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Factors Instrumental in Female Occupational Status: A Comparison to Factors Instrumental in Male Occupational Status

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FACTORS INSTRUMENTAL IN
FEMALE OCCUPATIONAL STATUS:
A COMPARISON TO FACTORS INSTRUMENTAL
IN MALE OCCUPATIONAL STATUS

by

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CHAPTER I

OCCUPATIONAL STATUS OF AMERICAN FEMALES

Introduction

The study of occupational mobility from one generation to the next has had a strong and consistent appeal for students of society wishing to describe the dynamics of the stratification system in the United States. The literature is replete with theoretical and empirical analyses of occupational mobility (for an extended bibliography, see Miller, 1960: 81-89). The major portion of the interest in occupational mobility has been given to describing the patterns of movement from social origin's or father's occupation to occupational destination or son's occupation. This research has characteristically been limited to males in the past. Recently, however, the study of intergenerational occupational mobility patterns was extended to females (see DeJong et al., 1971).

An area of research closely allied with the study of intergenerational occupational mobility patterns is that concerned with the factors affecting these patterns and the individual's chances of occupational success. More specifically, such studies have focused on describing the achieved and ascribed characteristics of individuals which are instrumental in determining where individuals are located, or locate themselves, in a hierarchy of occupations. Studies of this type also have been limited to males

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(see Blau and Duncan, 1967: 113). This research extends such study to females.

The objective of this research is to determine on a national basis those individual characteristics of females which affect their occupational status. In addition to analyzing each of these theoretically determined individual characteristics separately, a basic explanatory model of the process involved in the achievement of occupational status for females will be tested. Findings for females will be compared to those for males in order to determine whether the factors (and process) instrumental in determining the occupational status of females differ from those known, on the basis of previous research, to affect the occupational status of males.

Studies of achieved and ascribed characteristics instrumental in determining occupational status have been limited almost exclusively to the study of the male. The omission of the female from this research is becoming more serious for a full understanding of occupational status. There is a growing proportion of women working and an increasingly large segment of the occupational structure consists of females. In 1950 the percentage of American females fourteen and over who were working was 27.4 per cent; in 1969 this figure had risen to 41.6 per cent (U.S. Bureau of the Census, 1970: 223). The labor force itself is becoming increasingly female. In 1947, 28.1 per cent of the civilian labor force was made up of women sixteen and over, but by 1970 this figure had risen to 37.9 per cent (U.S. Bureau of the Census, 1970: 213). As a result, account must be taken of the more than

one-third of the labor force, females, who have been excluded from the study of occupational status.

Much has been written on the consequences of increased female participation in the labor force. In the area of the family, for example, it has been speculated that the increase in working wives is having consequences for patterns of marriage, child bearing, child rearing, marital conflict, and the divorce rate (Goode, 1964: 75-77). The educational sphere is also considered to be affected. As traditional values and beliefs regarding women and work are changing, more young women are seeking higher education as preparation for more demanding and status conferring occupations (Cavan, 1969: 34-35). Studies of the factors affecting female occupational status provide additional perspective for an understanding of the consequences of increased female participation in the labor force and for the labor force as a whole.

Finally, studies of female and male occupational status, especially in relation to one another, have implications for the more general theoretical approaches to stratification and to certain assertions made about the female's role in American society. The theoretical implications of this research are explored both in this and ensuing chapters.

The Transition from Occupational Mobility to Occupational Status

It was suggested above that this research is intended to be a logical follow-up study to that of the intergenerational occupational

mobility patterns of American females (DeJong et al., 1971). The question may well arise then as to why the present study is conceptualized as factors instrumental in female occupational status rather than factors associated with the intergenerational occupational mobility of females. The latter conceptualization suggests an analysis wherein certain theoretically derived variables would be analyzed in relation to a mobility score denoting the amount of movement, either upward or downward, from father's occupational status to daughter's occupational status. Thus, the research would be concerned with the determinants of degrees of upward occupational mobility, downward occupational mobility, and occupational stability.

The reason we have chosen to focus on the daughter's occupational status as the phenomenon to be explained rather than her mobility score is that when one tries to establish the causes of mobility it is not generally advisable to attempt to use the mobility score as a variable in a straightforward statistical analysis (Blau and Duncan, 1967: 153). The detailed statistical reasons for this are presented elsewhere (Blau and Duncan, 1967: 195-199). Substantively, however, it may be noted that the phenomenon of "mobility" is not "causally homogeneous." That which determines where a female starts (her father's occupational status) may be different from what determines where she goes (her occupational status at the time of sampling). Moreover, because of the ubiquitous pattern of regression toward the mean, mobility in a specified direction from one starting point may be easier or more likely than

from another. Consequently, the starting point or origin status (father's occupational status) of the female is part of the causal configuration determining her destination status (her occupational status at the time of sampling). To treat the mobility score as the phenomenon to be explained would result in including in one variable both a cause and an effect, or as Blau and Duncan state, a confounding of cause and effect.

The conceptualization of this study in terms of occupational status does not result in the omission of any elements which would be present in an analysis using the mobility score. As later theoretical development and analysis shows, the daughter's origin status (father's occupational status) becomes an independent variable, rather than being included with daughter's destination status as a part of the dependent variable. In so doing, nothing is lost, but running the risk of confounding cause and effect has been evaded.

The Study of Social Status by Occupation

Although this research is specifically a study of factors affecting occupational status, it has implications for the more general study of factors which affect social status. This section briefly defines social status and indicates how this concept has been characteristically operationalized for study.

If, as Barber (1957: 356) states, societies may be conceptualized as consisting of variously ranked social strata, then the term "social status" may be used to refer to the individual's position in this system of ranked strata relative to that of other individuals in

society. The particular criterion, or more often criteria, which determine the individual's position relative to that of others varies across societies. In the United States, personal prestige, occupational status, income, style of life, and educational attainment are among the criteria which determine the individual's social status (Kahl, 1957).

The study of social status on a national basis has been traditionally accomplished by using ranked occupational categories as total indicators of different social status positions. A formidable rationale lies behind operationalizing social status level in this fashion and hence the use of occupational prestige measures has greatly enlarged the knowledge about social class and its importance for a whole range of social behavior (Reissman, 1959: 115). Yet, occupation and social status level are not conceptually synonymous.

Occupation as a single index of social stratum level has a social reality, especially in an industrial society. It is a real category of social classification that has direct meaning for social status (Hodges, 1964: 95). Occupations are differentially valued by the members of society and studies have shown there is a remarkable consistency in their prestige rankings. For example, in a well-known study of ninety occupations (National Opinion Research Center, 1947), there was substantial agreement among the rankings from different areas of the U.S., different sizes of home towns and cities, different age groups, different economic levels, and different sexes. A repeat study indicated the same conclusions

(Hodge et al., 1964). It has further been shown by Inkeles and Rossi (1956) that this agreement among rankings even holds cross-culturally in modern industrialized societies.

In addition to the logic behind using occupation as an index of social status, the mass of available evidence indicates that, in American society, occupation is the single best indicator of social stratum level (see Chinoy, 1955: 181; Hollingshead, 1957; Reiss, 1961: 83-84). It is highly related to other criteria of status level such as income, wealth, style of life, power, and quality of residential area. This point has been given strong credence by Kahl and Davis (1955) who subjected nineteen different indicators of class position to intensive statistical analysis. Their computations pointed to two variables which appeared to underlie all others: occupation and quality of house and residential area. Occupation, above all, proved to be most predictive.[1]

Although occupation and social status have much in common, there is not a one-to-one relationship between them. Too often, complains Hodges (1964: 96), studies which are purportedly investigations of social class fall into the trap of an unqualified equating of occupation and social stratum level. The error in such instances is not in using occupation as an index of social status, but in using occupation and stratum level as synonyms.[2]

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[1]This conclusion of Kahl and Davis has recently been questioned. It has been suggested that a combination of education and income is a more valid indicator than occupation (Bogue, 1969: 429-432).

[2]For an extended statement of the limitations of occupational measures of social status, see Barber (1957: 108-111); Reiss (1961: 89-108).

This research is specifically a study of the factors which affect the occupational status of American females. Since it is primarily a study of females rather than males, the limitations involved in generalizing from occupational status to social status may be even more serious. The male's social status is usually determined by his occupational status, whereas, as Bergel (1962: 331) states, the female's social status is generally taken from her husband, if married, as she shares her husband's status. As a result, the implications of this study for factors which affect the social status of females may not be as great as the implications of studies on males are for factors which affect male social status.

Factors Affecting Occupational Status

A number of variables have been theoretically posited as crucial for an understanding of the process involved in the achievement of occupational status. These variables interact with values underlying the stratification system which permit and encourage or prohibit and discourage the attaining of high occupational status. This section considers some of these variables which are basic to understanding occupational status.

No single element acts alone to produce a given level of occupational status. Occupational status is affected by several different but interrelated factors or conditions (Barber, 1957: 357). These factors can be thought of as affecting occupational status by operating on the system or by influencing the achievement of individuals. Hence, two modes of analysis, systemic and individual,

may be employed in the study of these factors (Blau and Duncan, 1967: 9-10). An analysis at the individual level is concerned with variables which are analyzed as characteristics of the individual affecting his occupational status, for example, education.

The present research is intended to be an analysis of the characteristics of the individual affecting his occupational status.[1] Thus, the factors affecting occupational status dealt with in this research are conceived of as characteristics of the individual. They include: father's occupational status, father's educational attainment, respondent's educational attainment, and respondent's race.

In the past, these factors basic to occupational status have been conceptualized in such a way as to account for variations in male occupational status. The possibility exists that their use in the analysis of the occupational status of females may not be precisely the same as for males. Consequently, the format for the discussion of each of these factors is first to present its current use in analyzing male occupational status, then to indicate the questions of analysis it raises for females.

Father's occupational status and father's educational attainment have been studied in relation to male occupational status because they represent vital characteristics of the male's family of origin. The family, in turn, is the "keystone" of the American stratifica-

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[1]For a consideration of some of the factors which affect occupational status in the system as a whole, see DeJong (1969: 8-13).

tion system (Barber, 1957: 371), and hence of crucial importance for an understanding of the occupational status. The family is the first socializing agent in the life history of the individual and so a prime determining factor in what will happen to him later in the occupational system.

It is well known that in the contemporary United States, different social strata (which represent different degrees of father's occupational status and educational attainment) socialize their children in characteristically different fashions. Rosen (1959: 53) has presented data which indicate that the higher social classes more consistently socialize their children into patterns of achievement motivation than do the lower classes. This differential socialization by social class has consequences for the individual's attitudes toward and chances for high occupational status (Goode, 1964: 77). A study by Kahl (1953) has offered evidence of the family's socializing influence as regards occupational status. It showed, for instance, that the lower middle class family that did aspire to high occupational status for its children was more successful in starting them on the educational route to that goal than was the lower middle class family which did not have this aspiration. Today, the influence of the family on the child's aspiration for higher education is extremely important because, as will be noted shortly, education is increasingly becoming an indispensible prerequisite for high occupational status.

In addition to their representing different socializing influences, the male's origin statuses (father's occupational status and father's

educational attainment) are also important factors in determining his occupational status because simply the level at which the individual enters the status structure appears to have an effect on his occupational status. Blau and Duncan's (1967: 58-59) data show that "boundaries" to the intergenerational occupational mobility of males exist among the occupational groupings of white collar, blue collar, and farm.[1] Further, Lipset and Bendix (1959: 191) present data which indicates that even when educational attainment is controlled, sons from lower status origins are more likely to hold lower status occupations than sons from higher status origins. Lipset and Bendix (1959: 198) attribute this finding to a greater absence of helpful "personal contacts" in the occupational sphere on the part of sons from lower status origins.

In sum, it is because of systematic differences in types of socialization among different social strata and the negative effect of lower status origins apart from socialization influences that the male's origin statuses have been analyzed in relation to male occupational status. To our knowledge, it is not specifically known whether the same relationships exist between the two origin statuses and occupational status for both females and males. The differences in types of socialization among different social strata most likely also extend to females, but one should be careful in predicting the same relationship between the two origin statuses and occupational status for both females and males, because there are also

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[1]DeJong et al. (1971: 1039) report the same "barriers" to mobility exist for females.

systematic differences between females and males in all strata.
Moreover, it is possible that the content of socialization across
different strata is more standard for females as opposed to males,
i.e. there is the possibility of interaction between type of social-
ization and sex at different social strata levels. At any rate, the
character of differential socialization of females and males and
its probable effects are explored in later sections.

Formal education is fast becoming an essential prerequisite
for high occupational status. As American society becomes in-
creasingly industrialized, the factor of education becomes more
important for occupational advancement. Whereas earlier a boy
was taught agrarian techniques or business dealings at the side of
his father or as an apprentice, today this function has been largely
taken over by the system of formal education. The major part of
the production and distribution of goods is handled by large corpor-
ations, and ambitious young men are more likely to seek work in
corporations, rather than start their own firms (Kahl, 1957:
277). To begin a corporate career, a man begins with a college
training often in either a technical field like engineering or
business administration. Thus, the combination of complex scien-
tific technology and large bureaucratic organization has made
higher education necessary for high positions in most fields of
business and government, as well as in the professions. The
diploma has become the primary indicator of degree of knowledge
and the necessary credential for entrance into many occupations.
"Only in entertainment, art, and sport can talented individuals make

headway without being asked, 'Do you have a bachelor's degree?'"
(Kahl, 1957: 277).

But the requirement of formal education for entrance into various occupational roles is not merely dictated by the greater need for technical knowledge. Hodges (1964: 260) maintains the prerequisite of college and even post-graduate degrees by some occupational groups appears to be primarily motivated by needs to "professionalize" and to gain in public esteem.

The literature does not directly indicate whether the effect of education on occupational status is different for females as opposed to males. However, on a general level, it is known that the values and behavior toward obtaining an education differ for females and males; that is, it is generally considered less important for females to get an education than it is for males (Goode, 1963: 16). On the individual level, the effect of education may differ for females since females more often than males enter and re-enter the labor force, and since females enter the labor force at lower status occupational levels than do males (Rossi, 1964: 625-626). In view of these facts, the question arises whether females are as able to hold occupations equivalent to their level of education as readily as are males.

As noted earlier, the chances of occupational achievement are limited by the status ascribed to a man as the result of the family into which he is born. "Indeed, a stable society is hardly conceivable that does not ascribe to every child a status in some kinship group, which is responsible for rearing and socializing him,

and which, therefore, strongly influences his motivation to achieve, his qualifications for achievement, and hence his chances for success" (Blau and Duncan, 1967: 207). Limitations on the opportunity to achieve determined by ascribed status, however, are not due only to differences in acquired orientations and abilities but also to discrimination. One type of discrimination particularly prominent in the analysis of male occupational status is that based upon the racial status a man's parental family imposes upon him.

Discrimination resulting in the Negro's lowly position in the occupational sphere has been theoretically and empirically defended so many times and in so many ways that presenting evidence for this point seems like an attempt to prove the obvious (Miller, 1964: 84). Although the Negro has made significant gains in occupational status over the past two decades, his position still remains far below that of the white. Hill (1965) presents an insightful analysis which accounts for this gap. Industrial manage- ment, organized labor, state employment agencies, and even the federal government through its apprenticeship and vocational training programs continue to evidence institutional discrimination against the Negro in the occupational arena.

Again, detailed empirical investigation of the similar or differ- ential effect of racial status on occupational status by sex is lack- ing. Aside from the sometimes forwarded argument that the occu- pational sphere presents more job opportunities for Negro females than Negro males, it seems unlikely that, once in the labor force, the occupational status of Negro females and males is differentially

affected by racial discrimination. The disadvantaged position of the Negro in the labor force is as likely to be reflected in the occupational status of Negro females as it is in that of Negro males since both are subject to discrimination. This is suggested by Miller (1964: 96) who presents percentage distributions which indicate Negro women are heavily concentrated at lower occupational levels. More recent data substantiate those of Miller. Waldmen (1971: 13) relates census data which show Negro females as opposed to white females are underrepresented in white collar occupations (47 per cent versus 62 per cent) and overrepresented in the lower status service occupations (30 per cent versus 17 per cent). Neither of these studies, however, controlled for the most obvious of interaction effects--that between racial status and social status origins.

This section has considered four factors, conceptualized as individual characteristics, which affect occupational status. In some instances, these variables may affect differentially the occupational status of males and females. Consequently, the need to understand the factors involved in female occupational status stems not only from the increasing number of females in the labor force. It also derives from the possible alterations which such study might introduce into the theory used to account for occupational status as a social phenomenon, which up to this point, has been conceptualized only in terms of male occupational status.

Factors Affecting Occupational Status
Indicated by Previous Research

This examination of the literature focuses on factors instru-
mental in the occupational status of males. It is of necessity that
the focus is limited to males, since, to our knowledge, females
have not been systematically studied in this context.

The predominant emphasis in occupational status research has
been on occupational mobility analysis (Blau and Duncan, 1967:
9). The general procedure has been to classify specific occupa-
tions into relatively encompassing occupational categories and then
study the patterns of movement from fathers' occupations to sons'
occupations (see DeJong, 1969: 17-25). Although the results of
such analyses describing mobility patterns are occasionally rela-
ted to other variables, such as education, the major preoccupation
has been the internal analysis of mobility tables, with little atten-
tion devoted to the systematic investigation of the relationships
between other factors and occupational mobility or more particu-
larly occupational status. This situation has resulted in a decided
lack of empirically based explanation of both occupational mobility
and occupational status. To be sure, scattered correlations exist
in the literature, but it was not until Blau and Duncan's (1967)
study that a systematic, methodologically sophisticated investiga-
tion was made of the factors instrumental in determining male
occupational status and hence, mobility patterns.

The format for the discussion of the research bearing on factors
instrumental in male occupational status is to consider, in turn,

the research related to each of the four factors theoretically dis-
cussed in the previous section. In view of the situation mentioned
above, by far the most attention is given to Blau and Duncan's
analysis.

The large number of occupational mobility analyses all suggest
a relationship between father's occupational status and son's
occupational status (see Davidson and Anderson, 1937; Centers,
1948; Rogoff, 1953; Lipset and Bendix, 1959; Jackson and
Crockett, 1964; Blau and Duncan, 1967). These studies suggest
such a relationship by showing that occupational inheritance from
father's occupation to son's occupation is considerably greater
than that expected on the basis of chance. The term "suggest" is
used here because all of these analyses, except the last, only
studied the relationship between father's occupation level and son's
occupation level using broad occupational categories. These cate-
gories are so encompassing that specific occupations of widely
varying status fall into the same category. Consequently, the
possibility of an inflated relationship exists.

Blau and Duncan (1967) went farther. They reclassified the
specific occupations of their 1964 national sample of males and
fathers into occupational status scores (Blau and Duncan, 1967:
119-120). Using this classification, they found a Pearson pro-
duct moment correlation between father's occupational status and
son's occupational status of .52. Hence, father's occupational
status explained 27 per cent of the variation in son's occupational
status.

The relationship of father's educational attainment to son's occupational status is initially indicated in the correlation between father's occupational status and son's occupational status. This is the case since father's educational attainment is most likely related to father's occupational status. More explicit documentation comes from Blau and Duncan's research. Their data show a correlation coefficient of .32 (Blau and Duncan, 1967: 169).

The relationship of respondent's educational attainment to respondent's occupational status has been indicated many times and in many ways. A study by Hochbaum et al. (1955: 34) based on a local sample from the telephone directory of Minneapolis shows a strong relationship between education and occupational status. Duncan and Hodge (1963: 643-644) using data from a local sample of Chicago, report the relationship holds even when father's education and father's occupational status are statistically controlled.

National sample studies also document the relationship between educational attainment and occupational status. Miller (1964: 154) presents 1960 Census data to support the relationship. Blau and Duncan (1967: 169) have reported a correlation coefficient of .60. In fact, of all the variables studied in relation to occupational status by Blau and Duncan, educational attainment is the most predictive.

The negative effect of being a Negro on occupational status is again well confirmed. The Chicago data of Duncan and Hodge (1963: 643-644) indicate the relationship when father's educational

attainment, father's occupational status, and respondent's educa-

tional attainment are controlled. Miller (1964: 154) substantiates

the relationship with 1960 Census data while controlling for re-

spondent's education. Finally, Blau and Duncan replicate the find-

ing through a sophisticated analysis. They conclude (1967: 209):

> In sum, Negroes are handicapped by having poorer par-
> ents, less education, and inferior early career experien-
> ces than whites. Yet even when these handicaps are sta-
> tistically controlled by asking, in effect, what the achieve-
> ment of nonwhites would be if they had the same origins,
> the same education, and the same first jobs as whites,
> their occupational chances are still consistently inferior
> to those of whites.

There are two major points arising out of this brief review of

the literature which should be stressed. First, there is a great

deal of consistency in findings among the studies, even though

some were conducted on a local basis while others were conducted

on a national basis. This consistency was maintained despite the

fact that some of the studies used broad occupational categories and

some used more specific occupational status scores. Second, it is

of special interest that all of the studies reviewed here were

studies of males. None was a systematic research of the factors

which affect female occupational status. As indicated, it is this

omission in the literature that this study hopes to redress.

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Social Roles of the Female and Participation
in the Labor Force

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The question now arises, how are these factors instrumental in

male occupational status likely to affect the occupational status of

females? Moreover, are there any additional factors which might be instrumental in female occupational status but are not related to male occupational status? To answer these questions, certain dimensions of the female role in American society must first be taken into account, particularly those aspects of the female role which affect her patterns of participation in the labor force. This section develops this topic as a basis on which to predict how the process of achieving occupational status for females may or may not differ from that of males.

In spite of the fact that a large number of theorists and empirical researchers have involved themselves in the study of the female role from different perspectives, there has been almost a unanimity of conclusions. Most agree that changes in the economic basis of the social structure since the Industrial Revolution have resulted in differential shifts in the roles of men and women. Although the social roles of men have remained quite clearly defined, those of women are subject to a large measure of ambiguity. This role ambiguity of the female has resulted in a lack of certainty on the part of the female about education and occupational roles. This, in turn, has had a definite impact on the types of occupations in which women generally engage.

Rose (1951: 69) hypothesized that social and cultural changes accompanying the Industrial Revolution left the middle class urban woman's roles relatively less specific than those of comparable men, and hence her pre-adult expectations are less adequate. Through a comparison of male and female roles over the past one

hundred yea.·s, Rose (1951: 69-72) gives credence to his pro-
position.

Since the Industrial Revolution, males have lost many of their
family functions. They no longer assist with food and clothing
preparations, and their educational function for their children has
decreased drastically. However. they have acquired new civic
responsibilities such as voting for governmental officials, joining
unions, participating in social welfare activities, and soldiering.
Furthermore, and most important, most adult males realize they
must have an occupation to support their families. As a result,
though there have been changes in the roles of men, there has not
been either a decrease of function or a change in their most basic
role, that of provider.

The change in the social role of women after the eighteenth
century was much different, according to Rose (1951: 70). In the
first place, her change of functions was slower and less complete.
Over the past one hundred years, housework for the female has be-
come easier and less time consuming. Modern technology has
done much by adding labor-saving devices to the household. Fewer
children are born to each family and the schools have taken over
part of the task of raising and educating the children. Yet, these
losses of functions came about so slowly that most women did not
realize them and therefore did not prepare for alternate functions.

A second difference between the modification of male and fe-
male roles is that there has been considerable opposition to women
acquiring new functions. Many interest groups have worked to keep

women in the home. Women have been excluded from higher status occupations and from leadership in sexually mixed organizations. This opposition has hindered women from acquiring new roles.

A third difference between men's and women's change of roles is that the new roles of women have not become clear and definite. Although the female does not spend as much time at the old economic functions (eg. clothes making) or at child-rearing after the children begin school, no new demands on her time and interest take their place. She may choose between a "career" or marriage or work out a combination of the two. Because she has this choice, she may eventually question whether the goals she chose are the ones she really wants. A man, in contrast, has no such choice; he must get an occupation. This can be illustrated by the fact that within the economically active years (25-54), over 95 per cent of the males were in the labor force in 1969. The comparable figure for females is 48 per cent (U.S. Bureau of the Census, 1970: 214).

Parsons (1942: 608-613) has also emphasized a lack of definiteness or ambiguity in the wife's role. In addition to the patterns of total domesticity and careerist, the wife has the alternatives of the "glamor" role with its specific emphasis on a feminine form of attractiveness, and the "common humanistic" role with its emphasis on either the cultivation of "cultural" interests or humanitarian obligations in community welfare. But since the domestic and "common humanistic" roles are not fulfilling to many wives, and since the careerist and glamor patterns are considered by

community opinion to threaten the stability of the family, the proper role of the wife is not clearly defined and thus, unstable. In sum, states Parsons (1942: 613): "It is quite clear that in the adult feminine role there is quite sufficient strain and insecurity so that wide-spread manifestations are to be expected in the form of neurotic behavior."

According to Rodman (1965: 272-275), Parsons has more recently placed less emphasis on the strains involved in choosing a particular role pattern. With the increase in female participation in the labor force, attitudes regarding women and work are changing. As a result, states Rodman, the inference Parsons leaves is that it is more likely and acceptable now for women to combine various patterns such as the domestic and the careerist rather than to choose any particular pattern. However, Rodman maintains that the central aspect of the female role still remains the rearing of children and management of the household (see also Goode, 1963: 16). Hence, any other pattern combined with the domestic pattern must of needs be secondary.

In a study of college seniors, Komarovsky (1946) reported two conflicting female roles. The "feminine" role defines the proper attitude toward men, family, work, and love as being "not dominant or aggressive as men." In contrast, the "modern" role calls on the female to develop in competitive lines of endeavor and attain techniques of adaptation similar to those of the male. In other words, the latter role partially obliterates the differentiation in sex. Now if the female chooses to accept the second

role, she becomes penalized for failing to properly fill her feminine role. The result is role conflict and ambiguity about future roles. Komarovsky (1946: 189) concludes by stating this problem will persist for the female "until the adult sex roles of women are redefined in greater harmony with the socio-economic and ideological character of modern society."

Wallin (1950), in replicating the study of Komarovsky, came to essentially the same conclusions. The questionnaire yielded similar results, but Wallin did not find as much conflict between the feminine and modern roles in his interviews as did Komarovsky. However, Wallin explains this inconsistency away by stating that his research dealt mostly with marriage oriented women, while Komarovsky's examined predominantly career oriented women.

The lack of a clearly defined role in the case of the American female has had a profound impact on both the attitudes of young women toward work and on the type of occupations in which women generally engage (Goode, 1963: 16). Rose (1951: 70), for example, reports that among the college women he studied, almost 33 per cent planned to retire "permanently" from all paid work before the age of 30, while only one per cent of the men planned to do so. Even the career women in his sample planned to retire from their jobs considerably earlier than men. In summing up his observations, Rose (1951: 70) writes of the college female: "She has not made, or is not able to make, definite plans--to the same extent as men do--regarding her use of her expected

occupation."

Rossi (1964: 626; see also Davis, 1964) has also lamented over the attitude of young women toward both education and work. She (Rossi, 1964: 626) writes: "To study and to prepare for a future job 'in case I have to work' is just as poor a preparation for occupational participation as the postponement of learning domestic skills 'until I have to' is a poor preparation for the homemaker role." This emphasis on the "present", Rossi continues, is characteristic of the American woman throughout her life span. She also notes the curious similarity between occupational attitudes of women and the working class.

The lack of certainty about occupational roles on the part of females has a definite effect on the type of occupations in which women generally engage. Robin (1969: 205) states: "There has been an apparent selectivity in the sort of positions females have occupied in the labor force." The emphasis throughout the literature on this point has been that females are underrepresented in the more challenging and demanding occupations and that the female's increased entry into the labor force has generally occurred in the lower paying, less prestigious, non-professional occupations.

Cavan (1963: 33-34) states that although the time is past when "careers for women" were considered as an alternative to marriage and family, women still do not have a commitment to one occupation by virtue of an investment of time, money, and educational preparation. Rather, they enter those occupations requiring only

routine preparation on the job. Such semiprofessional, skilled, and semiskilled occupations can be easily abandoned and resumed, and fitted to full time or part time hours as the demands of a family dictate.

Bell (1967: 333-334) contends that women still enter occupations in which they have traditionally been found. As a result, they are notoriously underrepresented in the most prestigeful professions such as law and medicine, and heavily represented in intermediate status occupations such as typists and secretaries. The lower status of women's occupations is reflected in their lower incomes. In 1962, for example, the median income for full time female workers was only $3,458 as compared to $5,826 for full time male workers.

A recent study by Gross (1968) lends support to the thesis of Bell. Using the detailed Census classification of occupations, Gross reports there has only been a slight decrease in sexual segregation[1] in occupations over the past sixty years. Consequently, Gross concludes that the increasing movement of females into the labor force has been into occupations that were already heavily female, newly emerging occupations (eg. key punch operator) defined as female from the start, and previous male occupations which have been taken over by females. It is

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[1] Sexual segregation is defined as the number of females (or males) that would have to change occupations to have the percentage of females in each occupation correspond to the percentage of females in the labor force as a whole.

interesting to note that Gross (1968: 207) attributes the slight decrease in sexual segregation in occupations to men moving into primarily female occupations, rather than females moving into male dominated occupations.

Hunt (1965: 413) has summarized the conclusions of the literature about the nature of female participation in the labor force in the following fashion:

> ... American women have been drawn into the occupational complex of an industrialized society but their participation has been structured toward intermediate status roles. They show only a minor participation in professional, technical and managerial activities and make up a surprisingly small part of the industrial labor force. Similarly they attend higher educational institutions at little more than half the masculine rate and make hardly more than a token contribution to such professions as law and medicine.

In view of the role ambiguity of American females and its affects on the nature of female participation in the labor force, how are the factors instrumental in male occupational status likely to affect the occupational status of females? Moreover, are there any other factors, suggested by this literature, which might be instrumental in female occupational status but are not related to male occupational status? The subsequent section deals with these questions.

Factors Affecting Occupational Status and the Female

In the review of the research related to factors affecting occupational status, these findings were indicated for males: (1) father's educational attainment and father's occupational status

(the origin statuses) are both related to son's occupational status, (2) son's educational attainment is closely related to son's occupational status both as a simple two variable relationship and when the origin statuses are controlled, and (3) son's race is related to son's occupational status as a simple relationship and when the origin statuses and son's educational attainment are controlled. Now, on the basis of the preceding discussion of female role ambiguity and its affects on the nature of female participation in the labor force, can the named relationships be expected to differ for females, and, if so, in what way? Are any other factors for females suggested by this literature? It must be realized that since the information applicable to these questions is limited, the following answers are no more than educated guesses.

The findings of Gross (1968) suggest a smaller relationship between the origin statuses and occupational status for females as opposed to males. Gross has reported, for example, that over the past sixty years females have been moving into occupations already heavily female, newly emerging occupations defined as female from the start, and previous male occupations which have been taken over by females. If this is so, it would seem the type or character of the occupation has had more influence on the daughter's choice of occupation than father's occupation, at least to the extent of determining the daughter's occupation. In the case of the male, however, it has been demonstrated that father's occupation does influence the son's choice

of occupation.

As stated earlier, the literature does not directly indicate whether the affect of respondent's educational attainment on respondent's occupational status is different for females than for males. However, the affect may well differ since females more often than males enter and re-enter the labor force (Rossi, 1964: 626). Not maintaining as consistent an occupational career as do males, it may be expected that females are not as able as males to hold an occupational status equivalent to their educational attainment.

There is additional reason to expect that females are not as able to transform high educational attainment into high occupational status. Cavan (1963), Davis (1964), Komarovsky (1946), Parsons (1942, 1955), Robin (1969), Rodman (1965), and Wallen (1950) have all indicated that particularly in the conjunction of the economic and family spheres there occurs for females a strain of double responsibility, a role ambiguity and the necessity for choice which frequently involves role conflict. In contrast to males, females have and continue to have the obligation to choose between competing role models: domestic, social companion and/ or career. If females select the work or career role, occupation is maintained differently than males in extent, duration, and purpose. As Goode (1963: 16) maintains, the central aspect of the female role remains the rearing of children and management of the household, the occupational role is secondary.

In view of the higher incidence of entry and re-entry into the

labor force among females, role ambiguity and conflict, and the secondary position of occupation in the female role, it is certainly doubtful that the female can hold an occupational status commensurate with her educational attainment as readily as the male. Consequently, the relationship between respondent's educational attainment and respondent's occupational status should be weaker for females than for males. This difference in relationships should also hold when father's educational attainment and father's occupational status are controlled.

The negative affect of being a Negro on occupational status is as likely to be present for females as it is for males, since both are subject to discrimination. This is suggested by Miller (1964: 96) who presents percentage distributions which indicate Negro women, like Negro men, are heavily concentrated at lower occupational levels. Therefore, the same relationship between race and occupational status is predicted for females and males. The similarity in the relationships is expected to hold when the origin statuses and respondent's educational attainment are controlled to deal with the most obvious of possible interaction effects.

Theoretical literature and opinion of writers in the area of the family indirectly suggest there may be factors instrumental in female occupational status which do not affect the occupational status of males. They are number of children and marital status.

Cavan (1969: 412) points out there is a characteristic pattern of employment for working married women. They work just

subsequent to marriage until their first child is born, leave the labor force to bear their children and rear them full time until school age, and finally return to the labor force until late middle age (55-59). The obvious result of this pattern is interrupted occupational careers for working married women with children as opposed to single and married women without children. Now, it might be expected that the greater the number of children, the longer the interruption of the occupational career. This may well have a negative affect on occupational status. As a result, a negative relationship is predicted between number of children and occupational status for females.

In testing for this relationship, age must be controlled. This is the case since the negative affect of a large number of children on occupational status should be less for older females since their children become older or independent and they have had more time to overcome their career interruption.

Somewhat similar reasoning as the above may be used for the inclusion of marital status. Although a married woman may have no children at home, she may be anticipating this period of interruption in her occupational career if she is a young married woman, or already have experienced the effects of an interrupted career if she is an older married woman who has children no longer living at home. Moreover, all married women face additional household duties which single women do not. Consequently, both married women with children and married women without children face impediments to the attaining of high

occupational status which single women do not. In testing for this negative relationship between marital status and occupational status for females, age again should be controlled for the same reason as given in the instance of number of children.

Up to this point, this section has used theoretical rationales and empirical findings for making the following predictions about female occupational status in relation to male occupational status:

1) There is a weaker relationship between father's occupational status and occupational status for females than for males.

2) There is a weaker relationship between father's educational attainment and occupational status for females than for males.

3) There is a weaker relationship between respondent's educational attainment and respondent's occupational status for females than for males when father's educational attainment and father's occupational status are controlled.

4) There is a similar negative relationship between race and respondent's occupational status for females and males. Females and males have similar negative relationships between race and respondent's occupational status when father's occupational status, father's educational attainment, and respondent's educational attainment are controlled.

5) There is a negative relationship between number of

children and occupational status for females when age is controlled.

6) There is a negative relationship between marital status and occupational status for females when age is controlled.

These predictions about female occupational status in contrast to male occupational status have been made on the basis of applicable theoretical and research literature from the areas of the female role and the family. These bodies of literature are highly consistent with one another in regard to the existence of ambiguity in the female role and its likely effects on the nature of female participation in the labor force. Perhaps because of this consistency, the conclusions reached in this literature generally have been accepted. However, recent research (Brawer et al., 1970; DeJong, 1969; DeJong et al., 1971; Robin et al., 1970) on the intergenerational occupational mobility of American females in contrast to that of males has called this literature into serious question.

DeJong et al. (1971) studied the patterns of intergenerational occupational mobility from father's occupation to daughter's occupation and compared these patterns to previously known patterns for males. They maintain that because particularly in the conjunction of the economic and family spheres there occurs for females a strain of double responsibility, a role ambiguity and the necessity for choice which frequently involves role conflict, and because the central aspect of the female role remains the

rearing of children and management of the household, intergenerational occupational mobility patterns were likely to differ for females and males. More explicitly, these supposed impediments to occupational success which are attached to the female role in American society were likely to result in females exhibiting less occupational inheritance, less upward mobility, more downward mobility, less long distance upward mobility, and more long distance downward mobility than males. Yet, their various analyses for females which paralleled those conducted on males by Blau and Duncan (1967: 23-80), revealed that there are no major differences between female patterns of intergenerational occupational mobility and those of the Blau and Duncan males. These startling findings call into question the literature which was the source of their inaccurate predictions.

The same theoretical and empirical arguments have been forwarded to make the above six predictions in this research. We are hesitant to base the predictions of this research on a body of literature which so clearly proved to be inadequate in the DeJong et al. mobility research as indicative of a need for further research and to treat the predictions made on the basis of the literature extant as open questions whose examination will reflect even pointedly[1] on the adequacy of the named literature.

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[1] The DeJong et al. study classified specific occupations into broad occupational categories whereas the present research will use a more detailed classification of occupations in the form of occupational status scores, thus maximizing the chance of finding differences between females and males. In other words, with a more specific classification of occupations, it is less likely that a "masking effect" will be operative in this research.

Basic Explanatory Models of Female
and Male Occupational Status

The major objective of this research is not only to examine the specified relationships, but also to posit a basic explanatory model of female occupational status and compare it to a model of male occupational status already existing in the literature. This section presents Blau and Duncan's model for males, explains its nature, and finally suggests a model for females.

Blau and Duncan (1967: 163-177) set out to delineate and test the basic process of attaining occupational status for males in American society. They chose to include father's educational attainment (Fe), father's occupational status (Fo), respondent's educational attainment (Re), and status of respondent's first job in a basic path model explaining status of respondent's occupation at the time of sampling (Ro).

It is our intention to replicate as much as possible this work of Blau and Duncan. Unfortunately, however, the secondary data which we use in the later analysis does not contain information on respondent's first job. Consequently, the description of Blau and Duncan's model which follows excludes respondent's first job from consideration.[1]

Since a path model is posited as a causal ordering of variables,

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[1] The consequences of excluding respondent's first job from the path model are explored in a later chapter when Blau and Duncan's full model for males is compared to our model for males which excludes respondent's first job.

it is first necessary to establish the temporal ordering of var-
iables. In terms of the father's career, it is naturally assumed
that Fe takes temporal precedence over Fo because Fo was
taken at the time the son was sixteen years old (Blau and Dun-
can, 1967: 166). The concern, however, is not with explaining
the father's career, but only with his statuses (Fe, Fo) as
determininants of his son's statuses (Re, Ro). Consequently,
no assumption has to be made as to the temporal ordering of
Fe and Fo; the measurements of these variables are taken to be
contemporaneous from the son's point of view. Re is supposed
to follow in time and thus be susceptable to causal influence from
the two measures of father's status (Fe, Fo). Because Fo was
taken at the time the respondent was sixteen, some respondents
may have completed schooling before the age to which Fo per-
tains. However, such cases are doubtlessly a small minority in
view of present laws in regard to the age at which formal educa-
tion may be terminated. Finally, there is no problem in
assuming Re precedes Ro in time.

In sum, the temporal ordering of variables incorporated into
Blau and Duncan's basic causal model of occupational status can
be represented as: (Fe, Fo) - (Re) - (Ro). A diagram of their
path model for males, excluding respondent's first job, is pre-
sented and further explained below[1] (Blau and Duncan, 1967:
170):

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[1]Values are not presented in this diagram as they will be
presented and explained in a later chapter.
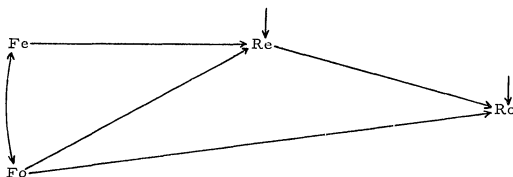
FIGURE 1.1 BASIC MODEL OF OCCUPATIONAL STATUS

The conventions followed in constructing this diagram of re-
lationships have been explained by Duncan (1966: 2-7). First,
the link between Fe and Fo is shown as a curved line. This is
to distinguish it from other lines which denote paths of influ-
ence. The curved line merely serves to indicate that explana-
tion thereof is not part of the present problem. Second, the
straight lines running from one variable to another represent
net influences[1] of the prior variables on the latter variables.
Finally, the lines with no source into each of the effect variables
are residual paths of influence. They represent all other influ-
ences on the effect variables not specifically measured in the
model, thus giving the model at least a formal completeness.

Path models such as the above allow an interpretation in
terms of cause and effect. However, causality in path analysis is
not determined by the magnitude of the values calculated.
Rather, the causal influences are only as valid as the causal

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[1]Net influence refers to the relationship between two variables
when all other variables in the diagram which are temporally
antecedent are controlled.

properties of the theoretical considerations which stand behind them. The causal validity of this model depends on the theoretical considerations set down in previous sections of this chapter, and those contained in Blau and Duncan (1967: 163-171).

Blau and Duncan tested out this model for males and found it to be adequate. Interestingly, they did not incorporate the variable of respondent's race into it. Instead, they arbitrarily chose to treat respondent's race as a characteristic of the individual to be analyzed outside of the model which describes the basic process involved in the achievement of occupational status. Thus conceptualized, being a Negro has a negative effect on occupational status, but the basic process involved in the achieving of occupational status (represented by the diagram) is the same for both Negroes and whites.

In view of the questions raised about the adequacy of the female role and family literature, and because of the convergence of findings about mobility for females and males in the DeJong et al. mobility research, it seems appropriate to propose the same model of occupational status for females as that developed for males by Blau and Duncan. Because the remarks made about Blau and Duncan's data on temporal ordering of variables are also applicable to our data, there is no need to reconsider the ordering of variables for the suggested model for females. Similar to Blau and Duncan's treatment of race, this research will treat race, number of children, and marital status as variables which should be controlled outside of the basic explanatory model of

female occupational status.

In sum, since there is an apparent conflict between the female role and family literature, and the DeJong et al. mobility research, this research will attempt to answer through its analysis two questions regarding female occupational status in comparison to male occupational status: (1) are the factors which affect female and male occupational status the same, and do they operate in the same fashion, and (2) is the basic process of achieving occupational status the same for females and males? Answers to these questions should help to resolve the apparent conflict referred to above.

This chapter has presented a theoretical background and rationale for an analysis of factors instrumental in female occupational status. The first section considered the study of social status by using occupational level as an indicator of social stratum level. The second section presented a rationale for shifting the focus from occupational mobility to occupational status. The third section related those characteristics of individuals which affect their occupational status. Following this, studies using this operational specification of occupational level were reviewed to determine those factors basic to occupational status which have been reported for males.

After reviewing factors instrumental in male occupational status, the interest turned to determining the factors instrumental in female occupational status. Certain dimensions of the female's social role which affect her patterns of participation in the

labor force were presented. Using this discussion as a basis, predictions were made about female occupational status. It was then noted that this same literature had led to erroneous predictions in the DeJong et al. mobility research. Consequently, it was decided to treat predictions about female occupational status as open questions for analysis. Finally, Blau and Duncan's path model for male occupational status was set down (excluding respondent's first job) and a similar model was posited for females as a procedure for testing the comparability of the process of attaining occupational status.

CHAPTER II

RESEARCH METHODS

This chapter describes the methods used to analyze the attainment of occupational status of females and males. The first section identifies the data required for the study, the procedures used to obtain the data, and the source of data. The second section presents descriptions of the female sample and the male sample, and an evaluation of the representativeness of these samples. The third section considers the measurement and scaling of the variables as well as some problems involved in this process. The fourth section focuses on the analytical techniques used in this research, while the final section discusses the assumptions of these techniques in relation to the data.

Data Collection Procedures

In Chapter I, a number of factors were shown to be of importance for the attainment of occupational status. A series of empirically answerable questions were posed as to how these factors may affect the attainment of occupational status for females in comparison to males. To answer these questions, data for the United States for the following variables were desired: occupation of respondent, occupation of respondent's father, education of respondent, education of respondent's father, race of respondent, marital status of respondent, and number of children

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of respondent.

National sample data were desired in order to be able to gen-
eralize the findings of this research to the national labor force.
To obtain these data, a number of data repositories throughout
the nation were contacted and asked if they had available national
samples containing the variables mentioned above.[1] The
National Opinion Research Center had the data most appropriate
for this research and was extremely cooperative in making it
available. Two nation-wide samples from NORC research were
combined for this study.

The Samples

The female sample

The population for the two NORC studies was defined consis-
tently as the total noninstitutional population, 21 years or older.[2]

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[1] The following data banks were approached: The Roper Public
Opinion Research Center, the Survey Research Center of the Uni-
versity of Michigan, the Bureau of Applied Social Research of
Columbia University, the Bureau of Labor Statistics of the United
States Department of Labor, the Institute for Survey Research of
Temple University, and the National Opinion Research Center of
the University of Chicago. The selection of archives was made
from Glaser (1967). This listing of data archives contained infor-
mation indicating the type of data different archives had available.

[2] Although both studies sampled the same population, the sam-
pling techniques were not identical. Study 466 is a national area
probability sample, while Study SRS-857 is an amalgam sample.
Complete descriptions of these sampling techniques can be found
in the following sources. For the national area probability sam-
ple see Feldman (1966: 7-23). For the NORC amalgam sample
see the National Opinion Research Center (n.d: 1-4).

The female sample used in this study consists of all females in the two NORC studies who said they are or have been in the labor force. The NORC study number, the year conducted, and the number of females from each study are listed in Table 2.1.

TABLE 2.1 COMPOSITION OF THE FEMALE SAMPLE

NORC Study Number	Year Conducted	Number of Females
466	1964	433
SRS-857	1965	348
Total Female Sample		781

The male sample

   The male sample consists of all males in the two NORC studies who are or have been in the labor force. The NORC study number, the year conducted, and the number of males from each study are listed in Table 2.2.

TABLE 2.2 COMPOSITION OF THE MALE SAMPLE

NORC Study Number	Year Conducted	Number of Males
466	1964	390
SRS-857	1965	688
Total Male Sample		1078

   Because the analysis in this research largely has taken for its model that of Blau and Duncan (1967), and because comparisons of findings for NORC males and Blau and Duncan males will be made to check the reliability of the NORC data, it is appropriate to note Blau and Duncan's sampling procedures. Their data for

males were collected as an adjunct to the monthly "Current Population Survey" (CPS) taken by the U.S. Bureau of the Census in March, 1962 (Blau and Duncan, 1967: 10-13). The population sampled was males, 20 to 64 years old, in the civilian, noninstitutional population of the United States. The CPS contacted 25,000 eligible male respondents. Complete questionnaires were obtained from five-sixths of these men: that is, from 20,700 respondents. Blau and Duncan state these 20,700 respondents represent the 45 million men 20 to 64 years old in the civilian, noninstitutional population of the United States in March of 1962.

The instrument used by Blau and Duncan, "Occupational Changes in a Generation" (OCG), was left to be filled out by the respondents. They were requested to fill it out and mail it to the regional headquarters of the Bureau of the Census. This questionnaire was designed to obtain supplementary information not available through the regular CPS interview. A copy of the OCG questionnaire is reproduced in Blau and Duncan (1967: 445-449).

Representativeness of samples

It is evident from the review of the research in Chapter I that most of the studies discussed there used local samples and have limited generalizability. This research uses national sample data in order to generalize to the national labor force. If this type of generalization is to be made, the occupational distributions of the female and male samples should be

representative of the national distributions of females and males in the various occupational categories.

Specifically, the following questions may be raised: (1) Does the female sample correspond to the 1965 national distribution (U.S. Bureau of the Census, 1969: 222) of females in the occupational categories? (2) Does the male sample correspond to the 1965 national distribution (U.S. Bureau of the Census, 1969: 222) of males in the occupational categories?

In order to answer these questions, the respondents have been classified into nine occupational categories by sex and source of data. The Blau and Duncan males are also classified into these occupational categories to provide an additional independent source of national sample data. Table 2.3 presents the percentage distributions for males in the nine occupational categories by source of data, while Table 2.4 presents the percentage distributions for females.

In each of these tables, the occupational distribution for the U.S. Bureau of the Census is also presented. The Bureau of the Census distributions serve as the basis of comparison in each table since they represent the best estimate of the population parameters.

An examination of Tables 2.3 and 2.4 indicates that both the NORC sample distributions and the Blau and Duncan sample distribution are similar to the Bureau of the Census distributions for the labor force in 1965. In Table 2.3, the largest difference between the NORC males and the Bureau of the Census males

TABLE 2.3 PERCENTAGE DISTRIBUTION OF MALES IN OCCU-
PATIONAL CATEGORIES BY SOURCE OF DATA

Occupation of Males	1965 Bureau of Census Males	NORC Males	Blau and Duncan Males
Prof.	11.9	12.3	11.6
Managers	13.2	13.3	14.9
Clerical	7.0	5.4	6.1
Sales	6.0	5.0	4.6
Craftsmen	19.0	22.1	19.2
Operatives	20.5	20.4	23.0
Service	7.0	6.7	5.5
Laborers	8.0	7.0	6.4
Farm Wks.*	7.4	7.8	6.9
Total	100.0	100.0 (N=1078)	100.0

* The "Farm Workers" category includes both farmers and farm
laborers (U.S. Bureau of the Census, 1969: 222).

Sources: (U.S. Bureau of the Census, 1969: 222); (Blau and Dun-
can, 1967: 496)

is a 3.1 percentage difference in the category of craftsmen. The

largest difference between the Blau and Duncan males and the

Bureau of the Census males is a 2.5 percentage difference in the

category of operatives. Of the possible eighteen comparisons with

the Bureau of the Census males in Table 2.3, nine show less than

a 1 percentage difference and sixteen show less than a 2 per-

centage difference. In Table 2.4, the largest variation from the

Bureau of the Census females is in the category of professionals.

A 2.6 percentage discrepancy is shown here. Of the possible

nine comparisons with the Bureau of the Census females, three

show less than a 1 percentage difference and eight show less than

a 2 percentage difference.

TABLE 2.4 PERCENTAGE DISTRIBUTION OF FEMALES IN
OCCUPATIONAL CATEGORIES BY SOURCE OF DATA

Occupation of Females	1965 Bureau of Census Females	NORC Females
Prof.	13.0	15.6
Managers	4.4	6.1
Clerical	31.3	30.5
Sales	7.5	5.9
Craftsmen	1.1	2.0
Operatives	15.0	14.1
Service	24.1	22.4
Laborers	0.5	1.7
Farm Wks.	3.1	1.7
Total	100.0	100.0 (N=781)

Source: (U.S. Bureau of the Census, 1969: 222)

We can further assess the representativeness of the NORC data

by considering distributions on another crucial variable in this

research--respondents' father's occupation. Here we do not have

the Bureau of the Census data as a basis of comparison, but we

do have Blau and Duncan's large sample which was drawn by the

Bureau of the Census. Table 2.5 presents occupational distri-

butions of respondents' fathers by sex and source of data.

In Table 2.5, the distribution of father's occupation for NORC

females combines both working and nonworking females (hence the

larger N for females in Table 2.5 than Table 2.4). This has
been done to make the three distributions in Table 2.5 compar-
able. We are assuming that a national sampling of the U.S.
population yields similar distributions on father's occupation for
both males and females.

TABLE 2.5 PERCENTAGE DISTRIBUTION OF FATHERS OF
MALES AND FEMALES IN OCCUPATIONAL CATEGORIES
BY SOURCE OF DATA

Occupation of Fathers	Fathers of Blau and Duncan Males	Fathers of NORC Males	Fathers of NORC Females
Prof.	4.8	5.4	5.9
Managers	11.8	14.3	15.5
Clerical	3.4	3.1	2.8
Sales	4.0	3.4	3.0
Craftsmen	18.5	18.4	21.5
Operatives	15.4	14.7	14.3
Service	4.8	4.6	4.2
Laborers	6.5	6.1	7.1
Farm Wks.	30.8	29.9	25.6
Total	100.0	100.0 (N = 1017)	100.0 (N = 1165)

Source: (Blau and Duncan, 1967: 496)

A comparison of the distributions of fathers of Blau and Dun-
can males and fathers of NORC males indicates minimal varia-
tion between percentages. Of the possible nine comparisons,
eight show less than a 1 percentage difference. The largest
variation from the fathers of Blau and Duncan males is in the

category of managers. A 2.5 percentage discrepancy is shown here.

Somewhat more variation is shown when comparing fathers of NORC females to fathers of Blau and Duncan males. Of the possible nine comparisons here, three show less than a 1 percentage difference while six show less than a 2 percentage difference. The largest variations from the fathers of Blau and Duncan males are in the categories of managers (3.7 per cent), craftsmen (3.0 per cent), and farm workers (5.2 per cent). But these categories are categories with large percentages. Being categories with large percentages, there is greater tolerance for variation because they comprise smaller relative variations.

In sum, Tables 2.3, 2.4, and 2.5 provide substantial evidence that the NORC data are representative of the national labor force. Of the thirty-six comparisons made between the NORC data and the Bureau of Census or Blau and Duncan data, nineteen comparisons showed less than a 1 percentage difference and thirty indicated less than a 2 percentage difference.

There are, however, two questions which still remain in regard to the representativeness of the NORC data. The first has to do with the fact that both NORC studies asked for the respondent's present or latest past occupation rather than simply requesting the respondent's present occupation. As a result, the female and male samples include women and men who are working and have worked.

Although this form of questioning does not present a problem with males since well over 90 per cent of males were employed in 1965, it might with females. The NORC data indicate that from 1964 through 1965, 60.8 per cent of women 21 and over are or have been working. The U.S. Bureau of the Census (1969: 212) indicates 36.4 per cent of women 20 and over are working. Hence, rather than 36.4 per cent, we are using 60.8 per cent of the females in the NORC samples in analyzing factors affecting female occupational status.

The question arises as to whether the representativeness of the female sample is jeopardized by combining females who have been working but are not presently employed with females who are presently working. A partial answer to this question may be obtained by comparing the occupational distributions of women presently working and women not presently working but employed in the past. These distributions are presented in Table 2.6.[1]

A comparison of the distributions in Table 2.6 reveals that they are very comparable with the exception of three categories.

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[1]The distinction in Table 2.6 between presently working and not presently working but employed in the past is not entirely clear. The "presently working" category is nebulous in that the NORC studies included in this category women who temporarily are not working because of illness, a strike, or a vacation but still feel they hold a job. The "presently working" category also includes women who are working, but working without pay on a family farm or business. The inclusion of these women as working has resulted in a slight overrepresentation of "working women" in the NORC data. The U.S. Bureau of the Census (1969: 212) indicates 36.4 per cent of women were working in 1965, while the NORC data classify 41.9 per cent as presently employed.

The largest categories, clerical workers and service workers, show the largest variations. A 6.1 percentage discrepancy is indicated for both. The other sizeable variation is in the category of managers, a 3.5 percentage difference. None of the other six categories show a discrepancy exceeding 1.3 per cent. In general, then, females who are presently working and females who are not presently working but were employed in the past have similar occupational distributions. These data indicate that the collapsing of the two working status categories is unlikely to invalidate the generalization of the findings of this research to the national female labor force.

TABLE 2.6 PERCENTAGE DISTRIBUTIONS OF FEMALES IN OCCUPATIONAL CATEGORIES BY WORKING STATUS

Occupation of Females	Presently Working	Not Presently Working but Employed in the Past
Prof.	15.2	16.5
Managers	7.2	3.7
Clerical	28.6	34.7
Sales	5.8	6.2
Craftsmen	2.0	2.1
Operatives	13.7	14.9
Service	24.3	18.2
Laborers	1.7	1.7
Farm Wks.	1.5	2.0
Total	100.0 (N = 539)	100.0 (N = 242)

There is a second question associated with the representativeness of the NORC data. The question about respondent's father's occupation was not consistent across the two NORC studies. One study (466) requested the father's occupation when the respondent was 16 years old, while the other (SRS-857) asked the respondent for the occupation in which his or her father "normally" engaged. To ascertain the discrepancies which this variation in questioning introduces into the occupational distributions of respondents' fathers, percentage distributions for occupation of fathers by NORC study are presented. Table 2.8 presents them for fathers of NORC females, while Table 2.7 gives these distributions for fathers of NORC males.

TABLE 2.7 PERCENTAGE DISTRIBUTION OF FATHERS OF MALES IN OCCUPATIONAL CATEGORIES BY NORC STUDY

Occupation of Fathers	Study 466	Study SRS-857
Prof.	4.4	5.9
Managers	19.7	11.2
Clerical	4.2	2.6
Sales	3.1	3.6
Craftsmen	13.1	21.3
Operatives	17.2	13.4
Service	4.2	4.9
Laborers	5.3	6.5
Farm Wks.	28.6	30.6
Total	100.0 (N = 360)	100.0 (N = 658)

TABLE 2.8 PERCENTAGE DISTRIBUTIONS OF FATHERS OF
FEMALES IN OCCUPATIONAL CATEGORIES BY NORC STUDY

Occupation of Fathers	Study 466	Study SRS-857
Prof.	5.7	6.1
Managers	16.4	14.7
Clerical	3.4	2.6
Sales	3.2	2.9
Craftsmen	19.7	22.6
Operatives	13.9	14.7
Service	4.4	4.1
Laborers	7.6	6.8
Farm Wks.	25.9	25.5
Total	100.0 (N = 476)	100.0 (N = 689)

Table 2.7 indicates that the difference in questioning about father's occupation between the two NORC studies may have had some affect upon the distributions of males' fathers' occupations for the two NORC studies. Rather sizeable discrepancies are evident in the categories of managers (8.5 per cent), craftsmen (8.0 per cent), and operatives (3.8 per cent). The remaining six categories show discrepancies of 2 per cent or less.

However, when we examine the percentage distributions in Table 2.8, we become reluctant to attribute the discrepancies in Table 2.7 to the difference between the two studies in questioning about father's occupation. The largest percentage difference in Table 2.8 is for the fathers of females who fall in the category of craftsmen. A difference of 2.9 per cent is shown here.

Of the remaining eight comparisons, none exceeds a difference of 1.7 per cent and seven show less than a 1 per cent difference. In other words, the distributions for fathers of females (Table 2.8) are virtually identical.

Because the difference in questions about father's occupation between the two NORC studies does not seem to have affected the occupational distributions of fathers of females, we feel the representativeness of the NORC data on father's occupation is not distorted by combining the two studies. This combination is made despite the fact that there are three "rather sizeable discrepancies" between the two studies in the occupational distributions of fathers of males. If the difference in questioning between the two studies did distort the representativeness of the data on father's occupation, the distortion should have been evident for both females and males.

No further questions arise concerning the representativeness of samples due to differences in questioning between the two NORC studies. On the remainder of the variables to be analyzed in this research, the questions in the two studies were consistent. This will become evident in the next section as the measurement and scaling of variables is taken up.

The Measurement and Scaling of Variables

This section identifies the question used to measure the variables, the manner in which the data obtained were classified and scaled, and some of the problems involved in the measurement

and scaling of the variables. Each class of variables is considered separately.

The occupational variables

There are two occupational variables used in the analysis: respondent's occupation and respondent's father's occupation. The questions used to measure respondent's occupation were consistent across the two NORC studies making up our female and male samples. In both NORC studies, respondent's occupation was obtained by a question asking for present or latest past occupation.

The question about the respondent's father's occupation was not consistent across the two NORC studies. This was indicated and dealt with in the preceding section.

The NORC occupational data were classified according to the detailed 1950 Census classification of occupations. This classification consists of 270 specific occupational categories which fall into the broad occupational groups used in the tables in the previous section.

It has been noted by Blau and Duncan (1967: 118) that two major approaches have been taken to the scaling of occupational variables in occupational mobility and occupational status research. The first involves the researcher developing a socio-economic ranking of occupations. Some of the pioneering work here was done by the census statistician Edwards (1943). With certain modifications, his "socio-economic grouping" of

occupations has led to the "major occupational groups" used by the U.S. Bureau of the Census since 1940.[1] Blau and Duncan (1967: 26) ranked the occupational groups by calculating average or typical educational and income levels of the workers included in the several occupational categories. This method of ranking occupations has predominated in occupational mobility research.

The second approach to measuring occupational status is to obtain, from samples more or less representative of the general public, ratings of the "general standing" or "prestige" of selected occupations. Such ratings have been shown to be remarkably close to invariant with respect to the composition and size of the sample of raters, the specific instructions or form of the rating scale, and the interpretation given by respondents to the notion of "general standing" of occupations, as well as the passage of time (see Reiss, 1961; Hodge et al., 1964). The high degree of reliability and stability shown by prestige ratings and the fact that these ratings take account of both the known and unknown criteria used by the general public to assess the status of the various occupations suggests that these ratings should be used in the scaling of occupational status.

There is, however, one problem involved in the construction of a scale of occupational status from these prestige ratings: ratings are available only for a relatively small number of

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[1]These major occupational groups were used in the preceding section in order to illustrate the representativeness of the NORC data.

occupational titles. A socio-economic index, however, has been designed to give "near-optimal reproduction" of a set of prestige ratings. A complete description of the construction of this index is given in Duncan (1961: 109-138), and only a few general points about its construction need to be made here.

Duncan and Reiss developed the socio-economic index of occupational status. Prestige ratings secured from a sizeable sample of the U.S. population in 1947 were taken as the criterion. These were available for 45 occupations whose titles closely matched those in the 1950 Census detailed classification of occupations. Data from the 1950 Census were converted to two summary measures: per cent of male workers with four years of high school or a higher level of educational attainment, and per cent with incomes of $3500 or more in 1949. The multiple regression of per cent "excellent" or "good" prestige ratings on the education and income measures was calculated. The multiple correlation, with the 45 occupations as the units of observation, yielded a value of .91, indicating that 83 per cent of the variation in prestige ratings was taken into account by the combination of the two socio-economic variables (education and income). Using the regression weights obtained in this equation, all census occupations were assigned scores on the basis of their education and income distributions. Such scores may be interpreted as estimates of prestige ratings or simply as values on a scale of occupational socio-economic status (hereafter, occupational status) (Blau and Duncan, 1967: 120). The scale is

represented by two digit numbers ranging from 00-96. We, like Blau and Duncan, are using the socio-economic index to scale the two occupational variables.

Two digit status scores are available for the 270 specific occupational categories of the 1950 Census classification of occupations. The reader may consult the original publication (Duncan, 1961: 263-275) for the scores of all of the occupations in the 1950 Census detailed classification.

There are two problems associated with the use of this scale of occupational status within the context of this research. The first has to do with the fact that educational attainment is a component of the index used to measure occupational status, while at the same time appears as an independent variable in the basic explanatory model of occupational status. Would not an analysis, then, which reveals a high correlation between respondent's educational attainment and respondent's occupational status primarily be a correlation of one variable with itself?

Blau and Duncan (1967: 126) provide a convincing answer to this question by correlating the occupational socio-economic status index with an alternative index of occupational status which does not include the educational component. The correlation between the original and alternative indexes of occupational status turned out to be .96. Hence, they conclude, the charge of circularity, in so far as it affects the results of the analysis, seems unwarranted.

They support this conclusion further by running the inter-

correlations among father's occupational status, respondent's educational attainment, respondent's occupational status using both the original and alternative indexes of occupational status. The results were the same regardless of which index of occupational status was used (Blau and Duncan, 1967: 127).

A second problem associated with the index of occupational status has to do with its temporal stability.[1] In this research, the variables of both father's occupation and respondent's occupation are present in the analysis. The oldest respondents then have been asked about their fathers' occupations which the latter may well have engaged in prior to World War I. Since that time, the character of the occupational structure has changed considerably in the proportion of individuals engaged in the various occupations. Moreover, many new occupations have risen to prominence since then, and others have become virtually insignificant. It may be that the socio-economic index of occupational status provides an accurate grading of occupational status for the NORC respondents, but does it do the same for their fathers?

Hodge et al. (1964) have made a detailed study of temporal stability in occupational prestige ratings. Their data indicate that a set of ratings obtained as long ago as 1925 is correlated to the extent of .93 with a set obtained in 1963. They conclude that there have been no substantial changes in the pattern of

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[1] This problem would apply to any index of occupational status we might have chosen.

occupational prestige since 1925.

Less complete evidence is available for the socio-economic components of the index, but an analysis of data available in the 1940, 1950, and 1960 Censuses suggests a comparable level of temporal stability (Reiss, 1961: 152). This conclusion holds despite major changes in the value of the dollar and the generally rising levels of educational attainment.

The education variables

There are two educational variables used in the analysis: respondent's educational attainment and father's educational attainment. The questions used to measure these two variables were consistent in both the NORC studies. Respondent's educational attainment and respondent's father's educational attainment were obtained by questions asking for the highest grade of school completed by the respondent and the respondent's father. The interviewer then recorded the answer to the questions on education into one of eight categories: no schooling, 1-4 years, 5-7 years, 8 years, some high school, high school graduate, some college, or college graduate or more.

These eight categories constitute the educational attainment scale in this research. This is consistent with the scaling of educational attainment used by Blau and Duncan (1967: 144) with one exception: they obtained an additional category in their scale by separating the category of "college graduate or more" into the categories of "college graduate" and "college, five years

or more (i. e., one or more years of postgraduate study."

Again, similar to the work of Blau and Duncan, we treat educational attainment as an intervally scaled variable. This treatment is not problematical because as Blau and Duncan (1967: 166) state: "Actually, this scoring system hardly differs from a simple linear transformation, or 'coding', of the exact number of years of school completed." They continue that the only problem with this scoring system is that it implies too great a distance between the intervals at the lower end of the scale; but the resulting distortion is minor in view of the very small proportions of respondents falling into the "no schooling" or "1-4 years" categories.

Race

The procedure for obtaining respondent's race was the same for both NORC studies. The interviewer was instructed to record the respondent's race immediately after the interview. He recorded race as White, Negro, or other.

Because the category of "other" is a residual category (comprising 0.5 per cent), the variable race has been reduced to a dichotomous variable: White and Negro. Those falling into the "other" category will be excluded from the analysis.

Marital status

The question used to measure marital status was again consistent in the two NORC studies. The respondent was asked:

"What is your marital status?" However, the interviewers for these two studies reported the marital status of the respondent according to slightly different classifications. The classification in Study 466 was: single, never married; currently married; separated or divorced; and widowed. Study SRS-857 used the following classification: single, never married; currently married; separated; divorced; and widowed. Hence, one study combined the separated and divorced categories, while the other did not.

The analysis is performed with marital status collapsed into a dichotomous variable: single and married. The "single" category includes those respondents who are single and have never been married plus those respondents without children who are separated, divorced, and widowed. The "married" category includes those individuals who are currently married plus those individuals who do have children and are separated, divorced, or widowed. Since we have collapsed marital status in this manner, the name of the variable will be changed from marital status to "family status." The "family" referred to here is the respondent's family of procreation, not his or her family of origin.

The justification for this dichotomization of family status is presented in Chapter I. The variable is theoretically relevant to female occupational status insofar as single women as opposed to married women do not experience or anticipate the degree of impediment to occupational status of an interrupted occupational career due to the presence of children. Further, even

the married women without children (10.4 per cent of those females classified married) face additional household tasks due to the presence of a husband which single women do not. These additional responsibilities may serve to impede an occupational career.

A problem arose in combining marital status and presence or absence of children to form the family status variable. In one of the NORC studies (SRS-857) the coding of the number of children variable included a residual category which combined both the "no responses" and the "inapplicables." "Inapplicables" here refers to married respondents which have no children. These respondents should go into the "married" category, on the family status variable. But rather than confound this "married" category on family status by combining the "inapplicables" and the "no responses", we have excluded the data from Study SRS-857 whenever family status enters into the analysis. Although unfortunate, this does not present too great a problem since "family status" is not a major part of the analysis, and because Study SRS-857 and Study 466 are independent national samples.

Number of children

Although the questions used to measure number of children in the two NORC studies were consistent, the coding of the respondents' answers differed. Study SRS-857 has number of children coded in terms of their actual number, while Study 466 has the variable coded dichotomously: have children or do not have

children.

Since it is more theoretically relevant to have a measure of "number of children" in terms of actual number (see Chapter I: 31), we have not chosen to reduce the data on this variable in Study SRS-857 to the dichotomy used in Study 466. Rather, whenever "number of children" enters into the analysis, the analysis is performed using only the data from Study SRS-857.

This section has been concerned with the measurement and scaling of the main variables which are used in the analysis. In the case of each class of variables, the questions used to measure the variables, the manner in which the data were coded, and the scaling of the variables for the analysis were considered. Problems associated with the measurement and scaling of variables were discussed where necessary.

Design and Analysis

Chapter I concluded by indicating that due to an apparent conflict between the theoretical and empirical literature, this research will attempt to answer through its analysis two questions regarding female occupational status in comparison to male occupational status: (1) are the factors which affect female and male occupational status the same, and do they operate in the same fashion, and (2) is the basic process of achieving occupational status the same for females and males? More specifically, Chapter I posited a multivariable, basic explanatory model of occupational status for females and males, as well as indicating

a number of two variable relationships are to be examined.

This section outlines the analyses which are reported on in subsequent chapters. Consideration is given to the analytical techniques which are used in conjunction with different combinations of variables in order to answer the questions posed in Chapter I. In all instances these analyses are run separately for females and males so that comparisons may be made. The headings used in this section parallel those used in later chapters to report the findings.

The basic explanatory model of occupational status

The basic explanatory model described in Chapter I includes the variables of father's educational attainment (Fe), father's occupational status (Fo), respondent's educational attainment (Re), and respondent's occupational status (Ro). In addition to looking at the interrelationships of these variables simultaneously in a multivariable model, Chapter I calls for an indication of the "gross relationships"[1] between each of the first three of these variables (Fe, Fo, Re) and respondent's occupational status. These three simple two variable relationships are estimated separately for females and males with Pearson product moment correlations (r).[2]

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[1] The term "gross" relationship is used to refer to a simple two variable relationship when no other variables are controlled.

[2] For a description of the nature of and calculation of r, see Blalock (1960: 285-299).

The interrelationships among the four variables in the basic model (see below) for the female and male samples are analyzed through the use of path analysis. The path coefficients which later are entered on the straight lines of the diagram represent net influences[1] of prior variables on latter variables. As Duncan (1966: 6) has indicated, path coefficients are nothing other than the "beta coefficients" in a standard multiple regression setup, and the standard procedures for multiple regression calculations may be employed.[2]
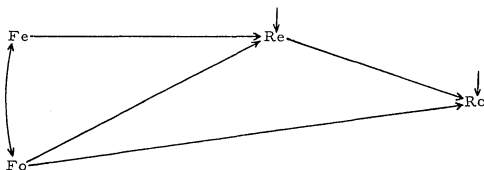
FIGURE 2.1 THE BASIC EXPLANATORY MODEL OF OCCUPATIONAL STATUS

Our decision to employ path analysis in this research is based on two reasons. First, we wish to retain as much continuity with Blau and Duncan's (1967) research as possible since their work is the model for this analysis. Second, our main interest in this research is looking at a number of possible determinants

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[1]"Net influence" refers to the relationship between two variables when all other variables in the diagram which are temporally antecedent are controlled.

[2]For a full description of the multiple regression approach, see Kelly et al. (1969).

of occupational status for females and males simultaneously,
i. e. both the net and combined influences of entire sets of var-
iables on occupational status. In view of the size of the female
and male samples, it would be impossible to perform such a
multivariate analysis through the classical procedure of cross-
tabulation. Even with a drastic collapsing of categories,
simultaneous cross-tabulations of several variables would pro-
duce tables in which the number of cases in many cells would
be too small for statistical reliability. As a result, we, like
Blau and Duncan (1967), have chosen to use the multiple re-
gression approach.

Race

Chapter I calls for a simple two variable correlation to be run
between respondent's race (Rr) and respondent's occupational status
for both females and males. Pearson product moment correla-
tions are used to determine if there is any difference between fe-
males and males in the gross relationship between Rr and Ro.

Chapter I also indicated that, similar to Blau and Duncan's
treatment of race, this research will treat race as a variable
which should be controlled outside of the basic explanatory model
of occupational status. Thus, partial correlations[1] for females
and males are calculated between Rr and Ro controlling for Fo,
Fe, and Re.

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[1]For a description of the nature and calculation of partial
correlations, see Blalock (1960: 329-336).

Family status and number of children

The techniques used in the analyses involving these two variables directly parallel those used with race. In addition, the partial correlation between family status (Rf) and Ro, and the partial correlation between number of children (Rc) and Ro are run controlling for age.

The N's for the female and male samples are reduced considerably in each of the analyses involving these two variables (Rf and Rc). This is due to the coding inconsistencies between the two NORC studies which was explained earlier.

Assumptions of the Analytical Techniques

The preceding discussion briefly noted the analytical techniques used in this research to answer the questions posed in Chapter I. All of these techniques, Pearson product moment correlations, path coefficients, and partial correlations, are based upon statistics yielded by either simple two variable linear regression analysis or multiple linear regression analysis. Although linear regression analysis permits a more "efficient" use of the data than the method of cross-tabulations, one gains this advantage only at a price. The use of linear regression analysis requires that some assumptions be made about the nature of the data. These assumptions are now considered in relation to the type of data used in this study.

The first assumption of linear regression analysis is that

the variables used be treated as intervally or quantitatively scaled variables. We have already treated this assumption in regard to the occupational and educational variables to be used in the analysis. This leaves only three other variables: race, marital status and number of children. Since number of children has been scaled in the form of the actual number of children, there is obviously no problem with treating this variable as intervally scaled. Race and marital status also do not present problems. Although they are nominal or classificatory variables, both have been dichotomized. The procedure of treating dichotomous classificatory variables as intervally scaled is well known (see Laslett, 1971).

Perhaps the primary assumption attached to linear regression analysis is that the relationship between variables actually be linear, at least to an acceptable degree of approximation. Blau and Duncan (1967: 143-145) have presented data, directly comparable to ours, which clearly shows that the departures from linearity are not extreme. They further state that their inspection of similar data plots satisfies them that the assumption of linearity is usually close enough to the truth to make linear regression analysis worthwhile.[1]

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[1] It may be noted that the result of assuming linearity when it does not exist is never an inflated correlation coefficient. It may result, however, in the analyst concluding there is no relationship between two variables when in fact a curvilinear relationship or even more complex relationships exist.

There are, however, two other assumptions of linear regression analysis problematical within the context of this research. The first is that if the linear regression of one variable (Y) is run on another variable (X), the dispersion of Y scores should be constant for various scaled values of X. That is, the analytical technique assumes homoscedasticity. Secondly, it is assumed that the Y scores are normally distributed around the X specific means. Blau and Duncan (1967: 145) state that in regard to data comparable to ours, neither of these assumptions is fully met.

The question then arises as to whether we are justified in using linear regression analysis when our data likely do not fully meet these two assumptions of this technique. It might initially be noted that rarely are the assumptions of various statistical techniques fully met in the scientific researches that employ them. The techniques rarely, if ever, can summarize all of the information in the data (Blau and Duncan, 1967: 145). But there are more convincing reasons for employing linear regression analysis in this research. First, this research has taken as its model for analysis that of Blau and Duncan (1967). If we wish to compare our findings for males to theirs, we must use comparable analytical techniques. Second, there is precedent in the literature for using linear regression analysis on occupational and educational data such as we have (see Duncan and Hodge, 1963; Blau and Duncan, 1967; Laslett, 1971). Third, and most important, Blau and Duncan compared the findings they

obtained from linear regression analysis to findings yielded by multiple classification analysis, a technique which does not require such stringent assumptions. Where these comparisons were made, no significant changes in conclusions were required (Blau and Duncan, 1967: 147).

All of the above assumptions apply to both simple two variable linear regression analysis and multiple linear regression analysis. There is one additional assumption which applies to only multiple regression analysis. It assumes additivity of independent variables, i.e. the absence of interaction effects. Although Blau and Duncan did not explicitly test this assumption, it will be tested in this research. Following the precedent of Laslett (1971), this assumption will be tested through the use of dummy variable analysis. The specific procedures and statistics associated with dummy variable analysis will be considered as they are introduced in a later chapter.

This chapter has described the methods and analytic techniques used to investigate the factors which affect female and male occupational status. The first section identified the data required for this study and the procedure used to obtain the data. The next section described the female and male samples and illustrated their representativeness through a consideration of certain occupational distributions. This was followed by a section on the measurement and scaling of the variables. A brief description of the techniques of analysis which are used in this study was given, and finally the assumptions they require

were dealt with in relation to the data used in this research.

CHAPTER III

PRESENTATION OF THE BASIC DATA

It was indicated in the preceding chapter that in this research, regression analysis is used to answer the questions posed in the first chapter. Besides being a convenient and meaningful manner in which to summarize large bodies of data, regression analysis permits us to examine the relationships among a number of variables simultaneously with a relatively small number of respondents where other modes of analysis would not. However, Pearson product moment correlation coefficients, partial correlation coefficients, and beta coefficients do not acquaint the reader with the basic data about the major variables in the research. As a result, this brief chapter is inserted prior to the bulk of the analysis. After examining the distribution of the major dependent variable in this research, respondent's occupational status, cross tabulations are presented for each independent variable in this research by respondent's occupational status. Throughout, separate data are presented for females and males.

Table 3.1 gives the percentage distribution of respondent's occupational status for females and males. The 00-96 scale of occupational status has been collapsed into five point intervals. Notice first that females are underrepresented in lower status occupations. Thirty-six per cent of the females have occupational status scores below 20, while 44.6 per cent of the males

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TABLE 3.1 PERCENTAGE DISTRIBUTIONS OF RESPONDENT'S
OCCUPATIONAL STATUS FOR FEMALES (N = 781) AND MALES
(N = 1077)

Occupational Status	Females	Males
00-04	0.1	0.8
05-09	7.5	9.1
10-14	4.8	9.1
15-19	23.1	25.6
20-24	4.7	4.1
25-29	0.3	3.2
30-34	0.8	4.2
35-39	0.8	1.5
40-44	9.2	4.6
45-49	10.9	8.5
50-54	6.2	3.1
55-59	0.3	0.6
60-64	14.9	1.8
65-69	5.4	13.3
70-74	8.6	2.0
75-79	1.6	4.2
80-84	0.9	2.4
85-89	0.0	0.9
90-96	0.0	0.9
Total	100.0	100.0
Mean	40.30	38.37
Standard Deviation	22.57	24.87

fall into this grouping. Females are also underrepresented in the higher status occupations. Only 2.5 per cent of the females have occupational status scores in excess of 74, while 8.4 per cent of the males do. Since females as opposed to males are underrepresented at both extremes of the occupational status scale, they are overrepresented in occupations of intermediate status. The underrepresentation of females in lower status occupations and their overrepresentation at intermediate levels is more than enough to offset their underrepresentation at the higher levels. Table 3.1 shows that mean occupational status is slightly higher for females (40.30) than males (38.37).

Table 3.1 also presents the standard deviations for the occupational distributions of females and males. The slightly smaller value for females (22.57) than males (24.87) indicates that occupational status scores for females are somewhat less dispersed about their mean than is the case for males. Obviously, the direction of this small variation in standard deviations for females and males is expected since we have already noted the overrepresentation of females in the intermediate status occupations and their underrepresentation at the lower and higher levels.

The means and standard deviations in Table 3.1 suggest a general conclusion about the occupational status of females and males. There is so little variation between the measures of central tendency and dispersion for the occupational distributions of the sexes that we may state that females and males are

essentially homogeneous groups with respect to occupational status.[1]

Table 3.2 presents each independent variable in this research cross-classified with respondent's occupational status for females and males. In most instances, the cross-classification is in the form of mean scores on the specified independent variable for given categories of respondent's occupational status (dependent variable). In the cases of race and family status, however, the cross-classifications are in the form of percentages. These are dichotomous variables and their mean scores for given levels of respondent's occupational status vary so little[2] that presentation of percentages gives the reader more meaningful information. The table also indicates the overall mean and standard deviation for each of the independent variables, except race and family status. In the cases of these two variables, mean occupational status scores are presented for each of the categories of these variables by sex.

The discussion of the contents of Table 3.2 will take the following form. Considering each independent variable separately, the initial attention will be focused on a comparison of

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[1]In attempting to determine the relative homogeneity of two groups or categories with respect to a particular characteristic (eg. occupational status), it is sometimes desirable to calculate the coefficient of variability (Blalock, 1960: 73). However, if the means and standard deviations of the two groups are nearly the same, no additional information is obtained by the calculation of this statistic (Blalock, 1960: 73).

[2]The means on a dichotomous variable cross-classified with another variable can only vary between 1 and 2.

the means (or percentages) for females and males. This will give an indication from the basic data as to whether or not mean scores for a given independent variable are similarly distributed on the occupational status scale for females and males. More simply, it will give a rough indication of whether a relationship exists between a given independent variable and respondent's occupational status for females and/or males. Second, the overall means for the specified independent variable will be compared across sex. Lastly, the standard deviations for females and males will be compared for the independent variable. The joint consideration of the means and standard deviations for females and males for a given independent variable will allow us to come to a conclusion about the relative homogeneity of females and males with respect to that variable.

The first two columns in Table 3.2 give mean occupational status scores for fathers of females and males by respondent's occupational status. A distinctive pattern is obvious for both the fathers of females and those of males. As mean fathers' occupational status scores increase, respondents' occupational status scores increase for both females and males. In fact, the mean scores of father's occupational status for different levels of respondent's occupational status are practically identical for females and males. Hence, these data suggest a similar positive relationship between father's occupational status and respondent's occupational status for females and

TABLE 3.2 RESPONDENT'S OCCUPATIONAL STATUS BY FATHER'S OCCUPATIONAL STATUS FATHER'S EDUCATIONAL ATTAINMENT, RESPONDENT'S EDUCATIONAL ATTAINMENT, RACE, FAMILY STATUS, AND NUMBER OF CHILDREN FOR FEMALES AND MALES

RESPONDENT'S OCCUPATIONAL STATUS	MEAN OCCUPA-TIONAL STATUS OF FATHERS		MEAN ED. ATT. OF FATHERS*		MEAN ED. ATT. OF RESPON-DENTS		RACE Percent White	
	Fem. (1)	Males (2)	Fem. (3)	Males (4)	Fem. (5)	Males (6)	Fem. (7)	Males (8)
00-09	23.8	21.7	2.0	2.3	3.4	3.1	4.6	8.2
10-19	22.0	22.6	2.5	2.5	3.6	3.7	25.6	33.1
20-29	21.8	22.3	2.0	2.4	3.3	3.9	3.4	7.5
30-39	34.8	31.1	3.1	2.8	5.0	4.1	1.7	6.2
40-49	32.3	31.0	3.3	3.2	4.8	4.6	22.6	13.6
50-59	32.9	28.5	3.2	3.4	5.0	5.2	7.6	3.6
60-69	43.8	37.8	3.4	3.6	5.3	5.5	22.9	16.5
70-79	41.3	41.7	4.0	3.3	6.4	5.6	10.7	6.6
80-89	45.4	52.0	3.7	4.8	6.4	6.3	1.1	3.6
90-96		57.8		5.3		6.4	0.0	1.1
Mean for Indep. Var.	28.60	31.10	3.09	3.01	4.46	4.38		
							43.04	38.34
Stan. Dev. for Indep. Var.	24.62	24.50	1.81	1.92	1.44	1.68		

* The coding for educational attainment is: 0 = no schooling, 1 = 1-4 yrs., 2 = 5-7 yrs., 3 = 8 yrs., 4 = some high school, 5 = high school graduate, 6 = some college, and 7 = college graduate or more.

TABLE 3.2 (continued)

RESPONDENT'S OCCUPATIONAL STATUS	RACE		FAMILY STATUS				Mean No. of Children	
	Percent Negro		Percent Single		Percent Married			
	Fem. (9)	Males (10)	Fem. (11)	Males (12)	Fem. (13)	Males (14)	Fem. (15)	Males (16)
00-09	24.0	22.6	2.4	15.1	7.9	8.3	2.5	3.3
10-19	40.0	45.9	35.7	45.3	27.6	32.6	2.8	3.1
20-29	5.6	6.0	0.0	1.9	0.0	7.7	3.1	2.9
30-39	0.8	2.3	0.0	0.0	5.9	4.5	1.8	2.5
40-49	8.8	10.5	9.5	17.0	19.9	13.9	2.1	2.1
50-59	0.8	2.3	7.1	3.8	6.9	2.7	1.8	2.5
60-69	7.2	5.3	26.2	7.5	21.5	15.1	1.8	2.3
70-79	8.8	3.8	16.7	7.5	9.5	10.4	1.8	2.4
80-89	0.0	1.5	2.4	1.9	0.8	4.2	2.7	1.9
90-96	0.0	0.0	0.0	0.0	0.0	0.5		1.6
Mean for Indep. Var.	25.66	24.41	44.71	31.17	39.94	39.26	2.62	2.71
Stan. Dev. for Indep. Var.							1.79	1.85

males.[1]

Table 3.2 also shows the overall means for father's occupational status are very similar for females (28.60) and males (31.10). Moreover, the standard deviations on this independent variable are virtually identical for the sexes; 24.62 for females and 24.50 for males. Because the sexes exhibit so little difference between these two major summary measures of their distributions on father's occupational status, we may conclude that they are homogeneous groups with respect to father's occupational status.

Columns 3 and 4 of Table 3.2 present respondent's occupational status by mean educational attainment of father for females and males. These means are very similar for females and males, and as they increase, so does the occupational status of female and male respondents. A similar positive relationship exists between father's educational attainment and respondent's occupational status for females and males.

The mean for females on father's educational attainment is 3.09. For males, it is the same (3.01). The standard deviations on this independent variable are very similar for the sexes, 1.81 for females and 1.92 for males. Again, females and males constitute homogeneous groups with respect to the independent variable.

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[1] The exact degree of relationship between these and other variables is presented in subsequent chapters when correlation coefficients are introduced.

The same pattern of findings is shown in columns 5 and 6 for respondent's educational attainment. Different levels of respondent's occupational status have essentially the same mean levels of educational attainment for females and males. As the means for respondent's educational attainment increase, so do the levels of respondent's occupational status, thus indicating a positive relationship between the two variables. The close similarity of overall means and standard deviations for females and males on respondent's educational attainment indicates the sexes are homogeneous groups with respect to this independent variable.

Columns 7, 8, 9, and 10 show the percentage distributions of respondent's occupational status by race for females and males. First, a comparison of the percentages for females and males within the same racial category (column 7 with column 8, and column 9 with column 10) shows some variation in percentages, but not a great deal. This indicates that white females and males are similarly distributed in the different levels of respondent's occupational status; and that Negro females and males are similarly distributed in the different levels of respondent's occupational status. Second, comparing percentages for white females (column 7) to Negro females (column 9) indicates that Negro females are overrepresented at the lower occupational status levels, and underrepresented at the higher levels. The same pattern holds for males (see columns 8 and 10). Thus, a differential relationship exists between race and occupational status for both females and males.

At the bottom of columns 7, 8, 9, and 10 mean occupational scores are given by race and sex. The higher mean occupational status scores for white females and males as opposed to Negro females and males summarize the relationship between race and occupational status for both females and males pointed to above. Obviously, these means do not give an indication of the expected homogeneity of race by sex. That there are similar proportions of white females and males, and Negro females and males in the NORC data can be ascertained from the frequency and percentage distributions presented in Table A-5 in the Appendix.

The percentage distributions of respondent's occupational status by family status are shown in columns 11, 12, 13, and 14 of Table 3.2. First, a comparison of the percentages for females and males within the "single" category (column 11 with column 12) shows variation in percentages. Single females show sizeable representation at both low and high occupational status levels, while single males tend to be more overrepresented at the lower occupational status levels. Comparing the percentages for married females (column 13) to married males (column 14) shows no significant variation between the sexes. Moreover, both married females and males are sizeably represented at both the lower, intermediate, and higher levels of respondent's occupational status.

Turning attention now to a comparison of single females (column 11) to married females (column 13), it can be seen that

both single and married females are fairly equally represented at all levels of respondent's occupational status. The same comparison for males (column 12 with column 14), however, shows that single males tend to be overrepresented at the lower levels of respondent's occupational status and underrepresented at the higher levels. Consequently, there appears to be little or no relationship between family status and respondent's occupational status for females, while being married and higher occupational status are somewhat associated for males. That this is the case can further be seen by comparing the mean occupational status scores of single females to married females, and the mean occupational status scores of single males to married males (see the means at the bottom of columns 11, 12, 13, and 14).[1]

The final independent variable to consider is number of children. The comparable means for different levels of respondent's occupational status show some variation between females and males, but still not a great deal. Further, with increasing occupational status, the means tend to decrease for females and males. There are two obvious exceptions to this pattern for females: the mean of 1.8 in the 30-39 category of respondent's occupational status and the mean of 2.7 in the 80-89 category of respondent's occupational status. However,

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[1] The expected homogeneity of females and males on family status may be ascertained from the frequency and percentage distributions in Table A-6 in the Appendix.

the N's are only 8 and 3 respectively for these two exceptions and hence unlikely to affect noticeably a correlation coefficient.[1] As a result, it may be said that a negative relationship exists between number of children and respondent's occupational status for females and males.

Finally, the overall means and standard deviations on number of children are essentially the same for females and males. The sexes show homogeneity with respect to number of children.

This chapter has briefly presented basic data on the main variables in this research. Comparable means (or percentages) are very similar for females and males in the case of five of the independent variables analyzed in relation to respondent's occupational status. The only exception is family status where single females and males differ somewhat. Because of the convergence of comparable means (or percentages) for females and males, similar zero order correlations between each independent variable (except family status) and respondent's occupational status may be expected for females and males in the subsequent chapters.

Perhaps a more important general finding of this chapter is shown by female-male comparisons on means and standard deviations. The lack of appreciable differences in comparable

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[1] The total N for this distribution is 231.

means and standard deviations between females and males indicates that females and males constitute homogeneous groupings with respect to the major dependent variable (respondent's occupational status) and four of the six independent variables. The expected homogeneity of females and males with respect to the other two independent variables, race and family status, has also been noted. Consequently, any differences between females and males which may arise in the ensuing analyses can not be attributed to females and males having significantly different distributions on the variables analyzed in this research.

CHAPTER IV

THE BASIC EXPLANATORY MODEL OF FEMALE
AND MALE OCCUPATIONAL STATUS

In this chapter the interrelationships among the variables included in the basic explanatory model of female and male occupational status are analyzed. Using the sequence of presentation and analytical techniques outlined in the preceding chapter, this chapter is addressed to the first series of questions posited in the first chapter. Specifically, this chapter deals with four questions: (1) What are the gross relationships between the independent variables in the basic model and occupational status? (2) What are the net and combined net influences of these variables on occupational status? (3) How does our model for males compare to Blau and Duncan's model for males? (4) May we assume additivity (lack of interaction) between the independent variables in the basic model?

The discussion of the gross and net relationships in this chapter is guided by the two major objectives of this research: (1) to delineate factors which are related to the occupational status of females, and (2) to compare the relationships discovered for females to the already known relationships for males (see Blau and Duncan, 1967: 165-172). To facilitate the meeting of these objectives, separate data for females and males are presented side by side throughout. The discussions initially

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center on findings for females, followed by comparisons of findings for females to findings for males.

The Gross Relationships Among the Variables in the Basic Model

In Chapter I, a model was posited to explain the basic process of attaining occupational status for both females and males. This model, based upon the work of Blau and Duncan (1967: 170), includes the variables of father's educational attainment (Fe), father's occupational status (Fo), respondent's educational attainment (Re), and respondent's occupational status (Ro).

Because this model was set down as a causal ordering of variables, it is necessary to establish the temporal ordering of variables. The temporal order of variables was discussed in Chapter I (36) and is considered to be (Fe, Fo) - (Re) - (Ro).

In translating this conceptual model of occupational status into quantitative estimates, the first task is to establish the pattern of associations among the variables in the sequence. As indicated in Chapter II, this is accomplished through the use of the Pearson product moment correlation coefficient. Table 4.1 presents the zero order correlation coefficient matrices for females and males on which much of the subsequent analysis is based.[1]

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[1] Two tests of significance have been run for these relationships and those which follow. They are $p = 0$ and $p_1 = p_2$. For the computations involved, see Walker and Lev (1953: 251-257).

TABLE 4.1 ZERO ORDER CORRELATION COEFFICIENTS OF FOUR STATUS VARIABLES FOR FEMALES (N = 613); COMPARABLE FIGURES FOR MALES (N = 840) IN PARENTHESES

Variable	Fe	Fo	Re	Ro
Fe	___	.48 *	.47 *	.35 *
		(.43)*	(.48)*	(.31)*
Fo		___	.30 *	.33 *
			(.35)*	(.34)*
Re			___	.61 *+
				(.52)*+
Ro				___

* Denotes a statistically significant correlation at the .05 level.

+ Denotes a difference between the two comparable correlations that is statistically significant at the .05 level.

Given the assumption about the direction of causation, it may be said that the zero order correlation measures the gross magnitude of the impact of the antecedent (independent) variable upon the consequent (dependent) variable. Thus, if $r_{RoFo} = .35$ for females in Table 4.1, it may be said that in increment of one standard deviation in father's educational attainment produces either directly or indirectly[1] an increment of just over one-third of one standard deviation in respondent's occupational status for

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[1] The terms "directly" or "indirectly" are used because the influence of Fe on Ro may be direct or may be mitigated through another variable such as Re. This introduces the question of net influences which is taken up in the next section on path analysis.

females.[1]

Viewing the values in Table 4.1 for females from this perspective, it can be seen that $r_{FoFe} = .48$ is somewhat lower than $r_{RoRe} = .61$. The difference suggests a heightening of the gross effect of education upon occupational status between the fathers' and daughters' generations. This interpretation should not be stressed too strongly, however, since the measurements on father's educational attainment and father's occupational status do not pertain to some actual earlier generation of men, here designated "fathers."

NORC sampled respondents 21 and over in 1964-1965. Hence, some "fathers" may have retired as much as forty years ago, while other "fathers" are still in the labor force. Put differently, each "father" is represented in the data simply in proportion to the number of his "working" daughters who were 21 and over in 1964-1965.

The first recorded status of the daughter herself is educational attainment. Table 4.1 indicates that $r_{ReFe} = .47$ is larger than $r_{ReFo} = .30$. Apparently, father's educational attainment has a greater gross effect upon daughter's educational attainment than father's occupational status, even though both origin statuses are factors in daughter's educational attainment.

Lastly, the correlations for females show that r_{RoFe} (.35)

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[1] The Pearson r may also be interpreted in another manner. Its square represents the proportion of variation in one variable explained by the variation in the other variable.

and r_{RoFo} (.33) are considerably smaller than r_{RoRe} (.61). The gross effect of neither origin status on respondent's occupational status approaches that of respondent's educational attainment on respondent's occupational status.

Viewing the values for females and males simultaneously in Table 4.1 provides answers to certain of the questions posed in Chapter I regarding female occupational status in comparison to male occupational status. A comparison of the values for females and males reveals the origin statuses are similarly related to respondent's occupational status for females and males. Thus, r_{RoFe} for females is equal to .35, while r_{RoFe} for males is equal to .31. The relationship r_{RoFo} for females is .33 and .34 for males.

Of all the status variables, respondent's educational attainment shows the largest gross relationship to respondent's occupational status for both females and males. Yet, r_{RoRe} = .61 for females is somewhat larger than r_{RoRe} = .52 for males. This difference is statistically significant at the .05 level (see Table 4.1). It appears as though females hold occupations with statuses more nearly equivalent to their level of educational attainment than do males.

In general, the values for the gross relationships for males in Table 4.1 largely reproduce those for females. The only relationship which exhibits a statistically significant difference between the sexes is that for respondent's educational attainment and respondent's occupational status. Even this difference

is quite moderate. Apart then from the somewhat greater gross relationship between respondent's educational attainment and respondent's occupational status for females than for males, similar gross relationships among the four status variables exist for the sexes.

The Net Relationships Among the Variables in the Basic Model

The preceding section indicated values for the gross relationships among the variables in the basic model, or, given our assumption about the direction of causation, the section indicated values for gross influences. From another point of view, our main interest is with net effects. If both respondent's occupational status and respondent's educational attainment have a common antecedent cause, for example, father's occupational status, we want to state what part of the effect of respondent's educational attainment on respondent's occupational status consists of a transmission of the prior influence of father's occupational status. Or, thinking of father's occupational status as the initial cause, we may focus on the extent to which its influence on respondent's occupational status is transmitted by way of its prior influence on respondent's educational attainment. The consideration of such net influences among the variables in the basic model is accomplished in this section through the use of path analysis.

Figures 4.1 and 4.2 are graphic presentations of the system

of relationships among the four variables that have been pro-
posed as the basic model for female and male occupational
status. Prior to explaining the estimation of the values in the
diagrams, the conventions followed in constructing a path dia-
gram are briefly repeated (Duncan, 1966: 2-7). First, the
link between Fe and Fo is shown as a curved line. This is to
distinguish it from other lines which denote paths of influence.
The curved line merely serves to indicate that explanation
thereof is not part of the present problem. Second, the straight
lines running from one variable to another represent direct or
net influences of the prior variables on the latter variables.
Finally, the lines with no source into each of the effect variables
(Re and Ro) are residual paths of influence. They represent all
other influences on the effect variables not specifically measured
in the model.
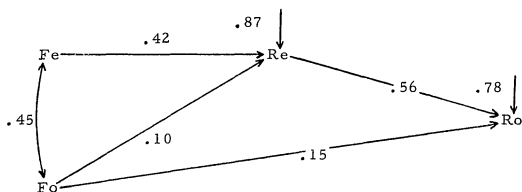
FIGURE 4.1 PATH COEFFICIENTS IN THE BASIC MODEL
OF OCCUPATIONAL STATUS FOR FEMALES (N = 613)

The numerical values in the diagrams were obtained in the

following manner. The value for the curved line between Fe and Fo is merely a Pearson product moment correlation coefficient. Calculating its square allows an interpretation in terms of the proportion of variation in one variable explained by variation in the other variable.
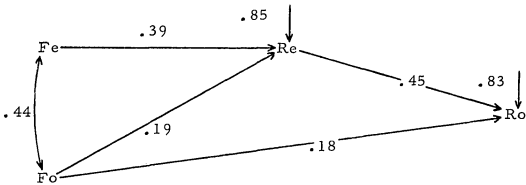
FIGURE 4.2 PATH COEFFICIENTS IN THE BASIC MODEL OF OCCUPATIONAL STATUS FOR MALES (N = 840)

The values for the straight lines running from a causal variable to an effect variable are path coefficients. These path coefficients are "nothing other than the 'beta coefficients' in a regression setup, and the usual apparatus for regression calculations may be employed" (Duncan, 1966: 6). As a result, obtaining path coefficients for these two diagrams necessitated the estimation of two regression equations for females and males separately:

$$Re = a + B_1 Fe + B_2 Fo$$
$$Ro = a + B_1 Fe + B_2 Fo + B_3 Re$$

Since beta coefficients are standardized b coefficients, the path

coefficients in the diagrams may be interpreted as: the propor-
tion of a change in a given variable produced by a unit change in
a causal variable when other variables in the system temporally
preceding the consequent variable are controlled. More simply,
path coefficients may be interpreted as the magnitude of the net
influence of an antecedent variable on a consequent variable.
Finally, the residuals are obtained from coefficients of multiple
determination. For example, the residuals for Re in Figures
4.1 and 4.2 were obtained using the formula (Blau and Duncan,
1967: 174):

$$\text{Residual for Re} = 1 - R^2_{Re}(FeFo)$$

The residuals are interpreted as the proportion of variation in the
consequent variable left unexplained by designated antecedent
variables in the path system.

An important feature of this kind of causal scheme is that
variables recognized as effects of certain antecedent factors
may, in turn, serve as causes for subsequent variables. For
example, the diagrams indicate that Re is produced by Fe and
Fo, but it in turn influences Ro. Thus, the algebraic represen-
tation of the causal scheme is the two equations given above,
rather than the single equation more often employed in multiple
regression analysis. This feature permits a flexible conceptual-
ization of the mode of operation of the causal network. Note that
Ro is shown in the two diagrams as being influenced directly by

Re and Fo, but not by Fe (an assumption which will be justified
shortly). But this is not meant to imply that Fe has no influ-
ence on Ro. Fe affects Re, which in turn affects Ro. In addi-
tion, Fe is correlated with Fo, and thus shares in the effect of
Fo on Ro, which is partly direct and partly indirect through Re.
Hence, the gross effect of Fe on Ro noted in the previous section,
is interpreted in the path diagrams as being entirely indirect,
in consequence of Fe's effect on an intervening variable (Re)
and its correlation with another cause of Ro (Fo).

One other note on the nature of path analysis is in order be-
fore the values in the two diagrams are discussed. Since path
analysis gives quantitative estimates to a causal scheme, the
path diagram must be complete in the sense that all causes of
all dependent variables in the diagram are accounted for. Here,
as in most problems involving analysis of observational data, a
formal completeness of the scheme is achieved by representing
unmeasured causes of each dependent variable as a residual
factor.

Now that the character of path analysis has been reviewed,
attention may turn to the values in the path diagram for females
(Figure 4.1). The residual on respondent's occupational status
is equal to .78.[1] This indicates that 78 per cent of the variation
in female occupational status must be attributed to factors other
than father's educational attainment, father's occupational status,

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[1]Sociologists are often disappointed at the size of the residu-
als. Some comfort has been offered by Blau and Duncan (1967:
174-175).

and respondent's educational attainment.

In regard to the two origin statuses, father's educational attainment has a greater effect upon respondent's educational attainment for females than father's occupational status. The p_{ReFe}[1] = .42, while the p_{ReFo} = .10. Of the two direct influences upon respondent's occupational status, respondent's educational attainment (p = .56) is considerably greater than father's occupational status (p = .15).

As noted, only one possible direct influence has been left out of the basic model.[2] This is the direct influence of father's educational attainment on respondent's occupational status. Father's educational attainment is assumed to influence respondent's occupational status indirectly by virtue of its effect on an intervening variable (Re) and its correlation with another cause (Fo) of respondent's occupational status. The assumption is upheld by the data. Calculations showed that the direct net influence of father's education on respondent's occupational status for females was so small as to be negligible (p_{RoFe} = .01).[3]

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[1]The symbol for the path coefficient, such as p_{ReFe}, carries a double subscript. The first subscript is the variable at the head of the path, or the effect; the second is the causal variable. This resembles the convention for regression coefficients, where the first subscript refers to the "dependent" variable and the second to the "independent" variable.

[2]This is consistent with the procedure of Blau and Duncan (1967: 170).

[3]The same assumption is upheld for males. The data indicate p_{RoFe} = .10 for males.

Perhaps a more meaningful interpretation of the path co-efficients for females is obtained by comparing the magnitudes of gross relationships (Table 4.1) and net relationships (Figure 4.1). Use is made here of the fact that the Pearson r and the path coefficient have the same scale of measurement (Blau and Duncan, 1967: 172). The correlation $r_{RoFo} = .33$ (Table 4.1) means that a unit change (one standard deviation) in father's occupational status produces a change of one-third unit in respondent's occupational status for females, in gross terms. The path coefficient, $p_{RoFo} = .15$ (Figure 4.1) indicates that almost one-half of this gross effect is a result of the direct influence of father's occupational status on respondent's occupational status. The remainder (.33 - .15 = .18) is indirect, via respondent's educational attainment. The sum of all indirect effects, therefore, is given by the difference between the simple correlation and the path coefficient connecting the two variables (Blau and Duncan, 1967: 176). Even the variable temporally closest (in the model) to respondent's occupational status has "indirect effects" in terms of common antecedent causes. Thus, $r_{RoRe} = .61$ and $p_{RoRe} = .56$ indicates that the aggregate of indirect effects is .05. In this case, the .05 influence represents common determinants of respondent's educational attainment and respondent's occupational status that spuriously inflate the correlation between them.

Blau and Duncan (1967: 176-177) have indicated the procedure for ascertaining the indirect effects along a given change of

causation. They state that to do this the path coefficients along the chain must be multiplied. The procedure is to locate on the diagram the dependent variable of interest, and then trace back along the paths linking it to its immediate and remote causes. In such a tracing, the direction may be reversed once, but only once, following the rule "first back, then forward." Any bidirectional correlation, such as that between Fe and Fo in Figure 4.1 may be traced in either direction. If the path diagram contains more than one such correlation, however, only one may be used in a given compound path. In tracing the indirect connections no variable may be intersected more than once in one compound path. Having traced all such compound paths, the entire sum of indirect effects is obtained.

Consider the example of the effects of respondent's educational attainment on respondent's occupational status for females in Figure 4.1. The gross or total effect is $r_{RoRe} = .61$ (Table 4.1). The direct path is $p_{RoRe} = .56$. There are two indirect connections or compound paths: from Ro back to Fo then forward to Re; and from Ro back to Fo, then back to Fe, and then forward to Re. Hence we have:

$$r_{RoRe} = p_{RoRe} + p_{RoFo} \, p_{ReFo} + p_{RoFo} \, r_{FoFe} \, p_{ReFe}$$
(gross) (direct) (indirect)

or, numerically

$$.61 = .56 + (.15)(.10) + (.15)(.48)(.42)$$
$$= .56 + .015 + .030$$
$$= .61$$

In this case all the indirect effect of respondent's educational attainment on respondent's occupational status for females derives from the fact that both respondent's educational attainment and respondent's occupational status have father's occupational status (plus father's educational attainment) as a common cause. As Blau and Duncan (1967: 177) point out, in other path models when more than one common cause is involved and these causes are themselves interrelated, the complexity is too great to permit a succinct verbal summary.

Having presented the reader with some alternative modes for interpreting the data in the path model for females, attention may be directed to a comparison of the values in the model for females (Figure 4.1), to those in the model for males (Figure 4.2). First, the origin statuses (Fe and Fo) are practically identically related for females and males (.45 for females, and .44 for males). This is expected unless it is predicted that having sons or daughters in the respective samples are associated with the relationships between Fe and Fo. Second, the direct influence of father's educational attainment (Fe) on respondent's educational attainment (Re) is nearly the same for females and males. The path coefficients for this relationship indicate a .03 discrepancy.

The direct influences of father's occupational status (Fo) on the two statuses of the respondents (Re and Ro) show a noticeable difference and a minor discrepancy between females and males. The p_{ReFo} is .09 greater for males. Apparently,

father's occupational status has a somewhat greater influence on the educational attainment of males than females, although the influence is not great for either sex. The p_{RoFo} shows a difference of .03 between females and males, suggesting father's occupational status similarly influences the occupational status of both females and males. Again, the influence is not great for either sex.

The largest net influence indicated for both sexes is that between respondent's educational attainment (Re) and respondent's occupational status (Ro). However, the p_{RoRe} is .11 greater for females. Consequently, educational attainment has a greater influence upon occupational status for females than males when father's educational attainment and father's occupational status are controlled.

Finally, the relative explanatory power of the basic model for female and male occupational status may be obtained by comparing the size of the residuals on respondent's occupational status. It will be recalled that the value for the residual may be interpreted as the proportion of variation in the consequent variable (here Ro) left unexplained by designated antecedent variables (Fe, Fo, Re) in the path system. A comparison of the values for the residual on respondent's occupational status in Figures 4.1 and 4.2 reveals that, although this model was initially developed for males, the basic model of occupational status is slightly more explanatory of the occupational status of females than of males. The model accounts for 5 per cent more of the variation

in female occupational status than male occupational status.

Overall, it may be concluded that the path model of occupational status reveals similar findings for females and males. Only three differences are worth noting: (1) Father's occupational status exerts a somewhat greater influence on the educational attainment of males than of females. (2) Respondent's educational attainment has a greater influence upon respondent's occupational status for females than males when the origin statuses are controlled. (3) The basic explanatory model accounts for slightly more of the variation in female occupational status than male occupational status.

A Comparison of Blau and Duncan's Model for Males to the Basic Model for Males in this Research

This research largely has adopted the work of Blau and Duncan (1967) for its analytical model. We have reproduced Blau and Duncan's basic explanatory model for males insofar as the NORC data allows. However, as was indicated in Chapter I, the NORC data do not contain information on status of respondent's first job. This section compares Blau and Duncan's model for males to the model adopted for males in this research in order to determine the effect of excluding status of respondent's first job.

The exclusion of status of respondent's first job is potentially serious in that its exclusion may alter the pattern of relationships among the remaining variables in the model (Blau and

Duncan, 1967: 175). To ascertain whether this has occurred,
Blau and Duncan's model for males is reproduced in Figure 4.3
along with comparable figures for NORC males in parentheses.
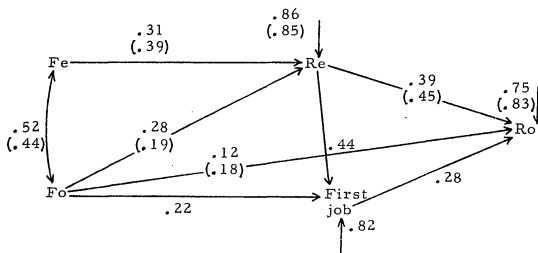
FIGURE 4.3 PATH COEFFICIENTS IN BLAU AND DUNCAN'S
BASIC MODEL OF OCCUPATIONAL STATUS FOR MALES;
COMPARABLE FIGURES FOR NORC MALES IN PARENTHE-
SES.
SOURCE: (BLAU AND DUNCAN, 1967: 175)

An examination of the comparable paths in the diagram
indicates that there is only slight variation between Blau and
Duncan males and NORC males. The largest variation is for
p_{ReFo} where a .09 difference is indicated. En toto, the same
pattern of relationships is exhibited in the two models.

It is interesting to note that p_{RoRe} = .39 for Blau and Dun-
can males is smaller than the .45 for NORC males. This indi-
cates that some of the influence of respondent's educational
attainment on respondent's present occupational status (Ro) is
indirect through first job. Further, although the residuals on

respondent's educational attainment are the same for Blau and Duncan males and NORC males, this is not the case for the residual on respondent's present occupational status. This residual is .08 smaller for Blau and Duncan males, indicating that respondent's first job has some net influence on respondent's present occupational status which cannot be attributed to the indirect influences of other variables temporally preceding respondent's first job in the model.

It may be said that a comparison of values in our path model for males to the values in Blau and Duncan's path model for males shows that our exclusion of respondent's first job does not appreciably change the pattern of relationships among father's educational attainment, father's occupational status, respondent's educational attainment, and respondent's present occupational status. The only significant difference is that the inclusion of respondent's first job permits Blau and Duncan's model to account for 8 per cent more variation in male occupational status. This additional variation may be attributed to the net influence of respondent's first job on respondent's present occupational status.

Dummy Variable Analysis--A Test for Additivity of Independent Variables in the Basic Model

The basic explanatory model of respondent's occupational status for females and males has been analyzed using path analysis. As indicated in Chapter II, the statistical techniques used

in path analysis assume additivity of independent variables.
There is no empirical manner in which specific statements can
be made about interaction[1] among the independent variables
from the values in the path model itself. As a result, dummy
variable analysis[2] is inserted at this point to test whether inter-
action among the three independent variables is statistically
significant and hence should be given additional consideration.

Dummy variable analysis, a form of multiple regression
analysis, begins by dichotomizing independent variables into
high and low values, while the dependent variable is left in
scaled form. Thus, father's educational attainment was class-
ified as 1 for high education and 0 for low education; father's
occupational status was classified as 1 for high occupational
status and 0 for low occupational status; and respondent's edu-
cational attainment was classified as 1 for high education and 0
for low education. In all instances the independent variables
are dichotomized as near to their respective midpoints as
possible with the greater number of cases falling into the high
group.

Interaction terms or multiplicative effects of the independent
variable are formed in the following fashion. If a respondent has
a 1 or high classification on two of the independent variables

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[1]For an explanation of the meaning of interaction see Ker-
linger (1964: 223-226).

[2]For the use of dummy variable analysis in two different
context⌐ see Melichar (1965); Laslett (1971).

(hereafter, main effects), an interaction term is formed by giving this respondent a 1 classification on a new variable. Since there are three main effects (Fe, Fo, Re), four new variables must be formed to denote all possible interaction terms: FeFo, FeRe, FoRe, and FeFoRe.

It is now possible to posit two models of respondent's occupational status. The first model, a restricted model, contains only the main effects and the dependent variable. The second model, a full model, contains the main effects, all interaction terms, and the dependent variable. The regression equations for these two models may be written as:

$$Ro = a + b_1 Fe + b_2 Fo + b_3 Re \qquad \text{(restricted model)}$$

$$Ro = a + b_1 Fe + b_2 Fo + b_3 Re + b_4 FeFo$$
$$+ b_5 FeRe + b_6 FoRe + b_7 FeFoRe \qquad \text{(full model)}$$

Using the NORC data, the regression equations for the restricted and full models were calculated for females and males separately. Table 4.2 presents the resulting regression constants and b coefficients for the two models for both females and males.

A brief note on the interpretation of the values in Table 4.2 is in order at this point. Table 4.2 shows that the value for the regression constant (a) in the restricted model for females is equal to 20.7. This means that the predicted score for those females falling into the class of low Fe, low Fo, and low Re, is 20.7 on the socioeconomic index of Ro. In addition, Table 4.2

indicates that the b coefficient for Fe for females in the re-
stricted model is equal to 3.6. This means the net effect[1] of
falling into the class of high Fe is an increase of 3.6 points over
the regression constant on the socioeconomic index of Ro.

TABLE 4.2 VALUES OF THE REGRESSION CONSTANTS AND
b COEFFICIENTS FOR THE RESTRICTED AND FULL MODELS
OF FEMALE OCCUPATIONAL STATUS (N = 613) AND MALE
OCCUPATIONAL STATUS (N = 840)

Reg. Cons. and b Coef.	Females		Males	
	Res. Model	Full Model	Res. Model	Full Model
a	20.7	20.7	22.7	24.2
b_1 Fe	3.6	2.3	2.9	1.6
b_2 Fo	5.5	9.5	8.4	7.7
b_3 Re	25.2	24.3	17.6	15.7
b_4 FeFo		-5.0		-4.1
b_5 FeRe		3.4		-1.4
b_6 FoRe		-5.2		-4.0
b_7 FeFoRe		5.2		14.2

It is obvious from the above manner of interpretation that
predicted or mean values of respondent's occupational status can
be calculated for the various cross-classified categories of
father's educational attainment, father's occupational status, and
respondent's educational attainment. However, calculation and
analysis of such data is somewhat extraneous to the purpose at

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[1]"Net effect" here refers to the effect of one main effect on
the dependent variable when the other main effects are statisti-
cally controlled.

hand, viz. testing whether interaction among the main effects is statistically significant. Hence, presentation of this data is foregone at this point.[1]

To test for the statistical significance of interaction among the main effects in this research, a form of the F test may be used which compares the amount of variation in the dependent variable explained by the full model (includes interaction effects) to the amount of variation in the dependent variable explained by the restricted model (does not include interaction effects). If the amount of variation in the dependent variable explained by the full model does not differ significantly from that explained by the restricted model, interaction among the main effects may be discounted and additivity of the main effects may be assumed. The formula[2] for this form of the F test may be written as:

$$F = \frac{(R^2_f - R^2_r) \, / \, (m_1 - m_2)}{(1 - R^2_f) \, / \, (N - m_1)}$$

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[1]For those readers interested in the predicted scores of respondent's occupational status for the various cross-classified categories of Fe, Fo, and Fe, this data is presented in the Appendix for both females and males.

[2]For a full explanation of this formula see Kelly et al. (1969: 277-279).

where:

R_f = the coefficient of multiple determination for the full model

Rr = the coefficient of multiple determination for the restricted model

m_1 = the number of independent variables in the full model plus 1

m_2 = the number of in dependent variables in the restricted model

N = the number of observations

d.f. = 2, N - 6

Performing this F test for females and males separately yielded a F = .70 for females and a F = 2.78 for males. Neither of these F values is statistically significant at the .01 level. As a result, the effects of interaction may be discounted in the preceding section on path analysis.

A simpler and perhaps more revealing manner of illustrating the minimal effects of interaction in this research is to calculate what Melichar (1965: 8) has referred to as a Partial R^2. This coefficient is interpreted as the precentage increase in the amount of variation in the dependent variable explained by the full model over that explained by the restricted model.

The formula for Partial R^2 may be written as:

$$\text{Partial } R^2 = \frac{R^2_f - R^2_r}{1 - R^2_r}$$

Calculation of this statistic for females and males results in

a value of .005 for females and .013 for males. Hence, the full model with its interaction terms adds very little additional explanatory power (in terms of variation) over the restricted model.

This chapter has analyzed the gross and net influences among the four status variables incorporated into a basic explanatory model of respondent's occupational status. In general, the analyses performed in this chapter indicate that, insofar as what we have conceptualized the basic process of attaining occupational status to be (that represented by the basic model), there is little difference between females and males. The findings for NORC females and males are summarized below in a more specific fashion:

1. The gross relationship between father's educational attainment and respondent's occupational status are similar for females and males.

2. The gross relationship between father's occupational status and respondent's occupational status are similar for females and males.

3. The gross relationship of respondent's educational attainment to respondent's occupational status is somewhat higher for females than males. The difference between the correlations for this relationship for females and males is statistically significant.

4. Respondent's educational attainment shows a considerably stronger gross relationship to respondent's occupational

status than either of the two origin statuses for both females and males.

5. In the path models, the relationship between the origin statuses is the same for females and males.

6. The direct influence of father's educational attainment on respondent's educational attainment is nearly the same for females and males.

7. The direct influence of father's occupational status on respondent's educational attainment is higher for males than females, although the influence is not great for either sex.

8. The direct influence of father's occupational status on respondent's occupational status is similar for females and males, although the influence is not great for either sex.

9. The largest direct net influence on respondent's occupational status for females and males is that exerted by respondent's educational attainment.

10. The net influence of respondent's educational attainment on respondent's occupational status is somewhat higher for females than males.

11. The basic model accounts for slightly more variation in female occupational status than male occupational status.

12. Finally, dummy variable analysis indicates that interaction among the independent variables in the path models for females and males is statistically insignificant in both instances.

CHAPTER V

THE GROSS AND NET RELATIONSHIPS OF RACE,
FAMILY STATUS, AND NUMBER OF CHILDREN
TO OCCUPATIONAL STATUS
FOR FEMALES AND MALES

In this chapter the factors related to attainment of occupa-
tional status for females and males which have been conceptu-
alized as variables which should be controlled outside of the
basic explanatory model of occupational status are analyzed.
Using the sequence of presentation and analytical techniques out-
lined in Chapter II, this chapter is addressed to the set of ques-
tions posed in the first chapter about race, family status, and
number of children in relation to occupational status. The first
section on race and occupational status considers two questions:
(1) What is the gross relationship between race and occupational
status? (2) Does race have an additional net relationship to
occupational status when the independent variables in the basic
model are controlled? The second section on family status and
occupational status deals with three questions: (1) What is the
gross relationship between family status and occupational status?
(2) Is the gross relationship between family status and occupa-
tional status altered when the age of the respondent is controlled?
(3) Does family status have an additional net relationship to occu-
pational status when the independent variables in the basic model
are controlled? The final section, which is concerned with the

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relationship of number of children to occupational status,
answers the same questions about number of children as those
asked about family status.

Consistent with our procedure in the previous chapters, the
analyses in this chapter follow the format of initially presenting
findings for females and then comparing these findings to those
obtained for males.

Race and Occupational Status

It is well known that in contemporary United States, Negroes
have considerably less educational and occupational opportunity
than whites. The relevant studies reviewed in Chapter I con-
sistently supported this contention. This state of affairs is
again analyzed in this section, both in terms of gross and net
relationships of race to educational attainment and occupational
status.

Table 5.1 presents the gross relationships among race and
the four variables included in the basic model of occupational
status for females and males. The first correlations of interest
in Table 5.1 for females are those between respondent's race
(Rr) and father's education (Fe), and respondent's race and
father's occupation (Fo). These correlations are not exception-
ally large, -.09 and -.16 respectively, but their negative signs
do indicate that Negro females come from somewhat lower social
origins than white females.

Considering the variables related to respondent's educational

attainment prior to those correlated with respondent's occupa-
tional status for females, Table 5.1 indicates a gross relation-
ship of -.11 between respondent's race (Rr) and respondent's
educational attainment (Re). Although this correlation shows
that being a Negro has a negative relationship to educational
attainment for females, the $r_{ReRr} = -.11$ is considerably
smaller than either the gross relationship of father's educational
attainment to respondent's educational attainment ($r_{ReFe} = .48$)
or the gross relationship of father's occupational status to re-
spondent's educational attainment ($r_{ReFo} = .30$). Consequently,
the social origins (Re and Ro) rather than racial status appear to
be more closely tied to the educational attainment of females.

Table 5.2 presents partial correlation coefficients for fe-
males and males which contain race as the independent variable
of interest. The table shows that when the origin statuses are
controlled, the relationship between race and respondent's edu-
cational attainment for females reduces to a statistically in-
significant -.04. Thus, being Negro and lower educational at-
tainment are not associated for females when the influences of
the origin statuses are removed.

Our main interest in this section is with analyzing the gross
and net relationships of race to respondent's occupational status.
Turning attention back to Table 5.1, it can be seen that the gross
relationship of race to respondent's occupational status for fe-
males is a -.22. This indicates that, in gross terms, race can
account for approximately 5 per cent of the variation in female

occupational status. This relationship is not as great as those between each of the origin statuses and respondent's occupational status ($r_{RoFe} = .36$ and $r_{RoFo} = .32$), and is just over one-third as great as that between respondent's educational attainment and respondent's occupational status ($r_{RoRe} = .62$). Hence, the social origins and especially the educational attainment of females are more closely associated with the occupational status of females than is their race.

TABLE 5.1 ZERO ORDER CORRELATION COEFFICIENTS OF RACE AND THE FOUR VARIABLES IN THE BASIC MODEL FOR FEMALES (N = 610); COMPARABLE FIGURES FOR MALES (N = 836) IN PARENTHESES

Variable	Rr	Fe	Fo	Re	Ro
Rr	___	-.09 *	-.16 *	-.11 *	-.22 *
		(-.05)	(-.13)*	(-.15)*	(-.17)*
Fe		___	.49 *	.48 *	.36 *
			(.43)*	(.48)*	(.31)*
Fo			___	.30 *	.32 *
				(.35)*	(.34)*
Re				___	.62 *+
					(.52)*+
Ro					___

* Denotes a statistically significant correlation at the .05 level.

+ Denotes that a difference between the two comparable correlations is statistically significant at the .05 level.

However, the important fact is that when the social origins

and educational attainment of females are controlled, the nega-
tive relationship of race to occupational status remains largely
intact. Table 5.2 shows that the net relationship of race to
occupational status is -.17 for females. Thus, even when the
lower social origins and educational attainment of Negro fe-
males have been taken into account, their occupational status
is still inferior to that of white females.

TABLE 5.2 PARTIAL CORRELATION COEFFICIENTS BE-
TWEEN RACE AND RESPONDENT'S EDUCATIONAL ATTAIN-
MENT CONTROLLING FOR THE ORIGIN STATUSES FOR FE-
MALES (N = 1005) AND MALES (N = 859); AND PARTIAL
CORRELATION COEFFICIENTS BETWEEN RACE AND RE-
SPONDENT'S OCCUPATIONAL STATUS CONTROLLING FOR
THE ORIGIN STATUSES AND RESPONDENT'S EDUCATION-
AL ATTAINMENT FOR FEMALES (N = 610) AND MALES
(N = 836)

Partial Cor. Coef.	Females	Males
$r_{ReRr} \cdot FeFo**$	-.04	-.13*
$r_{RoRr} \cdot FeFoRe$	-.17*	-.09*

* Denotes a statistically significant correlation at the .05
level.

** The disignated variables following the dot in this notation
refer to the variables which have been controlled.

   A comparison of the values for females and males in Table
5.1 indicates similar gross relationships between race and each
of the other four status variables for females and males. One
exception is that there is no relationship between race and father's
educational attainment for males. But insofar as father's occu-
pational status by itself is an adequate index of social origins,
we may state that, like Negro females, Negro males come from

lower social origins than white males, have lower educational attainment than white males, and attain lower occupational statuses than white males. Further, the negative relationships of race to educational attainment and race to occupational status are smaller than the relationships of the origin statuses to respondent's educational attainment and respondent's occupational status for males as they are for females. In short, except for the gross relationship between respondent's educational attainment and respondent's occupational status, which did not concern us here, the gross relationships for males in Table 5.1 virtually reproduce those for females.

In terms of the more important net relationships presented in Table 5.2, a difference did appear. The partial correlation between respondent's race and respondent's educational attainment controlling for father's educational attainment and father's occupational status turned out to be a statistically significant -.13 for males, whereas there is no relationship for females. This indicates that there is a negative net association of being a Negro and lower educational attainment for males, but not females.

The magnitudes of the partials between race and respondent's occupational status, controlling for social origins and respondent's educational attainment, show some difference, but the difference is not statistically significant (see Table 5.2). Thus, the negative net association of being a Negro and lower occupational status is similar for females and males.

Despite the difference in one net relationship between females and males, the findings reported in this section suggest a general conclusion about race and occupational status. Entering the occupational sphere with the ascribed status of "Negro" handicaps one in the process of attaining high occupational status through the associated impediments of lower social origins, lower educational attainment, and an additional negative net impact most likely due to racial discrimination.[1] This conclusion holds for females and males.

<center>Family Status and Occupational Status</center>

In our first chapter the question was raised whether married women as opposed to single women experienced an impediment to their occupational statuses because of household duties, the presence of children, or the anticipation of children. To answer this question, the variable of family status has been created. The category "single" of this variable includes those respondents who are single and have never been married plus those respondents without children who are separated, divorced, and widowed. The "married category" includes those individuals who are currently married plus those individuals who do have children and are separated, divorced, or widowed. This section analyzes the gross and net relationships of this variable of family status to

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[1]Attributing the net association to racial discrimination is consistent with the interpretation of Blau and Duncan (1967: 405).

respondent's occupational status.

Table 5.3 presents the gross relationships among family status (Rf) and the four variables included in the basic model of occupational status for females and males. Looking at the gross relationships of family status (Rf) to each of the variables in the basic model (see the first row of figures in Table 5.3) for females, indicates that family status is not related to the origin statuses or respondent's educational attainment. Most importantly, family status is unrelated to the occupational status of females. Hence, family status does not appear to be a factor in

TABLE 5.3 ZERO ORDER CORRELATION COEFFICIENTS OF FAMILY STATUS AND THE FOUR VARIABLES IN THE BASIC MODEL FOR FEMALES (N = 358); COMPARABLE FIGURES FOR MALES (N = 313) IN PARENTHESES

Variable	Rf	Fe	Fo	Re	Ro
Rf	____	-.04	-.06	-.09	-.05
		(.01)	(-.01)	(.03)	(.10)*
Fe		____	.48 *	.52 *	.39 *
			(.38)*	(.48)*	(.29)*
Fo			____	.30 *	.39 *
				(.32)*	(.40)*
Re				____	.64 *+
					(.52)*+
Ro					____

* Denotes a statistically significant correlation at the .05 level.

+ Denotes that a difference between two comparable correlations is statistically significant at the .05 level.

the attaining of occupational status for females.

It was suggested in Chapter I that the relationship between family status and occupational status for females should be viewed when age is controlled. The various expectations for "married" females which might serve as an impediment to their attainment of high occupational status are not constant throughout their married life but tend to decrease with increasing age. Even though we have found no zero order relationship between family status and occupational status for females, it is still important to report the partial correlation between these two variables controlling for age because a relationship between family status and occupational status might be present at just certain ages for females. Thus, this partial correlation coefficient, along with others for females and males, is presented in Table 5.4.

TABLE 5.4 PARTIAL CORRELATION COEFFICIENTS BETWEEN FAMILY STATUS AND RESPONDENT'S OCCUPATIONAL STATUS CONTROLLING FOR AGE FOR FEMALES (N = 340) AND MALES (N = 387); AND PARTIAL CORRELATION COEFFICIENTS BETWEEN FAMILY STATUS AND RESPONDENT'S OCCUPATIONAL STATUS CONTROLLING FOR THE ORIGIN STATUSES AND RESPONDENT'S EDUCATIONAL ATTAINMENT FOR FEMALES (N = 358) AND MALES (N = 313)

Partial Cor. Coef.	Females	Males
$r_{RoRf} \cdot Ra$	-.06	.11*
$r_{RoRf} \cdot FeFoRe$	.02	.11*

* Denotes a statistically significant correlation at the .05 level.

The partial correlation between family status and occupational status for females when age is controlled is statistically

insignificant. Family status remains unrelated to female occupational status when the control for age is introduced.

Similarly, a partial correlation analysis between family status and occupational status for females when the origin statuses and respondent's educational attainment are controlled is statistically insignificant (see Table 5.4). In short, none of the zero order or partial correlation coefficients reported for females suggest that family status is related to occupational status for females.

An examination of Table 5.3 reveals that a comparison of the gross relationships involving family status for females and males indicates only one difference between the sexes. Family status has a statistically significant positive relationship to occupational status for males (r_{RoRf} = .10), where none exists for females. This relationship for males is small in comparison to the gross relationships of the origin statuses and respondent's educational attainment to male occupational status (see Table 5.3).

Lastly, r_{RoRf} . FeFoRe = .11 for males (see Table 5.4). This indicates that when the influences of the independent variables in the basic model are removed, being married and higher occupational status are somewhat positively associated. This positive net relationship of family status to occupational status did not appear for females.

In sum, it may be said that the zero order and partial correlation analyses reported on in this section for females and males indicate that family status is unrelated to occupational status,

for females, while showing a very small positive association with
male occupational status.

Number of Children and Occupational Status

The variable "number of children" has been introduced into
this research for essentially the same reasons as family status.
The presence of children generally introduces an interruption into
the occupational careers of women. Further, the larger the num-
ber of children, the longer the interruption in the occupational
career of women may be expected to be. This section analyzes
the gross and net relationships of number of children to the occu-
pational status of females and then compares these findings to
those obtained for males.

The gross relationships among number of children and the
four variables included in the basic model are shown for females
and males in Table 5.5. Looking at the gross relationships of
number of children (Rc) to the origin statuses for females first,
it can be seen that neither of the origin statuses is related to
number of children for females. The $r_{RcRe} = -.16$ indicates that
females with larger families tend to have somewhat lower levels
of educational attainment than females with smaller families or
no children.

Table 5.5 shows a negative gross relationship between number
of children and respondent's occupational status equal to -.21 for
females. This indicates that women with a larger number of
children do achieve lower occupational statuses than women with

smaller families. The gross relationship of number of children to female occupational status is comparable to the gross relationships of the two origin statuses to female occupational status ($r_{RoFe} = .28$ and $r_{RoFo} = .20$). However, for females $r_{RoRc} = -.21$ is considerably smaller than $r_{RoRe} = .55$. Thus, the gross relationships in Table 5.5 suggest that number of children may be as important a factor in the attaining of occupational status for females as are the origin statuses, but a less important factor than the educational attainment of females.

TABLE 5.5 ZERO ORDER CORRELATION COEFFICIENTS OF NUMBER OF CHILDREN AND THE FOUR VARIABLES IN THE BASIC MODEL FOR FEMALES (N = 231); COMPARABLE FIGURES FOR MALES (N = 453) IN PARENTHESES

Variable	Rc	Fe	Fo	Re	Ro
Rc	___	.00	-.04	-.16 *	-.21 *
		(-.20)*	(-.12)*	(-.17)*	(-.21)*
Fe		___	.46 *	.38 *	.28 *
			(.50)*	(.48)*	(.35)
Fo			___	.24 *	.20 *
				(.38)*	(.30)*
Re				___	.55 *
					(.55)*
Ro					___

* Denotes a statistically significant correlation at the .05 level.

It was suggested in Chapter I that the relationship between number of children and occupational status for females should be

viewed when age is controlled. The possible negative effect of a
large number of children upon the occupational status of the fe-
male may be reduced as the female moves out of the child-
bearing and child-rearing years. The data do not support this
contention as Table 5.6 indicates $r_{R_oR_c} \cdot R_a$ is equal to -.21.
This is the same value as that for the reported gross relation-
ship between number of children and female occupational status.

TABLE 5.6 PARTIAL CORRELATION COEFFICIENTS BETWEEN
NUMBER OF CHILDREN AND RESPONDENT'S OCCUPATIONAL
STATUS CONTROLLING FOR AGE FOR FEMALES (N = 247) AND
MALES (N = 486) AND PARTIAL CORRELATION COEFFICIENTS
BETWEEN NUMBER OF CHILDREN AND RESPONDENT'S OCCU-
PATIONAL STATUS CONTROLLING FOR THE ORIGIN STATUSES
AND RESPONDENT'S EDUCATIONAL ATTAINMENT FOR FE-
MALES (N = 231) AND MALES (N = 453)

Partial Cor. Coef.	Females	Males
$r_{R_oR_c} \cdot R_a$	-.21*	-.22*
$r_{R_oR_c} \cdot F_eF_oR_e$	-.15*	-.14*

* Denotes a statistically significant correlation at the .05 level.

A partial correlation analysis between number of children and
occupational status for females reveals a relationship of -.15
when the origin statuses and respondent's educational attainment
are controlled (see Table 5.6). The association of a large number
of children and lower occupational status remains largely intact
for females, when the influences of the independent variables in
the basic model are removed.

A comparison of the gross relationships for females and males
in Table 5.6 indicates negative relationships between number of

children and the origin statuses for males, where no relation-
ships exist for females. This indicates that males with larger
families come from lower social origins, while no such associa-
tion is present for females. The relationship between number
of children and respondent's educational attainment is the same
for the sexes: r_{RcRe} = -.16 for females and r_{RcRe} = -.17 for
males. Females and males with larger families have lower
levels of educational attainment than females and males with
smaller families. Lastly, r_{RoRc} = -.21 for both females and
males. Regardless of sex, number of children has a noticeable
negative gross relationship to occupational status.

Table 5.6 shows that the control for age makes no differ-
ence in the relationship of number of children to occupational
status for females or males. For females, r_{RoRc} = -.21 while
r_{RoRc} · Ra = -.21. For males, r_{RoRc} = -.21 and r_{RoRc} · Ra
= -.22. This indicates the association of a larger number of
children and a lower occupational status exists at all age levels
for "working" females and males.

Lastly, r_{RoRc} · FeFoRe = -.14 for males (Table 5.6).
When the influences of the independent variables in the basic
model are removed, having a larger number of children and lower
occupational status remain associated for males. This negative
net relationship of number of children and occupational status is
the same as for females.

It may be concluded that number of children is similarly re-
lated to occupational status for females and males. All the gross

and net relationships between number of children and occupational status reported on in this section show no difference for females and males.

This chapter has focused on the gross and net relationships of race, family status, and number of children to respondent's occupational status for females and males. The general impression left by these gross and net relationships is one of practically no difference between the sexes. Summarized below are the findings of this chapter:

1. With the exception of the gross relationship of race to father's educational attainment, there are no differences for females and males in the gross relationships of race to the origin statuses, respondent's educational attainment, and respondent's occupational status.

2. The negative net relationship of race to respondent's occupational status, when social origins and respondent's educational attainment are controlled, shows no difference for females and males.

3. Family status is unrelated to the origin statuses and respondent's educational attainment for both females and males.

4. Family status has a small positive gross relationship to the occupational status of males and is not related to the occupational status of females.

5. The control for age does not alter the relationship of family status to occupational status for males, or the lack of a relationship for females.

6. The controls for the origin statuses and respondent's educational attainment do not alter the relationship of family status to occupational status for males, or the lack of a relationship for females.

7. Females do not show a gross relationship between number of children and the origin statuses, while males show negative gross relationships.

8. There is no difference between females and males in their negative gross relationships of number of children to respondent's educational attainment.

9. The negative gross relationships between number of children and respondent's occupational status are identical for females and males.

10. Controlling for age does not alter the identical relationship between number of children and respondent's occupational status for either females or males.

11. Controlling for the origin statuses and respondent's educational attainment yields no difference in the negative net relationships between number of children and respondent's occupational status for females and males.

CHAPTER VI

SUMMARY, IMPLICATIONS, AND SUGGESTIONS
FOR FUTURE RESEARCH

The objective of this research was to present a systematic
analysis on a national basis of those individual characteristics
of females which affect their occupational status. The findings
for females were to be compared to those obtained for males to
determine whether the factors and processes involved in the at-
tainment of occupational status differ or are similar for the sexes.

The objective was accomplished through an analysis of nation-
al sample data for females and males obtained from NORC.
The variables used in the analysis were: occupation of respon-
dent, occupation of respondent's father, education of respon-
dent, education of respondent's father, race of respondent,
family status of respondent, and number of children of respon-
dent. In large part, the analysis paralleled that used by Blau
and Duncan in their work, The American Occupational Structure.

This chapter considers the findings of this research in re-
lation to the theoretical considerations in Chapter I, general
theories of stratification, and future research. The first
section briefly summarizes the findings of this research and
critiques the methods used. The second section considers the
implications of the relevant findings for the analysis of the fe-
male role in American society. Next, the implications of the

findings for the study of individual characteristics affecting occu-
pational status are examined. A fourth section presents the
implications of this study for the functional theory of stratifi-
cation. A fifth section summarizes theoretical conclusions and
presents additional theoretical discussion. Lastly, suggestions
for future research and a final statement are set down.

Summary of Findings and Critique

The analysis in this report was divided into three parts and
treated separately in Chapters III, IV, and V. The first part
considered the basic data. Our concern here was to present
summary measures of the distributions of the main variables
present in this research, and to examine different levels of
respondent's occupational status by the distributions of each inde-
pendent variable. The second part of the analysis focused on
the gross and net relationships among the four status variables
included in the basic model of occupational status. Since this
model was conceptualized as a causal ordering of variables, the
gross and net relationships indicated by the analysis were dis-
cussed in causal terms. The third part of the analysis (Chapter
IV) dealt with three variables, race, family status, and number
of children, which were conceptualized as variables which should
be controlled outside of the basic model of occupational status.
Our main interest here was to find out if these variables have any
gross association with occupational status and, additionally, to
determine whether they have any net relationship to occupational

status when the independent variables in the basic model are controlled.

This section summarizes the major findings of these three parts of the analysis. Attention is limited to those findings for females and males which bear directly on the theory to be discussed later in this chapter. Consistent with our procedure up to this point, findings for female occupational status are considered relative to findings for male occupational status.

Chapter III, which presented basic data on the main variables analyzed in this research, indicated two major findings. First, the occupational status of females and males is very similarly distributed by the various means (or percentages) of five of the independent variables (father's occupational status, father's educational attainment, respondent's educational attainment, race, and number of children). The only independent variable which diverges from this pattern of similarity for females and males is family status where the occupational distributions of single females and males differ somewhat. This major finding resulting from cross-tabulations pointed to the gross relationships reported on in Chapters IV and V. The second major finding of Chapter III is that with respect to the major dependent variable (respondent's occupational status) and every independent variable, females and males constitute homogeneous groupings.

Chapter IV analyzed the basic model of female and male occupational status. This model includes the variables of the father's educational attainment, father's occupational status, respondent's

educational attainment, and respondent's occupational status. An analysis of the gross relationships among these variables reveals almost identical findings for females and males. The gross influences of the origin statuses upon educational attainment and the gross influences of the origin statuses upon occupational status are the same for females and males. Only the gross influence of respondent's educational attainment upon respondent's occupational status shows a statistically significant difference between the sexes; the value is .09 higher for females. However, this difference does not introduce a discrepancy between the sexes in terms of the ordering of gross influences upon occupational status. Clearly, the respondent's own educational attainment is a much more important influence on his or her occupational status than either of the two variables indexing social origins.

Path analysis has been used in this research to explore the net influences among the variables in the basic model. The direct influence of father's educational attainment upon the educational attainment of the respondent is the same for females and males. The direct influence of father's occupational status upon the respondent's educational attainment is somewhat greater (.09) for males than females. However, this influence is minor for both sexes, being considerably smaller than the direct influence of father's educational attainment upon respondent's educational attainment.

The direct influence of father's occupational status upon the

occupational status of females and males is the same and minor for both sexes. It does not approach the importance of the direct influence of respondent's educational attainment upon occupational status for either females or males. Despite this similarity, the path coefficients indicate the direct net influence of respondent's educational attainment on respondent's occupational status is .11 higher for females than males. Hence, the data on both gross and net influences suggest that educational attainment has a slightly greater influence on the occupational status of females than males.

A comparison of the residuals on respondent's occupational status for females and males shows that the basic model is slightly more explanatory of female than male occupational status. Five per cent more variation in female than male occupational status is accounted for by the combined direct and indirect net influences of father's educational attainment, father's occupational status, and respondent's educational attainment.

Overall, the path analysis reveals similar findings for females and males. Except perhaps for the somewhat greater gross and net influences of respondent's educational attainment on respondent's occupational status for females than males, the basic process of attaining occupational status is the same for females and males.

Chapter IV was concerned with the gross and additional net relationships (i.e., when the three independent variables in the basic model are controlled) of race, family status, and number of

children to occupational status. The major findings resulting from these analyses are summarized now.

The negative gross association of being Negro and occupational status is the same for females and males. This negative relationship between race and respondent's occupational status is somewhat smaller than the relationships of the origin statuses to occupational status, and considerably smaller than the relationship of respondent's educational attainment to respondent's occupational status for both sexes. However, the negative association of being Negro and occupational status remains to a degree for both females and males when the independent variables in the basic model are controlled. The partial correlations for this relationship show no difference between females and males.

Family status is not related to female occupational status and has a very small positive relationship to male occupational status (.10). The lack of a relationship for females, and the small positive relationship for males remain intact both when age is controlled and when the independent variables in the basic model are controlled.

Regardless of sex, the same negative gross association exists between a larger number of children and occupational status. This relationship is near in value to that between the origin statuses and occupational status for females and males, but does not approach that between respondent's educational attainment and respondent's occupational status for either sex. The negative relationship of number of children and occupational status remains

intact for females and males when age is controlled. The negative net relationship of number of children and occupational status when the independent variables in the basic model are controlled is the same for females and males.

The overriding conclusion emerging from the analysis is that there is little difference in the various comparable relationships reported for females and males. By far the majority of differences in comparable values noted for females and males are not statistically significant. Where relationships exist, they are in the same direction for females and males. The relative ranking of importance[1] of variables in the attaining of occupational status is the same for females and males. The only statistically significant differences are: (1) the somewhat greater gross and net impacts of educational attainment on occupational status for females than males, and (2) the presence of small gross and net relationships between family status and occupational status for males, where none exist for females. Even here, the discrepancies between the sexes are only about .10 for the gross and net relationships. In short, it may be said that this research indicates that, except for family status, similar variables are related in the same way to female and male occupational status.

Prior to discussing the implications of these findings for various bodies of theory, some critical consideration should be

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[1]It is assumed here that "importance" of a variable in relation to occupational status may be determined by its gross or partial correlation with occupational status.

given to the nature of this research.

This study is in large part based upon the work of Blau and Duncan (1967). Both the path model and the techniques of analysis are taken from Blau and Duncan. A major exception is that we have excluded respondent's first job from our analysis because the NORC studies used in this research did not contain data on this variable. The exclusion of this variable is somewhat serious in that the path model in this research accounts for 8 per cent less variation in male occupational status than does Blau and Duncan's model for males (see Chapter IV: 102).

A frequent criticism directed against the construction and use of path models is that they do not account for most of the variation in the dependent variable of interest. This being the case, there must be additional variables which influence the major dependent variable of interest, and which if included in the path model might well alter the path coefficients for the direct net influences in the model. As Blau and Duncan point out (1967: 175), a delicate question in this regard is the burden of proof. It is all too easy to make a formidable list of unmeasured variables that someone has alledged to be crucial to the process under analysis. But the mere existence of such variables is already acknowledged by the very presence of the residuals in the path model. Blau and Duncan (1967: 175) further argue:

> It would seem to be part of the task of the critic to show, if only hypothetically, but specifically, how the modification of the causal scheme to include a new variable would disrupt or alter the relationships in the original diagram. His argument to this effect could then be examined for

plausibility and his evidence, if any, studied in terms of the empirical possibilities it suggests.

Despite the comfort offered to the present researchers by Blau and Duncan's argument, the contention of the critics of path models and analyses must be acknowledged as fundamentally sound. As a result, the path model for female and male occupational status adopted in this research can at best only be considered as a rough approximation of the intricate process of the attaining of occupational status.

Additional caution is suggested when the assumptions of the various statistics used in the analysis are brought under consideration. The analysis has used simple linear and multiple linear regression analysis to measure the gross and net relationships among variables. Both these analytic techniques assume linearity, intervally scaled variables, homoscedasticity, and normal distribution of "Y" scores around "X" specific means. In addition, multiple linear regression analysis assumes additivity of independent variables.

It has already been shown that the assumptions of linearity and intervally scaled variables are approximated within the context of this analysis (see Chapter II: 55-64). Further, the dummy variable analysis reported on in Chapter IV indicates that additivity of the independent variables in the basic model of occupational status may be assumed for both females and males. However, Blau and Duncan (1967: 145) state that in regard to data comparable to ours, neither the assumption of homoscedasticity

or normal distribution of "Y" scores around "X" specific means is met.

The question then arises whether we are justified in using the statistics we have employed. First, it may be noted that rarely are the assumptions of various statistical techniques fully met in scientific research. The techniques rarely, if ever, summarize all of the information contained in the data (Blau and Duncan, 1967: 145). Second, we have the precedent of Blau and Duncan's research, as well as others,[1] for using these statistical techniques. Third, Blau and Duncan compared the findings they obtained from linear regression analysis to findings yielded by multiple classification analysis, a technique which does not require such severe assumptions about the nature of the data. Where these comparisons were made, no significant changes in conclusions were required (Blau and Duncan, 1967: 147).

Again, despite the reasons for employing the techniques that we have in this research, we must acknowledge the limitations on conclusions that their use implies. At best, the values for gross and net relationships indicated by this research can only be taken as a rough estimate of the relationships of various variables to female and male occupational status. The named limitations of this research must be kept in mind as the findings are considered now in relation to various bodies of theory.

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[1]See Chapter II (70).

Implications of this Research for the
Analysis of the Female Role

In Chapter I a general theoretical analysis of the female role in American society was developed as a partial basis on which to predict the character of the relationships of certain variables to female occupational status. The female role literature suggests that changes in the economic basis of the social structure since the Industrial Revolution have resulted in differential shifts in the roles of women and men. While the social roles of men have remained quite clearly defined, those of women have become subject to a large measure of ambiguity. This role ambiguity of the female has engendered a lack of certainty on the part of the female concerning education and occupational roles. As a result, there has been an apparent selectivity in the occupations in which women generally engage. Females are moving into occupations already heavily female, newly emerging occupations defined as female from the start, and previous male occupations which have been taken over by females. In addition, females are underrepresented in the most prestigious occupations, while being overrepresented in the intermediate status occupations.[1]

On the basis of these theoretical statements from the female role literature, the following predictions about female occupational status in relation to male occupational status were made:

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[1] This statement from the female role literature is correct; see the occupational prestige distributions in Chapter III (74).

(1) There is a weaker relationship between the origin statuses and occupational status for females than for males. (2) There is a weaker relationship between respondent's educational attainment and respondent's occupational status for females than males. (3) There is a weaker relationship between respondent's educational attainment and respondent's occupational status for females than for males when father's educational attainment and father's occupational status are controlled. (4) There is a negative relationship between number of children and occupational status for females when age is controlled. (5) There is a negative relationship between family status and occupational status for females when age is controlled.

The first prediction proved to be totally unfounded. The gross relationships between each of the origin statuses and respondent's occupational status is the same for females and males. In addition, path analysis reveals the direct net influences of each of the origin statuses on respondent's occupational status is the same for females and males.

The second and third predictions also are not supported by the data. Although the gross relationship between respondent's educational attainment and occupational status is somewhat different, the difference is in the opposite direction than one would expect on the basis of the female role literature. In gross terms, educational attainment accounts for more variation in the occupational status of females than males. This finding is upheld when the origin statuses are controlled. Path analysis shows that when

the influence of social origins is removed, the net impact of respondent's educational attainment on occupational status is somewhat higher for females than males.

The fourth prediction is supported by the analysis. There is a negative gross relationship between number of children and occupational status for females. The negative relationship remains intact when age is controlled. Thus, women with larger families do tend to have lower occupational statuses than women with smaller families.

Yet, one is reluctant to explain this finding in terms of the female role literature. This literature suggests that a negative impact of a large number of children should be greater for females than males. However, both the negative net and gross relationships of number of children to occupational status are identical for females and males. The convergence of findings here for females and males suggests an interpretation in terms of the higher birth rates of lower socioeconomic categories, [1] rather than attributing the negative correlation between number of children and female occupational status to differences between the female and male roles in American society.

Finally, there is hardly support for the fifth prediction. There are no gross or net relationships between family status and female occupational status.

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[1] The implication of such an interpretation for the direction of causation between number of children and occupational status is important. It is taken up in the next section.

It will be recalled from Chapter I that we chose to leave the predictions about female occupational status in relation to male occupational status as open questions. We did this because the DeJong et al. (1971) intergenerational occupational mobility research on females and males had already called the female role literature into serious question.

The choice to leave the predictions about female occupational status in relation to male occupational status as open questions proved to be a wise decision. There is little, if anything, among the findings of this research to give support to the highly articulated literature concerning the female role in American society. This literature is inadequate as a basis from which to predict the attaining of occupational status for females in relation to males. Although female role ambiguity and its consequence of overrepresentation in the intermediate status occupations[1] would lead to an expectation of differences between the way in which particular factors operate on the occupational status of females as opposed to males, such an expectation is highly suspect in view of the findings. In fact, the high degree of convergence between findings on female and male occupational status seems to call into question the supposedly strong role ambiguity of females

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[1] The female role literature consistently emphasizes the underrepresentation of females in the most prestigious occupations, and their overrepresentation in the intermediate status occupations. However, it stops here and fails to note the equally important fact that males are overrepresented in the lowest status occupations. See Chapter III (74).

in regard to their occupational roles. Perhaps females are no longer experiencing role ambiguity to the extent to which this literature leads one to expect. Perhaps female role ambiguity does not affect female occupational status in the way in which the literature leads one to expect. At any rate, one point is obvious: the literature concerning the female role in American society is not an adequate theoretical base from which to predict the relationship of the various factors measured in this research to the occupational status of American females.

It is interesting to note in connection with this critique of the female role literature that the data analyzed in this research were collected in 1964-1965. Any recent gains made for females in the occupational sphere by the "women's liberation movement" do not affect these findings. Moreover, the frequently stated assertion by the "women's liberation movement" that women, more consistently than men, are forced to take jobs below their level of educational attainment is also suspect in view of the findings. Educational attainment more closely predicts occupational status for females than for males.

Before leaving this section, one more point should be made. The DeJong et al. (1971) mobility research used ten broad occupational categories to classify the various specific occupational titles. As a result, its findings in part were subject to the charge of "masking" differences between females and males, and its consequent calling into question of the female role literature could be considered somewhat suspect. This research, however,

classified specific occupations according to an index which is composed of 96 classifications. Any charge of "masking" differences between females and males in this research seems unwarranted. Consequently, the literature on the female role in American society is even more severely called into question by this research than the DeJong et al. (1971) mobility research. Clearly, additional research on the female role is in order.

<div align="center">

Implications of this Research for the
Study of Factors Affecting
Occupational Status

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In Chapter I a rather lengthy section was devoted to discussing the factors which affect occupational status. These factors can be thought of as affecting occupational status by operating on the system or by influencing the occupational status of individuals. Hence, two modes of analysis, systemic and individual, may be employed in the study of these factors (Blau and Duncan, 1967: 9-10).

The present research is intended to be an analysis of the characteristics of the individual which affect his or her occupational status. Chapter I discussed four factors, conceptualized as characteristics of the individual, which affect occupational status. They include: father's occupational status, father's educational attainment, respondent's educational attainment, and respondent's race.

The discussion of these factors took the form of initially presenting their extant conceptualization, i.e. for males, and

then indicating the analysis or questions of analysis they raise for females. This section considers the findings of this research in relation to these questions of analysis raised for females in Chapter I.

Father's occupational status and father's educational attainment have been studied in relation to respondent's occupational status because they represent vital characteristics of the respondent's family of origin. The family, in turn, is the "keystone" of the American stratification system, and hence of crucial importance for an understanding of occupational status. The family is the first socializing agent in the life history of the individual and so a prime determining factor in what will happen to his life later in the occupational system.

In this connection, it has been noted that different social strata (which represent different degrees of father's occupational status and educational attainment) socialize their children in characteristically different fashions. Rosen (1959: 53) has presented data which indicate that the higher social classes more consistently socialize their children into patterns of achievement motivation than do the lower classes. This differential socialization by social class affects the individual's attitudes toward and chances for high occupational status. In addition to their representing different socializing influences, the origin statuses are also important factors in determining occupational status because simply the level at which one enters the status structure appears to have an effect upon his occupational status.

It was stated in Chapter I that, to our knowledge, it is not specifically known whether the same relationships exist between the two origin statuses and occupational status for both females and males. The differences in types of socialization among different social strata most likely also extend to females, but it was cautioned that one should be careful in predicting the same relationships between the origin statuses and occupational status for females and males because there are also systematic differences in the socialization of females and males in all strata. Moreover, there is the possibility of interaction between type of socialization and sex at different social strata levels.

The data indicate the cautions concerning predicting the same relationships between the origin statuses and occupational status are unfounded. The gross and net relationships between each of the origin statuses and occupational status are the same for females and males. This convergence of findings for females and males suggests that whatever the differences in socialization between females and males which could result in differences in the relationships between the origin statuses and occupational status, those differences are overshadowed or do not affect the similarities in socialization between the sexes which resulted in the same relationships between the origin statuses and occupational status. The origin statuses appear to be factors of equal importance in both female and male occupational status.

The third individual factor discussed in Chapter I is the educational attainment of the respondent. Formal education is fast

becoming an essential prerequisite for high occupational status for at least two reasons. First, with increasing industrialization has come greater occupational specialization and complexity which in turn requires more formal educational training. Second, many occupational groups are requiring high levels of education because of a desire to gain in public esteem.

The question was raised in Chapter I whether education may differentially affect the occupational status of females and males because females more often than males enter and re-enter the labor force, and since females enter the labor force at lower status occupational levels than do males. In view of these facts, one wonders whether females are as able to hold occupations equivalent to their level of education as readily as are males.

Again, the data do not support the question raised about females in Chapter I. The gross relationship of educational attainment to occupational status and the net relationship of educational attainment to occupational status controlling for social origins are somewhat higher for females. Thus, females hold occupations more equivalent to their level of education than do males.

One should be careful in interpreting this modestly closer association of educational attainment and occupational status for females than males to mean that males are not taking as full advantage of their educational attainment as are females. Although this could be the case, an alternative interpretation is that somewhat more males than females are attaining higher occupational statuses than their level of educational attainment would

lead one to expect.

Even this interpretation should not be overly stressed. The
analysis indicates only .10 differences in the gross and net rela-
tionships of educational attainment to occupational status for fe-
males and males. This is not a great difference. Moreover,
the analysis suggests that of all the factors studied in relation to
occupational status, educational attainment is by far the most
important for both sexes. Certainly, the general impression left
by the analysis is that there is far more similarity than differ-
ence in the effects of educational attainment upon occupational
status when comparing females and males.

The section on factors affecting occupational status in Chapter
I dealt with the probable influences of father's educational attain-
ment, father's occupational status, and respondent's educational
attainment on occupational status separately. Later on in
Chapter I, these three factors were incorporated into a basic ex-
planatory model of occupational status. Doing this permitted
us to study the various net interrelations among these factors,
as well as between them and occupational status. The path analy-
ses of this basic model for females and males indicated very little
difference[1] between the sexes. The similarity of the indirect and
direct net influences of the three independent variables in the

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[1] The only difference is the somewhat greater impact of
educational attainment upon occupational status for females which
resulted in the model being somewhat more explanatory of fe-
male than male occupational status.

basic model on both female and male occupational status is important to reiterate here. It suggests that the basic process of attaining occupational status not only involves the same factors for females and males, but that these factors operate in the same fashion to very similar degrees for females and males.

The fourth factor dealt with in Chapter I as a condition influencing the attainment of occupational status is race. As do so many other researches, this study argues that both individual and institutional discrimination lead to a negative association of being Negro and occupational status. Further, no major differences in the negative influence of race on occupational status were expected between the sexes.

The data support race as a factor in the attaining of occupational status for females and males. There is a negative gross relationship between race and occupational status for both females and males. Moreover, when influence of the lower social origins and the lower educational attainment of Negroes is removed, a noticeable association between being Negro and lower occupational status remains for females and males. Obviously then, not all of the overrepresentation of Negro females and males in lower status occupations can be accounted for by their lower social origins and lower levels of educational attainment. The net negative relationship of race to occupational status for both sexes suggests that some of the overrepresentation of Negroes in lower status occupations may be attributed to individual and institutional discrimination.

The negative gross and net relationships between race and occupational status for females and males suggests that race is a factor in occupational status. Yet, consideration of these relationships in comparison to others yielded by the NORC data suggests that race may not be as important a factor in occupational status for either females or males as the factors previously discussed in this section. The relationships of each of the origin statuses to respondent's occupational status are considerably greater than those of race to respondent's occupational status for females and males, and the relationships of respondent's educational attainment to respondent's occupational status are far greater than the relationships of race to respondent's occupational status for both sexes.

This interpretation should be qualified. Following the lead of Blau and Duncan (1967: 170), we chose not to include race in the basic model of occupational status. Rather, this variable was treated as one which should be controlled outside of the model. In adopting this conceptualization, race obviously was not included in the interaction analysis reported on earlier. It is possible then that race may interact with any or all of the independent variables in the basic model and hence have a multiplicative effect upon occupational status. If this is the case, then race may prove to be a more important factor in the attaining of occupational status than the reported findings suggest. Certainly, this sort of interaction analysis warrants future research.

Despite the fact that family status and number of children were

not discussed in the section in Chapter I dealing with factors affecting occupational status, they were introduced later in that chapter as factors which may affect the occupational status of females, but be unlikely to affect that of males. It is therefore appropriate to discuss the implications of the findings involving these variables for the body of literature dealing with factors affecting occupational status.

The variable of family status was introduced for females because married women and separated, divorced, or widowed women with children likely experience interrupted occupational careers to a greater degree than single women and separated, divorced, or widowed women without children. It was argued that this higher incidence of interrupted occupational careers should lead to lower occupational status.

The data do not support this contention. Family status is unrelated to female occupational status.

There is a small positive gross association between family status and occupational status for males (.10). When the independent variables in the basic model are controlled, the positive association remains unaltered. However, because the values for these relationships are so small, it seems inappropriate to designate family status as a factor of importance in the attainment of occupational status for males.

The variable of number of children was introduced into this research for essentially the same reasons as family status. It was contended that the larger the number of children, the longer

the period of interruption in the occupational careers of women and the greater the division of attention by women to the competing spheres of activity. Hence, the larger the number of children, the lower the occupational status for women.

If the findings for females are considered in isolation from the findings for males, the data support this contention. There are appreciable relationships (gross and net) between number of children and occupational status for females. Yet, the same relationships exist for males. According to the theory set forth in the first chapter, this should not be the case. Males characteristically do not experience interrupted occupational careers because of the presence of children.

Because of the convergence of findings between females and males in regard to number of children and occupational status, one is led to an interpretation in terms of the differential fertility by social strata level. It is known that an inverse relation exists between social strata level and number of children. If respondent's occupational status is thought of as an index of social strata level, then the gross and net relationships between number of children and occupational status for females and males appear to be nothing more than a reflection of the social class fertility differential. If this interpretation is accepted, the initially posited direction of causation between number of children and occupational status is reversed and number of children ceases to be a factor of importance in the occupational status of females or males.

This section has considered the implications of the findings of this research for the body of literature dealing with factors affecting occupational status. Two major conclusions seem obvious in view of the preceding discussion. First, the extant conceptualization of factors affecting occupational status, i.e. for males, is supported by our findings. In decreasing order, educational attainment, social origins, and race are factors which affect the occupational status of males.[1] Blau and Duncan's conceptualization of the manner in which three of these factors operate to produce certain levels of occupational status for males is supported. Second, contrary to the questions raised about females in Chapter I, the extant conceptualization (for males) also appears appropriate for females. The only difference between factors affecting female and male occupational status is the somewhat greater influence of educational attainment on occupational status for females and the small positive influence of family status on male occupational status where none exists for females. Yet, this does not affect the relative ranking of the factors or the manner in which they operate. In short, the same factors appear to operate in the same fashion to very similar degrees upon the occupational status of females and males. This rather startling conclusion has implications for the functional theory of stratification.

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[1] This ordering of factors which affect occupational status is subject to the qualifications indicated earlier in this section.

This Research and the Functional
Theory of Stratification

Like many other general theories of social class and strati-
fication, the functional theory of stratification seemingly has had
little influence upon contempory research on factors affecting
occupational status. According to Blau and Duncan (1967: 3),
the reason for this omission is not simply the often reiterated
accusation that the grand theories are not formulated in terms
that make them amenable to empirical investigation. It is more
than that. First, these theories require comparative research
on social status, either cross-cultural or historical, to test
their propositions. Second, these theories emphasize strata or
social interaction as essential for the development of stratifi-
cation, a variable which researches on occupational status
rarely gather information. Finally, these theories point out
the multidimensionality of social stratification, whereas occupa-
tional status research operationalizes stratification as unidimen-
sional.

Although an adequate test of the functional theory necessitates
a comparative historical-societal framework, it is possible to
make some statements about it within the context of this research.
Subsequent to enumerating the theory as proposed by Davis and
Moore, some specific implications of this research for the
functional theory will be set down.

The theory as proposed by Davis and Moore (1945: 242-249)
rests on the assumption that no society is without some form of

stratification. The theory attempts to explain, in functional terms, the universal necessity for stratification in any social system. Since societies differ in the degree and kind of stratification, the theory also considers types of "social inequality" and the factors which produce them.

As indicated previously in this section, a comparative analysis is required to make reliable statements regarding these factors which vary between stratification systems. Hence, in the following discussion, particular attention is paid to general principles of stratification which are intended to apply to all societies.

The functional necessity of stratification is explained on the basis that as a functioning mechanism a society must in some manner distribute its members in social positions and induce them to perform the duties of these positions.[1] Thus, the society must concern itself with motivation at two different levels: to motivate the proper individuals to fill certain positions, and once in these positions, to motivate them to perform the duties attached to them. Whether a "positional system" is competitive or non-competitive, both types of motivation are required. The major difference between these two systems is that in the competitive system more emphasis is placed on the motivation to achieve positions, whereas in the non-competitive system greater

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[1] This position of Davis and Moore has been strongly criticized by Tumin (1953: 387-394). For additional criticism, see Buckley (1958: 369-375); Wrong (1959: 772-782).

importance is attached to the motivation to perform the duties of the positions.

Some positions are regarded as functionally more important for the survival of society than are others. Also, it is essential that the duties of all positions be performed with the diligence that their importance requires. Inevitably then, a society must have some kind of rewards it can use as inducements and some way of distributing these rewards differentially according to positions.[1] These rewards include things that contribute to "sustenance and comfort", "humor and diversion", and "self-respect and ego expansion."[2] The greatest rewards and highest rank are accorded to those occupying positions which have the greatest functional importance for society and require the greatest training.

Davis and Moore (1945: 243) conclude that part of their theory dealing with the functional necessity of stratification with this statement:

> If the rights and perquisites of different positions in a society must be unequal, then the society must be stratified, because that is precisely what stratification means. Social inequality is thus an unconsciously evolved device by which societies insure that the most important positions are conscientiously filled by the most qualified persons. Hence every society, no matter how simple or complex, must differentiate persons in terms of both prestige and esteem, and must therefore possess a certain amount of institutionalized inequality.

It is evident from the aforegoing that, as explained by Davis

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[1] Parsons makes somewhat the same point. See Parsons (1953: 104-105).

[2] For an explanation of these rewards see Davis and Moore (1945: 243).

and Moore, the functional theory of stratification only seeks to set down the universal system variables which are necessary for explaining stratification systems. No consideration is given by the theory to the systematic societal differences between males and females, and the effects of these differences on the occupational status of females and males. Rather, the theory has been set down implicitly for males. Because this theory has been written with males in mind implicitly, any distinction and comparison between males and females within the framework of this theory first requires that a logical application or extension of the theory be made. That is, before factors affecting male and female occupational status can be compared within the context of the functional theory of stratification, a logical application of this theory must be made to females in order to determine what the process of attaining occupational status would be expected to be within the functional framework for females as opposed to males.[1]

The necessary logical application of the functional theory of stratification can most clearly be seen by utilizing the appropriate work of Parsons written within the functional framework. Parsons (1951: 113-136)[2] like Davis and Moore explains social stratification in terms of varying degrees of functional necessity of different positions and the differential rewards attached to

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[1] The logical application of the functional theory which follows has been taken from Robin et al. (1970: 3-8).

[2] See also Barber (1957: 1-16).

them. However, instead of using the more limited term "posi-

tion" as do Davis and Moore, Parsons uses the broader term

"role". Thus, Parsons explains social stratification in terms

of differentially evaluated social roles and the differential re-

wards attached to them.

But Parsons has also written about social roles in another

context, namely, the social roles of males and females in Amer-

ican society.[1] Parsons (1942: 608) consonant with the other

theorists and researchers dealing with the roles of males and

females in American society, states that the basic aspect of the

male role is holding an occupation. In contrast, he (Parsons,

1942: 609) writes of the female: "The woman's fundamental

status is that of her husband's wife, the mother of his children,

and traditionally the person responsible for a complex of activi-

ties in connection with the management of the household, care of

children, etc." However, states Parsons (1942: 607-608), in

addition to the pattern of total domesticity, the female has the

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[1]It is interesting to note that although Parsons has used the
concept of social roles in the explanation of both social stratifi-
cation and the different societal expectations for male and fe-
male behaviors, he has never brought the two theoretical areas
together. It might be argued that Parsons has never linked
these two theoretical areas because he is using the concept of
social roles differently in each case. It has been pointed out
that Parsons uses the concept to refer to either expectations for
behavior or the behavior itself. However, considering the level
at which Parsons is operating in both of these theoretical areas,
this relatively specific distinction would not enter to prohibit
the linking of Parson's theory of social stratification and his
theory of differential roles of males and females. For a dis-
cussion of Parson's usage of the concept of social roles see
Gross et al. (1958: 13-16).

alternatives of the careerist role, the glamor role with its specific emphasis on a feminine form of attractiveness, and the common humanistic role with its emphasis on either the cultivation of cultural interests or humanitarian obligations in community welfare. But since the domestic and common humanistic roles are not fulfilling to many women, and since the careerist and glamor patterns are considered by community opinion to threaten the stability of the family, the proper role of the female is not clearly defined and hence ambiguous. This role ambiguity in turn supposedly results in working females being found in the less prestigeful or intermediate status occupations.

Parsons, then, is in agreement with the other theorists and researchers discussed in Chapter I[1] who dealt with the female role in American society. It was shown in Chapter I that when the work of these theorists and researchers concerning the female role is brought under consideration, one is led to expect differences in the ways various factors operate to produce female occupational status as opposed to male occupational status.[2] Thus, this literature seems to indicate that females as opposed to males would show weaker relationships between the origin statuses and respondent's occupational status, weaker relationships between respondent's educational attainment and respondent's occupational status, stronger negative relationships between

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[1]See Chapter I (19-27).

[2]See Chapter I (27-33).

family status and respondent's occupational status, and stronger negative relationships between number of children and respondent's occupational status.

The literature on the female role, although written with a functional emphasis, has not been set down in the context of social stratification or factors affecting occupational status. Hence, there still remains a gap between the functional theory of stratification and the literature of the female role. The linkage to fill this gap can be found in the work of Zelditch (1955: 307-352).

Zelditch, using Parson's framework, theorized that a certain amount of differentiation is necessary for the existence of any social system. A social system which is stable over time will differentiate roles such that instrumental leadership, focused on the achievement of tasks, and expressive leadership, focused on emotionally supportive behaviors, are discriminated within that system. Now, the nuclear family can be considered as a special case of the more general class of social systems. As a result, in order to remain stable over time, the nuclear family must also differentiate roles such that the instrumental and expressive functions are fulfilled.

Working from this theoretical basis Zelditch (1955: 314-315) hypothesized: "If the nuclear family constitutes a social system stable over time, it will differentiate roles such that instrumental leadership and expressive leadership of the system are discriminated."

Further, because the nuclear family has peculiar features not common to all systems (age and sex differences), Zelditch (1955: 315) was able to state a hypothesis about the "allocation" of these roles to system members: "If the nuclear family consists in a defined 'normal' complement of the male adult, female adult and their immediate children, the male adult will play the role of instrumental leader and the female adult will play the role of expressive leader."

Zelditch tested these hypotheses on a cross-cultural sample of 56 societies. Although there were a few special cases, his hypotheses were supported.

Of particular interest here is the status of his hypotheses in regard to American society. Zelditch concludes that the male plays the instrumental role and the female the expressive role. Zelditch (1955: 339)[1] describes these roles as follows:

> ... the American male, by definition, must "provide"
> for his family. He is responsible for the support of
> his wife and children. His primary area of performance
> is the occupational role, in which his status fundamen-
> tally inheres; and his primary function in the family is
> to supply an "income," to be the "breadwinner."
> ... American women, on the other hand, tend to hold
> jobs before they are married and to quit when "the day"
> comes; or to continue in jobs of a lower status than

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[1]Parsons (1955: 13-14) describes these roles of males and fe-
males in the same manner. The husband is the instrumental leader
in the American family by virtue of the importance of his occupa-
tional role. The wife is the expressive leader who offers emo-
tionally supportive behavior. Further, although there are many
women in the labor force, there is not symmetry between the
sexes in this respect. The role of "housewife" is still the pre-
dominant one for the American woman.

their husbands. And not only is the mother the focus
of emotional support ..., but much more exclusively so
than in most societies .... The cult of the warm, giv-
ing "Mom" stands in contrast to the "capable," "compe-
tent," "go-getting" male.

Zelditch and Parsons then, have provided the necessary link
between the functional theory of stratification and the different
roles of males and females. They have done so by stating that
differentiation of roles into instrumental and expressive leader-
ship must occur if a social system is going to be stable. This
differentiation must also occur in the nuclear family since it is
a social system in miniature. Because of age and sex differen-
tials in American society, the male is the instrumental leader and
the female the expressive leader. Central to being the instru-
mental leader in American society is obtaining an occupation;
central to being the expressive leader in American society is
offering emotionally supportive behavior in the role of "house-
wife." The warm, giving "Mom" stands in contrast to the "go-
getting," occupationally oriented male.

Given this difference in the central aspects of the roles of
males and females, one would expect that females would not be
able to effectively compete with males in the occupational sphere.
Thus Zelditch and Parsons emphasize that the female's occupation
is usually one of intermediate status. Further, if this is the
case, one would expect the differences mentioned earlier in the
attaining of occupational status for females as opposed to males.

The functional theory of stratification or differentiation then,
when applied and linked to a consideration of the differential roles

of females and males in American society, leads to an expectation of differences in the attaining of occupational status for females and males. Yet, this research has indicated the same factors appear to operate in the same fashion to very similar degrees upon the occupational status of females and males. This apparent inconsistency between the findings of this research and the functional theory of stratification, as proposed by Davis and Moore, and Parsons, raises some interesting questions. Discussion of these follows.

Prior to enumerating any criticism of the functional theory of stratification on the basis of the findings of this research, the following question should be posed. Is the socioeconomic index of occupational status used in this research a valid indicator of what Davis and Moore have called differentially rewarded positions and what Parsons has labelled differentially evaluated social roles? The answer to this question is yes. In fact, the functional theory of stratification has been strongly criticized for its near equation of social positions or social roles with occupational roles (Wrong, 1959: 774),[1] since such an equation relegates the concept of social stratification to a hierarchy of occupations. As a result, a consideration of the functional theory of stratification within the context of this research which utilizes ranked

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[1]Buckley (1958: 373) makes somewhat the same point, stating that this limited usage of the concept of social stratification ignores the historical development involved in each particular stratification system.

occupations seems appropriate.

As stated, when the functional theory of stratification is applied and linked to a consideration of the differential role of females and males, one is led to expect differences in the process of attaining occupational status for females and males. Yet, the findings of this research indicate the same factors operate in the same fashion to very similar degrees upon female and male occupational status. Consequently, one might simply conclude that the general principles of stratification set down by Davis and Moore, and Parsons, are inadequate in that when applied and linked to a consideration of the different roles of females and males in order to explain occupational status within the American stratification system, they can not account for the occupational status of that more than one-third of the labor force which is female.

It might be argued that the above conclusion is unwarranted in that it is not the functional theory of stratification which is inadequate, but rather its logical application to females. As suggested earlier,[1] perhaps females are no longer experiencing role ambiguity to the extent to which the literature leads one to expect. This is a possible alternative conclusion. However, simply because the literature on the female role is incorrect or dated does not mean, necessarily, that the functional theory of stratification is adequate. As previously illustrated, the literature on the

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[1]See Chapter VI (141).

female role and the functional theory of stratification are closely linked.

Regardless of which of the above conclusions one accepts about the functional theory of stratification, it seems that, in view of the findings of this research, the theory and its logical application must be reworked so as to be able to explain how those females now in the labor force have been motivated toward occupational achievement and obtaining the education necessary for the occupational status they exhibit. As implied above, this would involve either explaining the manner in which these females have been able to resolve the role conflicts and ambiguities so heavily emphasized in the existing literature, or explaining why these role conflicts and ambiguities have dissipated over the past few decades. In any case, as it now stands, the functional theory of stratification and its linked logical application provide an inadequate theoretical framework on which to base an explanation of the occupational status characteristic of females.

The relationship of this research to the functional theory of stratification has been considered in this section. Initially, it was indicated that, in view of the nature of most general stratification theories, there is a need for comparative, interactional, and multidimensional social status studies if the gap between theory and research in this area is going to be lessened. Subsequent to this, some specific implications of this research were drawn for the functional theory. The findings of this research seemingly indicate that the functional theory of stratification, as

presently proposed, and its logical application provide an inadequate theoretical basis for the explanation of the occupational status of that more than one-third of the labor force which is female.

<center>Summary of Theoretical Points and
Additional Theoretical Discussion</center>

This chapter has considered the findings of this research in relation to three bodies of theoretical literature: female role literature, factors affecting occupational status, and the functional theory of stratification. Certain theoretical questions have been raised and some theoretical conclusions have been reached about each of these bodies of theory on the basis of the somewhat unexpected character of the findings. These theoretical points are summarized here along with additional theoretical discussion. Because the female role literature and the functional theory of stratification are intimately linked, this section first summarizes and then deals with the other two bodies of theory collectively.

The findings of this research have suggested two major theoretical conclusions about the existing theory on the factors affecting occupational status which, until this research, have been conceptualized only in terms of male occupational status. First, the extant conceptualization (for males) appears to be correct. In decreasing order, educational attainment, social origins, and race are factors which affect occupational status.[1] Second, our

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[1] Again, this ordering is subject to the qualifications discussed earlier.

novel inclusion of females in occupational status research indicates that the extant conceptualization (for males) does not have to be altered when females are brought under consideration. The comparison of factors affecting female occupational status to the already known factors affecting male occupational status performed in this research, shows that the same factors appear to operate in the same fashion to very similar degrees upon female and male occupational status.

In appears then that, in a general sense, the occupational system in American society does not discriminate by sex. The system offers the best chances for high occupational status to those individuals who have high levels of educational attainment, who come from high social origins, and who are white. Whether they are females or males does not appear to matter.

In regard to the female role literature, it has been concluded that it is an inadequate theoretical base from which to predict the relationship of the various factors measured in this research to the occupational status of American females. Because of the intimate link of this literature to the functional theory of stratification, the latter has also been called into question. It is interesting to speculate where the apparent error has occurred because its discovery has profound implications for the social organization of American society in terms of sex roles.

The prior critique of the functional theory of stratification was a two step process. First, it was shown that the female role literature and the functional theory of stratification are written

with a functional emphasis. Second, these two bodies of litera-
ture were linked using Zelditch's (1955) work on role differen-
tiation in the nuclear family. It is apparent then, that an error
may occur at any one or all of three places: (1) the female role
literature, (2) Zelditch's position on role differentiation in the
nuclear family, or (3) the general principles of stratification set
down by Davis and Moore (1945).

Concerning the female role literature, the question has al-
ready been raised whether females are experiencing high occupa-
tional status hindering role ambiguity to the extent to which the
literature leads one to expect. This may well be the case for a
number of reasons. First, many of the theoretical contentions
in the female role literature are unsupported by research.
Second, the actual research on the female role is limited in scope.
No national sample studies of the female role have been conducted.
Third, and perhaps most important, is the fact that the research
on the female role is dated. Little, if any, empirical research
on the female role, and more particularly female role ambiguity,
has been conducted since the early fifties. It may well be that fe-
male role ambiguity once existed on a large scale, but now has
dissipated to the point where it does not appreciably affect the
occupational status of females in a negative manner. Cavan (1969:
35) at least hints at such a possibility when she argues that since
World War II women no longer have to justify a career; they may
simply work if they wish.

Certain questions may also be raised about Zelditch's (1955)

position on role differentiation in the nuclear family. He has stated that, as a social system, the nuclear family must differentiate roles such that instrumental and expressive leadership functions are performed. He further argues that in American society the male plays the instrumental role (supplying an income) and the female plays the expressive role (warm, giving mom). One wonders if the allocation of instrumental and expressive functions in the nuclear family is as distinctly differentiated by sex today as Zelditch states. The per cent of married women working more than doubled between 1940 and 1961. In 1940, 16.7 per cent of married women, sixteen and over, were working; but by 1969 this figure had risen to 40.4 per cent (U.S. Bureau of the Census, 1970: 223). Cavan (1969: 35) argues this dramatic increase in the proportion of married women working has forced men to adjust their own roles. Men are taking on more expressive functions (household tasks) as married women increasingly engage in instrumental tasks (occupations). In short, the division of labor into household activities and occupational activities by sex may be breaking down in American society.

The above should not be taken to mean that instrumental and expressive functions are not being performed in the American family as they once were. Both tasks are still being performed, but they may both be increasingly incorporated into both the roles of females and males. If this is the case, then both females and males increasingly are playing multiple roles, and there may be considerably more strain for both females and males today than

when a clearer sexual division of labor existed in American society. In any case, the organization of American society by sex may well be changing as females increasingly engage in instrumental tasks.

If any of the above speculations about either the female role literature or Zelditch's contention about role differentiation in the nuclear family are supported by the necessary future research, then the general principles of stratification set down by Davis and Moore could still stand in spite of the findings of this research. It does not seem appropriate to engage in additional criticism of the functional theory of stratification as so much has been done elsewhere and our criticism of it has been forwarded via its link to the work of Zelditch and the female role literature.

This section has summarized the theoretical conclusions arising from this research and engaged in some additional theoretical speculations. The theoretical discussions presented in this chapter have implications for future research.

Suggestions for Future Research

1. Longitudinal studies concerned with female role ambiguity in American society, specifically as it relates to female occupational choice. This research should not be conducted on single occupations only, as it has been in the past, but on a wide range of occupations simultaneously.

2. Studies directed at discovering whether or not race interacts with social origins and/or educational attainment as these

variables affect female and male occupational status.

3. Studies directed at discovering additional individual factors which play a role in determining female occupational status, and in what ways they similarly or differentially affect the occupational status of males.

4. Comparative occupational status studies, both cross-societal and historical, with the specific intention of relating their findings to general theories of stratification.

5. Occupational status studies aimed at the investigation of types of strata interaction and extent of social interaction in relation to the development of stratification as indexed by occupational status.

6. Multidimensional social status studies for the purpose of comparing their findings to the findings derived from occupational status studies.

7. Research aimed at discovery of the degree to which females and males perform expressive and/or instrumental functions in the American family.

A Final Statement

In our first chapter, we noted that this study is intended as a logical follow-up research to the comparative study of intergenerational occupational mobility patterns of American females and males (DeJong et al., 1971). But because of analytical problems, we, like Blau and Duncan (1967: 153), were forced to conceptualize this study as factors instrumental in female and male

occupational status rather than factors affecting the intergenera-
tional occupational mobility of females and males. Consistent
also with their procedure, we now generalize our empirically de-
rived conclusions about factors instrumental in female and male
occupational status to conclusions about factors which affect the
intergenerational occupational mobility of females and males.
As a result, the individual characteristics which affect intergen-
erational occupational mobility patterns are the same and operate
in the same fashion to very similar degrees for American fe-
males and males.

This final conclusion must be tempered. As Blau and Duncan
(1967: 8) have noted, there has been very little systematic re-
search on the factors which affect occupational status and hence
occupational mobility, even for males. Clearly then, the analysis
performed here is only an initial step to an understanding of the
processes of female and male occupational status and mobility.
Many more individual characteristics of females and males must
be researched before we can begin to delineate with assurance
how the many factors involved operate to produce the occupa-
tional status and intergenerational occupational mobility patterns
characteristic of American females and males.

APPENDIX

FREQUENCY AND PERCENTAGE DISTRIBUTIONS
FOR FEMALES AND MALES; AND PREDICTED SCORES
OF RESPONDENT'S OCCUPATIONAL STATUS FOR THE
CROSS-CLASSIFIED CATEGORIES OF FATHER'S EDUCA-
TIONAL ATTAINMENT, FATHER'S OCCUPATIONAL STA-
TUS, AND RESPONDENT'S EDUCATIONAL ATTAINMENT
FOR FEMALES AND MALES

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TABLE A-1 FREQUENCY AND PERCENTAGE DISTRIBUTIONS
OF RESPONDENT'S OCCUPATIONAL STATUS FOR FEMALES
AND MALES

Occupational Status Score	Females Frequency	Percent	Males Frequency	Percent
00-05	2	0.3	13	1.2
06-10	73	9.3	104	9.7
11-15	52	6.7	150	13.9
16-20	154	19.7	214	19.9
21-25	27	3.5	46	4.3
26-30	2	0.3	35	3.2
31-35	6	0.8	43	4.0
36-40	7	0.9	17	1.6
41-45	93	11.9	51	4.7
46-50	66	8.5	94	8.7
51-55	48	6.1	30	2.8
56-60	5	0.6	6	0.6
61-65	116	14.9	26	2.4
66-70	42	5.4	135	12.5
71-75	68	8.7	22	2.0
76-80	13	1.7	45	4.2
81-85	7	0.9	26	2.4
86-90	0	0.0	13	1.2
91-96	0	0.0	7	0.6
Total	781	100.0	1077	100.0

Mean for Females = 40.30

Mean for Males   = 38.37

TABLE A-2 FREQUENCY AND PERCENTAGE DISTRIBUTIONS
OF RESPONDENT'S FATHER'S OCCUPATIONAL STATUS FOR
FEMALES AND MALES

Father's Occu. Status Score	Females Frequency	Percent	Males Frequency	Percent
00-05	14	1.2	16	1.6
06-10	143	12.3	104	10.2
11-15	328	28.1	330	32.4
16-20	160	13.7	144	14.1
21-25	32	2.7	30	2.9
26-30	29	2.5	20	2.0
31-35	45	3.9	36	3.5
36-40	15	1.3	17	1.7
41-45	47	4.0	26	2.6
46-50	81	7.0	65	6.4
51-55	28	2.4	24	2.4
56-60	12	1.0	8	0.8
61-65	4	0.3	9	0.9
66-70	127	10.9	103	10.1
71-75	13	1.1	9	0.9
76-80	59	5.1	53	5.2
81-85	9	0.8	14	1.4
86-90	2	0.2	3	0.3
91-96	17	1.5	7	0.7
Total	1165	100.0	1018	100.0

Mean for Fathers of Females = 28.60

Mean for Fathers of Males   = 31.10

TABLE A-3 FREQUENCY AND PERCENTAGE DISTRIBUTIONS OF RESPONDENT'S EDUCATIONAL ATTAINMENT FOR FEMALES AND MALES

Respondent's Educ. Attain.	Females		Males	
	Frequency	Percent	Frequency	Percent
No Schooling	7	0.5	14	1.3
1-4 years	35	2.7	60	5.4
5-7 years	103	8.0	88	8.0
8 years	145	11.3	152	13.8
Some High School	294	22.9	249	22.6
High Sch. Grad.	431	33.5	235	21.3
Some College	167	13.0	159	14.4
College Grad. or More	103	8.0	144	13.1
Total	1285	100.0	1101	100.0

TABLE A-4 FREQUENCY AND PERCENTAGE DISTRIBUTIONS OF RESPONDENT'S FATHER'S EDUCATIONAL ATTAINMENT FOR FEMALES AND MALES

Father's Educ. Attain.	Females		Males	
	Frequency	Percent	Frequency	Percent
No Schooling	57	5.5	81	9.0
1-4 years	165	15.8	141	15.7
5-7 years	204	19.5	160	17.9
8 years	244	23.3	190	21.2
Some High School	140	13.4	107	11.9
High Sch. Grad.	125	12.0	119	13.3
Some College	54	5.2	45	5.0
College Grad. or More	56	5.4	53	5.9
Total	1045	100.0	896	100.0

TABLE A-5 FREQUENCY AND PERCENTAGE DISTRIBUTIONS
OF RESPONDENT'S RACE FOR FEMALES AND MALES

Respondent's Race	Females		Males	
	Frequency	Percent	Frequency	Percent
White	1111	87.1	961	87.8
Negro	165	12.9	134	12.2
Total	1276	100.0	1095	100.0

TABLE A-6 FREQUENCY AND PERCENTAGE DISTRIBUTIONS
OF RESPONDENT'S FAMILY STATUS FOR FEMALES AND
MALES

Respondent's Family Status	Females		Males	
	Frequency	Percent	Frequency	Percent
Single	45	8.6	56	14.1
Married	481	91.4	341	85.9
Total	526	100.0	397	100.0

TABLE A-7 FREQUENCY AND PERCENTAGE DISTRIBUTIONS
OF RESPONDENT'S NUMBER OF CHILDREN FOR FEMALES
AND MALES

Respondent's No. of Child.	Females		Males	
	Frequency	Percent	Frequency	Percent
0	80	11.3	74	12.2
1	119	16.8	96	15.8
2	175	24.7	147	24.1
3	151	21.3	108	17.7
4	84	11.9	86	14.1
5	45	6.4	44	7.2
6	18	2.5	25	4.1
7	12	1.7	10	1.6
8 or More	24	3.4	19	3.1
Total	708	100.0	609	100.0

TABLE A-8 PREDICTED MEAN SCORES OF FEMALE OCCUPATIONAL STATUS FOR THE CROSS-CLASSIFIED CATEGORIES OF Fe, Fo, AND Re IN THE RESTRICTED MODEL (N = 613)

	Father's Educational Attainment			
	Low		High	
	Father's Occupational Status		Father's Occupational Status	
	Low	High	Low	High
Resp's Ed Attain Low	20.7	20.7	20.7	20.7
		5.5	3.6	3.6
				5.5
	__20.7__	__26.2__	__24.3__	__29.8__
Resp's Ed Attain High	20.7	20.7	20.7	20.7
	25.2	5.5	3.6	3.6
		25.2	25.2	5.5
				25.2
	__45.9__	__51.4__	__49.5__	__55.0__

TABLE A-9 PREDICTED MEAN SCORES OF FEMALE OCCU-
PATIONAL STATUS FOR THE CROSS-CLASSIFIED CATE-
GORIES OF Fe, Fo, AND Re IN THE FULL MODEL (N = 613)

	Father's Educational Attainment			
	Low		High	
	Father's Occupational Status		Father's Occupational Status	
	Low	High	Low	High
Resp Ed Low	20.7	20.7	20.7	20.7
		9.5	2.3	2.3
				9.5
				-5.0
	<u>20.7</u>	<u>30.2</u>	<u>23.0</u>	<u>27.5</u>
Attain High	20.7	20.7	20.7	20.7
	24.3	9.5	2.3	2.3
		24.3	24.3	9.5
		-5.2	3.4	24.3
				5.2
	<u>44.0</u>	<u>49.3</u>	<u>50.7</u>	<u>62.0</u>

TABLE A-10 PREDICTED MEAN SCORES OF MALE OCCU-
PATIONAL STATUS FOR THE CROSS-CLASSIFIED CATE-
GORIES OF Fe, Fo, AND Re IN THE RESTRICTED MODEL

	Father's Educational Attainment			
	Low		High	
	Father's Occupational Status		Father's Occupational Status	
	Low	High	Low	High
R L e o s w p s	22.7	22.7	22.7	22.7
		8.4	2.9	2.9
				8.4
	22.7	31.1	25.6	34.0
E d A H t i t g n h	22.7	22.7	22.7	22.7
	17.6	8.4	2.9	2.9
		17.6	17.6	8.4
				17.6
	40.3	48.7	43.2	51.6

TABLE A-11 PREDICTED MEAN SCORES OF MALE OCCU-
PATIONAL STATUS FOR THE CROSS-CLASSIFIED CATE-
GORIES OF Fe, Fo, AND Re IN THE FULL MODEL (N = 840)

	Father's Educational Attainment			
	Low		High	
	Father's Occupational Status		Father's Occupational Status	
	Low	High	Low	High
Response Low	24.2	24.2	24.2	24.2
		7.7	1.6	1.6
				7.7
				-4.1
	_24.2_	_31.9_	_25.8_	_29.4_
Ed Att High	24.2	24.2	24.2	24.2
	15.7	7.7	1.6	1.6
		15.7	15.7	7.7
		-4.0	-1.4	15.7
				14.2
	_39.9_	_43.6_	_40.1_	_63.4_

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