 24(Dec.):347-354.

47. Miller, S. M. 1964. The outlook for working class youth. In Arthur B. Shostak & William Gomberg [eds.]. Blue collar world: studies of the American worker. Prentice-Hall, Inc. Englewood Cliffs, N. J.

48. Nye, Ivan F. & James F. Short, Jr. 1957. Scaling delinquent behavior. Amer. Sociol. Rev. 22(3):326-331.

49. ——— et al. 1976. Role structure and analysis of the family. Ntl. Council on Family Relations monograph series. Forthcoming. Sage Publications, Hollywood, Calif.

50. Rosenberg, Morris. 1958. Occupation and values. The Free Press, Glencoe, Ill.

51. Ross, E. A. 1940. New-age sociology. D. Appleton-Century.

52. Rushing, W. A. 1964. Adolescent-parent relationship and mobility aspirations. Social Forces XLIII(Dec.).

53. Schwarzweller, Harry K. 1959. Value orientations in educational and occupational choice. Rural Sociol. 24(Sept.): 247-249.

54. Senate Sub-Committee on Government Research. 1965. The rural to urban population shift, a national problem. Committee print, 90th Congress, 2nd Session. U.S. Govt. Printing Office, Washington, D.C.

55. Sewell, William H., Archie O. Haller, & Murray A. Strauss. 1957. Social status and educational and occupational aspirations. Amer. Sociol. Rev. 22(Feb.).

56. ——— 1964. Community of residence and college plans. Amer. Sociol. Rev. 29(Feb.).

57. ——— & Robert M. Hauser. 1974. Education, occupation and earnings: achievement in the early career. Dept. Sociol. Univ. Wisc. Madison Mimeo.

58. Sherif, Muzafer & Carolyn W. Sherif. 1953. Groups in harmony and tension. Harper, New York.

59. Slocum, Walter L. 1956. Occupational planning by undergraduates at the State College of Washington. Wash. Agr. Exp. Sta. Bull. 547.

60. ——— 1956. Occupational and educational plans of high school seniors from farm and nonfarm homes. Wash. Agr. Exp. Sta. Bull. 564.

61. ———, LaMar T. Empey, & H. S. Swanson. 1956. Increasing response to questionnaires and structed interviews. Amer. Sociol. Rev. 21(2):222.

62. ——— & LaMar T. Empey. 1956. Occupational planning by young women. Wash. Agr. Exp. Sta. Bull. 568.

63. ——— 1963. Family culture patterns and adolescent behavior. Wash. Agr. Exp. Sta. Bull. 648.

64. ——— & Gerald R. Garrett. 1965. Educational and occupational aspirations and expectations of rural youth. Report prepared for principals of schools included in the 1964-65 study of educational and occupational aspirations and expectations. Wash. State Univ., Pullman.

65. ——— 1968. Educational aspirations and expectations of students in rural Washington high schools. Wash. Agr. Exp. Sta. Bull. 690.

66. ——— & Roy T. Bowles. 1968. Attractiveness of occupations to high school students. Personnel & Guidance J. P. 754-61.

67. _____ 1974. Occupational careers (2nd ed.). Aldine Publ. Co., Chicago.

68. _____ & Carol L. Stone. 1959. A method for measuring family images held by teenagers. Marriage & Family Living (Aug.): 245-250.

69. _____ & Zahi Kamal. 1969. What affects grades. Washington Education (May).

70. Smith, Ernest A. 1962. American youth culture: group life in teenage society. The Free Press of Glencoe. P. 7.

71. Solomon, Daniel. 1961. Adolescent decisions: a comparison of influence from parents with that from other sources. Marriage & Family Living XXIII (Nov.).

72. Stone, Carol L. 1961. Educational achievement and aspirations of Pend Oreille County: adults and high school students. In Human resources in relation to economic development in Pend Oreille County. Wash. State Univ. Agr. Ext. Serv. & Depts. Rural Sociol. & Agr. Econ.

73. Suchman, Edward A., Robin M. Williams, Jr., & Rose K. Goldsen. 1953. Student reaction to impending military service. Amer. Sociol. Rev. 18(3):297.

74. U.S. Bureau of the Census. 1972. Educational attainment. Series/P-20, no. 243.

75. Wylie, Ruth C. 1961. The self concept: a critical survey of pertinent research literature. Univ. Nebr. Press, Lincoln.

76. Young, Kimball. 1942. Sociology. American Book Co. N.Y. P. 581.