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HIGHER EDUCATION AND LIFE CHANCES: A STUDY OF OCCUPATIONAL ATTAINMENTS AND ATTITUDES AMONG SOME PUBLIC UNIVERSITY GRADUATES

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HIGHER EDUCATION AND LIFE CHANCES: A STUDY OF OCCUPATIONAL ATTAINMENTS AND ATTITUDES AMONG SOME PUBLIC UNIVERSITY GRADUATES

BY

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DISSERTATION

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in

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This dissertation has been examined and approved.

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MAY 14, 1987
Date

To the memory of my best friend,

Sarah McMillen Davis

1948-1981

whose songs live on

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ABSTRACT

HIGHER EDUCATION AND LIFE CHANCES:
A STUDY OF OCCUPATIONAL ATTAINMENTS AND ATTITUDES
AMONG SOME PUBLIC UNIVERSITY GRADUATES

by

Richard P. Talbot
University of New Hampshire, May, 1987

This study investigates the post-graduate educational and occupational experiences of the 1968 and 1978 graduates of a state flagship university. First, it explores the influence of parental variables upon respondents' choice of curriculum and of post-graduate study. Second, it examines the occupational placement of the respondents by cohort and by gender. Third, it explores the present attitudes of the respondents by cohort and gender.

A stratified random sampling of the graduates (N = 433) via a mailed survey questionnaire shows that more men than women in the 1968 cohort return their forms. There is the suspicion that only those who view their occupational performance as successful returned their questionnaires. Therefore, many of the findings of this study must be placed in the context of this particular sample.

The main results of this study suggest that the

respondents' gender and the educational resources of the respondents' family of orientation are related to the selection of undergraduate curriculum such that males and students from less educationally-privileged families tend to major in more quantitative or technical disciplines. Second, I find that going on to professional school is a function of father's occupational position. Third, there are differences in the occupational attainment process for male and female respondents in the sense that different explanatory factors are involved. Fourth, there are few differences in occupational and political attitudes of the respondents by cohort or gender.

CHAPTER I

INTRODUCTION

1. The General Problem

Public higher education has not escaped the present crisis of the Welfare State in the United States. Those in charge of it are now being asked to redefine its mission and become "more efficient" and "excellent." Today's quest for efficiency and excellence in public higher education is like the pressure placed on lower levels of schooling --the elementary and secondary -- much earlier in this century (Callahan, 1962).

Efficiency and excellence are often measured along lines of a model of "productivity" that mirrors notions of productivity outside academia. What counts is the "bottom line." Faculty/student ratios decrease at public colleges and universities. The greater number of students within the sight of a professor, the higher the "productivity"; the greater number of publications, the greater the "productivity." For students, the greater the number of pages to write or read, the greater the "productivity." What can be numerically measured is supposed to be "real," especially in today's public higher education.

Public institutions of higher learning are being asked to raise tuition and "standards." Members of elite national and state commissions, and administrators and trustees of

private institutions ask for tax relief for private colleges and universities while demanding that public higher education be more "cooperative," "excellent," and "efficient."

Excellence in public higher education today is often based on the private model of selectivity -- admitting only an elite, say the top 10% - 20% of all applicants. The more selective, the greater the "excellence." While private institutions can determine the extent to which they wish to accommodate diversity, public universities and colleges that traditionally were asked to serve the community at large are now asked to raise their standards and become more selective.

Successes in minorities' struggle for equality and fairness that took place in the 1960s appear to be coming to an abrupt halt in the 1980s. Although an expanding economy can find room for those with talent or luck to rise, a limited economy closes several of the doors of opportunity for groups that hope to catch up to the demands of the mainstream. Today there is the widespread sense that an advance by one group must come at the expense of others; we are becoming in Lester Thurow's (1980) phrase, a "zero-sum" society.

The United States has developed a mass higher education system more extensive than any other system. From the 1930s to the 1960s higher education in the United States developed

dramatically in the range of subjects of teaching and research, in cultural scope, and in its openness to wider and wider sections of the population.

Private industry's need for educated labor and individuals' needs for social mobility no doubt contributed to the widespread growth of higher education in the United States especially after 1945. I suspect that historically the social forces of a democratically organized political system did not always match the forces of a privately organized economic system; social forces do often operate at cross-purposes with each other, pushing somtimes for expansion and sometimes for contraction. For example, economic expansion since the 1930s has demanded an increasingly educated and socially mobile labor force; in addition, minority demands for a greater share of the economic and political pie during this time period has also greatly contributed to the growth of higher education. Furthermore, the growing professions have demanded longer periods of apprenticeship for certification as they sought to justify their autonomy and maintain their earning power. All of the social forces, including the need for manpower as America became a superpower after 1945, have combined to generate the growth of public higher education.

As more people earned college degrees and joined the categories of well-paid and professional labor, private business became more interested in restraining the salaries

of educated labor. In addition, as professionals tried to maintain a clear distinction between themselves and lay persons thereby limiting entrance into the profession and increasing its prestige, autonomy, and earning power, there were greater demands on higher education for more and higher credentials (Bledstein, 1976; Larson, 1977).

Given the role of labor costs in profit rates and 1970 economic troubles, it no longer became as profitable for American business to promote the extension of public higher education. Paul Blumberg (1980) shows that the salaries of educated labor did not keep pace with inflation during the 1970's (hence "a college degree is not worth what it used to be"). The expanding numbers of college graduates also created a "loose labor market" that could be used by industry to discipline educated labor (hence the "too many graduates" claim). In addition, the professions had a role in restructuring licensing and certification requirements for jobs (hence "too many graduates" and the "declining value of a college degree").

The consumers of higher education are well aware that educational credentials are the key to occupational mobility. Not long ago people went to college to study academic subjects that interested them. Just twenty years ago half of the college freshmen in America intended to major in the liberal arts -- the natural sciences, social sciences, and humanities; today less than a quarter intend

to do so (Astin and Green, 1986). The most popular field today is business -- one quarter of 1985 college freshmen choose this single field for their major. In 1985, over 70 percent of college freshmen, compared with less than 50 percent in the early 1970s, indicated that a major reason for attending college is "to be able to make more money" (Astin and Green, 1986). However, perhaps today's emphasis on business curriculum indicates that undergraduates are less certain about the occupational payoff of higher education than the student of twenty years ago.

2. The Present Study

This study is concerned with the adult educational and occupational attainments of public university graduates. Recently, labor market entry has been more difficult for college graduates than in the past. In the 1970s inflation soared, real earnings of American college educated workers stagnated, and college graduates faced a "loosely organized" (or squeezed) labor market. I will focus on three main subjects in this study:

1. the influence of parental variables upon the respondent's choice of undergraduate curriculum and of post-graduate study.

2. the occupational placement of the respondents by cohort and by gender.

3. the present occupations and attitudes of the respondents by cohort and by gender.

Much has been written about the squeezed labor market position of college graduates. However, little systematic research actually documents labor market entry or the "overqualification" that exists for jobs taken by college graduates. There has been little systematic inquiry into the early career patterns of public university educated men and women and the effects of "overqualification" upon their behavior and attitudes. This study explores questions concerning labor market entry and the extent and consequences of overqualification among 1968 and 1978 graduates of the University of New Hampshire in Durham. UNH is the flagship public institution of the University System in the State of New Hampshire. Other public colleges exist in the state yet none are as selective or as prestigious as the Durham campus.

By the mid-1970s parents and students were being told that the "life-chances" of college graduates had changed from the opportunity-rich 1960s -- there were already too many college graduates and the ole sheepskin wasn't worth what is used to be worth. Cutbacks in public higher educational funding, student programs and services, and cutbacks in student aid and rising tuition costs all contributed to greater pressure on public higher education.

College graduates faced an uncertain labor market in the 1970s. The downturn in the college labor market led some social commentators to warn the American public about a

necessary relationship between overqualification and leftist poltical discontent (Freeman, 1976; Gorz, 1967; Blumberg and Murtha, 1977; and Bowles and Gintis, 1976). Other commentators warned about a rise in materialism, competition, political conservatism, and alienation among the college-educated. The Carnegie Commission on Higher Education (1973: 4-5) warned that " if inadequate adjustments are made,...we could end up with a political crisis because of the substantial number of disenchanted and underemployed or even unemployed college graduates." General Electric's Management Development Institute also expressed considerable alarm over the political implications of the growing number of overqualified workers (1978: 29): "perhaps the most pernicious trend over the next decade is the growing gap between an increasingly well educated labor force and the number of job openings which can utilize its skills and qualifications....The potential for frustration, alienation and disruption resulting from the disparity between educational attainment and the appropriate job content cannot be overemphasized." Hence, this study is designed also to explore the social and political attitudes of college graduates in relation to their career lines.

The sociological literature on status inconsistency and cognitive dissonance leads one to expect that overqualified college graduates are inclined toward different political attitudes than are graduates who found jobs commensurate

with their qualifications. The central claim of this literature is that persons who occupy inconsistent positions on different dimensions of status -- for example, high educational status and a low occupational status -- experience this inconsistent situation as stressful and, if their attempts at mobility are blocked, they are likely to express their discontent in the form of liberal or "radical" political tendencies (Lenski, 1954).

Other theoretical traditions in sociology emphasize that overqualified workers may display high levels of political and social alienation. For example, the inability to fully use one's skills on the job is thought to generate diffuse feelings of social and political inefficacy; jobs that do not reward one's spirit lead to habits of withdrawal and spill over into other areas of political and social life leading to a general estrangement from the political system (Sheppard and Herrick, 1972: 77-95). Status inconsistency theorists also suggest that status inconsistent persons may tend to withdraw from social and political participation (Lenski, 1956; Laumann and Segal, 1971).

Important social and politcal consequences have been attributed to overqualification. Overqualified workers are expected to display higher levels of job dissatisfaction, increased tendencies to some sort of political extremism (left or right), and greater political alienation. These hypotheses are explored below.

American sociology has not been overly concerned with the economics of higher education, with the fit or congruence between the education and economic systems, between learning and earning (cf. Bowman, et al., 1978; Rosen, 1972). A recent empirical study by Val Burris (1983) shows that over 30% of college graduates in the mid-1970s were employed in occupations that did not require a college degree; it addition, Burris's study reported that among workers with one or more years of graduate training, 65% were employed in occupations that do not require any specialized education beyond the college degree (Burris, 1983: 458). Today, college graduates do not automatically obtain a preferred place in the occupational hierarchy. Hence, the present study seeks to understand the sociological variables that determine occupational placement of two cohorts of randomly selected male and female college graduates.

3. The Research Problem

The purpose of this study is to explore the relationship between public higher learning and career. I use an "outcomes" approach to public higher education by examining the college graduate's adult accomplishments in relation to social background variables and undergraduate curriculum. This approach does not assume that educational achievements are automatically converted into work and life achievements -- these are empirical questions. This study

seeks to take advantage of two distinct socioeconomic eras to seek a better understanding of the occupational placement of college graduates.

The period is interesting not only because of the economic changes that transpired but also because of the social and educational changes that took place, especially the career and family expectations of women. Protest and Viet Nam War subsided; an American president resigned and faded into the West; the American college campus became quiet as minorities worked seriously toward their own individual American dream.

This study seeks to understand the educational and occupational experiences of male and female public university graduates. Our questionnaire measures patterns of curriculum and professional choice. It also measures the labor market entry process public-university graduates. I hope to be able to measure the similarities and differences among public-univerity graduates from two difference socioeconomic eras. How has undergraduate curriculum changed? Are there any differences in labor force entry? Finally, what are the connections between gender, work, and political attitudes among college graduates?

4. Theoretical Perspectives

Randall Collins (1979) describes the United States as a "credential society" -- a society that places an overwhelming importance on educational credentials. Why do Americans chase educational degrees at such a pace? One sociological model of explanation suggests that higher education expands in response to economic growth: newly created jobs demand higher levels of skill and that higher education expands and contracts to balance the social system by producing or reducing the necessary trained workers. Research does not support this elegant and parsimonious explanation. There have been many newly generated jobs in the American occupational structure that require advanced knowledge and highly technical skills; however, the content of most jobs has not changed that much in this century. For example, the level of skills required of lawyers, teachers, sales representatives, or managers are generally little different than they were several decades ago; yet, these jobs now require more advanced qualifications for job entry. Only about 15 percent of the increase in occupational upgrading results from the generation of new, high-skill jobs (Berg, 1970; Freeman, 1976; Collins, 1979).

Employers demand higher educational credentials from

their workers for two major reasons. First, formal qualifications are used to make the task of screening and selecting job applicants easier. An oversupply of job candidates with the necessary credentials allows employers to increase the required qualifications. Secondly, employers share the widespread belief that there is a direct relationship between years and quality of education and productivity. Numerous studies indicate little relationship between educational achievement and job performance or productivity, but the widespread belief persists (Gintis, 1971; Collins, 1979; Fallows, 1985).

Blau and Duncan (1967) find that the most important factor affecting upward occupational mobility (father to son) is the amount of education the son attains. Degrees and professional certificates are valued resources for which Americans compete. An alternative explanation to the model presented above stresses that the expansion of public higher education has less to do with the demands of the economy than with the general competition for power, wealth, and status. In Randall Collins' (1979) conflict perspective, the pressure for ever-increasing credentials comes from two main sources: the professions that insist on higher membership qualifications as a means to protect their occupational interests, and, consequently, the consumers of education who demand credentials to enhance their career opportunities.

Randall Collins'(1979) explanation is correct in as far

as it goes. A more persuasive explanation, if not more parsimonious view, must add other social competitions. Class and ethnic conflicts continue in postindustrial United States. The working classes and minorities continue to have differential access to higher education. Furthermore, conflicts crosscut each other so that different segments of class and ethnic hierarchy pressure different segments of higher education. Work in postindustrial United States is not so complex that one quarter of the population needs a four year college degree. Yet I think that a satisfying explanation of increasing credentialism must stress economic, political, and ethnic antagonisms played out at both cultural and institutional levels.

Conflict theories emphasize that overqualification is a result of the use of educational credentials as a mechanism of rationing socioeconomic privilege. As long as employers allocate the best jobs to those who are best educated, there will be a constant pressure for increased education. This demand for greater education exists independent of skills requirements of jobs or any changes in the rate socioeconomic return. The emphasis of traditional conflict theories is on the oversupply of educational credentials. Marxist conflict theorists (Braverman, 1974; Bowles and Gintis, 1976; Rumberger, 1981) emphasize the demand for qualified labor. From this conflict perspective, the deskilling of top-level jobs is an important factor

restricting the demand for qualified labor. Rumberger (1981: 71) estimates that there has been a small decline in the proportion of jobs at the highest skill level; he does, however, agree that most of the increase in overqualification is explained by the increase in educational attainments rather than changes in the skill requirements of jobs.

The most widely accepted explanation of the trend toward overqualification is the neoclassical view put forth by economists like Freeman (1976). For Freeman the surplus of highly educated workers is a temporary disequilibrium in the market for educated labor. The major reason for this "disequilibrium" is the existence of what are known as "cobweb" effects -- that is, lags in the adjustment of supply and demand that result from the fact that the completion of a given level of education requires an extended period of time. These lags generate the oversupply of educated labor because they originate from the economic forces of a somewhat earlier period (Freeman, 1976: 51-63). This view implies that overqualification is not a cumulative trend; it is temporary and eventually works itself out. Also, this view implies that the demand for education is responsive to anticipated rates of economic return. In other words, the equilibration of supply and demand, while perhaps sluggish in the 1970s and early 1980s, is assured in the long run. Recent government data suggest

that this new "equilibrium" may be approaching now.

Is overqualification a temporary phenomenon rather than a cumulative trend? Conflict theories imply a cumulative, "lost generation," of overqualified educated labor holding jobs that are too small for their spirits. A cumulative trend toward overqualification would have severe consequences throughout American institutions.

5. Hypotheses

Five major hypotheses guide the analysis of the data. The first major hypothesis is that college curriculum is a function of the respondent's parental resources; that is, the more educational and social resources of the graduate's family, the less occupationally specialized his or her undergraduate training. This hypothesis focuses on the first-generation college graduate versus graduates whose families have had prior experience with higher education. For the first-generation college student, undergraduate training must be occupationally relevant; that is, there is an expected vocational payoff. A major question in this study is for whom does university training pay? Are there long- and short-run payoffs to higher education for students of different social backgrounds?

The second major hypothesis is that professional and graduate training is a function of parental resources and of gender. This hypothesis rests on the assumption that

first-generation college graduates and graduates from non-professional and non-managerial families are more likely to enter the labor market upon college graduation, find the economic rewards satisfying, and use the labor market itself as an avenue of occupational attainment. For college graduates with greater educational background and status resources, college graduation is the beginning not the end of their professional training. First-generation college graduates are hypothesized to have less likelihood of pursuing further professional training than are graduates whose parents have attended higher education. This relationship is hypothesized to be stregthened by class and gender factors. It is at these branchings in higher education that social class and gender are most likely to have an impact.

The third major hypothesis that guides this study is that there are no differences in the occupational attainment process for male and female public-university graduates. Once background and education factors are taken into account, earnings differences are seen as a function of marital status and child-rearing responsibilities. Studies investigating the attainments of women find social background (mostly measured as father's socioeconomic status) does influence the daughter's occupational attainment; however, a woman's socioeconomic origin is much less important than her own educational achievement. Thus,

sociological studies find that the process of status attainment for women is similar to that of men. For example, Dejong, Brawer, and Robin (1971) find similar intergenerational mobility patterns for both males and females -- "no major differences" (1971: 1040) in occupational inheritance or upward mobility. Another major study by Treiman and Terrel (1975: 182) concludes that when it comes to occupational status... women fare about as well as men." Treiman and Terrell do note that women do not get the same wages for their occupational achievements as men even though they are able to secure as prestigious jobs as men given equivalent qualifications. In this study, earnings differences are expected, but not differences in occupational status. The conversion of status into earnings is seen as partly limited by placement of individuals in family structures which cannot be completely measured in a study of this kind.1

1. The idea of "no major differences" in the status attainment process has been qualified by Marini (1979). Her 15-year follow-up study of students from ten Illinois schools in 1973/74 finds that like the studies mentioned above, the mean level of occupational status at labor market entry is virtually the same for men and women. However, an analysis of intragenerational occupational mobility (i.e., "career" mobility) shows that women experience little subsequent mobility over the work cycle (during the 15-year period studied), yet men's occupational prestige scores increase over the course of their careers. Indeed, one longitudinal study (Rosenthal, 1978) shows that a substantial proportion of women workers experience downward occupational mobility over their life cycle. For example, women reentering the labor force in their middle years most often enter a job with lower prestige and pay than the one they first held. This study explores women's career mobility in the context of their family structures and labor market

The influence of mothers' own occupational achievement is a neglected area of research for both their sons and daughters. Perhaps sociologists have neglected this issue because families rather than individuals are basic units of analysis in stratification research. Rosenfeld (1978: 44) finds that when mothers are full-time housewives, fathers' occupations contribute more to explaining the distribution of daughters across occupational categories. However, when mothers hold jobs outside the home the "distribution of these mothers over occupational categories contributes more to predicting the occupational distribution of the daughter than does the fathers' distributions."

The studies mentioned above all focus on factors that influence the process of status attainment. All large-scale studies comparing men and women find that the socioeconomic status of fathers does influence occupational attainment of daughters, but less than the daughter's own educational achievements. The process is nearly identical for men and women early in their careers. Some studies, especially those focusing on earnings, suggest that as men and women's careers progress their attainments grow less similar. It is hoped that the findings reported here can shed some light on the hypothesis of "no difference" in the occupational attainment of college-educated men and women.

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experience.

The fourth major hypothesis that guides this study is that overqualification among college graduates is a class and gender based but temporary phenomenon. The increase of educational attainments relative to the educational requirements of the economy has been amply documented over the past few decades. Folger and Nam (1964: 29) estimate that about 85 percent of the rise in educational attainments between 1940 and 1960 could be attributed to increases in educational levels within occupations, and only 15 percent to shifts in the occupational structure itself. Berg (1970: 38-60) concludes that the increase in levels of educational attainment between 1950 and 1960 exceedes the skill requirements of available jobs by a significant margin. Rumberger (1981) reports similar findings for the 1960-1976 period.

The road to postindustrial society is a bumpy one for college graduates. Burris (1983: 458) reports that 21.7 percent of full-time workers in 1977-78 were working in jobs in which their educational attainments exceeded the educational requirements of their job.

The trend toward the oversupply of college graduates has received the greatest attention.2 At the beginning of the 1970s, Folger et al. (1970: 39) projected a "residual"

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2. Interestingly, Burris (1983) reports that the highest rates of "overeducation"exist among those who attended higher education but didn't obtain a Bachelors degree (37.7%) and those with graduate training (65%).

of 2.6 million college graduates for the 1970s decade. The Carnegie Commission report, College Graduates and Jobs (1973: 3-4), estimates that 25 percent of new college graduates in the 1970s would be employed in jobs previously performed by noncollege graduates. Freeman and Holloman (1975: 27) find that the proportion of male college graduates entering nonmanagerial and nonprofessional jobs increased from 14 percent in 1958 to 31 percent in 1971.

Berg et al. (1978: 85) estimate that about 24 percent of almost 14 million employed college graduates in 1975 were "underutilized" in their jobs. Projections of the National Planning Association (O'Toole, 1975: 32-33) indicated that in the 1980s there might be 2 to 2.5 college graduate competing for every professional and managerial job, with an annual surplus of 700,000 college graduates being unable to find jobs commensurate with their training or aspirations.

Did the respondents to this survey find jobs commensurate with their training and aspirations? If so, how have they managed to escape the squeeze of the 1970s? What is the attainment process like for men and women? If these graduates encountered difficulties, how did they overcome labor market difficulties? I hypothesize that first-generation college graduates and female graduates faced greater labor market difficulties than their counterparts. Yet after six years in the labor market, I do not think that the gender or the status of the

respondent's family of orientation predicts of overqualification, holding present family responsibilities constant.

The fifth major hypothesis that guides this study is that there are no gender or cohort differences in psychological commitment to work or political attitudes among college graduates. Previous research indicates that a general or consistent shift in political attitudes as a result of overeducation should not be expected (Burris, 1983). In addition, I hypothesize that the respondents to this survey have reorganized their priorities toward leisure and non-work activities. In today's political climate, job discontent, if any, is not easily translated into political discontent. Today problems at work lead to a concentration on leisure activities; it is at home and at play that one realizes his possibilities. Confirmation of this hypothesis will illuminate some of the reasons why much of the education-occupation research shows such mixed and inconclusive findings. In sum, the private discontents among today's educated labor remains unfocused. With the exception of women's organizations, very few political groups exist to focus the uneasiness of post-industrialism.

6. Research Design and Plan of Analysis

The research design involves the statistical analyses of survey data collected by the investigator by means of a

mailed questionnaire in the summer of 1984. The respondents to this survey are randomly chosen from graduation lists provided by the Alumni Office. Statistical hypotheses are tested using crosstabulation and linear regression techniques. Comparison tests of relationships are based on the chi-square and t-statistics. Sampling characteristics and limitations of the design are taken up in further detail in Chapter II.

The presentation of the findings is broken up into three principal sections. Chapter III examines the educational achievements of the respondent as dependent variables; the respondent's college major, program of studies, GPA, and post-UNH professional training is explored. These dependent variables are cast in the light of parental educational and occupational resources. In addition, these dependent variables are broken down by graduation cohort and gender. Tests of major hypotheses 1 and 2 are reported in Chapter III.

Chapter IV reports the findings on the first jobs and sixth-year jobs of the respondents. This chapter explores the "no difference hypothesis" for male and female college graduates. The first jobs and sixth-year jobs of each respondent are placed in the context of an intergenerational status attainment model; present jobs are analyzed in Chapter V. Findings regarding "career" mobility of the respondents are also reported in Chapter V. The main foci

are gender and graduation cohort differences.

Chapter V examines the present jobs, labor market participation, and income attainments of the respondents. Statistical tests are performed to determine if gender and cohort are related in any way to these dependent variables. The hypotheses about psychological commitment to work and political attitudes by gender and cohort are also examined in Chapter V. Finally, Chapter VI presents a summary and the conclusions.

CHAPTER II

THE STUDY DESIGN: METHODS AND SAMPLE

1. Introduction

The procedures employed in testing the hypotheses previously discussed are presented in this chapter. In addition the source and procurement of data, the sample description, the questionnaire design and measurement, and the means of analyzing the data are discussed.

This study deals with the achievements of public university graduates and their present attitudes. Figure 2.1 (see page 51) diagrams the empirical interconnections to be explored. Data for this report were collected by the investigator by means of a mailed questionnaire in late July, 1984. Funds for the data collection were made available from the Central University Research Fund of the University of New Hampshire. The data pertain to the various adult achievements and attitudes of an independently drawn stratified random sample (N = 433) of male and female 1968 and 1978 graduates of the University of New Hampshire. The randomly selected sample is stratifed by Gender (N = 248 males and N = 179 females) and Year of Graduation (N = 228 1968 Graduates, and N = 209 1978 Graduates. Demographic and other data were obtained on the respondent and both his or her parents to facilitate intergenerational comparisons as well as on his/her career achievements and present

attitudes.

The measures included in this study have a heavy success-theme component justified in part by what the American consumer expects out of higher education -- if not privilege then at least a productive and useful future for the college graduate. The survey data permit us to look at occupational mobility and "success" from the subject's perspective as well as from the vantage point of the analyst. In short, the perceptions of the respondent as to his relative achievements is seen as an important element in this study.

2. The Sample

Four hundred thirty-three completed questionnaires form the basis of this study (1968 subsample size, N = 220; 1978 subsample size, N = 213). Table 2.1 shows that each of the randomly chosen original mailing lists generated from the records of the University of New Hampshire Alumni Office yielded fairly equal questionnaire return rates when broken down by year graduated (1968 mailing list = 44.7%; 1978 = 42.8%). However, Table 2.1 shows that the response rate to the mailed questionnaire is somewhat biased when broken down by gender and year graduated. The group most likely to participate in this study is the 1968 male respondents. Almost sixty-four (63.5%) percent of the sampled 1968 male graduates returned their survey questionnaire in usable

form; only one out of four 1968 female graduates sampled in this study returned their questionnaires. The opposite response bias exists among the 1978 graduation cohort. In this graduation cohort female responded at greater rate than did males. The difference in the response in the 1978 cohort are clearly not as significant as for the 1968 group.

I carefully monitored the returns as they came in. Each questionnaire was opened, scanned, and assigned an identification number and return date code. The detachable questionnaire slip was separated from each questionnaire. I carefully graphed frequencies by year graduated and gender for the first three weeks after the questionnaires were mailed. The response to the the questionnaire was very quick. Within two weeks of the first mailing, over 80% of the respondents had returned their questionnaires. My graphs displayed quite an even distribution of respondents by year graduated and by gender -- I did not plot the joint distributions, however. I did not suspect that such a differential response rate was accumulating between 1968 male and female respondents.

The research funds made available for this study were exhausted by the first mailing. One reason for this was the unanticipated increase in postal rates and photocopying charges in Spring 1984. Given the available research funds and my excellent early response pattern, I decided that a follow-up mailing was not needed. I thought that a forty

percent overall response rate was adequate for analysis and reporting. I thought that I surely would exceed forty percent with the original mailing. Furthermore, I saw little response bias developing.

In sum, the overall 43 percent return does not allow the sample to escape from the possibility of bias. I did try to control for bias by comparing early with later returns and found that there were no significant differences along the lines of the major dependent variables. It may well be that the lower return rate of 1968 women is explicable by virtue of the role of many women as mothers, taking them out of the labor market (temporarily at least). This interpretation is suggested by the fact that many more women in the 1968 cohort are missing than is the case with the 1978 cohort. I suspect that only those respondents who viewed their occupational performance as successful returned the questionnaires. Thus, the overwhelming number of respondents in professional and managerial positions.

The sample is an independently drawn stratifed random sample; it is stratified by cohort and gender. However, because of the response bias, I think that it is best to limit some of the generalizations of this study to successful public university graduates. The findings may not be representative of all public university graduates or to all UNH graduates either. All findings presented here have to do with this particular sample return.

3. The Population

The sampling frame for this study is the list of names and present addresses of UNH graduates held and maintained by the Alumni Office. I did not have direct access to these names and addresses. The sample was drawn according to my instructions by a member of the Alumni Office staff. Population information for the 1968 and 1978 cohorts is quite sketchy with no authoritative counts available. The Registrar's lists are the most accurate but these data have not been summarized in any published form.

Tables 2.2 and 2.3 present my computations of the population from which this sample is drawn. These population computations come from the corrected published commencement lists (1968 and 1978) of the Registrar's Office. The corrected commencement lists are probably the most accurate source documents available to the researcher.

Table 2.2 shows and corrected graduation counts for the 1968 cohort. The are 926 students who actually received undergraduate degrees from UNH in 1968: 519 males and 407 females. Males constituted 56 percent of the 1968 graduates; 1968 males, however, constitute 71.3% of our 1968 respondents. Though randomly chosen, 1968 males are quite overrepresented in our sample. Conversely, females constituted 44 percent of the 1968 graduates; however, 1968 females constitute only 28.6% of our 1968 respondents -- they are quite underrepresented.

they are quite underrepresented.

Table 2.3. shows that 1460 students actually received undergraduate degrees from UNH in 1978: 757 males and 703 females. Males constituted 51.8 percent of the 1978 graduates. In our sample, 1978 males constitute 45.5% of the respondents. The sample, then, slightly underrepresents 1978 males and overrepresents females. The situation is not as problematic as is the case in the 1968 cohort.

Tables 2.2 and 2.3 can be broken down by college and gender to provide some interesting comparisons. In 1968 males constitute 54.3 percent of the graduates in the College of Life Sciences and Agriculture; in 1978 males constitute only 44.8 percent of the graduates of this college -- a sizeable decline. In 1968 females constitute 55.2 percent of Liberal Arts graduates; in 1978 females are 60 percent of Liberal Arts graduates.

In 1968 females are only 3.7 percent (5/132) of the Engineering and Physical Sciences graduates; in 1978 females increase their share of the Engineering and Physical Science degree to 21.2% (38/180). Clearly, female graduates made important gains in the ten-year interval. However, females actually lose some ground in the Whittemore School of Business. In 1968 females are 22 percent of the graduates of the business program; in 1978 female are only 18.9 percent of the graduates of the business program.

TABLE 2.1 SAMPLING SHEET

Original Mailing List: N = 990

Year Graduated:	1968 (N = 492)	1978 (N = 498)
	Males: N = 247	Males: N = 249
	Females: N = 245	Females: N = 249

Returns: N = 433
1968 Return Rate: 220/492 = 44.7%
1978 Return Rate: 213/498 = 42.8%

Total Sample Rate: 433/990 = 43.7%

Return Rates by Year Graduated and Gender

1968 Return Rate:
Males: 157/247 = 63.5% Females: 63/245 = 25.7%

1978 Return Rate:
Males: 97/249 = 38.9% Females: 116/249 = 46.5%

TABLE 2.2 1968 GRADUATION COUNTS

CORRECTED COMMENCEMENT COUNTS	Male	Female	Total
LIFE SCIENCES & AGRI	44	37	81
LIBERAL ARTS	281	346	627
ENGINEERING & PHYSCI	127	5	132
WHITTEMORE BUSINESS	67	19	86
	519	407	926

TABLE 2.3 1978 GRADUATION COUNTS

CORRECTED COMMENCEMENT COUNTS	Male	Female	Total
LIFE SCIENCE & AGRI	123	171	274
LIBERAL ARTS	194	292	486
ENGINEERING & PHYSCI	142	38	180
WHITTEMORE BUSINESS	279	65	344
HEALTH STUDIES	19	137	156
	757	703	1460

4. The Research Instrument

The survey questionnaire is designed to measure background and attainments (e.g., occupations, program of studies, post-graduate credentials, and present personal and family income) of two cohorts of graduates of the University of New Hampshire in Durham. In addition, it measures both subjective and objective indicators of employment and occupational resources of the respondent and his/her parents. Furthermore, the respondent's experiences within the university are measured by indicators of year of graduation, college and college major, and self-reported academic status. Finally, other attitudinal and behavioral measures (e.g., job satisfaction, psychological commitment to work, political liberalism and alienation, and support of politcal parties and unions as well as voting behavior in the 1984 elections) are included in the survey to explore the possible consequences of employment and career patterns. In sum, the research instrument operationalizes the concepts of educational and occupational experiences and political attitudes and behavior. Essentially, the research instrument (Appendix A) incorporates several ideas derived from the literature on social stratification and political sociology.

The questionnaire is introduced by a brief covering letter to the respondent explaining the purpose of the study

and the nature of the tabular analysis. A detachable questionnaire-slip is provided to reassure the respondent of the confidentiality of response and to help the investigator to keep track of the respondent by detaching his/her name from the questionnaire as the returns came in. In sum, the covering letter introduces the purpose of the study and enlists the respondent's participation by assuring confidentiality. The detachable questionnaire-slip allows the researcher to track the gender and graduation cohort of the respondent.

The first six items of the questionnaire are designed to measure the respondent's experiences at UNH and to measure the respondent's age (v4) and gender (v3). Questionnaire item # 1 measures the undergraduate UNH Program of Studies in which the respondent received the Bachelor's degree. Besides the four major colleges of the University (i.e. the College of Life Sciences and Agriculture, the College of Liberal Arts, the College of Engineering and Physical Sciences, and the Whittemore School of Business and Economics), the questionnaire item includes an open-ended response category for the respondent. Forty-two respondents (10.6% of the sample) listed the School of Health Studies by checking the open-ended response category.

Questionnaire item #2 is an open-ended query that measures the respondent's undergraduate college major. The

three most frequently reported majors are Business Administration (63 cases, 14.7%); Social Work (24 cases, 5.6%); and Political Science (21 cases, 4.9%). In all, 63 distinct majors are measured by this item.

Four advanced training or education variables are measured by questionnaire item #5: "Since graduation from UNH with a Bachelor's degree, have you earned any other degree or professional certificates?" The variable UNH Advanced Degrees (v5a) measures the educational experiences of the respondent after graduation from UNH. Slightly over one half of the respondents (52.3%) report some form of advanced training after their undergraduate studies at UNH. Almost thirty percent (28.9%) of the respondents report Master's degrees; only 2.8% report Ph.d's.

Questionnaire item #5 also measures the area of respondent's Advanced Degree (v5b); that is, the type of professional training that the respondents report. The most frequently reported areas are: Education, 4.2%; Business Administration, 3.9%; Law, 3.5% ; and Educational Counseling and Finance, each 3%.

Post UNH Institution (v5c) measures three values relevant to the institution at which the respondent attained his advanced professional training: 1. a UNH graduate degree or certificate; 2. another in-state degree or certificate program; or 3. an out-of-state degree or certificate program. Less than one in ten (8.8%) of respondents (N =

38) earn an advanced degree at UNH. Almost forty percent (39.0%) attain their advanced training out-of-state; altogether eight out of ten respondents with advanced certificates or degrees undertook their training other than at UNH. Graduation Year of Advanced Degree (v5d) is simply a measurement of the date of the respondent's Advanced Degree.

Questionnaire item #6 asks the respondent to check his/her "general academic standing while at UNH." UNH Academic Standing (v6) is a self-report measured on a four-point scale that ranges from (1)"slightly under average" to (4)"excellent." Almost sixty-nine (68.1%) of the sample report above average undergraduate academic standing; only about 4 percent report being below average.

The educational items measured on page #1 of the questionnaire allow us to explore the respondent's adult attainments in relation to his/her undergraduate and graduate training. These items are strategically placed early in the questionnaire to interest the respondents in our study and to entice them to start reporting their accomplishments.

Items seven thru twelve are designed to provide some basic demographic information about the respondent and his family. Most mailed surveys measure demographic information toward the end of the questionnaire. I purposely placed these items on the first page to get the respondent working quickly onto pages two and three which measure more

sensitive occupational and income data. In retrospect, these items may have given the appearance that this questionnaire is "just another form" and perhaps diminshed the response rate. There is no method to determine if such an effect is operating in this survey. I tend to go along with my original belief that these demograhic items allow the respondent to proceed onto more difficult and important research questions.

Religious background (v11) is measured by questionnaire item # 11. Items #8 and #10 measure the population size of the city or town that the respondent resided in at age 16 and at present. The Blau and Duncan school of mobility studies suggest these two variables have some predictive power in the status attainment process so I include them here.

Questionnaire items #7 and #9 measure the respondent's New Hampshire residency status as an undergraduate and at present. These two variables, v7 and v9, are of some institutional importance given the recent tendency of this university to enroll such a large proportion of students from out of state. In fact, New Hampshire's dependence upon out-of-state students to sustain the operation of its higher educational institutions is substantial - and increasing according to U.S. Department of Education data reported in the Jan. 21, 1987 edition of The Chronicle of Higher Education. For example, in 1984 only 61 percent of the

first-time students enrolled in New Hampshire's public and private colleges and universities were residents of the Granite State. Sometime soon, I expect that UNH's "importer" status to become an educational issue in the state because nationally over 86 percent of all college students are attending institutions in their home state. Only the District of Columbia, with less than 53 percent of its residents attending colleges within the District, has fewer of its native students obtaining a college education "at home" than does New Hampshire.

Almost three-quarters (74.1%) of the respondents to this survey presently live outside New Hampshire. Considering that 53.1% of the respondents initially hail from New Hampshire, there is a considerable migration of the highly educated out of the state.

Questionnaire items #12 - #14 on page two of the questionnaire measure some aspects of the respondent's present living situation. Marital Status (v12) is measured by item #12. Marital Status (v12) is an important control variable in the study. Our original coding (though descriptively interesting) of item #12 yielded an unmanagable variable. Several recodings are developed which concentrate on marital status and child-care responsibility differences. One important oversight in this questionnaire item is the failure to measure the ages and number of children of the respondent. I would include such a

measurement if I were to construct this questionnaire again.

Employment status (v13) describes the present employment situation of the respondent. Almost 87 percent of the respondents in this study report working 20 hours or more a week for pay. Only five respondents (1.2%) indicated at the time of this study that they were "actively looking for fulltime work." Overall, less than two percent were actively seeking some kind of work. Unemployment among the respondents in this study is about one half the typical rate for college graduates (usually around 3 percent).

Questionnaire items #15, 16, 18, 19 measure some occupational and political attitudes of the respondent. Job Satisfaction (v15) measures the respondent's perspective on his present job with a six-point scale ranging from minimal thru extreme job satisfaction. Roughly one in ten (9.6%) respondents report less than average job satisfaction; almost 65% report better than average job satisfaction.

Questionnaire item # 16 asks the respondent to compare his job to "other things which add to the quality of life (children, leisure, friendships)." A five-point scale ranging from (1)"not important" to (5)"the central thing in my life" measures job importance. Less than one in five regarded their job as "somewhat" or "not important"; however, only slightly over three percent (3.3%) valued their work over all other things. This item is used to measure the respondent's psychological commitment to work

(v16).

Questionnaire item #18 asks the respondent to place himself/herself on a six-point political scale that ranges from Very Liberal to Very Conservative. Responses to the political scale are normally distributed with the modal response being "Slightly Conservative." This political scale (v18) is dichomized (V18) to form a simple indicator of political attitude as well.

Political party preference in 1984 is measured by questionnaire item #20. The Republican party is preferred most often (49%) among our respondents. The respondents to this survey are quite commited to the two-party system, less than one in ten respondents (8.1%) were undecided or chose some other party other than the Republican or Democratic.

The respondent's father's (f22) and mother's (m22) formal education is measured by questionnaire item #22. A seven point scale ranging from (1) grade school to (7) graduate degree measures the educational resources of the respondent's parents. Family Educational Resources (famed) is one additive index that is created to measure this parental information. Futhermore, the family educational resources variable is recoded to generate an ordinal variable (FER) distinguishing four educational background situations of the respondent: (1)neither parent attended college; (2) one parent attended college; (3)both parents attended college; and (4) at least one parent graduated from

college. Family Educational Resources (FER) will allow us to identify the first-generation college students in our sample and to examine their experiences in comparison to their more privileged classmates.

Questionnaire items #23 and #24 measure the total personal (v23) and total family (v24) income of the respondent on a 12-point scale. Responses to each income variable are negatively skewed toward high incomes. In order to make the income variables more normal and symmetrical, each income variable is trichotomized into (1)low, (2)medium, and (3)high income groupings. In addition, each income variable is dichotomized at the value of 11 to produce two major income groupings: (1)below $30,000 and (2)$30,000 or more.

The open-ended questionnaire item #25 asked the respondent to "list work-related and social clubs or organizations" that they belonged to. The variable, Work Related Clubs or Organizations (v25a) is simply a count of work organizations that the respondent reports. The values for this variable range from (0) to (9) with a mode of 0 and a mean of .98. Fifty-three percent of the sample reported belonging to zero (0) work clubs or organizations. Social and Community Organizations (v25b), counts the non-work related organizations that the respondent reported in item #25. Again, the mode for this variable is zero (0) and the mean is under one (.77). Over half of the respondents

(56.4%) report zero (0) social organizational memberships.

Questionnaire item #26a-l measure in matrix format several attitudes and opinions of the respondents to this survey. Each of these attitudinal variables is measured on a six-point scale ranging (1)Strongly Agree to (6)Strongly Disagree. Some of these items are combined to form additive indexes. For example, items #26 b, h, and k are combined to form an additive index of Alienation from Work (xalw). Items #26c, f, j, and l are combined to form an additive index of Social Spending (xspen). Each of these indexes is dichotomized and trichotomized.

Item #26g is a traditional measurement of political alienation (v26g) used in many studies over the years. Essentially, it attempts to measure the political alienation that the respondent feels -- whether or not he feels taken advantage of. The respondent's Confidence in Labor Unions (v26d) is measured by item #26d. Again, this traditional political variable is used in many surveys to distinguish respondents' political orientation toward labor issues.

Items #26a and #26e explore the respondent's attitude toward how their undergraduate experiences relate to their present world of work. The issue measured in #25a concerns whether or not they feel their preparation for the labor market was "versatile and flexible" enough for their careers (v26a). Almost eighty percent (78.4%) agree that their

undergraduate training was "versatile and flexible;" slightly under sixteen percent (15.7) disagreed with the idea. Certainly, response to this item indicates strong positive evidence about the public university's value for the respondents. The issue measured in #26e concerns whether or not the respondent's present job meets the expectations (v26e) he had as an undergraduate at UNH. About half (55.8%) of the respondents agree that their undergraduate expectations about work had been met.

5. Statistical Analysis

Standard statistical techniques are employed to display the graduate's scores on each measure. The primary statistical techniques used are contingency analysis (chi-square tests), bivariate and partial correlation, and multiple regression. Each of these techniques is available as part of professional version of the microcomputer software package, STATA.

While historically, sociological research has been tied closely to the evolution of mainframe computers, this report is generated primarily by desktop computing. Although objectively less powerful than mainframes, microcomputers offer many advantages to social scientists over mainframes. In addition to the substantive findings, this report illustrates some recent contributions that microcomputers can provide sociological analysis. Lawrence

Hamilton (1986) notes that the present evolution of sociology is in no small part shaped by the evolution of computer science. Today's emphasis on survey research and causal modeling is a direct outgrowth of developments in high-speed computing. This study seeks to exploit some of the new developments in microcomputing.

Most of the variables in the data set are at best ordinal. The great majority of these variables are limited as to possible response. With these constraints in mind, contingency table analysis is used for the most part. Crosstabulation, with the associated chi-square goodness of fit test, allows clear assessment of the existence of a statistical relationship between categorical variables. In addition, the information provided by this method is supplemented by graphic and verbal presentation. Thus, crosstabulation is the most widely used statistical technique in this study. In addition, some regression models are constructed to test some of our hypotheses.[1]

The crosstabulations computed here display joint frequency distributions of cases on two or more variables and compute the chi-square statistic which is the sum over all cells of the ratio of the squared diffences between the observed and "expected" (if there were no relationship) frequency with the expected frequency. The larger the value of chi-square, the more difference there is between the

observed and expected frequencies.

The magnitude of the resultant statistic is, however, not directly interpreted because the probability of obtaining any particular chi-square value depends on the number of cells of the table. The exact probability of observing any chi-square can be computed by comparison of it with the "degrees of freedom" (related to the number of cells) of the given table. This probability expresses the likelihood of the difference between the observed crosstabulation and that which is expected in the case of independence being due to sampling error. If this probability is very small, traditionally less than .05 or .01, it is concluded that the relationship between the variables under investigation is statistically significant, i.e., the observed situation is so different (as measured by chi-square) from the situation of statistical independence, that the probability is very small that the difference between the two tables could have occurred by chance (i.e., sampling error).[2]

6. Measurement of Occupation

Measurement of occupations is given a central place in this study. If one conceives of "power" as "control over resources" (cf. Parkin, 1971; Weber, 1958), then studies of occupational staus and mobility tap a major stratifying process. Max Weber was among the first to connect class

theory with occupations and the phenomenon of mobility. Essentially, Weber (1968) defined "social classes" as the totality of those class situations (Klassenlagen) between which a change is possible, one that can take place either (a) in the succession of generations, or (b) personally, that is, in the course of one's occupational career. From Weber's structural point of view, persons can be considered as owners of educational and occupational qualifications, as holders of positional and institutional resources. Therefore, the analysis of mobility patterns can be linked with specific features of a society such as its educational system, its class, property, and labor market structures.

Several measures of occupations are used in this study to locate the respondent and his parental family in occupational space. Duncan's (1961) measure of socioeconomic status, SEI, is the primary ordinal level measure of occupation employed in this study. This measure carries the assumption that a hierarchy of occupations exists that reflects educational prerequisites and monetary remuneration. For many statistical purposes, the Duncan SEI is a useful measure in survey situations; it yields valid and reliable information about a person's relative location in the occupational hierarchy. It is also theoretically relevant to a well-known school of sociological studies termed the status attainment school of occupational

mobility.

The detailed Census category code is assigned to each occupation reported in this research. This coding enables categorical representation and analysis of each occupation. One limitation of the Duncan SEI measurement is that while it provides a detailed ordered metric it loses touch with distinct types of work activities. While powerful regression analyses are possible with the Duncan measure, the measurement operation itself dissolves multi-dimensional differences between occupations into unidimensional differences of " superiority/inferiority" (Horan, 1978: 535). [3] Recodings of the detailed Census category code enables us to develop the typologies of "social class" divisions proposed by Levison (1974) and Knoke (1978). In addition, the Census recodings will allow us to display variations of the white-collar/blue-collar division.

The Census category code provides the basis for our measurement of professional-managerial versus nonprofessional-nonmanagerial jobs of our respondents. One of the major concerns of this study is the idea that professional-managerial opportunities declined for public university graduates who entered the labor force in the 1970s. I examine the so-called "overqualification" of college graduates in Chapter 4. The Census category codings allow us to classify respondents according to whether or not they hold professional or managerial jobs. This ad hoc

measurement of the idea of "overqualification" will allow us to examine the correlates of non-professional employment of college graduates. Futhermore, this information combined with the Household Income variable (v24) will allow us to distinguish the so-called Yuppies (young, urban professionals) from the non-Yuppies in our sample. For the purposes of this study, Yuppies will be defined as those respondents that were holding professional or managerial jobs and had household incomes of at least $30,000 in 1983.

Besides the "vertical" dimension of occupational status, this study included a "horizontal" measurement of occupational status: the "situs" category scheme of Morris and Murphy (1959). The Morris and Murphy scheme differentiates occupations into ten categories on the basis of occupational function. Intergenerational mobility and career mobility in terms of occupational function -- situs -- is a neglected area of sociological studies. The situs variable may perhaps supplement the analysis of vertical mobility patterns.

The occupational data for the respondent and each of his/her parents are coded directly into Duncan scores, Census categories, and Morris and Murphy Situs categories from the following questionnaire items:

Q14. What is your present job -- what type of work do you do? (If now unemployed, what type of work was your last job?)

Q17. What type of firm are you presently employed in?

Q21. Describe the type of work your father and mother have done for most of their lives.

Q27. Please list in previous to most recent order the types of full-time work you have had since graduating from UNH. In parentheses, include the approximate dates and reason for leaving each type of work or job that you've mentioned.

Questionnaire item #27 yields a wealth of occupational information of which only some is reported in this study. For this study I have decided to code the occupations of the respondents at three points in time: 1. labor force entry; 2. sixth year after labor force entry; and 3. present job. This coding decision makes it possible directly to compare 1968 and 1978 graduates in terms of their labor force entry and progress after six years in the labor force.

For each respondent and his parents I assigned the three-digit University of Michigan (Institute of Survey Research) identification code, the two-digit Duncan score, the two-digit revised Census category code, and the Morris and Murphy (1959) occupational situs code.

The standard Duncan SEI scale is devised from 1950 Census aggregate data on the average income and education level of persons in each occupational category (Robinson et al., 1969: 335-37). Weightings for income and educational level are derived from regression equations yielding overall scores ranging from 0 (a laborer in the tobacco industry) to 96 (a dentist or medical doctor). I assigned "male" scores to all the respondents in this study. In addition, I arbitrarily assigned the mean (SEI = 60) for all military

occupations in this study.

The Duncan SEI scale sometimes underrates occupations because it is compiled from two characteristics. For example, clergy typically receive lower Duncan scores than found by more subjective measures because they have small salaries. Conversely, other occupations are perhaps overrated by the Duncan scale because these occupations receive extremely high incomes. Entertainers usually receive high Duncan scores. According to Duncan (1961: 124) 83 percent of the variance in occupational prestige is accounted for by a linear combination of aggregate education and income characteristics of detailed occupational titles. In other words, the status that inheres in an occupational role is largely a function of prerequisite certification, credentials, or skills, and the market value of the persons who commonly execute that occupational role. Thus, Duncan's measure refers to an attribute of a specific occupation and is not necessarily highly correlated with either the individuals's own years of schooling or the person's earnings. Using the Duncan measure neither exposes the research to an ecological fallacy nor generates an automatic issue of multicollinearity at the observational level. Table 2.4 summarizes the occupational variables in this study according to their Duncan SEI scores.

TABLE 2.4 SUMMARY OF DUNCAN SEI SCORES

VARIABLE	OBS	MEAN	S.D.	MIN	MAX
Father (fsei)	427	61.01	23.04	1	96
Mother (msei)	186	53.38	19.36	2	85
R's present (psei)	415	68.32	15.68	9	96
R's first job (sei1)	421	63.37	17.47	7	96
R's 6th year job (sei6)	413	67.12	16.45	7	96
Father's SEI BY:					
All Males	246	58.21	22.57	1	96
All Females	181	64.81	23.18	1	96
1968 Sub-Sample	219	55.19	23.49	3	96
1978 Sub-sample	208	67.13	20.93	1	96
1968 Males	156	55.42	23.59	1	96
1968 Females	63	54.63	23.42	3	96
1978 Males	90	63.04	19.91	1	92
1978 Females	118	70.25	21.23	7	96

Several recodings of the Revised Census Code produced the nominal measures of occupation used in this study. The Blue Collar/White Collar dichotomy is used in some tables in this report as well as David Knoke's (1978) measure of social class. Knoke's categories are: upper nonmanual work, consisting of professional, technical, and managerial; lower nonmanual work, or clerical and sales Census categories; upper manual, the same as the Census Craftsman designation; and lower manual, comprising operatives and service workers; and Farm related work. Knoke's measure is included in order to allow us to distinguish the upper and lower white collar world.

Questionnaire item #17 measures the present sector of the economy that the respondent is employed in. Over three-fourths (75.8%) of our sample works in the private sector. State (9.7%) and Local (9.0%) labor force employment are roughly equal among the respondents; Federal employees are roughly about one in twenty (5.5%).

7. Summary

In this chapter I discuss the major procedures employed in this study. In addition, I describe the source and procurement of the survey data, the sample and population description, and the questionnaire design and measurement operations. Finally, I describe the means of analyzing the data. Figure 2.1 lists the major variables included in the

analysis and suggests some of the relationships that are explored and tested. The next chapter focuses on two major hypotheses regarding the respondent's educational experiences. These experiences are placed in the context of an intergenerational model and explored by gender and graduation cohort.

FIGURE 2.1. LIST OF MAJOR VARIABLES

Major Independent Variables	Major Dependent Variables
UNH College of Studies	Post UNH Advanced Study
UNH Major	Area of Advanced Study
Gender	Job Satisfaction
Age	Job Importance
Year of Graduation	Political Attitudes
Marital Status	Income
Family Educational Resources	Work Organizations
Father's Occupation	Social Organizations
Mother's Occupation	Politcal Party Preference
Religion	Alienation from Work
City Size-Age 16	Present Opinions & Attitudes
	Respondent's Employment Status
	Respondent's First Occupation
	Respondent's Sixth Year Occupation
	Respondent's Present Occupation

CHAPTER III

THE PUBLIC UNIVERSITY, COLLEGE CURRICULUM, AND PROFESSIONAL TRAINING

1. Introduction

In this chapter two major hypotheses that focus on the respondent's educational experiences are examined. The independent variables of family occupational and educational resources are used in the context of gender and graduation cohort to explore the respondent's educational attainments.

The first hypothesis is that college major is a function of the respondent's parental resources such that the greater the educational and occupational resources of the respondent's family, the less occupationally specialized (or vocational) his/her undergraduate training. The second hypothesis states that professional and graduate training is a function of pareental resources and gender is also examined in the context of graduation cohort.

2. Parental Background of the Respondents

Several studies show that family background influences the number of years of schooling achieved and quality of that schooling (Sewell and Shah, 1977; Sewell and Hauser, 1975). Sewell's Wisconsin follow-up studies of high school seniors show that socioeconomic background, measured in Duncan SES units and measured IQ score have both independent

and interactive effects on who enters college. A national study by the American Council on Education in 1971 reports that of all the students who enter local community colleges, twelve percent come from families with over $20,000 in yearly income; yet public universities have 22 percent of such students and the private universities have forty-two percent from such families. Karabel (1977) argues that the relative prestige of the college diplomas follows a similar ranking, and employers make choices accordingly.

In this study, I cannot measure the socioeconomic backgrounds of those who enter the public university but the data do indicate the socioeconomic background of those who become successful graduates. Table 3.1 shows that over sixty percent (60.1%) of the fathers of the respondents are employed in professional or managerial occupations. Slightly over twenty (20.2%) percent of the respondents to this study have fathers employed in traditionally defined "blue-collar" occupations. Table 3.2 shows that almost one-quarter of the mothers of the respondents work in professional or managerial occupations (24.48%). Only about thirteen percent (12.7%) of the mothers work in sales or clerical jobs; slightly more than five percent (5.4%) work at traditionally defined "blue-collar" occupations. For the most part, the respondent's mothers are employed in middle and upper middle

TABLE 3.1 FATHER'S OCCUPATION

Father's Census OCC Code	Freq.	Percent	Cum.
Professi	140	32.86	32.86
Manag/Pr	116	27.23	60.09
Sales	48	11.27	71.36
Clerical	6	1.41	72.77
Craft/Fr	54	12.68	85.45
Operativ	20	4.69	90.14
Service	5	1.17	91.31
Laborer	13	3.05	94.37
FOwner	8	1.88	96.24
Military	16	3.76	100.00
Total	426	100.00	

TABLE 3.2 MOTHER'S OCCUPATION

Mother's Census Occ Code	Freq.	Percent	Cum.
Professi	94	21.71	21.71
Manag/Pr	12	2.77	24.48
Sales	9	2.08	26.56
Clerical	46	10.62	37.18
Operativ	12	2.77	39.95
Service	3	0.69	40.65
Laborer	9	2.08	42.73
FOwner	1	0.23	42.96
Househol	247	57.04	100.00
Total	433	100.00	

class occupations, with over half in the housewife role.

Tables 3.3 and 3.4 display fathers' and mothers' occupations by the respondents' year of graduation. Table 3.3 shows a significant difference (at the .05 level) in the father's occupational distributions for the two cohorts under study. One quarter (25.5%) of the respondents have professional fathers in 1968; however, the 1978 respondents have professional fathers in over forty percent (40.5%) of the cases. The class composition of UNH graduates is significantly more professional in the later cohort. In addition, the sales category grows from nine percent to thirteen -- the 1978 respondents come from more white collar backgrounds than do the 1968 respondents. Correspondingly, there are cohort declines in the proportion of craftsmen and foreman fathers (17.8% to 7.3%); in the proportion of operative fathers (5.4% to 3.9%); in the proportion of service worker fathers (1.3% to .98%); and laborer fathers (4.1% to 1.9%).

The occupational background composition shift appears to be more than one would expect from chance or the simple expansion of white collar work force during the ten year interval that separates the two cohorts. Each graduation cohort is part of the baby boom generation; male professional workers in the economy during this time period never exceeds fifteen (15%) of all male workers. The sons and daughters of professional and managerial workers are

TABLE 3.3 FATHER'S OCCUPATION BY YEAR GRADUATED

Father's Census OCC Code	Year of UNH Graduation 1968	1978.	Total
Professi	25.5 (56)	40.5 (83)	139
Manag/Pr	26.9 (59)	27.8 (57)	116
Sales	9.1 (20)	13.1 (27)	47
Clerical	2.7 (6)	0.0 (0)	6
Craft/Fr	17.8 (39)	7.3 (15)	54
Operativ	5.4 (12)	3.9 (8)	20
Service	1.3 (3)	0.9 (2)	5
Laborer	4.1 (9)	1.9 (4)	13
FOwner	3.1 (7)	0.4 (1)	8
Military	3.6 (8)	3.9 (8)	16
Total	100.0 (219)	100.0(205)	424

TABLE 3.4 MOTHER'S OCCUPATION BY YEAR GRADUATED

Mother's Census Occ Code	Year of UNH Graduation 1968	1978	Total
Professi	20.4 (45)	23.3 (49)	94
Manag/Pr	3.6 (8)	1.9 (4)	12
Sales	2.7 (6)	1.4 (3)	9
Clerical	11.8 (26)	9.5 (20)	46
Operativ	3.6 (8)	1.9 (4)	12
Service	1.3 (3	0.0 (0)	3
Laborer	3.6 (8)	0.4 (1)	9
FOwner	0.4 (1)	0.0 (0)	1
Househol	52.3 (115)	61.4 (129)	244
Total	100.0 (220)	100.0 (210)	430

overrepresented among UNH graduates in 1968. This professional and managerial class overrepresentation increases in 1978; the 1978 graduating sons and daughters of professionals and managers are greatly overrepresented among UNH graduates.

Table 3.4 displays the occupations of mothers of the respondents to this survey. The increases in professional mothers among the two cohorts of respondents is not quite so dramatic as in the increases in the proportion of professional fathers. The three percent increase is probably much more in line with the increase in female professionals at large during this time interval. I am surprised by the cohort increase in the number respondents that report their mother's occupation as "housewife." Over sixty percent (61.4%) of the 1978 graduates report that their mothers are not employed for pay. This finding further suggests that there is an overall upward shifting in social background of the two cohorts of public university graduates examined here.

There is a twelve point difference in the mean occupational status score (Duncan SEI) of the two cohorts under examination. Table 3.5 shows that the mean Duncan SEI is 67.1 for the 1978 fathers and 55.2 for the 1968 fathers. The cohort differences in Duncan SEI scores for mothers of the respondents are also shown in Table 3.5. The sharp increase in mean occupational status score indicates

TABLE 3.5 SUMMARY OF FATHER'S AND MOTHER'S DUNCAN SCORES BY COHORT

	Cohort	Var	Obs.	Mean	Std. Dev.	Min	Max
Father							
	1968	fsei	219	55.2	23.5	3	96
	1978	fsei	208	67.1	20.9	1	96
Mother							
	1968	msei	105	49.4	21.7	2	85
	1978	msei	81	58.5	14.5	10	85

that the 1978 respondents come from significantly higher socioeconomic status families than do the 1968 respondents. This difference is significant at the .05 level.

The educational resources of the respondent's family of origin is displayed in Table 3.6. Table 3.6 indicates that slightly under thirty-five percent (34.4%) of the respondents are first-generation college students -- that is, neither parent attended a college of any kind. About one in ten (9.2%) respondents have one parent that attended college but didn't graduate; about one third (30.9%) have one parent with a college degree. Over a quarter (25.4%) of the respondents come from families in which both parents have a college degree. More than half of the respondents (56.3%) have at least one parent with a college degree. Clearly, most of the respondents to this survey come from families with considerable educational resources. However, slightly over one-third are first-generation college graduates.

TABLE 3.6 FAMILY EDUCATIONAL STATUS

Family Educ Status	Freq.	Percent	Cum.
First Generation	149	34.41	34.41
1Parent Some	40	9.24	43.65
1ParGraduate	134	30.95	74.60
Both Par Grad	110	25.40	100.00
Total	433	100.00	

TABLE 3.6A FAMILY EDUCATIONAL STATUS BY YEAR GRADUATED, ROW PERCENT

Year of UNH Graduation	Family Educ Status: First Generation	1Parent Some Col	1Parent Graduated	Both Parents Graduates	Total
1968	95	25	62	38	220
	43.18	11.36	28.18	17.27	100.00
1978	54	15	70	71	210
	25.71	7.14	33.33	33.81	100.00
Total	149	40	132	109	430
	34.65	9.30	30.70	25.35	100.00

chi2(3)= 24.0380 Prob>chi2=0.000

TABLE 3.6B FAMILY EDUCATIONAL STATUS BY YEAR GRADUATED, COLUMN PERCENT

Year of UNH Graduation	Family Educ Status: First Generation	1Parent Some Col	1Parent Graduated	Both Parents Graduates	Total
1968	95	25	62	38	220
	63.76	62.50	46.97	34.86	51.16
1978	54	15	70	71	210
	36.24	37.50	53.03	65.14	48.84
Total	149	40	132	109	430
	100.00	100.00	100.00	100.00	100.00

chi2(3)= 24.0380 Prob>chi2=0.000

Tables 3.6A and 3.6B show the cohort differences in the Family Educational Status (famed) of the respondents. In 1968 over four-tenths (43.2%) of the respondents come from families in which neither parent has attended college. However, only one quarter (25.7%) of the 1978 respondents hail families in which neither parent has attended college. In addition, the percentage of respondents that have both parents that are college graduates almost doubles (1968 respondents = 17.3% 1978 respondents = 33.8%) from the 1968 to the 1978 cohort. Overall, like the occupational background status of the respondents, the educational status of respondents shifts significantly upward from the 1968 to the 1978 graduating cohorts.

3.Undergraduate Curriculum

The upward shift in overrepresentation of the offspring of the middle middle classes among the respondents generates a major research question: Is the undergraduate college curriculum a function of the respondents' parental resources such that the more educational and socioeconomic resources of the respondent's family, the less occupationally specialized his undergraduate training. In particular, this hypothesis focuses on first-generation public university graduates in comparison with graduates whose families have prior experience with higher education.

Do first generation public university students select a more occupationally relevant undergraduate training than do students whose family background includes greater educational resources? I wonder also, does occupationally specialized undergraduate training "pay off" in terms of higher status first jobs? Are there different long or short run payoffs to selecting different undergraduate majors? If so, is there any tendency for students of certain social backgrounds to select a certain type of curriculum?

Are first-generation college students more likely to choose a vocationally oriented curriculum? Table 3.7 shows that there is no statistically significant relationship between family educational status (famed) and college curriculum selection (demaj). First Generation college students select Engineering (20.1%) and Business (21.5%) more frequently than do students from higher educational status groups, but the differences are not greater than could occur by sampling error.

First-generation respondents also select Liberal Arts (32.2%) less often than do respondents with greater family educational resources, especially less often than graduates that come from families in which both parents have graduated from college (46.3%). Once again, the relationship between family educational status and college curriculum is not statistically significant at the .05 level. However, the

TABLE 3.7 FAMILY EDUCATIONAL STATUS BY COLLEGE PROGRAM

Family Educ Status	UNH College of Studies: Life Science & Agricul.	Liberal Arts	Engineer	Business	Health	Total
First Ge	24	48	30	32	15	149
Generatio	16.11	32.21	20.13	21.48	10.07	100.00
1ParSom	8	12	9	7	4	40
College	20.00	30.00	22.50	17.50	10.00	100.00
1ParGrad	23	52	19	24	16	134
	17.16	38.81	14.18	17.91	11.94	100.00
Both Par	22	50	10	15	11	108
Grad	20.37	46.30	9.26	13.89	10.19	100.00
Total	77	162	68	78	46	431
	17.87	37.59	15.78	18.10	10.67	100.00

chi2(12)= 13.1303 Prob>chi2=0.360

cell frequencies are in the direction implied by our first major hypothesis.

An analysis of this relationship by graduation cohort does not change the finding stated above. First-generation 1978 respondents are much more likely to chose the business curriculum in 1978 (35.2%) than in 1968 (13.7%). However, Tables 3.8 and 3.9 show that the proportion of 1978 respondents selecting the business program has more than doubled relative to the 1968 cohort. The decline in Liberal Arts majors (45% to 29.8%) corresponds to the growth of respondents reporting a business program major. As is the case in 1968, the Liberal Arts program in 1978 draws almost half of its majors (n = 28/63) from students who come from families in which both parents have graduated from college.

TABLE 3.8 FAMILY EDUCATIONAL STATUS BY COLLEGE PROGRAM -1968

Family Ed Status	UNH College of Studies: Life Science & Agric.	Liberal Arts	Engineer	Business	Health	Total
First Ge	12	37	24	13	9	95
	12.63	38.95	25.26	13.68	9.47	100.00
1ParSom	4	8	6	4	3	25
	16.00	32.00	24.00	16.00	12.00	100.00
1ParGrad	12	32	9	6	3	62
	19.35	51.61	14.52	9.68	4.84	100.00
BothGrad	8	22	3	3	2	38
	21.05	57.89	7.89	7.89	5.26	100.00
Total	36	99	42	26	17	220
	16.36	45.00	19.09	11.82	7.73	100.00

chi2(12)= 14.0842 Prob>chi2=0.295

TABLE 3.9 FAMILY EDUCATIONAL STATUS BY COLLEGE PROGRAM - 1978

Family Education Status	UNH College of Studies					
	Life Science & Agric.	Liberal Arts	Engineer	Business	Health	Total
First Ge	12	11	6	19	6	54
	22.22	20.37	11.11	35.19	11.11	100.00
1ParSom	4	4	3	3	1	15
	26.67	26.67	20.00	20.00	6.67	100.00
1ParGrad	11	20	10	18	13	72
	15.28	27.78	13.89	25.00	18.06	100.00
BothGrad	14	28	7	12	9	70
	20.00	40.00	10.00	17.14	12.86	100.00
Total	41	63	26	52	29	211
	19.43	29.86	12.32	24.64	13.74	100.00

chi2(12)= 12.6989 Prob>chi2=0.391

4. Gender and College Curriculum

The simple inflow Table 3.10 shows that two programs at UNH are clearly frequented more often by female rather than male graduates: The College of Life Sciences and Agriculture (59.2% female) and the College of Health Studies (82.6% female). Conversely, female respondents are underrepresented in the Liberal Arts (40%), Engineering (14.7%), and Business (28.6%).

Table 3.11 (outflow table) shows that males graduate from Engineering at a rate of almost four times greater than females. In additon, males graduate from the Business curriculum at almost twice the rate of females. On the other hand, females graduate from the Health Studies program at a rate of five times that of males.

If the data are analyzed by graduation cohort, the strong relationship between gender and curriculum remains undisturbed. However, there are some interesting changes in the relationship between curriculum and gender in the two graduation cohorts. First, whereas males are more represented in the Liberal Arts curriculum in 1968, females are more respresented in 1978. Males in 1968 constitute almost three quarters (74.5%) of the Liberal Arts respondents; 1978 males constitute 37.1% of the Liberal Arts respondents. In addition, in 1968 males represent slightly

TABLE 3.10 PROGRAM OF STUDIES BY GENDER, COLUMN PERCENTS

Gender	UNH College of Studies: Life Science & Agric	Liberal Arts	Engineer	Business	Health	Total
Male	31	96	58	55	8	248
	40.79	60.00	85.29	71.43	17.39	58.08
Female	45	64	10	22	38	179
	59.21	40.00	14.71	28.57	82.61	41.92
Total	76	160	68	77	46	427
	100.00	100.00	100.00	100.00	100.00	100.00

chi2(4)= 67.1735 Prob>chi2=0.000

TABLE 3.11 PROGRAM OF STUDIES BY GENDER, ROW PERCENTS

Gender	UNH College of Studies: Life Science & Agric.	Liberal Arts	Engineer	Business	Health	Total
Male	31	96	58	55	8	248
	12.50	38.71	23.39	22.18	3.23	100.00
Female	45	64	10	22	38	179
	25.14	35.75	5.59	12.29	21.23	100.00
Total	76	160	68	77	46	427
	17.80	37.47	15.93	18.03	10.77	100.00

chi2(4)= 67.1735 Prob>chi2=0.000

over half of the graduates in the College of Life Sciences and Agriculture; in 1978 males constitute only 30% of these respondents.

Females make some gains in their representation in two male public university strongholds from 1968 to 1978. First, the percentage of males declines in the Engineering School from 92.9% in 1968 to 73% in 1978. Second, the percentage of males declines in the Business School from 84% in 1968 to 65.4% in 1978.

Females do increase their percentage of respondents in the Health Studies program and the College of Life Sciences and Agriculture. Among 1978 respondents, the Health Studies program is almost nine-tenths composed of females. Despite the modest gains made by females in the 1978 graduation cohort over the 1968 graduation cohort, females continue to be underrepresented in programs that employers find most desirable. Such a fact indicates that differences in program selection might be related to differences in labor market experiences among male and female college graduates.

5. Predictors of College Major

The respondent's undergraduate college major is ordered according what this researcher sees as the labor market demand for that particular type of training in the variable that is labelled, demand for major (demaj). The basic idea behind this operation is to generate an ordinal variable out

of the 63 distinct majors reported in this study. The construct validity of this variable as an ordinal one may be questionnable, however, this variable appears to capture the intended meaning: at one end are majors relating to education and the social sciences, next come the qualitative liberal arts majors like art history, then the quantitative liberal arts majors like math, followed by technical programs like environmental and agriculutural studies, health, and business. Finally, this variable consists of the majors of engineering and computer science. This variable has face validity as a nominal variable and appears to correlate with what I would expect it to be related to.

Father's occupation is not related in any significant way to the demand for major (demaj) variable. The outflow Table 3.12 shows that the sons and daughters of blue-collar fathers choose majors in education and the social sciences at similar rates as do the sons and daughters of white-collar fathers. Similarly, sons and daughters of blue-collar fathers choose health-related and engineering/computer-related majors only slightly more often than do the sons and daughters of white-collar fathers. The only difference between the respondents of different social class backgrounds is that the offspring of white-collar fathers choose business-related majors at almost twice the rate of the sons and daughters of blue-collar fathers. Once again, however, these differences are not statistically

significant at the .05 level. Among these respondents, there is no significant relationship between father's occupation measured by the simple blue-collar/white-collar dichotomy and the demand for major variable (demaj).

Analyzing the data by cohort (Tables 3.12a and 3.12b) does little to alter the picture given in Table 3.12. The only major differences are that 1978 respondents from blue-collar backgrounds are less likely to major in education or social science-related majors and are the 1968 respondents.

Family Educational Status (famed) is not significantly related to college major in the sample as a whole. However, the family educational status of 1968 respondents is statistically related to college major. Table 3.13 shows that in 1968 first-generation college respondents major in the education major much more often than would be expected by chance. In addition, they select the business major almost twice as often (11.8%) as do respondents who have both parents (7.8%) that graduated from college. It appears that the 1968 first-generation college students select an occupationally-related college curriculum. First-generation graduates in 1968 choose engineering and computer majors (20.4%) at almost four times the rate as do respondents respondents who have both parents that graduated from college (5.2%).

TABLE 3.12 MAJOR DEMAND SCALE BY FATHER'S OCCUPATION

Father's Occ Collar	demaj Education	Social Sciences	Mediun Lib Arts	High Lib Arts	Agri & AgriEnvt	Total
Blue Col	3	23	7	23	3	90
	3.33	25.56	7.78	25.56	3.33	100.00
White Co	11	73	51	47	8	310
	3.55	23.55	16.45	15.16	2.58	100.00
Total	14	96	58	70	11	400
	3.50	24.00	14.50	17.50	2.75	100.00

Father's| demaj (continued)

Collar	Business	Health	EnginCom	Total
Blue Collar	10	9	12	90
	11.11	10.00	13.33	100.00
White Collar	58	22	40	310
	18.71	7.10	12.90	100.00
Total	68	31	52	400
	17.00	7.75	13.00	100.00

chi2(7)= 11.3328 Prob>chi2=0.125

TABLE 3.12a MAJOR DEMAND SCALE BY FATHER'S OCCUPATION -1968

Father's Collar	demaj Education	Social Sciences	Medium LibArts	High LibArts	Agric & Envnt	Total
Blue Col	3	19	4	13	2	61
	4.92	31.15	6.56	21.31	3.28	100.00
White Co	7	37	25	24	4	141
	4.96	26.24	17.73	17.02	2.84	100.00
Total	10	56	29	37	6	202
	4.95	27.72	14.36	18.32	2.97	100.00

Father's Collar	demaj (continued) Business	Health	EnginCom	Total
Blue Col	4	6	10	61
	6.56	9.84	16.39	100.00
White Co	17	4	23	141
	12.06	2.84	16.31	100.00
Total	21	10	33	202
	10.40	4.95	16.34	100.00

chi2(7)= 9.9806 Prob>chi2=0.190

TABLE 3.12b MAJOR DEMAND SCALE BY FATHER'S OCCUPATION - 1978

Father's Collar	demaj Education	Social Science	Medium LibArts	High LibArts	Agric & Envt	Total
Blue Col	0	4	3	10	1	29
	0.00	13.79	10.34	34.48	3.45	100.00
White Co	4	36	26	23	4	169
	2.37	21.30	15.38	13.61	2.37	100.00
Total	4	40	29	33	5	198
	2.02	20.20	14.65	16.67	2.53	100.00

Father's Collar	demaj (continued) Business	Health	EnginCom	Total
Blue Col	6	3	2	29
	20.69	10.34	6.90	100.00
White Co	41	18	17	169
	24.26	10.65	10.06	100.00
Total	47	21	19	198
	23.74	10.61	9.60	100.00

chi2(7)= 8.7849 Prob>chi2=0.268

The family educational status relationship disappears among the 1978 respondents. Table 3.14 shows that not one 1978 first-generation respondent to this survey chooses to major in education. In the 1978 cohort, first-generation respondents are overrepresented in the higher, more quantitative liberal arts majors such as mathematics and physics as well as the agricultural and environmental majors. In addition, these graduates pursue the business major at a high rate; however, first-generation respondents lose some ground in engineering and the computer fields. Table 3.14 also shows that respondents from families in which both parents hold college degrees continue to be overrepresented in the liberal arts majors but not to the extent that they are in 1968.

TABLE 3.14 DEMAND FOR MAJOR BY FAMILY EDUCATIONAL STATUS, 1978 COHORT

Family Educ Status	demaj Education	Social Science	Medium LibArts	High LibArts	Agric & Envnt	Total
First Generation	0 .00	7 12.9	6 11.1	12 22.2	3 5.5	54 100
1Parent Some	0 .00	1 6.6	4 26.6	3 20.0	0 0.0	15 100
1Parent Graduate	2 2.7	16 22.2	7 9.7	14 19.4	1 1.4	72 100
Both Parent Graduates	3 4.3	19 27.1	13 18.6	8 11.4	1 1.4	70 100

(CONTINUED)

Family Educ Status	demaj Business	Health	Engineer	Total
First Generation	17 31.5	5 9.3	4 7.4	54 100
1Parent Some	3 20.0	1 6.7	3 20.0	15 100
1Parent Graduate	16 22.2	10 13.9	6 8.3	72 100
Both Parent Graduates	13 18.6	6 8.6	7 10.0	70 100
Total	49 23.2	22 10.4	20 9.5	211 100

chi2 (21)= 22.6 Prob>chi2=0.364

TABLE 3.15 DEMAND FOR MAJOR BY GENDER

Gender	demaj Education	Social Science	Medium LibArts	High LibArts	Agric& Envnt	Total
Male	7	38	42	49	11	246
	2.8	15.5	17.1	19.9.	4.5	100.0
Female	8	64	20	28	1	179
	4.5	35.7	11.2	15.6	.6	100.0
Total	15	102	62	77	12	425
	3.5	24.0	14.6	18.1	2.8	100.0

(CONTINUED)

Gender	demaj Business	Health	Engineer	Total
Male	50	0	49	246
	20.3	0.0	19.9	100.0
Female	20	33	5	179
	11.2	18.4	2.8	100.0
Total	70	33	54	425
	16.5	7.7	12.7	100.0

Chi2(7)=102.2 Prob>chi2=0.00

TABLE 3.16 DEMAND FOR MAJOR BY GENDER, 1968 RESPONDENTS

Gender	demaj Education	Social Science	Medium LibArts	High LibArts	Agric& Envnt	Total
Male	7	28	30	34	7	155
	4.5	18.1	19.4	21.9	4.5	100.0
Female	3	33	2	6	0	61
	4.9	54.1	3.3	9.8	0.0	100.0
Total	10	61	32	40	7	216
	4.6	28.2	14.8	18.5	3.2	100.0

(CONTINUED)

Gender	demaj Business	Health	Engineer	Total
Male	17	0	32	155
	10.9	0.0	20.6	100.0
Female	4	11	2	61
	6.6	18.0	3.3	100.0
Total	21	11	34	216
	9.7	5.1	15.7	100.0

Chi2(7)= 71.2 Prob>chi2=0.00

TABLE 3.17 DEMAND FOR MAJOR BY GENDER, 1978 RESPONDENTS

Gender	demaj Education	Social Science	Medium LibAtrs	High LibArts	Agric& Envrnt	Total
Male	0	10	12	15	4	91
	0.0	10.9	13.2	16.5	4.4	100.0
Female	5	31	18	22	1	118
	4.2	26.3	15.2	18.6	0.8	100.0
Total	5	41	30	37	5	209
	2.4	19.6	14.3	17.7	2.4	100.0

(CONTINUED)

Gender	demaj Business	Health	Engineer	Total
Male	33	0	17	91
	36.3	0.0	18.7	100.0
Female	16	22	3	118
	13.6	18.6	2.5	100.0
Total	49	22	20	209
	23.4	10.5	9.7	100.0

Chi2(7)= 55.2 Prob>chi2=0.00

6. Gender and College Major

The respondent's gender is related significantly to the labor market demand for the college major variable (demaj) in such a way that women in 1968 and in 1978 choose majors that are at the lower end of the demand scale (more qualitative majors) while men choose majors in high demand areas (more quantitative). Table 3.15 shows that female respondents are twice as likely than male respondents to chose education and social science majors. Conversely, men are more likely to choose high demand liberal arts majors like math and physics. In addition, male graduates (20.3%) choose the business major at twice the rate that female (11.1%) respondent do. Finally, Table 3.15 indicates that male respondents major in engineering and computer studies at a rate of nine (19.9%) to one (2.8%).

Analysis of the data by graduation cohort does not disturb the significant relationship between gender and demand for college major (demaj). Table 3.16 shows a similar pattern to Table 3.15. However, note that over half of the 1968 female respondents (54.1%) major in one of the social science disciplines. Addition of the percentages of education, social science, and health-related disciplines for the 1968 cohort yields a total that seventy-seven percent (77%) of the female respondents major in these disciplines.

Table 3.17 indicates that 1978 female participation in these three categories declines to slightly under fifty percent (49.1%). 1978 female respondents double their participation in business-related majors (6.6% to 13.6%) and increase their participation in the medium liberal arts disciplines from 3.2% to 15.2%.

The multivariate estimation equation below provides the regression coefficients that describe the respondents' college major measured as an ordinal variable (demaj). For the four variable model, the least squares equation (3.1) is,

predicted Y = a0 + b1X1 + b2X2 + b3X3 + e

where Y = respondent's undergraduate major, X1 = father's occupational status, X2 = family educational resources, X3 = value (1) of the gender variable. The gender variable (v3) has two categories. Therefore, I formulate one dummy variable. I chose to use the female category as base so that the male advantage can be more easily assessed.

Least squares yields the following parameter estimates,

Predicted Y =	3.9 +	.005X1 -	.19X2 +	.72X3
	<.34>	<.01>	<.08>	<.21>
	(11.6>	(1.1)	(2.4)*	(3.4)*

R2 = .043 n = 421 se = 2.1

where the values in <> are the standard errors of the parameter estimates, the values in parentheses are the t ratios, R2 = coefficient of determination, n = sample size, and se = the standard error of estimate for Y.

Equation (3.1) can be criticized because it consists merely of ordinal variables. With this qualification in mind, equation (3.1) indicates the model hardly explains any (4.3%) of the variation in the demand for college major of the respondents. The equation does indicate that gender is significantly related to the labor market demand of the respondent's major, holding the other variables constant. Males major in much more high demand (quantitative) areas than do females. This relationship is significant at the .001 level. Equation (3.1) also indicates that the respondent's family educational status is negatively related to the demand for college major variable (demaj) at the .01 level of significance. This means that graduates from families with low educational status (resources) tend to major in high demand (quantitative) majors. In the sample as a whole, then, college major is related to the educational status that the respondent brings with him to college.

Finally, the multivariate estimation equation (3.1) indicates that father's occupational status is not significantly related to the respondent's college major. The first major hypothesis that college curriculum is a function of the respondent's parental resources is not fully confirmed by the data analysis. College major is not statistically related to parental occupational resources. However, equation (3.1) indicates that the family educational status that the respondent brings with him to college does influence his choice or selection of college major. If the graduate comes from a family with few higher educational experiences, then he organizes his undergraduate curriculum around the aqusition of marketable skills; he majors in more quantitative or technical areas. Conversely, graduates with greater family educational status major in less quantitative liberal arts areas.

Gender is related to the undergraduate major of the respondents to this study. In addition, there are some interesting differences in curriculum selection according to the respondent's graduation cohort. These differences must be kept in mind as the analysis proceeds to explore the professional training of public university graduates as well as their labor market entry.

7. The Professional Training of the Respondents

Slightly over four-tenths (44.1%) of the respondents to the survey report some form of formal schooling after graduating from UNH. Table 3.18 shows that more than one-quarter (28.9%) earn Masters degrees and almost three percent (2.8%) earn Doctorates. In addition, almost one-tenth of the sample earn some sort of professional certificate to bolster the careers. Another small segment (3.9%) are still enrolled in some kind of professional training program.

Several theories concerning the expansion of education in industrial societies point to the impact of social class factors at the transition points in the educational process in predicting who goes on to the next phase of schooling (Collins, 1979; Bowles and Gintis, 1976). Below I test the ability of several factors to predict who among UNH graduates goes on for further professional training.

Table 3.19 indicates that father's occupational position, measured along the white and blue collar dichotomy, is connected significantly to who pursues advanced professional training. Surprisingly, it is the sons and daughters of blue-collar fathers that are overrepresented among the proportions of respondents who earned Masters and Doctoral degrees. For example, Table 3.18 shows that although almost 29 percent of the respondents

earne Masters degrees, almost one-third of the offspring of blue-collar fathers earn the Masters. Again, while respondents earn Doctorates at a rate of three percent, graduates from blue-collar families earn Doctorates at a rate of almost eight (7.6%) percent. Clearly, the data show that respondents from blue-collar families that pursue advanced educational credentials.

TABLE 3.18 RESPONDENT'S EDUCATION BY FATHER'S SOCIAL CLASS

V5A	Father's Collar Blue Col	White Co	Total
Masters	30	86	116
	32.61	27.74	28.86
Ph.D.	7	5	12
	7.61	1.61	2.99
Certific	10	23	33
	10.87	7.42	8.21
Current1	1	16	17
	1.09	5.16	4.23
Missing	44	180	224
	47.83	58.06	55.72
Total	92	310	402
	100.00	100.00	100.00

chi2(4)= 14.2747 Prob>chi2=0.006

The last row in Table 3.18 shows that less than fifty percent of the respondents from blue-collar backgrounds fail to proceed onward with professional training; yet almost sixty percent (58%) of respondents from white-collar backgrounds do not proceed onwards for any further professional schooling.

Table 3.19 presents the respondent's professional training by father's occupation measured in terms of three simple categories: professional fathers, mangerial fathers, and nonprofessional-nonmanagerial fathers. Again, the father's occupation and respondent's pursuit of professional training is significant at the .05 level. A slightly different conclusion must be draw from Table 3.19 than from Table 3.18. Sons and daughters of professional fathers are the most likely to pursue professional training (50.7%). The graduates least likely to pursue professional training are the sons and daughters of managers -- almost two-thirds (64.6%) do not go on for any professional training. Respondents from low status white-collar (sales and clerical) fathers and blue-collar fathers pursue professional training at a lesser rate than respondents from professional fathers but at a greater rate than respondents of mangerial fathers. I must conclude that the relationship between father's occupational position and respondent's pursuit of professional training is statistically

TABLE 3.19 RESPONDENT'S EDUCATION BY FATHER'S OCCUPATION

V5A	fcol2 Professi	Manageri	Non-Prof	Total
Masters	46	28	51	125
	32.86	24.14	28.81	28.87
Ph.D.	3	2	7	12
	2.14	1.72	3.95	2.77
Certific	12	6	19	37
	8.57	5.17	10.73	8.55
Currentl	10	5	2	17
	7.14	4.31	1.13	3.93
Missing	69	75	98	242
	49.29	64.66	55.37	55.89
Total	140	116	177	433
	100.00	100.00	100.00	100.00

chi2(8)= 15.7152 Prob>chi2=0.047

significant at the .05 level but not straight-forward. Sons and daughters of managerial fathers seem to value educational certificates less than the offspring of other classes.

In chapter one, I hypothesize that there is a connection between parental socioeconomic resources and the pursuit of professional training. The data in Table 3.18 confirms this hypothesis. However, confirmation appears to be in the opposite direction than predicted by my hypothesis. Blue-collar sons and daughters pursue degrees and certificates at a much higher rate than do the offspring of white-collar fathers.

Blue-collar 1978 respondents do not follow the general pattern of the larger sample. Indeed, these respondents lag slightly behind their white-collar peers in earning professional degrees. Table 3.20 shows that blue-collar 1978 respondents are slightly below the cohort averages for Masters degrees, professional certificates, and currently enrolled degree candidates. The slight advantages that 1978 white-collar sons and daughters have in this regard are not statistically significant, however. The only Doctorate earned as yet by a member of the 1978 cohort is by a male respondent of blue-collar origin.

The relationship between the father's occupation and the respondent's pursuit of professional training is more complicated than it looks according to the simple

TABLE 3.20 PROFESSIONAL TRAINING BY FATHER'S OCCUPATION, 1978 RESPONDENTS

V5A	Father's Occupation		
	Blue Collar	White Collar	Total
Masters	6	40	46
	20.7	23.7	23.2
Doctorate	1	0	1
	3.4	0.0	0.5
Certificate	2	16	18
	6.9	9.5	9.1
Currently Enrolled	1	13	14
	3.4	7.7	7.1
Missing	19	100	119
	65.5	59.2	60.1
Total	29	169	198
	100.0	100.0	100.0

chi2(4) = 6.89 Prob>chi2= 0.141

white-collar/blue-collar dichotomy. If father's occupations are grouped into high white-collar (professionals and managers) and low white-collar (sales and clerical) and blue-collar occupations, then it is possible to observe an alternate pattern among the respondent's pursuit of professional training within the high white-collar world. The sons and daughters of professions pursue professional training at the highest rate; the sons and daughters of managers pursue professional training at the lowest rate. The sons and daughters of low status white-collar fathers and of blue-collar fathers pursue professional training more frequently than the offspring of managerial fathers but less frequently than the offspring of professional fathers. I must conclude that among some college graduates, social class background is significantly related to who goes on to professional training, the next rung on the higher educational ladder.

8. Family Educational Status and Professional Training

The relationship between the father's occupational status and the respondent's professional training, makes me wonder whether parental educational status (famed) is also related in any way to the respondent's educational experiences after college graduation. Table 3.22 suggests that there is no significant relationship between parental educational status and the respondent's professional training at the .05 significance level. The row labeled Missing indicates those respondents that did not pursue professional training. One should note the discrepancy between first-generation respondents and respondents who have both parents that graduated from college. This ten percentage difference is not statistically significant.

Table 3.22 shows that both first-generation university respondents and respondents who had at least one parent attend but not graduate from college are proportionately overrepresented in the Master degree and the Ph.D. totals. In addition, the first-generation college graduates have the lowest percentage of those respondents who did not pursue some advanced professional training. The differences are not greater however than might occur by chance.

Table 3.23 shows that first-generation college graduates earn almost forty percent of the Masters degrees

of the graduates. Graduates who have one parent that graduated from college earn slightly over a quarter of all the Masters degrees. Graduates that have parents who both hold college degrees, themselves are able to earn slightly more than one-fifth of all the Masters degrees that the respondents earn. First-generation college graduates, thus, are about twice as likely to earn Masters degrees than are graduates from the highest family educational status backgrounds.

TABLE 3.22 RESPONDENT'S EDUCATION BY FAMILY EDUCATIONAL STATUS

	Family Educ Status				
V5A	First Ge	1ParSom	1ParGrad	BothGrad	Total
Masters	48	13	36	28	125
	32.21	32.50	26.87	25.45	28.87
Ph.D.	6	2	4	0	12
	4.03	5.00	2.99	0.00	2.77
Certific	13	3	11	10	37
	8.72	7.50	8.21	9.09	8.55
Currentl	4	0	10	3	17
	2.68	0.00	7.46	2.73	3.93
Missing	78	22	73	69	242
	52.35	55.00	54.48	62.73	55.89
Total	149	40	134	110	433
	100.00	100.00	100.00	100.00	100.00

chi2(12)= 14.2735 Prob>chi2=0.284

TABLE 3.23 PROFESSIONAL TRAINING BY FAMILY ED. STATUS, 1968 RESPONDENTS

Family Educ Status	V5A Masters	Ph.D.	Prof Certif	Current Enrolled	Missing	Total
First Generation	37	5	9	1	43	95
	38.9	5.2	9.4	1.0	45.3	100.0
1 Parent Some Colleg	9	2	0	0	14	25
	36.0	8.0	0.0.	0.0	56.0	100.0
1 Parent Graduate	21	4	3	2	32	62
	33.8	6.4	4.8	3.2	51.6	100.0
Both Parent Graduates	10	0	4	0	24	38
	26.3	0.0	10.5	0.0	63.2	100.0
Total	77	11	16	3	113	220
	35.0	5.0	7.2	1.4	51.4	100.0

Chi2(12) = 11.73 Prob>chi2= 0.468

9. Gender and Professional Training

Among the respondents to this survey, gender is a statistically significant predictor of professional training. Table 3.24 indicates that while male respondents constitute fifty-eight percent of the sample, they earn sixty-six percent of all the Masters degrees and over eighty-three percent of all Doctorates. Inspection of the Missing Values column indicates that males are slighty underrepresented among the respondents who do not pursue professional training after graduation.

Table 3.25 shows a similar pattern for the 1968 graduation cohort. However, the differnces in the table are not so different as might occur by chance. Among the 1968 graduates, males earn over three-quarters of the Masters degrees but they constitute almost three-quarters of the 1968 respondents to the survey.

Among the 1978 respondents, males have clearcut advantages over the females. Almost fifty percent (48.9%) of the Masters degree are earned by males who constitute slightly more than forty-three percent (43.5%) of the 1978 respondents. The differences shown among the 1978 male and female respondents could only occur by chance in about three cases out of one hundred.

TABLE 3.24 PROFESSIONAL TRAINING BY GENDER

Gender	V5A Masters	Ph.D.	Certific	Currentl	Missing	Total
Male	82 66.13	10 83.33	19 51.35	3 17.65	134 56.54	248 58.08
Female	42 33.87	2 16.67	18 48.65	14 82.35	103 43.46	179 41.92
Total	124 100.00	12 100.00	37 100.00	17 100.00	237 100.00	427 100.00

chi2(4)= 18.7765 Prob>chi2=0.001

TABLE 3.25 PROFESSIONAL TRAINING BY GENDER -1968

Gender	V5A Masters	Ph.D.	Certific	Currentl	Missing	Total
Male	59	9	12	2	75	157
	76.62	81.82	75.00	66.67	67.57	72.02
Female	18	2	4	1	36	61
	23.38	18.18	25.00	33.33	32.43	27.98
Total	77	11	16	3	111	218
	100.00	100.00	100.00	100.00	100.00	100.00

chi2(4)= 2.5389 Prob>chi2=0.638

TABLE 3.26 PROFESSIONAL TRAINING BY GENDER -1978

Gender	V5A Masters	Ph.D.	Certific	Currentl	Missing	Total
Male	23	1	7	1	59	91
	48.94	100.00	33.33	7.14	46.83	43.54
Female	24	0	14	13	67	118
	51.06	0.00	66.67	92.86	53.17	56.46
Total	47	1	21	14	126	209
	100.00	100.00	100.00	100.00	100.00	100.00

chi2(4)= 10.8412 Prob>chi2=0.028

Professional training is linked with father's occupational position. Sons and daughters of blue-collar fathers pursue and achieve educational credentials at a much higher rate than their proportional representation would predict. They do not pursue and achieve professional status at the rate of the sons and daughters of professional fathers, however. The analysis of family educational status shows that first-generation college graduates pursue the professions at a high rate but that these differences are not statistically significant at the .05 level. Gender is related to professional training: males are more likely to earn professional degrees and certificates than females.

10. Conclusion

This chapter focuses on the dependent variables of college major and professional training. Several hypotheses are tested using the independent variables of educational and occupational status of the respondent's family of origin. Gender and graduation cohort are also considered as independent variables in the analyses.

The first major hypothesis tested is that the graduate's college major is a function of parental educational and occupational status. I find that parental resources do influence the undergraduate curriculum selection of the respondents. Father's occupational status

is not significantly related to the respondent's college major. However, family educational status is related to the respondent's selection of college major in such a way that the lower the family educational status of the respondent, the more quantitative or vocational his/her choice of college major. Alternatively, graduates with higher family educational status major in less quantitative or occupationally-specialized liberal arts areas. I also find that gender is related to the curriuclum of the respondents to this study: female respondents tend to major in the less quantitative or occupationally-specialized liberal arts areas.

The second major hypothesis is that professional training is a function of parental educational and occupational status. I find that who goes on for professional training is a function of father's occupational status. The sons and daughters of professional parents are most likely to go on to professional school. The next likely group to pursue professional training is the sons and daughters of low status white-collar fathers and blue-collar fathers. The sons and daughters of managerial fathers are least likely to pursue professional training. These differences are significant at the .05 level. No significant relationship exists between family educational status and pursuit of professional training.

These findings on the relationship of parental status to the graduate's curriclum choices and pursuit of professional training suggest that the offspring of different segments of the social class structure bring different motivations, if not abilities, to the public university. These motivations are no doubt directly related to their family's values toward higher schooling.

The educational experiences of the respondents to this survey generate the impression that public university graduates of blue-collar and lower white-collar origin use the public university as a mechanism for upward educational (and hopefully occupational) mobility. At the same time, it appears that the public university is used to reproduce the middle class position of graduates of professional origin. The managerial element of the middle class does not appear to feel the need to acquire educational credentials to protect its status.

The findings pertaining to gender suggest that middle class daughters use the university to protect themselves from downward mobility, that is, to maintain their already middle class status. Daughters of blue-collar origin tend toward nursing and quantitative undergraduate majors like the life sciences and engineering. Daughters of white-collar origin tend toward the less quantitatve liberal arts -- music, language, and art history. Each of their choices is limited by factors of social class and gender.

I wonder if educational mobility and immobility are directly connected to occupational mobility and immobility. I suggest that the connections, if any, are not as strong as is commonly thought. The linkages between these two distinct types of attainment pose serious empirical questions for researchers interested in social stratification. Chapter 4 explores the issue of converting educational mobility into occupational mobility. Let's turn our attention to the findings that pertain to labor market entry and subsequent occupational mobility.

CHAPTER IV

LABOR MARKET ENTRY OF PUBLIC UNIVERSITY GRADUATES

1. Introduction

In this chapter labor market entry is viewed as a process that involves the respondent's first six years after college graduation. This perspective is necessary because of the difficulty in measuring labor market entry. Measurement at two points in time allows us to investigate the process by which the respondent begins his/her career. Two major hypotheses focusing on the occupational attainments of public university graduates are examined. These hypotheses are explored through a series of multivariate regression models.

First, I examine the hypothesis that the respondent's first job after college graduation is determined by parental occupational position; that is, I test what is termed an SES intergenerational model of labor market entry. This analysis focuses on describing the differences in initial labor market entry broken down by the respondent's socioeconomic background. I place the analysis in the context of graduation cohort and gender. Second, I examine the major hypothesis that there are no differences in the occupational attainment process for male and female UNH graduates. Here I

focus on the comparison of predictors of first- and sixth-year job. The progress that each graduation cohort and gender achieves during the early stages of their career is examined.

Entry into the labor force marks two important divisions within the social stratification process. It separates each person's education from work experience, and it is the first point at which occupations can be traced from one generation to the next (Ornstein, 1976). Two important stratification variables become defined by this passage from school to work -- the respondent's education and the occupational status of his/her first job. The critical relationship between the occupations of parent and offspring, between an individual's first job and later jobs, and between schooling and occupation become defined at entry.

Most sociological research that considers labor market entry focuses on the maintenance of inequalities in the family backgrounds of individuals and their levels of educational attainment in the jobs held after entry. Blau and Duncan's (1967: 170) national sample survey shows that about one-third of the variation in the quality of the first job, as measured using a socioeconomic scale of occupations, can be explained by the respondent's educational attainment together with the education and occupation of his father. In addition, Blau and Duncan show that the respondent's

education and his father's occupation directly influence the quality of his first job, but that the father's education has only an indirect effect, which is transmitted by the other two variables. More elaborate models that include several measures of intelligence and of motivation do not achieve much greater predictive power than about forty per cent (40%) (Duncan, Featherman, and Duncan, 1972: Chapter 5).

A second set of major findings by Blau and Duncan (1967) concerns the impact of race as a structural determinant of labor market entry and career development. Blacks and other minorities are "disadvantaged relative to whites, not only educationally, but also in respect to all other career contingencies" (1967: 209). Blau and Duncan add that holding constant such handicaps as socioeconomic status does little to reduce the inferior occupational chances of nonwhites. As noted in an earlier critique institutional racism, therefore, pervades the occupational stratification process. Minority status contributes an independent effect to the occupational stratification process.

This chapter examines the labor market entry of public university graduates. Blau and Duncan's findings lead us to consider structural aspects of the achievement process. Do class differences continue to exist among college graduates with the same educational credentials? I take seriously

Durkheim's (1982:128) dictum that it is "in the nature of the society itself that we must seek the explanation of social life." Thus, my theoretical orientation is that the organization of society affects the range of options people have and that such choices are external and coercive over individuals. From this perspective I look at the intergenerational factor as one structural predictor of the quality of labor market entry. In addition, I look at gender as a structurally-based predictor of the quality of labor market entry. Finally, because many argue that a college degree no longer yields the privilege that it once did, I compare the quality of labor market entry, viewed as a six-year process, of two cohorts of public university graduates.

2. Central Tendencies of Labor Force Entry

Table 4.1 summarizes the occupational findings of the Occupational Changes in a Generation (OCG) data of Blau and

TABLE 4.1 COEFFICIENTS OF CORRELATION FOR OCG MALES AGED 20-64, DUNCAN SOCIOECONOMIC STATUS UNITS

Variables	FAED	FAOCC	EDUC	FJOB	OCC	MEAN	S.D.
Father's ed.	--	.501	.445	.325	.298	2.27	1.55
Father's occ.		--	.426	.402	.380	28.06	18.77
R's education			--	.512	.564	3.42	1.56
R's First job				--	.523	26.68	20.23
R's current occupation					--	35.66	21.48

Source: Robert M. Hauser and David L. Featherman, The Process of Stratification: Trends and Analyses, New York: Academic Press, pp.19.

Duncan (Hauser and Featherman, 1977: 19). For our purposes, the reader should note the existence of moderate correlations between the respondent's father's education and occupation variables with respondent's first and current jobs in this nationally representative sample. In addition, the Duncan occupational scores for the respondent (Respondents' mean first job SEI = 26.68; Respondents' mean present job SEI = 35.66) and his father (Fathers' mean SEI = 28.06) in the population at large are quite small compared to our sample's occupational scores.

The average fathers' SEI score for our sample is quite

high (mean fsei = 61.0). At the same time, the respondents enter the labor market at slightly higher Duncan socioeconomic status scores (mean sei1 = 63.09) than their fathers. The sample pattern itself is somewhat different from the general population pattern in which it is usual for the offspring to encounter a small status loss in the transition from school to work. For example, Table 4.1 shows that sons in Blau and Duncan's national sample enter the labor market with slightly less occupational status than their fathers (the national means are: father = 28.06; son = 26.68).

Table 4.2 summarizes the first-job socioeconomic status of the respondents to the survey. There is especially no difference in the mean Duncan scores of first jobs taken by male and female 1968 respondents. Respondents in 1978 cohort do not have so high a mean first job score as do 1968 respondents. In addition, the standard deviations of these occupational scores indicate that the first jobs taken by the 1978 graduates are more dispersed in terms of occupational status than are the occupational scores of 1968 respondents. Table 4.2 also shows that within each graduation cohort, males have slightly higher average occupational status than females. The observed mean differences summarized in Table 4.2 are not statistically significant at the .05 level. The null hypothesis that the true mean values of the occupational scores of the

TABLE 4.2 SUMMARY OF RESPONDENT'S FIRST JOB IN DUNCAN UNITS

GROUP	CASES	MEAN	STD. DEV.	.05 INTERVAL ESTIMATE	RANGE
1968 MALES	154	64.77	14.39	+/- 2.27 (a.)	7-96
1968 FEMALES	59	64.00	12.91	+/- 3.13 (b.)	16-96
1978 MALES	89	62.03	20.61	+/- 4.28 (c.)	7-96
1978 FEMALES	114	60.79	17.21	+/- 3.15 (d.)	11-93

---

* The .05 confidence interval estimate is computed as follows:

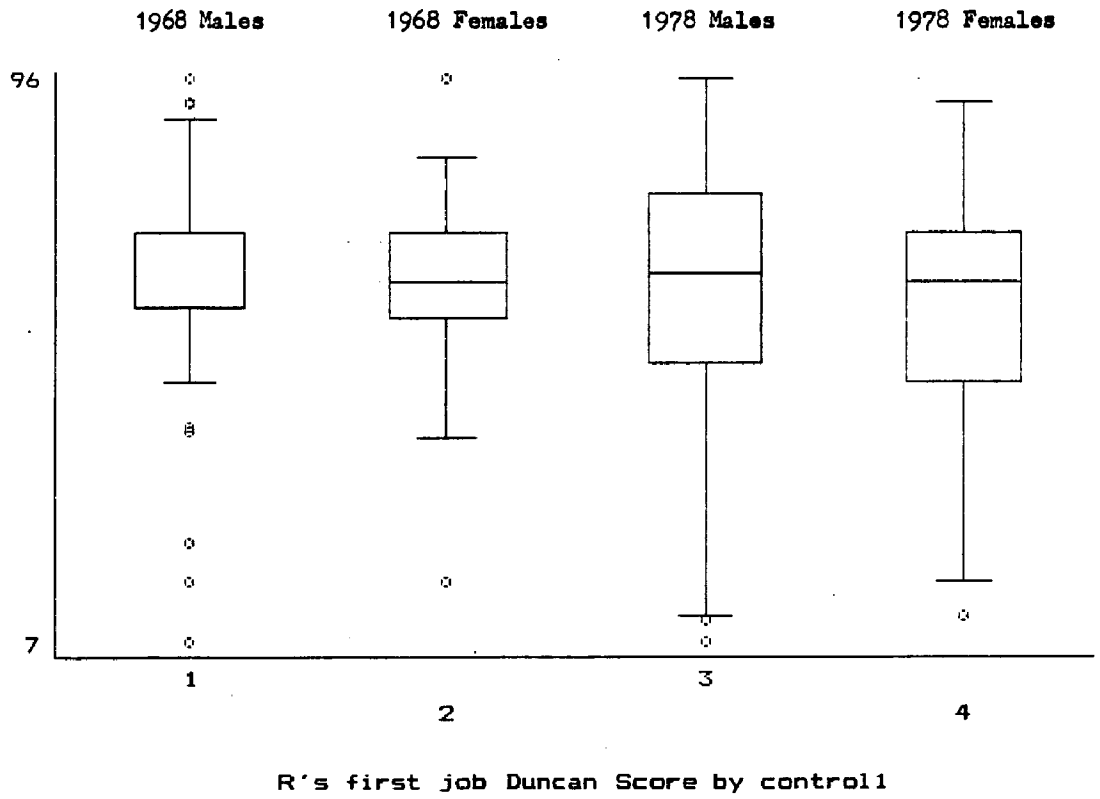
.05 confid. inter. = +/- Z * std. dev/square root of n.

		Confidence intervals:
(a.)	1.96 * 14.39/12.4 = +/- 2.27 ::	(62.49----------67.03)
(b.)	1.96 * 12.91/8.0 = +/- 3.13 ::	(60.87----------67.13)
(c.)	1.96 * 20.61/9.43 = +/- 4.28 ::	(57.75----------66.31)
(d.)	1.96 * 17.21/10.68= +/- 3.15 ::	(57.64----------63.94)

respondents are the same in the population from which the sample is drawn can not be rejected at the .05 level.

The box-and-whisker plots in Figure 4.1 indicate that the process of labor market entry is different for male and female respondents even if the average occupational status payoff of a college degree is the same. Figure 4.1 shows that female respondents have slightly lower median occupational status in their first jobs than do the men of their respective graduation cohort. In addition, the visual display indicates that the first job occupational status of UNH women is more symmetrically distributed than the first job status of men. In addition, the distribution of scores in 1968 male group contains several outliers that act to depress the mean Duncan score. Dropping these outliers gives the 1968 male group a greater average advantage over their female counterparts.

FIGURE 4.1 RESPONDENT'S FIRST JOB BY GENDER AND COHORT



I must conclude that there are some observed differences in the first job status between men and women -- male respondents enjoy slighty greater occupational status at labor market entry than do female respondents; 1968 respondents have slightly greater initial occupational status than do 1978 respondents. I do not think that much can be made of these initial labor market entry differences, however. The observed differences might br the result of sampling error and are, in any case, of minor amplitude. Overall, I suggest that mean occupational status at initial labor entry is similar for males and females and for graduation cohorts.

Table 4.3 summarizes the respondent's occupational attainments by cohort, gender, and father's occupational class background. Male 1968 UNH respondents from both blue-and white-collar fathers enter the labor force with almost identical first job SEI scores; means are 64.57 and 64.56 respectively. There is much more variation in socioeconomic status of 1968 men from blue-collar backgrounds than from men whose fathers wear white collars. I must conclude, however, that there are no measured occupational class background difference among the 1968 males respondents. Male from blue-collar backgrounds enter the labor force at the same occupational status as males from white-collar backgrounds. The same findings holds

for male respondents in 1978. Among 1978 male graduates from white collar backgrounds attain slightly higher first job occupational status than do male graduates from blue-collar backgrounds. However, this difference is probably due to sampling error. If 95% confidence intervals are drawn around the mean occupational status scores, the interval differences overlap. Therefore, I must conclude that the null hypothesis that there is no difference between the observed mean scores of respondents from blue-collar and white-collar backgrounds cannot be rejected at the .05 level of significance. Val Burris (1983) indicates that highly-educated workers from blue-collar backgrounds encounter greater problems in the labor market than do workers from white-collar backgrounds. These sample data do not appear to confirm this class-based hypothesis.

The social class hypothesis that college-educated <u>women</u> from white-collar backgrounds enter the labor force with greater occupational status gets some support from the data presented here. Table 4.3 shows that in 1968 female respondents from white-collar backgrounds enter the labor force with greater occupational status (mean Duncan score = 69.5) than women graduates from blue collar backgrounds (mean Duncan score = 54.5). This white-collar advantage also holds

TABLE 4.3 SUMMARY OF RESPONDENT'S FIRST JOB IN DUNCAN UNITS BY GENDER, COHORT, AND FATHER'S OCCUPATIONAL CLASS

GROUP	CASES	MEAN	STD. DEV.	.05 INTERVAL ESTIMATE	RANGE
1968 MALES OF WHITE-COLLAR FATHERS	102	64.55	13.05	+/-2.5	16-93
1968 MALES OF BLUE-COLLAR FATHERS	42	64.57	17.83	+/-5.4	7-96
1968 FEMALES OF WHITE-COLLAR FATHERS	34	69.47	9.69	+/-3.3	39-96
1968 FEMALES OF BLUE-COLLAR FATHERS	21	54.52	13.23	+/-5.7	16-72
1978 MALES OF WHITE-COLLAR FATHERS	70	62.04	21.16	+/-4.9	7-96
1978 MALES OF BLUE-COLLAR FATHERS	14	60.07	18.89	+/-9.8	15-87
1978 FEMALES OF WHITE-COLLAR FATHERS	94	61.88	16.36	+/-3.3	16-93
1978 FEMALES OF BLUE-COLLAR FATHERS	15	57.26	21.05	+/-10.6	11-87

for 1978 female graduates. The 1978 female graduates from white-collar backgrounds hold almost a four-point status advantage (Duncan sei1 score mean = 61.9 vs. 57.3) in their first jobs. The differences among college-educated women of different occupational class backgrounds are suggestive but are not statistically significant at the .05 level. The null hypothesis of there being any difference in the population means cannot be rejected. Table 4.3 suggests that college-educated women from blue-collar backgrounds do not enter the labor force at the same occupational status level as college-educated women from white-collar backgrounds. However, these are small, not statistically significant, differences.

Val Burris (1983) points out that women and college graduates from blue-collar backgrounds do not fare as well as men and college graduates from white-collar backgrounds. Furthermore, he suggests that these patterns grew worse among those college graduates who enter the labor force in the 1970s. The respondents' mean occupational status scores presented here do not confirm Burris' hypotheses. These data indicate that there are no significant differences in first-job occupational status by gender, cohort, or father's occupational class among public university graduates. These summaries of labor market entry, defined in terms of the occupational status of first

show few statistically significant differences.

3. The Intergeneration Question

Blau and Duncan's (1967) and Jencks' (1972 and 1978) research shows that thirty to forty percent of variation in the occupational status of first job is predicted by fathers' occupational status and education. I wonder if a high quality public university undergraduate degree diminishes, if not eliminates, this relationship? One expects that college graduation does have some impact on the connection between socioeconomic background on adult occupational attainments. Below I test several regression models to unravel these connections. First, however, let's look at some bivariate correlations to get more familiar with the relationships in this data set.

Nationally representative data indicate that fathers' occupation and education explain almost thirty percent of the variance in sons' first job, measured in Duncan SEI units (Hauser and Featherman, 1977:21). Jencks' studies (1972 and 1978) indicate that fathers' occupational and educational resources explain even more of the variance in sons' first job. These particular models cannot be tested in this study because all of the respondents have educational credentials from the same school. Therefore, I proceed by looking at the respondent's occupational attainment in the context of similar educational achievement.

TABLE 4.4 BIVARIATE CORRELATIONS OF RESPONDENT'S FIRST JOB AND PARENT'S OCCUPATION, MEASURED IN DUNCAN SEI UNITS

	Respondent's First Job (sei1)	Cohort	Gender	Cases
Father's Occupaption (fsei)	.007	1968	Male	154
	.452*	1968	Female	61
	.043	1978	Male	89
	.041	1978	Female	116
Mother's Occupation (msei)	.439*	1968	Female	33
	.377*	1978	Female	44
	.053	1968	Male	70
	.157	1978	Male	37

* Significant at .05 level

Table 4.4 shows the bivariate relationships between parents' Duncan socioeconomic measure (fsei and msei) and respondents' first job Duncan scores (sei1) for our sample of UNH graduates. The only significant connection between father's socioeconomic status and respondent's first job is for female UNH graduates of 1968. For the 1968 group, father's occupational status is positively related to the occupational status of daughter's first-job in such a way that the higher the father's occupational status, the higher the daughter's first-job. Among those who graduated in the two cohorts under examination in this study, only 1968 UNH female graduates' first-job status is directly connected to their fathers' occupational status.

Table 4.4 shows that daughters' occupational status in first job is directly related to mothers' occupational status in both graduation cohorts. Again, the greater the occupational status of a daughter's mother, the greater occupational status of her first job. Several previous studies of women's status attainment indicate that in the general population, mothers' occupational status -- if the mother works for pay -- is the best predictor of daughters' occupational status. The strength of this bivariate relationship is quite high. This finding suggests that daughters' occupational status is strongly tied to their mothers' occupational status: for women, the effect of occupational background is not eliminated by a public

university degree.

The survey data collected for this study indicate that there are some important occupational findings. First, male respondents' first-job status is independent of their fathers' job status. This finding holds in both graduation cohorts. Second, female graduates' occupational status is directly correlated to their parents' occupational position. In the case of 1968 female graduates, either parents' occupational position can be used statistically to explain daughters' first job status (fathers' occupation is the stronger predictor).

It must be noted that the 1968 female group is the group that is least representative among the subgroups in this study. Perhaps the intergenerational relationship is produced by the fact that only those 1968 female respondents who view their occupational and life experiences as successful returned their questionnaires. If the less successful female graduates are underrepresented here there may be several factors producing the father-daughter correlation. For example, opportunities for successful life experiences for daughters might be greater if they delayed marriage and went to professional school, the correlations between 1968 father and daughter might be somewhat inflated because it is the daughters of high status fathers that are most likely on to graduate training (see Chapter 3). Or perhaps these correlations are produced by females dropping

out of the labor force to have children if their labor market experience is not very rewarding. These are the respondents that are most underrepresented here.

Among 1978 female respondents, mother's occupation is moderately correlated to daughter's first job. Third, 1978 male respondent's first-job status is slightly but directly correlated with mother's occupational status.

The following bivariate regression of the respondent's first job on father's occupational status shows that fathers' occupation is not a significant predictor of first job for 1968 or 1978 male respondents and 1978 female respondents. The bivariate regression model of respondent's first job on father's occupation leads to the following equation:

$$Y = a_0 + b_1 X_1 + e$$

where Y = respondent's first-job occupational status (in Duncan units) and X_1 = Father's occupational status, e = error. This two-variable model is clearly misspecified and the slope estimator is biased because the independent variable, X_1, and the error term, e*, are correlated, thus violating an assumption necessary for regression to yield desirable estimators. It does however assert that the respondent's first job is a linear function of his father's occupational status. Estimating this bivariate regression with least squares for the four analytical groups in this study yields,

(1) 1968 males' predicted $Y = 64.5 + .004X_1$
<2.9> <.04>
(21.7) (.09)

$R^2 = .0001$ n = 154 $s_e = 14.4$

(2) 1968 females' predicted $Y = 49.6 + .262X_1$
<3.7> <.06>
(13.4) (4.2)*

$R^2 = .239$ n = 59 $s_e = 11.3$

(3) 1978 males' predicted $Y = 59.1 + .045X_1$
<7.3> <.11>
(8.0) (.4)

$R^2 = .001$ n = 89 $s_e = 20.7$

(4) 1978 females' predicted $Y = 58.9 + .026X_1$
<5.5> <.05>
(10.6) (.35)

$R^2 = .001$ n = 114 $s_e = 17.2$

where the values in <> are the standards errors of the parameter estimates, the values in parentheses are the t ratios, R^2 = the coefficient of determination, n = sample size, s_e = standard error of estimate of Y.

These four estimations tell us that only the 1968 females' first job is significantly influenced by father's occupational status (A t ratio, that is, the parameter estimate divided by its standard error s_b, must exceed 2.0 to indicate statistical significance at the .05 level.). In addition, estimation (2) tells us that father's occupational status explains almost twenty-three percent of the variation in 1968 females' first job status (the adjusted $R^2 = .239$).

I think a certain amount of caution is necessary regarding this finding. It is conceivable that this finding is a result of the somewhat biased response rate among 1968 females (see pages 124 -25).

Estimation (4) shows that the father-daughter occupational status relationship does not apply to the female respondents who graduated in 1978. Among the 1978 female graduates, the null hypothesis of no relationship cannot be rejected at the .05 significance level.

A public university degree does not separate the 1968 female respondents from the ties to their fathers' occupational standing. One interpretation of this finding is that 1968 women use family, friends, father's occupational position (personal contacts explanation) to locate their first jobs after college.

Ornstein (1976) finds that men with more education tend to use "direct" methods of finding jobs and are less likely to rely on the contacts of friends and family. He reports (1976: 55-57) that only 32% of male college graduates use "personal" methods to get the first job. Among male college graduates, 60% report obtaining their first job through direct application; however, only about one-quarter of male high school graduates use the direct application method. I suggest this kind of an interpretation although my survey does not measure the respondent's method of locating a job. Ornstein's study does not look at women's labor market

entry. However, he does find that highly educated blacks are more likely to rely on personal contacts in locating first jobs than are highly educated whites.

I suggest that my findings indicate that 1978 female public university graduates use more direct methods of locating jobs and are less likely to rely on personal contact methods. This interpretation stresses that 1968 female college graduates use family networks as an additional resource along with their college degree in locating their first jobs. This situation places the college-educated women from a low status background at a slight disadvantage at labor force entry.

Fathers' occupational status score does not predict the first-job status of 1968 males, 1978 males, or 1978 females. For these subgroups, the best predictor of the status of first job is the occupational demand for the respondent's UNH major (demaj). In other words, their occupational status is best predicted by an educational credential (or resource) variable.

The multivariate estimation equations below provide the regression coefficients that describe the occupational status of respondent's first job when the ordinal measure of labor market demand for the respondent's undergraduate major (demaj) is added to the above linear model. For the three variable model,

$$\text{predicted } Y = a_0 + b_1 X_1 + b_2 X_2 + e$$

where Y = respondent's first job status, X_1 = father's occupational status, X_2 = demand for the respondent's undergraduate major, e = error. The least squares estimates for the parameters are as follows:

(1) 1968 Males' Predicted Y = 59.1 + .021X_1 + .996X_2
<3.8> <.04> <.52>
(15.4)* (.44) (1.9)*

R^2 = .024 n = 152 s_e = 14.2

(2) 1968 Females' Predicted Y = 53.3 + .254X_1 + -.935X_2
<4.5> <.06> <.66>
(11.7)* (4.1)* (-1.4)

R^2 = .265 n = 59 s_e = 11.3

(3) 1978 Males' Predicted Y = 48.1 + .014X_1 + 2.49X_2
<8.7> <.11> <1.1>
(5.4)* (.13) (2.2)*

R^2 = .055 n = 89 s_e = 20.3

(4) 1978 Females' Predicted Y = 55.9 + .031X_1 + .635X_2
<6.6> <.07> <.8>
(8.3)* (.42) (.79)

R^2 = .00 n = 114 s_e = 17.3

where the values in <> are the standard errors of the parameter estimates, the values in parentheses are the t ratios, R^2 = coefficient of determination, n = sample size, and s_e = the standard error of estimate for Y.

Equation (1) indicates that knowledge of fathers' occupational status and of the 1968 male respondents' major provides little predictive information. Fathers' occupational status is not related to the status of the 1968 male graduates' first job. Holding father's occupation constant, the demand for the 1968 male graduate's major is

statistically significant (t = 1.9) at the .05 level for a one-tailed test. The equation suggests that 1968 males increase the status of their first jobs by majoring in areas with high labor market demand such as engineering and the more quantitative liberal arts. Father's occupational status is insignificant in helping them land their first jobs. For 1968 males, educational credentials appear to become converted into an occupational status resource.

Equation (2) shows that the multivariate regression model that includes demand for the graduate's major (demaj) statistically explains slightly more of the variation in first job (26.5%) of 1968 female respondents than father's occupational status by itself (23.9%). However, demand for major (demaj) is not significantly related to 1968 females' first job at the .05 level. The negative direction of the demand for major coefficient (demaj = -.935 ; t = -1.4) suggests that majoring in a high demand area appears to detract from the occupational status of first job for 1968 female respondents. The impact of this demand for major variable (X_2 = demaj), holding fathers' occupational status constant, acts to depress the 1968 female respondents' Duncan occupational score. In other words, the less in demand (oriented toward qualitative liberal arts) the respondent's major, the greater her first job's occupational status. The other three equations of this three variable model that includes father's occupational status and demand

for college major show that the significance of the variables at the.05 level is reversed. In these equations, fathers' occupational status is not related to respondents' first job status; however, demand for college major (demaj) is related at the .05 level.

Equation (3) illustrates the impact of majoring in the high demand areas for 1978 male graduates. The demand for major variable (demaj) is statistically significant (t = 2.1) at the .05 level. The impact, however, is not great. The model that includes father's occupational status and demand for major explains only about nine percent (R-square = .087) of the variance in the first job of these respondents. Those who major in high-demand areas such as business and the physical and mathematical sciences have a slight advantage relative to those who major in the Liberal Arts. Again, however, the advantage is not great.

Equation (4) shows that the model that includes fathers' occupational status and demand for college major has no impact on the first job status of 1978 female respondents. Neither of the regression coefficients is significant at the .05 level. The standard error in predicting first job (Y) is also quite large (17.3).

The following bivariate regression model provides the regression coefficients that predict the respondent's first job status based on mother's occupation if she worked for pay. The bivariate model is,

Predicted $Y = a_0 + b_1 X_1 + e$

where Y = respondent's first job status, X_1 = mother's occupational status if she worked for pay, and e = error. The least square estimates of the parameters are as follows:

(1) 1968 Males' Predicted $Y = 63.7 + .01X_1$
<4.6> <.08>
(13.7) (.22)

$R^2 = .00$ n = 70 $s_e = 15.5$

(2) 1968 Females' Predicted $Y = 47.0 + .31X_1$
<5.4> <.10>
(8.6)* (3.0)*

$R^2 = .234$ n = 32 $s_e = 12.6$

(3) 1978 Males' Predicted $Y = 47.9 + .22X_1$
<13.7> <.23>
(3.5) (.94)

$R^2 = .024$ n = 37 $s_e = 22.7$

(4) 1978 Females' Predicted $Y = 28.4 + .53X_1$
<12.4> <.19>
(2.2)* (2.6)*

$R^2 = .142$ n = 44 $s_e = 16.7$

Equations (2) and (4) indicate that the first-job occupational status of the female respondents to this survey is directly determined by the occupational status of their mothers in such a way that the higher the mothers' occupational status, the higher the status of the daughters' first job. This mother-daughter relationship is statistically significant at the .01 level. The R-square values indicated in equations (2) and (4) show that the

strength of the relationship is greater among the 1968 female respondents than among the 1978 female respondents. Almost one-quarter of the variance (R-square = .234) in the occupational status of first job of the 1968 female respondents is explained by mothers' occupational status. Among the 1978 female respondents, less than one-fifth of the variance (R-square = .142) in first job is explained by mothers' occupational status. The reader should keep in mind that these coefficients are produced at the expense of a huge case loss because so few of the respondents report that their mothers worked for pay.

Equations (1) and (3) indicate that mothers' occupational status is not significantly related to the first-job status of their sons. There is no mother-son occupational status relationship among male respondents. The major generalization that can be drawn from the regression analyses of the first jobs of our respondents is that among public university graduates, the occupational status of first job of male respondents is independent of parents' occupational status. The opposite generalization must be drawn for female public university graduates. For the female respondents to this study, their first jobs are directly related to both their fathers' and mothers' occupational status.

Table 4.4 (above) shows that mother's occupation, if she participated in the labor market, is strongly correlated

with her daughter's first job. The bivariate relationship is strongest for the 1968 cohort (Pearson's r = .439). The regression coefficients of female respondents' first job on mothers' job, measured in Duncan SEI units, are shown in the equations above. Almost twenty percent (R-square = .193) of the variance in 1968 female respondents' first job is explained by mothers' occupation. This relationship is statistically significant at the .01 level.

College graduation appears to sever the tie of parental occupational resources on sons' entry into the labor market. The college degree does not have exactly the same effect for women's labor market entry. For women public university graduates of 1968, both their fathers' and mothers' occupational status predict the occupational status of their first job. Women graduates' labor market entry in 1978 is independent of their fathers' occupational resources, but it is still significantly tied to their mothers' occupational resources if she worked for pay.

One possible interpretation of these first-job findings is that the public university degree does not yield an equivalent status payoff for women as for men. The data under examination here do not fully support this interpretation. Mean occupational status at labor market entry (i.e. first job measured in Duncan SEI units) is nearly identical for males and females in the 1968 UNH cohort and only slightly different in the 1978 UNH

cohort. Graduates in 1978 do not fare so well in their first jobs as do 1968 graduates. The first jobs taken by the 1978 graduates are much more varied in status; females in 1978 do less well on average in their first jobs than do 1978 males. However, these differences are not statistically significant.

The process of labor market entry is certainly different for male and female UNH graduates although the average payoff to a degree is much the same. The box-and-whisker plots in Figure 4.1 indicate that UNH women have slightly lower median occupational status in their first jobs than do the men of their cohorts. However, this visual display indicates that the first-job occupational status of UNH women is much more symmetrically distributed than the first-job status of UNH men.

The distribution of first jobs for 1968 men contains several outliers that indicate that the mean and standard deviation may not be typical or representative values of the central tendency and spread of the distribution of 1968 males' first jobs. In this particular case, the outliers depress the mean occupational score of the first job of 1968 male graduates. This gives the appearance of greater first job equality between male and female graduates than actually exists.

What is visually striking in Figure 4.1 is the cohort differences in the first jobs of UNH graduates. The shapes

of the 1968 first-job distributions are much more tightly packed than the first-job distributions of the 1978 graduates. The length of the lower whiskers show that while the median and mean of occupational status are not all that different for the two graduation cohorts, there are some cohort differences. I interpret this to mean that the college-educated labor market in the late 1970s is tighter for respondents to this study. In comparison to the 1968 graduate, the 1978 group enjoys less socioeconomic status and more varied first jobs. However, these observed differences are not statistically significant at the .05 level.

4. Summary of First-Job Findings

The analysis of the first jobs taken by the respondents to this survey suggests some interesting findings. First, our test of the intergenerational question indicates that there is a moderate direct relationship between parents' and daughters' occupational status as measured in Duncan SEI units. The father-daughter intergenerational occupational status relationship is stronger than the mother-daughter relationship among the 1968 female respondents. For the 1978 female respondents, however, only the mother-daughter occupational relationship holds. Furthermore, the data indicate that there is no relationship between the occupational status of sons' first job and either of their

parents' occupational status. Though the payoff in occupational status terms is roughly equivalent for male and female public university graduates, the occupational attainment process is different. For male graduates, college major predicts occupational status; for female graduates, parental occupational status predicts occupational status. One plausible interpretation of the data from this study is that for male public university graduates, the college degree promotes intergenerational mobility according to the educational resouces of the respondent; for female public university graduates, the college degree promotes the reproduction of intergenerational status.

One plausible explanation of why the public university degree helps to reproduce intergenerational status stresses women's reliance on family and personal contacts to land their first jobs. This tendency is reinforced if one looks at college participation as a marriage market. Other studies show that college-educated women often marry men of similar occupational background (and other characteristics) to their fathers.' Female graduates in 1968 married earlier than female graduates in 1978. I suggest that their first jobs reflect the status of their families of orientation and also their husbands' occupational status. These processes protect middle class women against downward mobility; they also reduce the upward mobility chances of college-educated women from blue-collar families. The data in this study indicate

that first-job occupational status of the female respondents is related to the status of their family of orientation. Also, the data indicate that this tendency declines somewhat from 1968 to 1978.

5. Labor Market Entry: Sixth-Year Job

Sixth-year occupation is used here as an indicator of the completion of labor market entry process. By the sixth year after college graduation the graduate has settled in to a career pattern. Most of the graduate's advanced training is completed and the obstacle, perhaps, of military obligation is finished.

Overall, there is little significant difference in the means of sixth-year occupational status attained by each UNH graduation cohort. The 1968 cohort enters the labor market with a Duncan average score of slightly under sixty-five (mean sei1 = 64.69) and increases its average in the next five years by two Duncan units (mean sei6 = 67.14). The 1978 cohort enters the labor market with less Duncan socioeconomic status (mean sei1 = 61.42) but increases its status score somewhat over five Duncan units during the next five years to gain socioeconomic "status parity" (mean sei6 = 67.08) with the 1968 cohort. The tight 1970s college-educated labor market certainly affects the first jobs of 1978 UNH graduates but does not appear to alter their career pattern.

Table 4.5 shows that the depression in the labor market appears to be a temporary but gender-based problem for the 1978 UNH graduate. Table 4.5 shows that 1978 female graduates are hit hardest by the 1970's depressed labor market. Whereas 1978 male respondents lose about 2.5 Duncan SEI units relative to 1968 males in first job status, 1978 female respondents lose almost 4 Duncan SEI units relative to 1968 females. These are not statistically significant differences, however. By the sixth year in the labor force, both 1978 males and females surpass their 1968 counterparts by about one Duncan SEI unit, respectively. By their sixth year in the labor force 1978 males gain over seven (7.1) Duncan units for an average (mean sei6 = 69.1) slightly greater than the 1968 male graduates' sixth year average (mean sei6 = 68.01). A similar pattern exists for 1978 UNH women relative to their 1968 counterparts. While 1968 UNH women do not gain any additional socioeconomic status from first job to sixth year job, 1978 UNH women gain almost five Duncan SEI units to surpass their 1968 counterparts by one Duncan SEI unit.

Several key points should be taken from Table 4.5. First, the so-called "depression" in the labor market for these respondents does not appear to be very severe and is a temporary phenomenon for both male and female respondents. The "troubles" encountered by 1978 graduates who do not adjust their majors to the needs of the labor

market are soon overcome by labor market experience and advanced professional training. One reason perhaps that the "personal troubles" of the depressed labor market do not translate into "public issues" is that they are temporary. This allows both employers and degree holders the opportunity to make adjustments to supply and demand of available talent

Second, what I term the "status losses" measured in Duncan SEI units encountered by the respondents of 1978 are not statistically significant at the .05 confidence level. The confidence intervals displayed in Table 4.5 establish that there appears to be no significant differences by cohort or gender in either first jobs entered by the graduates or in their sixth-year job. The observed differences may be simply the result of sampling error. Labor force entry conceived as a six-year process shows no major differences in the labor force entry of male and female public university graduates. These data confirm the "no difference" hypothesis that has been proposed by Dejong, Brawer, and Robin (1971) and Treiman and Terrell (1975).

Third, after six years in the labor market, the 1978 public university degree yields a slightly better observed

TABLE 4.5 COMPARISON OF RESPONDENT'S FIRST JOB AND SIXTH-YEAR JOB

GROUP	JOB	CASES	MEAN	STD. DEV	.05 INTERVAL ESTIMATE	RANGE
1968 MALES	SEI1	154	64.7	14.4	+/- 2.3	7 - 96
	SEI6	156	68.0	17.7	+/- 2.8	7 - 96
1968 FEMALES	SEI1	59	64.0	12.9	+/-3.3	16 - 96
	SEI6	49	64.2	13.2	+/-3.7	14 - 96
1978 MALES	SEI1	89	62.0	20.6	+/-4.3	7 - 96
	SEI6	90	69.1	16.6	+/-3.5	9 - 96
1978 FEMALES	SEI1	114	60.8	17.2	+/-3.1	11 - 93
	SEI6	114	65.4	15.5	+/-2.8	16 - 93

"average payoff" in occupational status terms than does the 1968 UNH degree. This pattern holds for both male and female graduates. The major difference in average socioeconomic payoff (though not significant at the .05 level) falls along the lines of gender, however.

Table 4.6 shows two important bivariate correlates of the respondents' sixth-year occupational status. First, about twenty-five percent of the variance in sixth-year jobs is explained by the respondents' first jobs alone. In addition, labor market demand for the respondents' major appears to be related to sixth year job. Note the gender difference, however.

TABLE 4.6 BIVARIATE PEARSON CORRELATIONS OF SIXTH YEAR JOB BY FIRST JOB AND DEMAND FOR MAJOR

Category	First Job (Duncan SEI) (sei1)	Demand for Major (demaj)
Sixth Year Job (sei6)		
1968 Males	.53	.15
1968 Females	.44	-.29
1978 Males	.54	.23
1978 Females	.52	.05

For 1968 females, the relationship between their sixth-year job and labor market demand (demaj) for their major is strong but negative. It appears that the more oriented females' major is to the liberal arts, the higher her sixth year occupational status. For 1978 female graduates, there appears

to be a small direct relationship between labor market demand for major and sixth year occupational status.

Table 4.7 displays the bivariate correlation matrices for the major independent variables in this study displayed by the four analytical subgroups. The second column labeled sei6 (the respondent's sixth year Duncan SEI score) displays the correlates of the respondents' sixth-year occupational status by cohort and gender.

Aside from the first-job, the strongest correlate of 1968 male respondent's sixth-year occupational status is his family's educational status (famed). This bivariate correlation is moderately strong ($r = -.24$) and negative. The greater the educational status of the 1968 male respondent's family, the less the socioeconomic status of his sixth year job. Futhermore, inspection of column 1 (the respondents' first job Duncan SEI score) indicates that this inverse relationship between family educational status and 1968 respondents' occupational status increases from first job to sixth-year job.

The major findings among the 1968 male respondents are that father's occupational status is not related to first job (sei1), sixth-year job (sei6), or present job (psei). Family educational status (famed) as noted above is negatively related to the respondent's occupational achievement such that the lower the educational status of the 1968 male respondent's family, the higher his occupational

achievement. The self-reported academic standing of the respondent (v6) is also directly related to his occupational achievement. Most of these relationships are quite weak.

The major correlate of the 1968 female respondent's sixth- year occupational status is fathers' occupational status (r = .44). This direct relationship is strong and statistically significant at the .01 level. The strength of the father-daughter relationship declines somewhat with labor market experience -- the first job (sei1) relationship to father's occupational status is very strong (r = .50); sixth-year job (sei1) relationship is strong (r = .44); and present or sixteenth-year job (psei) relationship is moderately strong (r = .30).

Family educational status (famed) is also a moderate positive correlate of the sixth-year occupational status of 1968 female respondents. Like fathers' occupational status, the family educational status correlation with respondents' occupation decreases with labor market experience. Inspection of column three shows that by the sixteenth year in the labor market the correlation of family educational status to 1968 female respondents' occupational status is almost zero (r = .04). This relationship mirrors the persistence of the impact of fathers' occupational status on daughter's occupational status.

Most of the independent variables listed in Table 4.7 are weakly correlated to the 1978 respondents' occupational

status. Father's occupational status (fsei) is not related to the 1978 male respondent's first job; it is, however, weakly related in a direct fashion to his sixth-year job. Demand for the 1978 male respondent's major is moderately related to his first job (r = .24) and weakly related to his sixth-year job (r = .10). Self-reported academic standing (v6) is a weak and direct correlate of the 1978 male respondent's first job (r = .20) and a weak direct (r = .14) correlate of his sixth-year job. Family educational status (famed) is a weak and positive correlate of the occupational status of the respondent's first job (r = .15) and his sixth year job (r = .12). Each of these positive relationships declines with labor market experience. By the sixth year in the labor force, the strongest correlate is self-reported academic standing (r = .14).

Fathers' occupational status is positively related to son's sixth year occupational status among 1978 male graduates (r = .12). The strength of this relationship increases (.04 to .12) with labor force experience.

This finding of a weak but increasingly strong relationship between fathers' occupational status and 1978 offsprings' sixth year occupational status holds for 1978 female respondents (r = .03 to .13) also. Family educational status (famed) is the strongest correlate of 1978 females' sixth-year occupational status (r = .19). Again, the strength of these family background correlates is quite weak but it

appears that for the 1978 cohort, and especially for the female respondents, family background measures grow stronger over time.

One interesting finding for the female respondents is that self-reported academic standing (v6) is a weak but direct correlate of the occupational status of their first jobs (sei1). However, in both female groups self-reported academic standing (v6) reverses the direction of its sign as a correlate of sixth-year occupational status. Among the 1968 female respondents, the direction of relationship between self-reported academic standing (v6) and the occupational status of the respondents' sixteen-year job again reverses itself as positive; the strength of this relationship is moderately strong (r = .30). The instability of this relationship over time is what is interesting. The instability of the academic standing-occupational status relationship appears to be a consistent pattern in the occupational attainment of female public university graduates.

The multivariate estimation equations (1-4) provide the regression coefficients that describe the occupational status of the respondent's sixth-year jobs when respondent's first job, father's occupational status, self-reported academic standing, and demand for major are included in the linear model. The five variable model is,

$$\text{predicted } Y = a_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$$

where Y = respondent's sixth-year job status, X_1 = respondent's first job status, X_2 = father's occupational status, X_3 = respondent's self-reported academic standing, X_4 = demand for respondent's undergraduate major, e = error. The least squares estimate for the parameters are as follows:

(1) 1968 Males' Predicted Y =

$$\begin{array}{lllll} 19.6 & +.63X_1 & +.01X_2 & +1.8X_3 & +.56X_4 \\ \langle 7.0\rangle & \langle .08\rangle & \langle .05\rangle & \langle 1.4\rangle & \langle .54\rangle \\ (2.7) & (7.3)^* & (.25) & (1.3) & (1.0) \end{array}$$

$R^2 = .306$ $\quad n = 150$ $\quad s_e = 14.6$

(2) 1968 Females' Predicted Y =

$$\begin{array}{lllll} 52.9 & +.28X_1 & +.17X_2 & -4.3X_3 & -1.1X_4 \\ \langle 11.1\rangle & \langle .17\rangle & \langle .08\rangle & \langle 2.6\rangle & \langle .81\rangle \\ (4.7)^* & (1.6)^* & (2.0)^* & (1.6) & (1.4) \end{array}$$

$R^2 = .295$ $\quad n = 49$ $\quad s_e = 11.6$

(3) 1978 Males' Predicted Y =

$$\begin{array}{lllll} 36.6 & +.43X_1 & +.08X_2 & +.67X_3 & -.35X_4 \\ \langle 8.8\rangle & \langle .08\rangle & \langle .07\rangle & \langle 2.2\rangle & \langle .82\rangle \\ (4.1) & (5.6)^* & (1.0) & (.31) & (.42) \end{array}$$

$R^2 = .305$ $\quad n = 88$ $\quad s_e = 14.1$

(4) 1978 Females' Predicted Y =

$$\begin{array}{lllll} 41.6 & +.48X_1 & +.08X_2 & -3.5X_3 & +.09X_4 \\ \langle 8.8\rangle & \langle .07\rangle & \langle .06\rangle & \langle 2.0\rangle & \langle .62\rangle \\ (4.7) & (6.5)^* & (1.4) & (1.7)^* & (.15) \end{array}$$

$R^2 = .298$ $\quad n = 113$ $\quad s_e = 13.2$

where the values in <> are the standard errors of the parameter estimates, the values in parentheses are the t ratios, R^2 = coefficient of determination, n = sample size, and s_e = the standard error of estimate for Y.

Equations (1) and (3) indicate that the only

statistically significant predictor of male respondents' sixth-year occupational status is the occupational status of their first job. For the males in this sample, neither father's occupational status (fsei), self-reported academic standing (v6), nor demand for the respondent's college major (demaj) is significantly related to the occupational status of the respondents' sixth-year job when the other variables in the model are held constant. Each equation explains approximately about thirty-one percent of the variance in the sixth-year occupational status of males' jobs. The standard error of estimates of Y are larger for the male equations than for the equations that describe the female respondents' sixth-year occupational status.

TABLE 4.7 BIVARIATE CORRELATION MATRICES BY GENDER AND COHORT
1968 MALE RESPONDENTS, 149 CASES

	SEI1	SEI6	PSEI	DEMAJ	V6	FSEI	FAMED
R' FIRST JOB, SEI1	1.00						
R's SIXTH-YR JOB, SEI6	.55	1.0					
R'S PRESENT JOB, PSEI	.27	.62	1.0				
DEMAND FOR MAJOR, DEMAJ	.16	.16	.19	1.0			
ACADEMIC STANDING, V6	.14	.16	.30	.01	1.0		
FATHER'S JOB, FSEI	.03	.01	-.01	-.06	-.03	1.0	
FAMILY ED. STATUS, FAMED	-.08	-.24	-.18	-.15	-.02	.49	1.0

1968 FEMALE RESPONDENTS, 47 CASES

R's FIRST JOB, SEI1	1.00						
R's SIXTH-YR JOB, SEI6	.39	1.0					
R's PRESENT JOB, PSEI	.34	.61	1.0				
DEMAND FOR MAJOR, DEMAJ	-.28	.25	.22	1.0			
ACADEMIC STANDING, V6	.36	-.07	.12	-.12	1.0		
FATHER'S JOB, FESI	.50	.44	.30	-.09	.06	1.0	
FAMILY ED. STATUS, FAMED	.25	.20	.04	-.29	-.10	.43	1.0

1978 MALE RESPONDENTS, 88 CASES

R's FIRST JOB, SEI1	1.00						
R's SIXTH-YR JOB, SEI6	.54	1.0					
R'S PRESENT JOB, PSEI	.	.	1.0				
DEMAND FOR MAJOR, DEMAJ	.24	.10	.	1.0			
ACADEMIC STANDING, V6	.20	.14	.	.01	1.0		
FATHER'S JOB, FSEI	.04	.12	.	.11	.09	1.0	
FAMILY ED. STATUS, FAMED	.15	.12	.	-.10	.03	.39	1.0

1978 FEMALE RESPONDENT, 113 CASES

R's FIRST JOB, SEI1	1.00						
R's SIXTH-YEAR JOB, SEI6	.52	1.0					
R's PRESENT JOB, PSEI	.	.	1.0				
DEMAND FOR MAJOR, DEMAJ	.07	.03	.	1.0			
ACADEMIC STANDING, V6	.13	-.07	.	.06	1.0		
FATHER'S JOB, FSEI	.03	.13	.	-.08	-.02	1.0	
FAMILY ED. STATUS, FAMED	.12	.19	.	-.13	.16	.49	1.0

. = unavailable coefficients

Equation (2) indicates that fathers' occupational status is a more important determinant than the status of the 1968 female respondents' first job (sei1) in explaining the status of her sixth year job: fathers' occupational status is directly related to daughters' sixth year occupational status for 1968 female respondents. Both father's occupation and the 1968 female's first job are significantly related to sixth-year occupational status. The negative sign of the relationship between self-reported academic standing (v6) and the 1968 female respondents' sixth year occupational status (sei6) is interesting because the direction of its impact changes from its direct connection to first job -- perhaps more talented women are dropping out of the labor force to start families. The model results suggest that academic standing and demand for the 1968 female respondents' major are inversely related to her occupational attainment six years after labor market entry. However, these particular findings are not statistically significant at the .05 level. The null hypothesis that these parameters equal zero can not be rejected.

Equation (4) indicates that the 1978 female respondents' first job and her self-reported academic standing are significantly related to sixth-year occupational status. Equation (4) looks quite similar to equation (2). The The model explains almost thirty percent

of the variance among both 1968 and 1978 female respondents' sixth-year occupational attainment. The strongest predictor for 1978 women is their own first job status; however, for 1968 women the strongest predictor is their father's occupational status. The 1978 female respondents' results indicate an inverse relationship between self-reported academic standing (v6) and sixth-year occupational status (sei6). These results are significant at the .05 level. The null hypothesis of any inverse relationship between academic standing (v6) and the occupational status of 1968 female respondents' sixth year job (sei6) cannot be rejected, however.

6. Summary of Sixth-Year Job Findings

Above I present the findings of this survey that pertain to the sixth-year occupational status of the respondents. I purposely present these findings broken down by graduation cohort and gender. In addition, I test several hypotheses concerning the predictors of sixth-year occupational status, measured in Duncan SEI units. Three major generalizations can be made regarding these data. First, viewing labor market entry as a sixth-year process shows that the determinants of occupational status differ for public university men and women. For example, the impact of family background variables such as father's occupation or family educational status differ along the

lines of gender. For male graduates the college degree appears to further diminish the tie between background variables and their sixth-year occupational attainments. For 1968 female graduates, however, the linkage remains quite strong: the higher the father's occupational status, the higher daughter's occupational achievements in terms of first job and sixth-year job. For 1978 female respondents, I do not find such a specific link between family background variables and occupational attainment. However, I do find a weak direct correlation between family educational status and the status of the 1978 female respondent's job. In addition, this relationship appears to increase over time. In sum, for the female respondents to this survey, family background or ascriptive variables appear positively connected to it. Achievement variables such as academic standing (v6) and demand for the respondent's college major (demaj) appear to be inversely connected. With the exception of the 1968 female group which is the "least respresentative" subsample, most of these relationships are quite weak.

The second major generalization concerning respondents' sixth-year job is that the status differences between 1968 and 1978 graduates are temporary and appear to be gender-based. The respondents who graduated in 1978 enter the labor market with lower socioeconomic status than do 1968 respondents. Female respondents of 1978 fare less well

in the occupational status of their first jobs than do the 1978 male respondents. Furthermore, the simple white-collar/blue collar dichotomy indicates that women from blue-collar backgrounds fare the worst in the depressed labor market of the late 1970s. This relationship appears to be an additive one: a female UNH respondent from a blue-collar background has the least opportunity for occupational status success. Confidence intervals indicate that these parameters are no different, at the 95% level of confidence.

Third, an examination of the occupational status of the sixth-year jobs of the 1978 respondents shows that this cohort of respondents appears to surpass the 1968 respondents in the socioeconomic status of their sixth-year jobs. Interval estimates again show that hypotheses of any differences in the level of occupational status at labor market entry, viewed as a six-year process, by cohort, gender, or class background, must be rejected at the .05 level. Indirectly, then, the third major generalization is that a public university degree in the late 1970's pays just as well in occupational status terms as it did a decade earlier. Perhaps college graduates, like white-collar workers in general, do lose some earning power in the 1970's relative to non-graduates. However, this study indicates that a public university degree did not lose any value in the 1970s in terms of generating socioeconomic

status for the recipient.

7. Summary and Conclusions

This chapter provides an analysis of labor market entry of two cohorts of UNH graduates. Its purpose is to view labor market entry as a process in which the public university graduate begins his career. I examine the relationship between parental educational and occupational variables and the respondent's first job. I find a strong direct relationship between parents' occupational status resources and daughter's first job occupational status. Conversely, I find no relationship between parents' occupational status and the status of the male respondent's first job. I conclude that initial entry into the labor force involves different explanatory factors for male (perhaps achieved factors) and female (perhaps ascriptive factors) public university graduates.

Second, I examine the hypothesis that there are no differences in the occupational attainment process for male and female UNH graduates by looking at labor market entry as a six-year process. First, I find no differences in the mean level of occupational attainment by gender. However, I find that the impact of family background and educational achievement variables differs along the lines of gender. In particular, I find a direct relationship between the first job and sixth-year occupational status of the 1968 female

respondent and her father's occupational status.

Third, I find that 1978 respondents enter the labor market with a level of occupational status similar to that of the 1968 respondents. A comparison of each cohort's occupational attainments shows that the difficulties that the 1978 cohort encounters in terms of the occupational status of their first job disappear with labor force experience and the upturn in the 1980's college-educated labor market.

The findings of this study show that there are no major differences in the mean level of occupational status for male and female public university graduates. However, there are different explanatory factors involved in the process of status attainment by gender. It is hoped that these findings clarify some of the controversy surrounding the literature on social stratification that suggests that there are no differences in the process of status attainment by gender.

CHAPTER V

PRESENT JOB AND ATTITUDES

1. Introduction

The purpose of this chapter is to describe findings about present occupation and attitudes in the context of graduation cohort and gender. In particular, I report the respondents' present occupational and income data and explore their meaning or consequences for other aspects of the respondents' lives. In addition, I report on the attitudes and political views of high-income UNH graduates. This sample contains many public university graduates (71.3%) who hold professional or managerial jobs, and that have household incomes of at least $30,000 per year. Thus, this chapter describes the demographic characteristics, the attitudes, and the political behavior of this professional and high-income group of public university graduates. These findings are also presented in the analytical context of graduation cohort and gender.

2. Present Employment and Occupational Patterns

The Department of Labor has developed an elaborate occupational code that divides types of work into nine major categories: managers, professionals, clerical workers, sales

workers, skilled blue-collar workers, operatives, laborers, service workers, and farmers/farm laborers. Two other categories can be added to this list to describe the type of work that people are presently involved in. First, "unemployed" is a category that describes those without a job who are actively seeking employment: that is, they indicate that they are currently looking for work. Second, people can be classifed as "not in the labor force." This is a "residual" category and includes everyone not working for pay or not actively looking for work. In this study, disabled people, discouraged workers, the retired, or people who describe themselves as "keeping house" are classified as "not in the labor force."

Table 5.1 breaks down the American occupational structure by gender according to Bureau of Labor Statistics data for 1984. Almost one-quarter (24.6%) of female workers in the U.S. are employed in what the Department of Labor classifies as professional occupations. Slightly over one-fifth (21.9%) of all male workers are classified as professional workers. This category consists of salaried professionals (teachers, engineers, technicians, etc.), small-business owners, and sales representatives. Sales representatives are insurance agents, stockbrokers, traveling salespeople, and the like. Their incomes and working conditions are much better than those of other sales workers. If the odds of becoming a member of the

professional category is computed as follows:

Odds = proportion/1 - proportion, then

males' odds of becoming a professional are (.219/.781 = .28) slightly under one-third and females' odds are (.246/.754 = .33) one-in-three. The occupational structure of the U.S. in 1984 gives females slightly more opportunity to be classified in the professional category.

The manager category reported in Table 5.1 includes salaried managers and self-employed professionals such as doctors and lawyers. Rose's (1986) category of "managers" differs from the Labor Department's category of "managers" in that it excludes self-employed managers but includes self-employed professionals. High corporate officials, even if they own a significant portion of their company's stock, are considered employees of their corporations and not self-employed. Slightly over one-fifth (12.7%) of American male workers are classified as members of the managerial group. However, less than one-in-twenty (4.3%) of American female workers are classified as managers in 1984. The odds of becoming a manager, Odds = p/1-p, are .15 to 1 for males and .04 to 1 for females in the general population. Clearly, males have greater chances to become managers than do females.

Table 5.2 shows the distribution of the respondents' present jobs in the Department of Labor's categories broken down by cohort and gender group. Overall, almost sixty

percent (59.2%) of the sample are engaged in professional occupations. Another quarter (25.2%) of the sample are working in managerial positions; about one tenth (9.5%) of the sample works in sales positions. In sum, almost eighty-five percent (84.4%) are engaged in professional or managerial work categories.

Table 5.2 shows that female graduates are more likely to be employed among the professional category than are the male graduates. This pattern holds for each

TABLE 5.1 OCCUPATION BY GENDER, 1984

OCCUPATION	MALE	FEMALE
Professional	21.9%	24.6%
Manager	12.7%	4.3%
Clerical/Sales	12.7%	40.2%
Skilled Blue Collar	22.6%	2.3%
Less Skilled Blue-Collar	26.2%	27.7%
Farm	4.5%	0.8%
Unemployed	6.2%*	7.5%*

Source: Rose, Stephen J., 1986 The American Profile Poster. New York: Pantheon Books, pp. 13

* my own calculations based on other information provided by Rose (1986: 13).

Table 5.2 *RESPONDENT'S PRESENT JOB BY GENDER AND COHORT*

PRESENT OCCUPATION	1968 MALES	1968 FEMALES	1978 MALES	1978 FEMALES	TOTAL
Professional	56.4% (88)	77.4% (41)	48.3% (44)	64.4% (71)	59.2% (244)
Managerial	31.4% (49)	9.4% (5)	29.7% (27)	20.5% (23)	25.2% (104)
Sales	6.4% (10)	3.7% (2)	16.5% (15)	10.75% (12)	9.5% (39)
Clerical	0.6% (1)	5.6% (3)	1.1% (1)	2.7% (3)	1.9% (8)
Skilled Blue-Collar	3.2% (5)	1.9% (1)	2.2% (2)	1.8% (2)	2.4% (10)
Less Skilled Blue-Collar	0% (0)	1.8% (1)	1.1% (1)	0.9% (1)	0.7% (3)
Military	1.9%	0.0%	1.1%	0.0%	.4%
	100.00 (156)	100.00 (53)	100.00 (91)	100.00 (112)	100.00 (412)

graduation cohort. Conversely, the managerial/proprietor category shows that 1968 male graduates are much more likely than 1968 females graduates to be a member of the managerial group. Among the 1978 respondents, the gender difference is not quite so marked. Even so, males with a public university degree are much more likely than females to be members of the managerial group.

Table 5.2 also shows that the more recent UNH graduates are more likely to be employed in sales work. This appears to be a cohort difference because the sixth-year jobs of the respondents show that a greater percentage of the 1978 graduates are employed in sales work. All together, very few respondents are employed in either clerical (n = 8) or low skilled blue-collar work (n = 3). There appears to be little difference by cohort or gender with regard to the percentage of respondents involved in white-collar employment. Simply put, college graduates are, for the most part, office workers.

Table 5.3 describes the employment status of the respondents at the time of our survey. Almost eighty-eight percent (87.5%) of the respondents are employed for more than 20 hours per week. Female graduates of 1968 are much less likely to be working more than twenty hours per week than are the males of their cohort (97.4% of 1968 male graduates are working more than 20 hours per week; 57.3% of

TABLE 5.3 RESPONDENT'S 1984 EMPLOYMENT STATUS BY COHORT AND GENDER

EMPLOYMENT STATUS	1968 MALES	1968 FEMALES	1978 MALES	1978 FEMALES	TOTAL
Working more than 20 hrs/wk	97.4% (153)	57.4% (35)	94.4% (85)	84.6% (99)	87.5% (372)
Working 20 hrs or less per wk	1.2% (2)	26.2% (16)	2.2% (2)	8.5% (10)	7.1% (30)
Looking for Fulltime work	.6% (1)	0% (0)	1.1% (1)	2.6% (3)	1.1% (5)
Looking for parttime work	0% ()	0% ()	0% ()	.9% (1)	.2% (1)
Out of the labor force	.6% (1)	16.4% (10)	2.2% (2)	2.4 (4)	4.1% (17)
	100.0 (157)	100.0 (61)	100.0 (90)	100.0 (117)	100.0 (425)

1968 females are working more than 20 hours per week. Among the 1978 graduates, the male-female difference in employment status is not so large as in the 1968 cohort: 94.4% of the 1978 males and 84.6% of the 1978 females are working more than 20 hours per week. I conclude that the respondents are highly committed to the labor force in a behavioral sense.

Table 5.3 also shows that over ninety-four percent of the 1978 female graduates are participating in the labor force at the time of the survey. Three 1978 females can be classified as "unemployed." Only one male from the 1968 graduation cohort can be classified as "unemployed" using the standard criteria of the Bureau of Labor Statistics. One trend that can be noted from Table 5.3 is that the percentage of 1968 female graduates who are working part-time is much larger than the 1978 female graduates who are working part-time. This is probably due more with family scheduling than any difference in commitment to work. However, there are substantial cohort differences in the percentage of women who report that they are not employed and are not looking for work. Overall, the data indicate high levels of participation in the labor force, for male and female respondents.

The type firm that employs UNH graduates is described in Table 5.4. Though most graduates are employed in the private profit-making sector, there are some important cohort and gender tendencies revealed in this table.

TABLE 5.4 RESPONDENT'S TYPE OF FIRM BY COHORT AND GENDER

Type of Firm that Respondent Works at	1968 Males	1968 Females	1978 Males	1978 Females	Total
Private, Profit Oriented	57.3% (90)	47.5% (28)	80.6% (71)	65.8% (75)	63.2% (264)
Private, Nonprofit	6.4% (10)	20.3% (12)	6.8% (6)	21.1% (24)	12.4% (52)
Government					
Local	13.4% (21)	20.4% (12)	1.1% (1)	3.5% (4)	9.1% (38)
State	13.4% (21)	11.9% (7)	5.6% (5)	7.0% (8)	9.8% (41)
Federal	9.5% (15)	0% (0)	5.7% (5)	2.6% (3)	5.5% (23)
	100.0 (157)	100.0 (59)	100.0 (88)	100.0 (114)	100.0 (418)

male graduates are more likely than female graduates to be employed in in the private-profit making sector. Second, UNH female graduates are more likely than male graduates to be employed in non-profit private firms and also in local government. Third, males are more likely than females to be employed by the federal government. In the 1968 graduation cohort male respondents are more likely than female respondents to be employed by state government agencies; however, this pattern is reverses itself among 1978 graduation cohort, in which females take state-level jobs at a greater rate than do males.

3. Income and Other Job Attainments

Table 5.5 displays the trichotomized distribution of 1983 personal income of the respondents to this study broken down by gender and cohort. Overall, four out ten (40.6%) of the respondents report earnings over $30,000 in 1983. Another forty percent (40.6%) report earnings between $15,000 and $30,000. Slightly less than one in five respondents (18.7%) report earning less than fifteen thousand dollars in 1983.

If the odds of earning over $30,000 per year is defined as Odds = p/1-p, then the odds that a 1968 male respondent earns over $30,000 in 1983 is 1.7 (.631/.369). The odds

TABLE 5.5 RESPONDENTS 1983 PERSONAL INCOME BY GENDER AND COHORT

1983 PERSONAL INCOME	1968 MALES	1968 FEMALES	1978 MALES	1978 FEMALES	TOTAL
Less than 15,000	5.7% (9)	57.4% (35)	3.4% (3)	28.2% (33)	18.8% (80)
15 - 30,000	31.2% (49)	26.2% (16)	48.4% (44)	54.7% (64)	40.6% (173)
Greater than 30,000	63.1% (99)	16.4% (10)	48.4% (44)	17.1% (20)	40.6% (173)
	100.0 (157)	100.0 (61)	100.0 (91)	100.0 (117)	100.0 (426)
Odds of earning over $30,000 = p/1-p.	1.7	.20	.94	.21	

for 1968 female respondents are 0.20 (.164/.836). The odds of 1968 males to earn high income in 1983 are 1.7 to 1; for females the odds are .2 to one. Clearly, there is a significant gender gap in the chances of becoming a member of the high income group in this sample. The gender gap in personal earnings over $30,000 per year is not so large for males and females who graduated in 1978. The 1978 male odds are .94 to one; the 1978 female odds are .21 to one. Males graduates in 1978 have distinctly greater chances than female graduates of belonging to the high income group.

The multivariate estimation equation below provides the regression coefficients that describe the 1983 personal earnings of the respondent. The eight-variable model is,

predicted Y = a0 + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + b6X6 + b7X7 + e

where Y = respondent's 1983 personal income, X1 = gender, X2 = demand for repondent's undergraduate major, X3 = age, X4 = value (2) of marital status (reg2), X5 = value (3) of marital status (reg3), X6 = value (4) of marital status (reg4), X7 = advanced professional training (V5X). The variable marital status (mar) has four categories. Applying the G - 1 rule, I formulate 4 - 1 = 3 dummy variables. I chose to construct one for married living with spouse only (X4), one for single (X5), and one for single with children (X6), which leaves (reg1) married with spouse and child(ren) as the base

category. I chose this last category as base because I thought this group would earn the highest personal income.

Least squares yields the following parameter estimates,

```
Predicted Y = 11.8 - 3.2X1 + .32X2 + .09X3 - .34X4 +
              <1.1>  <.27>  <.06>  <.12>  <.94>
              (10.2) (11.9)* (5.4)* (.73)  (.36)

 .72X5 + .41X6 - .07X7
 <.95>   <.94>   <.09>
 (.76)   (.43)   (.72)

          R2 = .354      n = 413   se = 2.5
```

where the values in <> are the standard errors of the parameter estimates, the values in parentheses are the t ratios, R2 = coefficient of determination, n = sample size, and se = the standard error of estimate for Y.

Equation (5.1) can be criticized because it consists merely of ordinal variables. In addition, I include gender in the equation as an ordinal variable (males = 1 and females = 2). Furthermore, the dependent variable, personal income -- 1983 is negatively skewed (-.97). With these qualifications in mind, equation (5.1) indicates that the model explains slightly over one-third (35.4%) of the variation in the personal income of the graduates. The equation also indicates that demand for the respondent's major is significantly related to personal income at the .01 level, holding the other variables constant. The greater the demand for the respondent's undergraduate major, the higher the personal income in 1983. This means that the more quantitative (or oriented toward the labor market) the undergraduate major,

the greater the respondent's personal income.

Given that female respondents in the sample are more likely to choose liberal arts majors, it makes sense that gender might also be significantly related to personal income, holding the other equation variables constant. Equation (5.1) indicates that being female significantly (.01 level) reduces personal income.

Equation (5.1) indicates that marital status is not significantly related to personal income in the population at the .05 level. The direction of the coefficients are suggestive, however. Among the married respondents, holding the other variable constant, married respondents with children have greater incomes than married respondents without children. Among the single, responsibilites toward children slightly increases the personal income of the respondent.

It is interesting to note that Equation (5.1) indicates that professional training is not significantly related to personal income at the .05 level. The direction of the coefficient is negative indicating that in this sample, the pursuit of graduate training diminishes personal income.

Equation (5.2) is the multivariate estimation model that best explains the graduate's personal income. For the three variable model, the least squares equation (5.2) is,

predicted Y = a0 + b1X1 + b2X2 + e

where Y = respondent's 1983 personal income, X1 = demand for

respondent's undergraduate major, X2 = gender (reg2 is female). For gender, I formulate 2 - 1 = 1 dummy variable. I chose to use male (reg1) as the base category because I thought this group would earn the higher income.

Least squares yields the following parameter estimates,

Predicted Y = 8.8 + .32X1 - 3.2X2
<.32> <.06> <.26>
(27.5)*(5.4)* (12.2)*

R2 = .333 n = 417 se = 2.5

where the values in <> are the standard errors of the parameter estimates, the values in parentheses are the t ratios, R2 = coefficient of determination, n = sample size, and se = the standard error of estimate for Y.

Equation (5.2) indicates that the model explains one-third of the variance in personal income of the graduates. The equation coefficients indicate that demand for the graduate's major is significantly related at the .01 level in a positive direction to personal income. In addition, gender is significantly related to personal income in such a manner that being female significantly reduces public university graduates' personal income.

The four variable model that includes age (v4) and the five variable model that includes marital status (mar) show that neither of these particular variables are significantly related to personal income in 1983. This tells us two important things about the personal income of these respondents. First, the personal income is not significantly

affected by cohort membership of these respondents. Along economic lines, the younger respondents do as well as the older respondents. Second, that personal income is not affected by marital status indicates that among these college graduates being married neither helps nor hinders one's ability to earn a living. For these particular university graduates, income is a function of one's college major (knowledge or skills) and one's gender.

Table 5.6 shows that 1983 household income is not quite as unequally distributed by gender as is personal income: four-fifths (80.9%) of the 1968 male respondents live in households with incomes over $30,000; almost three-quarter (73.8%) of the 1968 female respondents live in high income households. Among 1978 respondents the percentage living in high income households is almost seventy percent (68.3%) for male respondents and almost sixty percent (58.6%) for female respondents.

The percentage of respondents that living in low income households is also shown in Table 5.6. Ten (2.5%) respondents to this survey report living in households earning less than $15,000 in 1983. Seven of these respondents are women, however. Five of these women and two of the men live in households earning less than $13,000 in 1983. Table 5.6 shows that household income is also negatively skewed.

Table 5.6 TOTAL HOUSEHOLD INCOME BY GENDER AND COHORT

Total Household Income, 1983	1968 Males	1968 Females	1978 Males	1978 Females	Total
Under $15,000	1.3% (2)	1.6% (1)	1.2% (1)	5.8% (6)	2.5% (10)
Between $15,000 and $30,000	17.8% (27)	24.6% (15)	18.3% (15)	35.6% (37)	26.1% (104)
Over $30,000	80.9% (123)	73.8% (45)	68.3% (56)	58.6% (61)	71.4% (285)
	100% (152)	100% (61)	100% (82)	100% (104)	100% (399)

The multivariate estimation equation below provides the regression coefficients that best describe the 1983 household income of the respondent. The four variable model is,

(5.3) predicted Y = a0 + b1X1 + b2X2 + b3X3 + e

where Y = R's 1983 household income, X1 = demand for the respondent's undergraduate major, X2 = value 1 (male) of the gender dummy variable, and X3 = age. I chose to use female as the base category in this equation because I am testing to see if male gender coefficient, b2 > 0.

Least squares yields the following parameter estimates,

Predicted Y = 9.2 + .16X1 + .30X2 + .26X3
<.31> <.04> <.18> <.07>
(29.8) (4.1)* (1.6)* (3.6)*

R2 = .089 n = 395 se = 1.7

where the values in <> are the standard errors of the parameter estimates, the values in parentheses are the t ratios, R2 = coefficient of determination, n = sample size, and se = the standard error of estimate for Y.

Equation 5.3 indicates that male gender significantly adds to household income for public university graduates. The relationship is significant at the .05 level using a one-tailed test, b2 > 0. Age is also positively related (.01 level of significance) to the graduates' household income such that household income increases with age. The graduate's undergraduate major is also indicated to be related to household income at the .01 level. Explaining

household income for public university graduates is not an easy task. Equation 5.3 is reported here because it does the best job. The model, however, explains only about nine percent (R2 = .089) of the variance in total household income.

4. A Brief Note: The Status Variable

Most of the respondents are members of what is often referred to as the "baby boom" generation. The 1946-1964 birth cohort numbers about 76 million, or one-third of the entire U.S. population. The so-called "Yuppie baby boomers," young urban professionals, represent only about one-quarter (10-20 million) of the baby boom generation. They are perhaps a deciding force in American electoral politics. A longitudinal survey by the Institute for Social Research at the University of Michigan's Center for Political Studies (CPS) shows that though Yuppies are a minority of their birth cohort, they are more politically active than either other baby boomers or their parents' generation. They are a group that turns out in great numbers on election day.

One of the important findings of the CPS longitudinal survey directed by M. Kent Jennings and Gregory B. Markus is that the Yuppies' mix of social and political outlooks does not place them squarely into either the Republican or Democratic camps. Below, I describe the findings of this survey in terms of what might be best labelled "high status"

respondents. I will use the term "high status" group to refer to membership in a professional or managerial occupation and membership in the high income (greater than $30,000 per year) group. Over seventy percent (71.7%) of the respondents to this survey fit such a description.

Table 5.7 breaks down "high status" group membership by self-reported UNH academic standing. The chi-square hypothesis test shows that there is no relationship between reported academic standing (v6) and "high status" membership among public university graduates. There is the tendency among the respondents who report above average and excellent academic standing to have slightly higher chances to belong to the "high status category. Those respondents who do well in the labor market report higher academic standing (an intelligence explanation) or they report modest academic standing because they feel they have "earned" their privilege (hard work explanation). The variable, self-reported academic standing (v6) does not appear to be a source of high status membership among these respondents.

TABLE 5.7 HIGH STATUS BY ACADEMIC STANDING

Academic Standing	Status: Low	High	Total
Under Average	6 33.3	12 66.6	18 100.0
About Average	28 23.9	89 76.1	117 100.0
Above Average	64 32.5	133 67.5	197 100.0
Excel-lent	24 25.3	71 74.7	95 100.0
Total	122 28.6	305 71.4	427 100.0

Chi2 (3)= 3.42 Prob>chi2= 0.331

5. Attitudinal Consequences of Adult Attainments

Below I explore some of the consequences of the respondents' adult achievements. The lines of analysis are cohort, gender, and "high status" membership. First, I look at commitment to work in the respondents' lives. Second, I explore several attitudes that the respondents report. Finally, I consider issues of politics among UNH graduates.

One indicator of the quality of the respondent's work life is what I term "work centrality." The main idea behind this variable is what is sometimes referred to as "commitment to work." The general concept of "commitment" is variously defined as an attitude or as consistent behavior or as lines of activity (Becker, 1960; Kanter, 1972). It is necessary to distinguish the behavioral and the attitudinal dimensions of commitment.

I use the term "commitment" here to refer to a subjective orientation to work, that is, the extent to which work is perceived as a (Mortimer, 1979: 12) "meaningful and important sphere of activity." Bielby and Bielby (1984: 235) suggest a similar conceptualization. They define work commitment as "the importance of a work role as a source of identity in adulthood" and "the centrality of the work role as a source of intrinsic satisfaction relative to other adult roles."

I ask respondents in the survey to compare their jobs "with other things which add to the quality of life (children, leisure, friendships) (v16)." The scaled responses range from "not important" to "the central thing in my life." Two variables are derived from the responses: job centrality (V16) and commitment to work (cent). Overall, Table 5.8 indicates that the respondents' jobs are quite important compared to other aspects of their lives. Over eighty percent (81.4%) indicate their jobs are important or very important. Table 5.9 shows that compared to "other things" , work is just as central psychologically to the female respondent as to the male respondent. The means on the five-point scale range from a high 3.38 for 1978 males to a low of 3.12 for 1968 females. Futhermore, the mean for 1968 males and 1978 females are almost identical, 3.35 and 3.33. I conclude that there is no significant gender difference or cohort difference.

There is no doubt that the labor force participation of women is transforming the workplace, yet stereotypes about women's work roles persist. One such sterotype describes women as less than fully committed to labor force activity because in part of their traditional responsibilities to

Table 5.8 WORK CENTRALITY

WORK CNETRALITY	FREQUENCY	PERCENT
Not Important	12	2.85
Somewhat Important	52	12.35
Important	157	37.29
Very Important	186	44.18
Central	14	3.33
Total	421	100.00

TABLE 5.9 SUMMARIES OF WORK CENTRALITY (V16) AND COMMITMENT TO WORK (CENT) BY GENDER AND COHORT

Variable	Obser.	Mean	Std. Dev.	Min	Max
1968 Males:					
V16	156	3.35	.81	1	5
cent	157	2.33	.73	1	3
1968 Females:					
V16	55	3.12	.88	1	4
cent	61	2.26	.77	1	3
1978 Males:					
V16	90	3.33	.91	1	5
cent	91	2.39	.74	1	3
1978 Females:					
V16	116	3.33	.80	1	5
cent	117	2.32	.66	1	3

family and home. Employment is seen as tangential to women's lives, occurring on an intermittent basis with repeated labor force entries and exits and often less than full-time hours on the job.

Several studies show that female labor force participation continues to be a function of family responsibilities over the life course (Taeuber and Sweet, 1976; Masnick and Bane, 1980; Moen,1985). Women's employement patterns, however, may not accurately reflect their psychological involvement or commitment to the work role. Morse and Weiss (1955:191) show that, for men, work is more than merely a means of livelihood: "For most men having a job serves other functions than the one of earning a living. In fact, even if they had enough money to support themselves, they would still want to work. Working gives them a feeling of being tied into the larger society, of having something to do, of having a purpose in life." Is it reasonable to assume that employment is similarly significant in the lives of female public university graduate? Responses of the female respondents to this survey indicate that they are just as highly committed to work roles as are the male respondents.

I do find some interesting differences in work commitment along the marital status line, however. Table 5.10 summarizes the marital status differences on the two work commitment variables, V16 and cent. Table 5.10 shows

that the presence of children in the household depresses the work commitment of both cohorts of females respondents. For example, 1968 married female respondents without any children have a mean work centrality score of 3.7 (s.d. = .487); 1968 married female respondents with children have a mean score of 2.9 (s.d. = .888). A similar pattern is found among 1978 married female respondents, but the differences in mean scores are not as great as those listed above: 1978 married female respondents without children have a work centrality mean score of 3.2 and 1978 married female respondents with children have a mean score of 3.0. Given how work "centrality" is defined in this study (("In comparison with other things which add to the quality of life (children, leisure, friendships), how important would you say your job is?")), it surely must be concluded that the married female respondents with children value their occupational roles as important.

Table 5.10 shows that divorced female (1968 mean = 3.7; 1978 mean = 3.6) and single female respondents (1968 mean = 4; 1978 mean = 3.4) have higher than average work commitment scores. It appears, then, that marital and family responsibilities only slightly diminish the work commitment scores of female respondents. Overall, I think that these results indicate that work is far more than a means of earning a living for the female respondents. For female respondents, as for male respondents, the work role is an

important facet of their lives.

The distinction between psychological commitment and behavioral commitment, expressed as actual labor force participation, is an important one. It underscores the interplay between work roles and family roles over the life cycle. Family responsibilities still intrude upon

TABLE 5.10 SUMMARIES OF WORK COMMITMENT BY SELECTED CHARACTERISTICS

Group	Variable	Obser.	Mean	Std.Dev.
Married Females Without Children:	V16	93	3.4	.79
	cent	93	2.3	.69
1968 Females:	V16	7	3.7	.48
	cent	7	2.7	.48
1978 Females:	V16	34	3.3	.79
	cent	34	2.3	.67
Married 1968 Females with Children:	V16	41	2.9	.88
	cent	47	2.1	.79
Married 1978 Females with Children:	V16	26	3.1	.98
	cent	26	2.1	.69
Divorced 1968 Females with Children:	V16	4	3.7	.50
	cent	4	2.7	.50
Divorced 1978 Females with Children:	V16	3	3.6	.57
	cent	4	2.7	.50
Single 1968 Females:	V16	4	4.0	.00
	cent	3	3.0	.00
Single 1978 Females:	V16	47	3.5	.72
	cent	47	2.4	.65

women's work lives, leading to interruptions in their labor force participation. These family obligations are reflected in the variations displayed above in psychological commitment to work. However, a significant proportion of female respondents with high family obligations (wives with children) maintain a strong commitment to work even as they are unable to maintain a full-time continuous work history. Marriage and family are sometimes perceived as indicators of the absence of work commitment on the part of female workers by employers. These data indicate that female respondents have a high rate of participation in the labor force and are also psychologically committed to work roles.

One of the initial purposes of this study was to explore the overqualification thesis. The idea of overqualification suggests that the economic and occupational returns on investment in schooling are falling from historically higher levels. In Chapter four I indicate that the downturn in the college-educated labor market affects the first jobs of the 1978 respondents to this survey. However, the negative impact of the tight labor market is softened by labor market experience such that after six years of labor market participation there are no significant differential returns on the investment in higher education by cohort.

The idea of overqualification also suggests the underutilization of educational skills and many unfulfilled

expectations among the educated with regard to the characteristics of their work such as pay, prestige, and cognitive challenge. There are no studies that look at the "unfulfilled expectations" among public university graduates with respect to the characteristics of their work.

The questionnaire I constructed contains three items that measure the unfulfilled expectations of the respondents. Item 26b (v26b) measures the cognitive challenge of the respondent's job: "I feel my job is challenging and rewarding." A five point scale ranging from Strongly Agree to Strongly Disagree measures this idea. Over eighty percent (83.3%) of the respondents agree or strongly agree that their present job is "challenging and rewarding." I must conclude that the respondents are presently quite challenged by their work lives; their present jobs appear to be pychologically fulfilling.

Two questionnaire items measure the respondents' attitudes toward the public university's role in preparing them for the world of work. Item number 26a. asks the respondents to evaluate their UNH experiences as preparation for work. Did UNH prepare them to be "versatile and flexible with regard to the job market?" Table 5.11 shows few notable gender or cohort differences. Almost eighty percent (78.5%) of the respondents indicate that they agree that UNH

TABLE 5.11 PREPARATION FOR WORK BY GROUP

Flexible Preparation for Work	Gender & Cohort 1968 Males	1968 Females	1978 Males	1978 Females	Total
Strongly Agree	33 21.4	8 13.3	13 14.9	24 21.1	78 18.8
Agree	93 60.4	39 65.0	57 65.5	59 51.7	248 59.7
Undecided	8 5.2	3 5.0	8 9.2	5 4.4	24 5.8
Disagree	18 11.7	8 13.3	9 10.3	24 21.1	59 14.2
Strongly Disagree	2 1.3	2 3.3	0 0.0	2 1.7	6 1.4
Total	154 100.0	60 100.0	87 100.0	114 100.0	415 100.0

experiences prepared them to be versatile and flexible with regard to the job market.

The final indicator of the respondents' unfulfilled expectations with regard to the characteristics of their present job asks the respondent directly whether their present job meets the expectations and aspirations they held as undergraduates. Table 5.12 shows that over fifty percent (55.5%) of the respondents agree that their undergraduate expectations and aspirations are being met. The group that least agrees is the 1978 male respondents. Barely over fifty percent (51.6%) of 1978 male respondents agree or strongly agree that their expectations are met. These differences are not statistically significant, however.

In the first chapter of this study I dwelled mostly on the idea of overqualification. One of the initial purposes of this study is to consider the overqualification thesis -- the idea that the economic and occupational returns on investment in schooling are falling from historically higher levels. Both objective (Chapter 4) and subjective measures included in this study demonstrate no support for this main idea. The occupational status differences in the first jobs and sixth-year jobs of the two cohorts under examination here are not statistically significant. In addition, the subjective indicators show that after six years in the labor force, the members of the 1978 cohort feel that their jobs are just as "challenging and rewarding" as the members of

the 1968 cohort. Furthermore, there are no statistically significant differences by cohort in regards to whether or not their undergraduate expectations and aspirations are being met by their present jobs. Clearly, these are very positive results. The respondents feel that the public university has prepared them well for the labor market.

There are several possible explanations for these positive results. First, it very well may be that graduates of flagship state universities in the late 1970s did not encounter the labor market difficulties that college graduates, in general faced. The quality of one's undergraduate experience certainly must have some impact on one's labor market entry. I suspect that university quality is responsible in part for these results. Second, I also suspect that the research instrument, itself, may have been quite intimidating to the females who have chosen to see their main roles as wife and mother or also to respondents whose careers to have worked out as expected. The heavy "success theme" of this particular questionnaire requires an aggressive follow-up to locate reluctant respondents. The major failing of this study is the lack of an aggressive second mailing. The biased response rate of 1968 females suggests that the research instrument and the lack of an aggressive follow-up also partly explain these results.

TABLE 5.12 CURRENT JOB MEETS UNDERGRADUATE EXPECTATIONS BY COHORT AND GENDER

Current Job Meets Expectations	1968 Males	1968 Females	1978 Males	1978 Females	Total
Strongly Agree	18 11.7	8 14.8	12 13.5	13 11.4	51 12.4
Agree	70 45.7	23 42.6	34 38.2	50 43.9	177 43.2
Undecided	19 12.4	2 3.7	19 21.3	14 12.3	54 13.2
Disagree	37 24.2	16 29.6	15 16.8	29 25.4	97 23.6
Strongly Disagree	9 5.8	5 9.3	9 10.1	8 7.0	31 7.6
Total	153 100.0	54 100.0	89 100.0	114 100.0	410 100.0

6. The Political Consequences

Peoples' jobs and other aspects of their lives are intimately connected (Lipsitz, 1964). Adult job attainments are connected to a person's political outlook. Lewis Lipsitz (1964) finds that the ways in which the concrete work situation affects the automobile worker's political attitudes are determined by the technology and social setting of the job itself. For example, assembly-line workers are found to be more fatalistic, more punitive, and more politically radical than other workers of comparable salary and education who work in the same plant. While the factory is a symbol of industrial society, the symbol of post-industrial society is the office. Therefore, it is increasingly important to explore the politcal attitudes and behavior of the inhabitants of the white-collar world.

The survey questionnaire measures the respondents' liberal-conservative positions by asking their opinions on matters of social spending -- such as health and welfare (v26c), protecting the environment (v26f), military involvements (v26j), and educational opportunity (v26l). Respondents are also asked to classify themselves ideologically as liberal or conservative and to report their political party preference in the 1984 elections. Finally, the respondents are asked to express their opinions on labor unions.

Questionnaire item #18 asks respondents to place themselves on a six-point political scale ranging from very conservative to very liberal. Table 5.13 indicates that slightly over half of the respondents to this survey report that they identify themselves more as conservatives than as liberals. About one-quarter (24%) definitely place themselves in the conservative camp; slightly less than one-quarter of the respondents definitely place themselves in the liberal camp (23.3%).

Table 5.13 indicates that slightly more than sixty percent (61.4%) of the 1968 male respondents identify themselves as ideological conservatives; about twenty percent (21.1%) indicate that they are definitely liberals. By contrast, only about four out of ten (43.4%) 1978 female respondents identify themselves as conservatives; almost one-third (32.9%) of the 1978 female respondents indicate that they are definitely liberals. Cohort (age) and gender appear to be related to political liberalism, measured in self-report terms. Statistically, these differences are not significant.

The bivariate correlation matrix listed in Table 5.14 shows that the strongest predictor of political identification (V18) is 1983 personal income (V23b): the higher the respondent's personal income, the more

TABLE 5.13 POLITICAL ATTITUDE BY COHORT AND GENDER

Political Identification	Cohort and Gender 1968 Male	1968 Female	1978 Male	1978 Female	Total
Very Conservative	7 4.5	0 0.0	0 0.0	2 1.7	9 2.1
Conservative	39 25.0	14 23.7	15 16.7	15 13.0	83 19.7
Slightly Conservative	50 32.1	20 33.9	24 26.7	33 28.7	127 30.2
Slightly Liberal	27 17.3	13 22.0	37 41.1	27 23.5	104 24.8
Liberal	28 17.9	10 16.9	14 15.6	34 29.6	86 20.5
Very Liberal	5 3.2	2 3.3	0 0.0	4 3.5	11 2.6
Total	156 100.0	59 100.0	90 100.0	115 100.0	420 100.0

conservative the respondent's political identification ($r = -.22$). The strength of this finding is weak, even by social science standards. Many other studies indicate a much stronger relationship between income and political identification.

Table 5.14 indicates a moderate connection ($r = .38$) between political identification (V18) and political party support (V20). Table 5.15 shows the distribution of political party support among all the respondents to the survey. Almost fifty percent (49.2%) intend to vote Republican in the 1984 elections. Since the survey appeared in early summer the category of Undecided is quite interesting -- only one out twenty respondents (5.7%) indicate that they are not sure as to which political party they will support. The data indicate that most of the respondents are quite sure about how their political support is to be given.

Poltical party support is broken down by cohort and gender group in Table 5.15. Clearly, the Republican party is given the majority in each group with the exception of 1978 female respondents. At the time of the survey, less than forty percent (37%) of the 1978 female group intends to vote along Republican lines. Also note that almost ten percent (9%) of these 1978 female respondents are undecided as to which party to support at the time of the survey.

TABLE 5.14 BIVARIATE CORRELATION MATRIX, 398 OBSERVATIONS

	v18	psei	v23b	v19	v20
Political Liberalism (v18)	1.0				
Present Job(psei)	-0.10	1.0			
Per. Income(v23b)	-0.22	0.29	1.0		
Self-report SES (v19)	-0.18	0.22	0.35	1.0	
Pol Party Support	0.39	-0.03	-0.19	-0.15	1.0

TABLE 5.15 POLITICAL VOTE 1984 ELECTION BY COHORT AND GENDER

Intended Vote 1984	Cohort and Gender				
	1968		1978		
	Male	Female	Male	Female	Total
Republican	85	30	45	42	202
	55.2	50.0	52.3	37.8	49.2
Democrat	59	28	35	57	179
	38.3	46.7	40.7	51.4	43.5
Other	0	0	0	1	1
	0.0	0.0	0.0	0.9	0.2
Independnt	3	0	1	1	5
	1.9	0.0	1.1	0.0	1.2
Undecided	7	2	5	10	24
	4.5	3.3	5.8	9.0	5.8
Total	154	60	86	111	411
	100.0	100.0	100.0	100.0	100.0

The responses to a political alienation item suggest one reason the 1978 female respondents indicate some difficulty in deciding about which political party to support. Political alienation is measured as follows: "Most people with power try to take advantage of people like myself (v26g)." Table 5.16 indicates that more than twenty percent (21.5%) of 1978 female respondents agree or agree strongly with this statement. By contrast, less than ten percent (8.8%) of 1978 males report feeling this way; and slightly half as many 1968 female respondents feel this way. I conclude that the younger female respondents, most of whom are working full-time, highly committed to work, and earning moderate incomes, feel somewhat separated from the political process. Do they feel so politically alienated? Are their political values significantly different from the 1968 female respondents? Are their values different from the 1978 male respondents? I think their attitudes on governmental spending suggest that they have somewhat different outlooks.

Four questionnaire items measure the respondents' attitudes toward areas of governmental spending. One questionnaire item that distinguishes the attitude of 1978 female respondents reads: (v26c)"This country is spending too little on healthcare, welfare assistance, and family services." Table 5.17 shows that forty percent of the 1978 female respondents agree or strongly agree with this

TABLE 5.16 POLITICAL ALIENATION BY GENDER AND COHORT

Powerful Take Advantage	Gender and Cohort 1968 Male	1968 Female	1978 Male	1978 Female	Total
Strongly agree	1 0.6	0 0.0	2 2.2	3 2.5	6 1.4
Agree	24 15.6	7 11.5	6 6.7	22 18.9	59 14.0
Undecided	20 12.9	13 21.3	12 13.3	19 16.4	64 15.2
Disagree	91 59.1	31 50.8	65 72.2	57 49.1	244 57.9
Strongly Disagree	18 11.7	10 16.4	5 5.6	15 12.9	48 11.4
Total	154 100.0	61 100.0	90 100.0	116 100.0	421 100.0

TABLE 5.17 SPENDING ON SOCIAL SERVICES BY COHORT AND GENDER

Too Little Spent on Social Services	Cohort and Gender				
	1968		1978		
	Male	Female	Male	Female	Total
Strongly agree	15 9.7	9 14.7	8 8.9	23 20.0	55 13.1
Agree	30 19.3	13 21.3	19 21.1	23 20.0	85 20.2
Undecided	16 10.3	10 16.4	20 22.2	20 17.4	66 15.7
Disagree	68 43.9	23 37.7	29 32.2	38 33.0	158 37.5
Strongly Disagree	26 16.7	6 9.8	14 15.6	11 9.6	57 13.5
Total	155 100.0	61 100.0	90 100.0	115 100.0	421 100.0

TABLE 5.18 SPENDING ON MILITARY INVOLVEMENT BY COHORT AND GENDER

Too Much Spent on Military	Cohort and Gender				
	1968		1978		Total
	Male	Female	Male	Female	
Strongly agree	30 19.3	16 26.2	17 19.1	29 25.4	92 21.9
Agree	51 32.9	17 27.9	31 34.8	51 44.7	150 35.8
Undecided	29 18.7	17 27.9	22 24.7	16 14.0	84 20.0
Disagree	42 27.1	7 11.5	18 20.2	16 14.0	83 19.8
Strongly Disagree	3 1.9	4 6.5	1 1.1	2 1.7	10 2.4
Total	155 100.0	61 100.0	89 100.0	114 100.0	419 100.0

TABLE 5.19 CONFIDENCE IN LABOR UNIONS BY COHORT AND GENDER

Confidence in Labor Unions	Cohort and Gender				Total
	1968		1978		
	Male	Female	Male	Female	
Strongly Agree	0	0	0	1	1
	0.0	0.0	0.0	0.9	0.2
Agree	13	7	3	19	42
	8.4	11.7	3.4	16.4	10.0
Undecided	15	12	10	33	70
	9.7	20.0	11.2	28.4	16.7
Disagree	66	24	40	45	175
	42.9	40.0	44.9	38.8	41.7
Strongly Disagree	60	17	36	18	131
	38.9	28.3	40.4	15.5	31.3
Total	154	60	89	116	419
	100.0	100.0	100.0	100.0	100.0

TABLE 5.20 BIVARIATE CORRELATION MATRIX, 416 CASES

	v26d	V18	v23	psei
Confidence in Labor Unions v26d	1.0			
Pol.Liberalism,v18	-0.37	1.0		
PerIncome,v23	0.27	-0.24	1.0	
Present Job, psei	0.09	-0.11	0.26	1.0

statement. In contrast, under thirty percent (29.9%) of 1978 male respondents, twenty-eight percent (28.9%) of 1968 male respondents, and thirty-six percent (36%) of 1968 female respondents agree or strongly agree that the government is spending too little on social services. If spending on social services can be seen as an indicator of political liberalism, then one can conclude that there is somewhat of a "gender gap" among our respondents, especially among younger female respondents.

Attitudes toward military spending are measured by questionnaire item #26j (v26j): "This country is spending too much on military involvement in countries of the Third World." Table 5.18 shows that 1978 females are highly against spending money in Third World military involvement. Over seventy percent (70.1%) of 1978 female respondents agree or strongly agree that the government is spending too much. In contrast, slightly over fifty percent of the other gender and cohort groups agree that there is too much military spending on Third World involvements. Over half of the respondents in each group agree that there is too much military spending on Third World involvements.

A gender difference exists in regard to the role of labor unions. Questionnaire item 26d asks the respondents about their confidence in labor unions (v26d): "I have a great deal of confidence in labor unions to better the position of working people like myself." Table 5.19 shows a

statistically significant chi-square relationship between confidence in labor unions and cohort-gender group. The data indicate that female respondents have more confidence in labor unions than male respondents; this tendency is especially characteristic of 1978 female respondents. Female respondents are also much more undecided about their confidence in labor unions than are male respondents. Support for labor unions is not all that strong among either female or male respondents: slightly over ten percent (10.1%) of the respondents indicate that they have a "great deal of confidence in labor unions."

The bivariate correlations in Table 5.20 indicate a fairly moderate direct relationship between confidence in unions and identifying oneself as politically liberal ($r = -.37$) and an inverse relationship with personal income ($r = .27$) in 1983 (V23b). Confidence in unions is weakly ($r = .19$) related to social class identification (v19). The social forces operating on the lives of these respondents do not for the most contribute to their confidence in (or support of) labor unions.

The finding that 1978 females either have confidence in labor unions or are quite undecided about their confidence in labor unions indicates that there are social forces operating on the lives of these women that distinguish them, at least politically, from the other respondents to this survey. It suggests that the "gender gap" is a political

idea that has some basis in the lives of 1978 female respondents.

In sum, the analysis of the political attitudes of these respondents indicates that they tend toward conservative political identification such that age is directly tied conservatism. In addition, males tend to identify themselves as more conservative than females. The respondents' ideological self-placement is buttressed by the responses to the government spending items: younger female respondents tend to feel that (1) this country is spending too little on healthcare, welfare assistance, and family services and (2) this country is spending too much on Third World military involvements. In addition, I find that respondents have little confidence in labor unions to better the position of working persons "like themselves." The data indicate that younger female respondents tend to have more confidence in labor unions than older female or male respondents. These political tendencies are seen as flowing from the occupational rewards and work experiences of the respondents.

7. Summary and Conclusions

This chapter describes the the present occupational attainments and attitudinal findings of the occupational and educational experiences survey. I report the respondents' present occupation and income data and explore the

consequences of these data along the lines of cohort and gender. Below, I review the major findings presented in this chapter.

These respondents have high rates of labor market participation. Almost ninety-seven percent are working in white collar occupations. Almost eight-eight percent of the respondents are working more than twenty hours per week for pay. More than half (57.3%) of 1968 female respondents are working more than twenty hours per week for pay; almost eighty-five percent (84.6%) of 1978 female respondents are working twenty or more hours per week for pay. Behaviorally, the respondents are highly committed to the labor force.

Personal 1983 income of the respondents is highly skewed towards the high income category. Four out of ten respondents report personal earnings over $30,000 per year in 1983. Slightly less than one fifth of the respondents report personal earnings of less than $15,000 in 1983. There is a personal earnings gap, however: 1968 male respondents are much more likely to earn over $30,000 per year than are 1968 female respondents. Likewise 1978 male respondents are more likely to earn over $30,000 per year than are 1978 female respondents. Very few (2.5%) of the respondents report living in households earning less than $15,000 in 1983. However, seven out of ten low income respondents are women. The chance to earn high income and hold a professional or managerial job is not related to academic

standing (self-report), state residency status as an undergraduate, or religion. Based on these data, the public university offers equal opportunity along these lines. Advanced professional training, age, and marital status are not significantly related to one's chances for high income.

The respondents indicate high levels of job satisfaction and psychological commitment to work. A major finding of this study involves commitment to work among these graduates: there is no statistically significant difference between male and female respondents (or cohorts of respondents) in their psychological commitment to work. Among these college graduates, work is just as central psychologically to females as males. In sum, respondents show high commitment to work along behavioral and attitudinal lines.

Besides high levels of job satisfaction and work commitment, the respondents indicate that they hold "challenging and rewarding" jobs. There appears to be no significant differences in this regard by gender or cohort. Respondents report that their present jobs are pychologically fulfilling. However, slightly under fifty percent of the respondents indicate that their present job does not meet their undergraduate expectations. Again, there are no significant differences by gender and cohort in the degree to which undergrad expectations are being met by

present job. From the subjective perspective of the respondents, the overqualification thesis described in the first chapter receives no support.

Finally, educational, occupational, and income experiences of these respondents combine to produce political differences. On the whole these combine to produce conservative political identification and support for the Republican party. There are gender and cohort differences that indicate that males are more conservative than females; that 1968 respondents are more conservative than 1978 respondents. Furthermore, I found a small proportion of 1978 female respondents to be politically alienated and less certain as to which political party to support.

CHAPTER VI

SUMMARY AND CONCLUSIONS

1. Summary of Findings

The purpose of the study is to investigate the educational and occupational experiences of two cohorts of public-university graduates. The survey questionnaire attempts to measure the attainment process of these graduates to discover gender, cohort, and social background differences. A central question raised in this study concerns the beneficiaries of public university education: Did the returns on investment in higher education decline in 1978 compared to 1968? If so, which social groups, if any, benefited from the decline? Did men gain in relation to women? Did offspring of the middle classes gain or lose relative to offpring of blue-collar workers? How did first-generation college students fare? These kinds of questions generate the five major hypotheses that guide the analysis of the survey data.

First, I examine the hypothesis that college curriculum is a function of the respondents' parental resources: the greater the parental educational and socioeconomic resources, the less occupationally specialized the respondents' undergraduate training. I find that parental

resources do influence the undergraduate curriculum selection of the respondents. Father's occupational status is not significantly related to the respondent's college major. However, family educational status is related to the respondent's selection of college major in such a way that the lower the family educational status of the respondent, the more quantitative or vocational his/her choice of college major. I also find that gender is related to college major of the respondents: females tend to major in the less quantitative or vocationally-oriented areas.

Program of studies, that is, the particular college of the university in which the respondent earned his/her degree, is not statistically related to parental occupational resources or parental educational resources. However, program of studies is related to gender. I also find some cohort differences is curriculum selection.

Second, I examine the hypothesis that professional and graduate training is a function of parental resources, gender, and cohort. The survey data confirm a connection between father's occupation and professional training. However, I find that the connection is neither straight-forward nor exactly the one I hypothesized: 1968 sons and daughters of blue-collar fathers pursue advanced degrees and certificates at a much higher rate than do the 1968 offspring of white-collar fathers. In other words, the data indicate that among the 1968 respondents to this

survey, graduates from blue-collar backgrounds attain more professional degrees and certificates than their comparable classmates of white-collar backgrounds. First-generation college graduates in 1968 earn significantly more advanced degrees than do respondents whose parents hold one or more college degrees. This pattern does not hold among the 1978 respondents.

Overall, I find that who goes on for professional training is a function of father's occupational position. The sons and daughters of professional fathers are most likely to go on to professional school. The next likely subgroup to pursue professional training is the offspring of low status white-collar fathers and blue-collar fathers. The sons and daughters of managerial fathers are the least likely to go on to professional school. These differences are significant at the .05 level. No significant relationship exists between family educational status and the pursuit of professional training.

The public state universities were born in a climate of utilitarian rhetoric that led to the passage of the Morrill Act (setting up land-grant colleges) by Congress in 1862. By offering an education described in terms of some larger utility and cloaked in the prestige of science, 19th-century educational entrepreneurs managed to revive the status of the college degree (Collins, 1979: 124).

The state Agricultural and Mechanical universities set

up under the Morrill Act, however, tended historically to downplay vocational functions and to expand their arts and sciences offerings in imitation of major universities with their large numbers of research-oriented scholars.

Students generally greatly prefer the liberal arts to job-oriented vocational programs. The tight labor market of the late 1970s may have slowed down this long term preference for liberal arts education and reasserted the utility of the college degree for "success" -- college education is once again being seen as having job-specific payoffs. As the labor market pressure for vocationalism increased the sons and especially daughters of blue-collar workers found it more advantageous to enter job-specific majors, abandoning the liberal arts programs that lead to positions in graduate schools and professional training. The professional training advantages that 1968 offspring of blue-collar fathers hold in comparison to their white-collar peers may fade with increased vocationalism.

Ironically, the job-specific choices exercised by respondents of lower socioeconomic backgrounds contains implications for their "career" mobility: perhaps, they constrain the occupational sectors the respondents work in as well as many other of their life chances.

Attendance rates at colleges and universities fell off for male students from 54% of the 18-19 year-old group, and 29% of the 20-24 year old group in 1970, to 50% and 26% for

those age groups in 1975 (Collins, 1977:194). The increased attendance rates of females during these years -- from 42% to 44% of the 18-19 year-olds and from 15% to 19% of 20-24 year olds -- offset this trend. The efforts of women to break out of subordinate occupational positions are tied to the issue of gender as a predictor of college major and advanced professional training.

This study shows that 1978 female respondents lag behind male respondents in regard to the pursuit of professional training. In particular, female respondents in 1978 from blue-collar backgrounds have less chance of earning professional credentials than do their 1968 counterparts. Female respondents from white-collar families in 1978 do better in this regard than their 1968 female counterparts. The tight labor market in the late 1970s led to increased vocationalism among students who looked upon the public university as an avenue for occupational mobility. Vocationally-oriented students have less chance to earn professional degrees or certificates. In a credential-based society, these students probably hurt their long range life-chances.

This study finds a moderate positive relationship between parents' and daughter's first-job occupational status, measured in Duncan SEI units. The father-daughter intergenerational occupational status relationship is stronger than the mother-daughter relationship among the

1968 female respondents. For the 1978 female respondents, only the mother-daughter first-job occupational relationships holds. Furthermore, the data indicate that there is no relationship between the occupational status of son's first job to the occupational status of either of his parents.

The "payoff" in occupational status terms is roughly the same for male and female public-university graduates, the occupational attainment process differs by gender. For male respondents to this study, college major (an indirect measure of ability?) predicts the first-job occupational status; for female respondents, parental occupational status predicts their first-job occupational status.

The analysis of the respondent's first-job status indicates that entry into the labor force is preprogrammed for the female respondents: The higher their parents' occupational status, the higher the occupational status of their job. One plausible interpretation of this finding is that the college degree is more an indicator of status membership, a credential, for female respondents than an indicator of specific skills learned. This credential operates to insure that the female respondent does not fall out of the middle class. For male respondents, the public-university degree indicates "the sorting and sifting process", their commitment to a certain field like private business, and perhaps also a specific level of readiness to

undertake further professional training. It appears that the college degree is associated with intergenerational upward mobility in the first-job for male respondents and the protection of first-job status for female respondents. Whatever the interpretation, the first jobs entered into by male and female respondents involve different explanatory factors.

An examination of the hypothesis that there are no differences in the status attainment process among male and female respondents if labor force entry is conceived of as a six-year process must also be rejected. I find that the impact of family background and educational achievement variables differ along the line of gender. In particular, I find a direct relationship between the occupational attainment of fathers and daughters; however, no significant relationship exists between father's and son's occupational placement (The slight connection that might be inferred from these data would show an inverse relationship between father's and son's attainment (perhaps the talented sons of New Hampshire residents are sent off to private colleges and larger, more urban, universities)).

Cohort analysis of the occupational data indicate that the survey questionnaire was unable to detect any measurable overqualification among the 1978 respondents. This cohort enters the labor force with slightly less socioeconomic status (measured in Duncan SEI units) than does the 1968

cohort. The socioeconomic differences are not statistically significant, however. Measurement of the sixth-year occupational status of each cohort also shows no significant differences. The early slight disadvantage incurred among the first-jobs of 1978 respondents disappears among their sixth-year jobs. I must conclude that overqualification did not appear to be a problems for the respondents to this survey. I did find that female respondents from blue-collar backgrounds do the least well in the labor market measured in terms of sixth-year occupational status. Again, these differences are not statistically significant.

The present jobs of the respondents indicates that they are mostly working in professional and managerial jobs. Female respondents are slightly less likely to be working for pay twenty or more hours per week than are male respondents: the labor market participation rates are 57.3% for 1968 female respondents and 84.6% for 1978 female respondents. Behaviorally, I find the respondents are quite committed to the labor force.

The respondents to this study also indicate high psychological commitment to work. I find few differences between male and female respondents or, cohorts of respondents, in terms of their psychological commitment to work. I think that one major finding of this study is that psychological commitment to work does not differ by gender or cohort among public-university graduates.

Besides high levels of commitment to work, these respondents report high levels of job satisfaction and for the most part feel that their jobs are psychologically fulfilling . I find no statistically significant differences in job fulfillment by gender or cohort. From the psychological point of view of the respondent, there is no evidence that they see overqualification as an issue in their lives. They feel that their present jobs are challenging and rewarding.

The educational, occupational, and income experiences of these respondents produce political differences. I find high levels of conservative political identification and considerable support for the Republican party. There are age, cohort, and gender differences in the data that indicate that older respondents are more conservative than younger respondents; 1968 respondents are more conservative than are 1978 respondents; and male respondents are more conservative than female respondents. In all of these relationships, personal income is the major determinant of their conservative ideology and of their voting behavior.

2. The Public University and Social Mobility

Using occupational status as an indicator, Robert J. Havighurst (1958: 119-20) notes that education is the key to any further upward mobility for working class offspring

in the late twentieth century. By the year 2000, he concludes that "industrial and democratic society will be even more open and fluid than the most highly industrialized societies today, so that education will be the main instrument for upward mobility, and lack of education or failure to do well in one's education will be the principal cause of downward mobility." I would add that education appears to be the key to the occupational placement and upward movement of women and other minorities in the late twentieth century.

During the twentieth-century, public university attendance figures show that the working classes and women have made significant gains in higher education. According to Martin Trow (1970) the United States has experienced a shift from a male dominated elite to an universal post-secondary educational system. Data from a variety of sources confirm an apparent democratization of higher education.

Data from this study show that the democratization of the public university is not far from complete; of course, the ever-present danger is that this trend is at risk of reversing itself: the graduation rates reported here show an increasing bias toward the middle classes indicating the under-participation of children from blue-collar and lower-socioeconomic families; the father-daughter occupational attainment linkage indicates that daughters

from high-status families enjoy differential returns from a public university degree; and that social class and gender are related to labor force entry such that in times of economic recession female graduates from blue-collar backgrounds are hurt the most. These tendencies indicate that class and gender-based "tracking" are still ever-present possibilities in public higher education.

This study confirms that, given equivalent higher educational qualifications, male socioeconomic attainment is independent of his family of origin's socioeconomic status. For male respondents of blue-collar origin, the public university degree, in effect, opens the doors to a different set of life-chances. One hopes that the democratization of higher education is more fully extended to female (and minority) graduates.

The consistent "no difference" findings of this study suggest that there is a lot of similarity, if not outright equality, between male and female public university graduates. Indeed, the biggest gender differences seemed to be related to students' choices, not necessarily their opportunities.

In the nineteenth century, economic development transformed farmers into urban wage-workers. Revolutionary changes in technology and social organization stimulated the development of the social sciences to explain these dislocations. Masses of men struggled for a fair share of

the increasing surplus. Earlier industrialization threw the class system in sharp relief but it left gender patterns obscure even though the social forces that led to change were already at work. Today, the domestic division of labor can not be ignored if one hopes to understand to the social division of labor: what was a constant before 1950 (the household division of labor) is now a variable that must be more throughly explored if public universities are going to offer greater equal opportunity.

In the twentieth century the growth of clerical occupations opened up white-collar jobs to women. White-collar jobs, however, have become "feminized," that is, their wages fell too low to attract men qualified to do the work. Women with high school degrees worked in clerical and sales jobs; with college degrees, as teachers, nurses, social workers, or librarians. Few women worked as physicians, lawyers, college professors, or administrators in business and government. The mechanisms that excluded women have been well documented (Chafetz and Dworkin, 1986).

The women's movement highlights the changes that have been occurring in work and family life: women who intend to be employed most of their adult lives are comparing their opportunities to their male counterparts and for the most part feel that unequal conditions ought to be changed.

The comparisons in this study show that some of the social forces of particularism are still at work. Earnings

and occupational status placement differences between fulltime male and female workers with the same public-university credentials are documented in this study. A sizeable literature in sociology and economics asks why (see references in Reskin, 1984).

3. Limitations of the Study

One major source of bias, that is "systematic error," limits some of the results of this study. This important possible source of bias has to do with the pattern of non-response to the survey questionnaire. Though the sampling procedure employed in this study is best described as a computer-assisted independently drawn non-proportionally stratified random sample, there is considerable variation in the non-response rates of the four major analytical groups in this study. I suspect that only those who viewed their occupational performance as successful returned their questionnaires. If this suspicion is true, then one should not generalize these findings to all public university graduates; or to all UNH graduates either. Perhaps this endeaver is best viewed as a case study of occupationally successful male and female public-university graduates. Many of the interesting findings of this study must be placed in the context of this particular samole return.

Bias and sampling error combine to generate the

discrepancies between "true values" and "research values" in a single study. I conclude that the bias in response to this study means that neither 1968 females or 1978 males are fully represented here though a random sampling method is employed. I suspect that there is greater incentive to respond to a study like this if one is quite satisfied with work and family, and if one views one's occupational performance as successful.

4. Recommendations for Further Research

The present study investigates the effects of socioeconomic origin, college major, and self-reported academic standing on the educational and occupational achievements of two cohorts of college graduates. All three of these independent variables affect the postgraduate and occupational experiences of the respondents. However, there are different effects for male and female respondents.

The ideal research design for measuring the impact of these variables might be randomly choosing two groups of children at birth, separated by a ten year interval, and tracing their academic and occupational careers for the next thirty to forty years. This study is a more modest approach. Nevertheless, this study provides an opportunity to investigate the general relations between gender, higher education, and social mobility.

Future researchers interested in these questions must

seriously consider a panel research design that starts measuring the progress of male and female students as they enter college. A cross-sectional design focusing only on graduates like the one used here provides fairly reliable and valid measurement but it remains an merely interesting snapshot, a case study. Several studies indicate that retrospective occupational and other "hard" data like college major and program of studies are quite reliable. Self-reports of academic standing and attitudes at one point in time leave room for measurement error.

A major question that emerges from this study concerns "drop-outs" and "transfers" from public universities. How do university "drop-outs" "life-chances" differ from those of graduates? Are there important cohort and gender differences here also? A panel study that focuses on entrants of the public university would greatly extend the findings presented here. Time and money prevents this researcher from such a design. I recommend, however, that institutional research explore the career lines and social origins of graduates with a special focus on college-educated women, women "drop-outs" and "tranfers," and "non-traditional" students. The data in this study show that while upward intergenerational occupational mobility is offered to university men, the same opportunities are not perhaps extended to women.

Several subsidiary issues could be further explored

based on the findings of this study. The issue of college-educated women's commitment to work is one of great importance. Poor measurement of the respondent's household composition and resources greatly limits the analytical power of this study. In future studies, I suggest that the ages and number of children in the respondent's household be collected. A fruitful hypothesis to test is that commitment to work is some function of household composition and resources. The findings presented here are suggestive but cannot be more than that because I poorly measured these key variables. If given the opportunity to collect more data on these respondents, I would also include the occupation and age of the respondent's spouse, partner, or housemate(s). At the time of this survey, I thought questions of this sort might be too intrusive. To fully explore questions concerning women's behavioral and psychological commitment to work, these sorts of questions must be politely asked.

Another set of questions that need to be explored concerns the political attitudes of successful college graduates. Ongoing research at the Center for Political Studies (CPS) at the University of Michigan indicates that so-called "Yuppies" tend to be fairly conservative on matters of economic policy and relatively liberal on matters of culture and lifestyle. This research supports the findings that Yuppie baby-boomers are quite conservative on economic matters. However, measures of culture and lifestyle

are not included in this study.

What is interesting about the CPS panel studies is how the Yuppie baby-boomers' political attitudes have shifted since the 1960s. I have always been skeptical of the education-political attitude research that states a direct relation between education and political conservatism. If I can be bold for a moment, I suggest an alternative hypothesis to be explored by future research: that the more educated an individual the more he reports favoring the present political regime. In other words, I suggest that the current political conservatism of the highly educated has sources that do not emanate from the educative process; it is the distribution of power that generates political attitudes, not the other way around.

This research started out exploring the idea of overqualification among college graduates. I found that the 1978 graduation cohort did experience some difficulties at labor market entry. The difficulties (though not statisitically significant) were especially important for college graduates from blue-collar origins. Female respondents from blue-collar backgrounds were particularly hurt by a depression in the college-educated labor market. I suggest studies that can focus more clearly on college women who do not receive their degrees. I suggest that the "diploma effect" may be a significant predictor of upward occupational mobility for men but not for women. I suggest

also that overqualification may be an important issue for those women who attend college and do not graduate as well as those women who attend graduate school but do not graduate. In addition, I suggest a differential "sheepskin" effect by gender.

Finally, I suggest that other studies build on the ideas presented here by choosing a less culturally homogeneous public university as a site to test out some of these ideas. My guess is that this study underreports the difficulties encountered by 1978 respondents in labor market entry. It may also well be that my results underestimate the severity of early career problems on the career lines of the public university graduate. I think that a study of a culturally diverse urban-based public university would yield similar and more clear-cut findings than this research. It may well be that public higher education serves as a primary selector and sorter of male talent for later assignment to occupatioanal roles (Turner, 1960) and that soon it may become a primary selector and sorter of female talent.

5. Final Comments

The idea that the public university, or schoolong in general, can rectify problems of equal opportunity is noble if unrealistic. This study shows that male and female public university graduates experience slightly different chances for educational and occupational reward.

reward. Programmatic changes in higher education could realize a further democratization of educational opportunity. Yet the complete realization of educational opportunity would only bring the conflicts of gender and class stratification into sharper relief. The fact is that equality of educational opportunity could be realized and problems of the domestic and social divisions of labor would remain.

As in all other advanced industrial societies, the problems of inequality in the United States emanate from how households and places of production are organized. Household and work roles are central to the daily lives of people, a greater balance between them, however, might someday be placed on the political agenda.

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APPENDIX

UNH OCCUPATIONAL EXPERIENCES QUESTIONNAIRE

1. What UNH program of studies did you get your Bachelor's degree in? (Please check one)
   ____ College of Life Science & Agriculture
   ____ College of Liberal Arts
   ____ College of Engineering & Physical Sciences
   ____ Whittemore School of Business & Economics
   ____ Other Program (Please specify)_____

2. What was your major for your UNH Bachelor's degree?_____

3. Please check your sex: ____ Male ____ Female

4. Please check your current age-group:
   ____ Under 24 yrs. ____ 35 - 39 yrs. ____ 50 - 54 yrs.
   ____ 25 - 29 yrs. ____ 40 - 44 yrs. ____ 55 - 59 yrs.
   ____ 30 - 34 yrs. ____ 45 - 49 yrs. ____ 60+ yrs.

5. Since graduation from UNH with a Bachelor's degree, have you earned any other degree or professional certificates?

Types of Post-Bachelor's training	Area of Study	Institution	Graduation date(s)

6. Please check your general academic standing while at UNH:
   ____ Slightly under average (C-) ____ Above average (B/B-)
   ____ About average (C/C+) ____ Excellent (A/B+)

7. While at UNH were you considered an in-state or out-of-state student?
   ____ Resident of New Hampshire
   ____ Non-resident of New Hampshire

8. At age 16, what would you estimate the population size of the city or town you were residing in?_____

9. Currently, do you reside in the state of New Hampshire? ____ Yes ____ No

10. Currently, what would you estimate the population size of the city or town you are residing in?_____

11. Could you please check what your religion is:
    ____ Catholic ____ Jewish ____ Other _____ (specify)
    ____ Protestant ____ No religion

12. Please check your current marital status and living arrangement:
____ Married, living with spouse only
____ Married, living with spouse and child(ren)
____ Single, living alone
____ Single, living with housemates
____ Single, living with a steady partner
____ Divorced
____ Widowed
____ Other (specify)_____

13. Are you now employed?
____ Yes, more than 20 hrs. a week
____ Yes, less than 20 hrs. a week
____ No, I'm actively looking for full-time employment
____ No, I'm actively looking for part-time employment
____ Other (specify)_____

14. What is your present job -- what type of work do you do? (If now unemployed, what type of work was your last job?)
_____

_____

15. To what extent would you say you are satisfied with your present job?
____ Minimal satisfaction (Check one)
____ A bit satisfied
____ Less than average satisfaction
____ Average satisfaction
____ Considerably satisfied
____ Extremely satisfied

16. In comparison with other things which add to the quality of life (children, leisure, friendships), how important would you say your job is?
____ Not important
____ Somewhat important
____ Important
____ Very important
____ The central thing in my life

17. What type of firm are you presently employed in? (If now unemployed, what type of firm did you last work for?)
____ private profitmaking firm
____ private nonprofit firm
____ governmental organization (check one, ___ local ___ state ___ federal)

18. Where would you place yourself on this political scale?
____ Very liberal ____ Slightly conservative
____ Liberal ____ Conservative
____ Slightly liberal ____ Very Conservative

19. If you were asked to use one of the following categories for your own social standing at present, which would it be? (Check one)
____ Upper class ____ Middle class ____ Lower middle class
____ Upper middle class ____ Working class ____ Low socio-economic sta

20. Which political party are you most likely to give your support in the 1984 elec
____ Democratic Party
____ Republican Party
____ Other (specify)_____

21. Describe the type of work your father and mother have done for most of their lives.

Father _____

_____

Mother _____

_____

22. Please check the level of formal education that each of your parents completed.

Father	Mother
___ grade school (grade 1-8)	___ grade school (grade 1-8)
___ some high school (grade 9-11)	___ some high school (grade 9-11)
___ completed high school	___ completed high school
___ trade school (grade 12+)	___ trade school (grade 12+)
___ some college	___ some college
___ college graduate	___ college graduate
___ graduate degree (M.A., Ph.D., etc.)	___ graduate degree (M.A., Ph.D., etc.)

23. Examine the list below and indicate which of these is nearest to <u>your total personal income</u> for the year beginning Jan. 1, 1983, before taxes or other deductions and excluding the income of other household members. (Check one below)

___ Under $2,000	___ $10,001 - $13,000	___ $21,001 - $25,000
___ $2,000 - $5,000	___ $13,001 - $15,000	___ $25,001 - $30,000
___ $5,001 - $8,000	___ $15,001 - $18,000	___ $30,001 - $35,000
___ $8,001 - $10,000	___ $18,001 - $21,000	___ Over $35,000

24. Examine the list below and indicate which of these is nearest to your <u>total family income</u> for the year beginning Jan. 1, 1983, before taxes or other deductions. (Check one below)

___ Under $2,000	___ $10,001 - $13,000	___ $21,001 - $25,000
___ $2,000 - $5,000	___ $13,001 - $15,000	___ $25,001 - $30,000
___ $5,001 - $8,000	___ $15,001 - $18,000	___ $30,001 - $35,000
___ $8,001 - $10,000	___ $18,001 - $21,000	___ Over $35,000

25. Please list work-related and social clubs or organizations you belong to:

_____

_____

_____

_____

26. Now I'd like to get your reaction to some things that people have different opinions on. Read each item and the response alternatives for the statements below. Do you Strongly Agree, Agree, Feel Undecided, Disagree, or Strongly Disagree with these statements? (Please check each item)

	Strongly Agree	Agree	Un-decided	Dis-agree	Strongly Disagree
a. I feel my experiences at UNH prepared me to be versatile and flexible, and not narrowly specialized with regard to the job market.....	___	___	___	___	___
b. I feel my job is challenging and rewarding.....	___	___	___	___	___
c. This country is spending too little on healthcare, welfare assistance, and family services.....	___	___	___	___	___
d. I have a great deal of confidence in labor unions to better the position of working people like myself.....	___	___	___	___	___
e. The job I now have meets the expectations and aspirations I had as an undergrad.....	___	___	___	___	___
f. This country is spending too much on protecting the enviroment, not allowing business to benefit fully from our natural resources.....	___	___	___	___	___
g. Most people with power try to take advantage of people like myself.....	___	___	___	___	___
h. In today's world, leisure activities are more satisfying than what happens at work.....	___	___	___	___	___
i. I feel that I am paid fairly for the work I do.....	___	___	___	___	___
j. This country is spending too much on military involvement in countries of the Third World.....	___	___	___	___	___
k. I often feel that I'm overinvolved with my work.....	___	___	___	___	___
l. This country seems to be pulling back from the commitment it had in the 1960's of providing equal educational opport-	___	___	___	___	___