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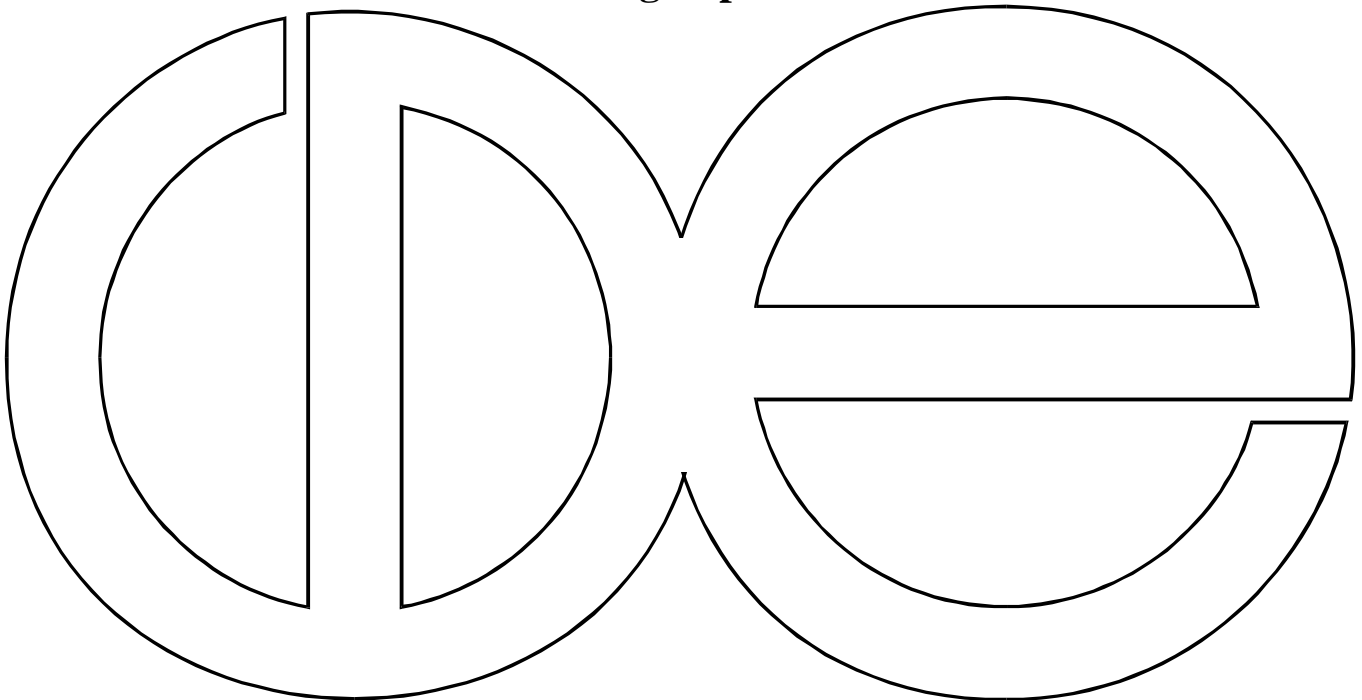
**Choosing a Measure of Occupational Standing:
How Useful are Composite Measures in Analyses of
Gender Inequality in Occupational Attainment?**

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Title Page

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"Socioeconomic Indexes of Occupational Status: A Review, Update, and Critique," Sociological Methodology (August 1997). Paul C. LePore and John Robert Warren. "A Comparison of Single-Sex and Coeducational Catholic Secondary Schooling: Evidence from the National Educational Longitudinal Study of 1988," American Educational Research Journal (Fall 1997).

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Hauser, Brett V. Brown, and William Prosser (eds.) Indicators of Children's Well-Being.
New York: Russell Sage Foundation. 1997; R.M. Hauser and Min-Hsiung Huang,
"Verbal Ability and Socioeconomic Success: A Trend Analysis," Social Science
Research 26 (September 1997).

Abstract

We ask whether and how indexes or scales of occupational socioeconomic standing affect inferences about gender differences in occupational success and occupational attainment processes. To address these questions, we report parallel analyses of the role of gender in the process of occupational attainment 15 times, each time using a different measure of occupational standing. We analyze data from the 1994 General Social Survey (GSS) and the 1986-1988 Survey of Income and Program Participation (SIPP). We find that global or composite indexes of occupational socioeconomic standing are too heterogeneous to be useful in studies of occupational stratification, especially studies of gender differences. First, women often have higher levels of education than men in the same occupation, while men usually have higher earnings than women in the same occupation. Thus, when a global index is used, the relative standing of men's and women's occupations is an arbitrary function of the weights given to occupational education and occupational earnings. Second, occupational earnings do not appear to be the basis of occupational persistence, either within or across generations. We conclude that investigators should not use standard, composite measures of occupational socioeconomic standing when comparing the occupations of men and women. It is preferable to index occupations separately by each of their socioeconomic characteristics, or to use other, direct, measures of occupational characteristics.

Occupation is a key indicator of general social standing. If you know what people do for a living, then you can reasonably guess how much schooling they have, how much money they make, how they spend their money, what their friends are like, and even how healthy they are likely to be in later life. Whether jobs are characterized in terms of occupational hierarchies or relational class positions, it is clear that the kind of work that people do both reflects and affects life chances. For this reason, social scientists often rank occupations. Sometimes, they rank occupations in terms of prestige ratings or how they fit into theoretically derived class positions. Since the early 1960s, researchers have often ranked or scaled occupations using composite or global measures of occupational socioeconomic standing, like those introduced by Duncan (1961) and Nam (1963). The characteristic feature of such measures is that the rating of each occupational category combines information about the educational attainment and income or earnings that is typical of its incumbents. While there has been much debate about the relative merits of composite indexes relative to occupational prestige or social class, much less work has focused on the ways in which composite measures of occupational socioeconomic standing are constructed. This may be an important omission, because the properties of these measures affect substantive conclusions.

In this paper, we ask whether the choice among available measures of occupational standing significantly influences conclusions about gender differences in occupational standing and in the process of occupational attainment. We focus on gender differences in occupational standing and attainment because of their theoretical and social importance and because they strikingly illustrate how different scales lead to different substantive conclusions. Ultimately, we argue against the use of composite scales of occupational standing, in favor of more direct measures of occupational characteristics. We begin by comparing men's and women's average

scores on 15 measures of occupational standing. Next, using the same 15 measures, we compare estimates of intergenerational occupational persistence among men and women. Finally, we estimate a series of regression models that describe the process of occupational stratification, and we show how findings about that process are affected by different measures of occupational standing. Our primary purpose here is not to investigate gender differences in occupational success or attainment processes, but we think that such studies should be informed by a better understanding of the measures used to describe women's and men's jobs and occupations.

MEASURES OF OCCUPATIONAL SOCIOECONOMIC STANDING

The availability of Duncan's SEI, Nam's SES, and related measures made possible a new generation of research on the process of occupational attainment and on the correlates of occupation. These measures are used with frequency because they are easy to use (i.e., it is convenient to be able to express occupations in terms of just one scalar variable) and because they purport to represent an important aspect of social life. A review of articles in the 1993 through 1997 editions of the American Sociological Review, the American Journal of Sociology, and Social Forces shows that measures of occupational standing, like Duncan's SEI or Nam's SES, have appeared in at least 21 research articles in this recent period.

In order to choose among measures of occupational standing, it is important to understand how they are constructed. The Duncan SEI (and its later relatives) are based on the relationships among occupational prestige, occupational education, and occupational earnings. The prestige of occupations has been ascertained periodically in the United States (Reiss, 1961; Siegel, 1971; Nakao and Treas, 1994) and Canada (Pineo and Porter, 1967) by asking survey respondents to rate a series of jobs. The job descriptions are mapped into Census occupation titles, and each occupation title is assigned its rating in the survey.¹ In the United States,

occupational education and occupational earnings have usually been calculated from Census data. For example, Hauser and Warren (1997) defined occupational education as the proportion of occupational incumbents who completed at least one year of post-secondary schooling, and they defined occupational earnings as the proportion of occupational incumbents who earned at least \$25,000 per year. In constructing SEIs, researchers regress occupational prestige ratings on occupational education and earnings. The estimated parameters of the regression model (the coefficients of occupational education and earnings) are used to calculate predicted prestige scores for each occupational category: these predicted values are SEI scores. Because SEI scores are the weighted sum of two occupational characteristics, we are calling measures constructed in this fashion “composite” measures of occupational standing.

Duncan's (1961) seminal work was based on the characteristics of male occupational incumbents in the 1950 U.S. Census and on the 1947 National Opinion Research Center (NORC) study of occupational prestige. Since then, several variants of the Duncan SEI have been constructed. First, because they pertain to specific decennial Census occupational classifications, which have changed at each Census enumeration, and because occupational education and earnings have changed across time and relative to changes in classification, SEIs have been updated or re-estimated for the 1960, 1970, 1980, and 1990 Census occupational classifications. Second, the relative weights of occupational education and earnings have been re-estimated from studies of occupational prestige in the 1940s, 1960s, and 1980s. Third, SEIs have been estimated from either the occupational education and earnings characteristics of male occupational incumbents or the occupational and earnings characteristics of all occupational incumbents. Not until the late 1970's were SEI scores constructed in the United States (Powers and Holmberg, 1978; Stevens and Featherman, 1981) and Canada (Blishen and Carroll, 1978) that used the

occupational characteristics of both men and women.²

Following the methodology developed by Nam (1963), Nam-Powers measures of occupational socioeconomic status (SES) are obtained by

(a) arraying the detailed list of census occupations for the experienced labor force according to the median educational level of the incumbents; (b) arraying the same occupations separately according to the median income level of the incumbents; (c) using the number of persons engaged in each occupation, determining the cumulative interval of persons in each occupation for each of the two arrays, beginning with the lowest-ranked occupation, and (d) averaging the midpoints of the two cumulative intervals of occupants and dividing by the total of persons in all occupations (Nam, Terrie and Schmertmann, 1994).

Like Duncan-style SEIs, Nam-Powers SES scores are weighted averages of functions of occupational education and occupational earnings; by design, the relative weights of the two socioeconomic components are equal. The Nam-Powers SES score is an equally weighted average of the cumulative share of occupational incumbents below the median for each occupation line in the cumulative education and income distributions. These scores are also “composite” measures of occupational standing, because they combine two occupational characteristics into one scale. Nam-Powers SES scores were originally developed for use with 1950 Census occupation categories, but have subsequently been updated for use with each succeeding Census classification.

PROBLEMS WITH SOCIOECONOMIC INDEXES FOR OCCUPATIONS

We believe that the choice among occupational prestige, the Duncan SEI (and its relatives), and the Nam-Powers SES (and its relatives) and among total-, male-, and female-

based composite measures is consequential. However, before Hauser and Warren's (1997) review, update, and critique of the SEI, other potentially relevant considerations in the construction of composite measures of occupational socioeconomic standing were overlooked. Specifically, there are possible methodological shortcomings in all such measures, and these may particularly affect comparative analyses of men's and women's occupational attainments.

First, no composite measures of occupational socioeconomic standing have taken into account the fact that men are more likely than women to work full time.³ When researchers constructed measures that were based in part on the occupational earnings of male and female incumbents, they used annual earnings figures that reflect both a wage-rate and hours worked per year (Nam and Powers, 1983). Furthermore, the proportion of women working part-time (and thus the significance of this phenomena) varies considerably from occupation to occupation and over time (Tyree and Treas, 1974). We initially agreed with Featherman and Stevens (1982) that labor supply differentials might explain why male-based measures have often been found to have greater external validity than measures based on the total work force. That is, a better specification of the socioeconomic standing of all occupations might be obtained if differences in labor supply were controlled in the construction of the index. However, Hauser and Warren (1997) found few differences in the behavior of earnings-based and wage-rate-based SEIs.

Second, the Duncan SEI (and its relatives) have, to varying degrees, suffered from specification problems. Because SEIs are based on the regression of occupational prestige on occupational education and earnings, these indexes are valid only to the degree that the regression model is descriptively accurate. However, as Fox (1991), Friendly (1991), and Hauser and Warren (1997) have described in detail, the validity of the regression model cannot be taken for granted. Occupational prestige has always been specified as a percentage - the

percentage of raters who say that the occupation in question is above a given prestige threshold. Thus, the residuals from the regression equation are necessarily heteroscedastic. Moreover, the parameters of many earlier SEI prediction equations have been dominated by substantial outliers. For example, Friendly (1991) showed that Duncan's (1961) original SEI was heavily influenced by three outliers (ministers, railroad engineers, and railroad conductors), and that Duncan would have come to very different conclusions about the relative contribution of occupational education and earnings to occupational status had he eliminated these three categories from his analysis. Finally, previous SEI regressions have weighted each occupation category equally. The use of unweighted regressions makes sparsely populated occupational categories as influential as larger categories in determining the weights of the socioeconomic variables.

Although the Nam-Powers SES is not affected by issues of model specification, it is subject to related problems. First, like the SEI, it has been based on occupational earnings, not on wage rates. Second, while the Duncan SEI weights occupational education and occupational earnings on the basis of their relationship to occupational prestige, Nam-Powers SES weights the two socioeconomic components equally. That weighting is arbitrary, and it is even less defensible than the implicit assumption that occupational prestige is an appropriate criterion to use in weighting occupational education and occupational earnings. In their analyses of occupational characteristics from the 1990 Census, Hauser and Warren (1997) estimated a series of structural equation models of intergenerational occupational stratification. In effect, they embedded Duncan's SEI regression within a model of intergenerational stratification among jobholders. They found that the weights of occupational education and occupational earnings were far different when occupational prestige was the criterion than when persistence of occupational standing across generations was the criterion. In fact, the estimated weight for the

earnings component was close to zero when a composite occupational status construct was the criterion. Their findings imply that the Duncan SEI and the Nam-Powers SES are both invalid in studies of intergenerational occupational stratification to the extent that they are based on occupational earnings.

Hauser and Warren (1997) constructed male-based, total-based, and female-based SEIs using data from the 1990 Census and from the 1989 NORC prestige survey (Nakao and Treas, 1994). Their occupational earnings data were adjusted for labor supply, that is, for hours worked per week and weeks worked per year. In addition, they took other steps to overcome the specification problems described above. First, they corrected for heteroscedasticity by constructing indexes that were based on a transformation of the prestige measure. Instead of using "percentage rating occupation X above a threshold," the authors used a started logit of that percentage.⁴ Second, they transformed occupational education and earnings in the same way to account for non-linearities in the relationships between men's and women's occupational education and earnings. Third, they estimated the influence of outliers in their regressions, and they eliminated several extreme outliers. Finally, they estimated weighted regressions in which larger occupational categories were more influential than smaller ones in determining the parameters of the model. Their preferred specifications of occupational socioeconomic status improved the prediction of occupational prestige by the socioeconomic variables, but it did not eliminate the core problem of combining occupational education and occupational earnings in a global, composite measure of occupational standing.

CHOOSING AMONG MEASURES OF OCCUPATIONAL STANDING

In this paper we compare measures of occupational socioeconomic standing that can be used with the 1980 Census occupational classification system in analyses of occupational

attainment among women and men. We use 15 such measures—seven variants of the Duncan SEI, one Nam-Powers SES, one measure of occupational prestige, three measures of occupational education, and three measures of occupational earnings. Stevens and Cho (1985) computed total- and male-based SEI scores for each 1980-basis occupation category by taking weighted averages of the socioeconomic scores of component 1970-basis categories. Nakao and Treas (1994) constructed entirely new male- and total-based 1980-basis SEIs by regressing occupational prestige scores which were produced in 1989 by NORC on the characteristics of occupational incumbents in the 1980 Census. Hauser and Warren (1997) constructed another new set of total-, male-, and female-based 1980-basis SEI scores by regressing the 1989 NORC prestige scores on the characteristics of occupational incumbents in the 1990 Census and then mapping their scores back into 1980-basis Census lines, which differed little from those of the 1990 Census.⁵ Finally, we use total-based Nam-Powers SES scores (Nam and Terrie, 1988), 1989 NORC prestige scores (Nakao and Treas, 1991), and total-, male-, and female-based occupational education and earnings measures that were produced by Hauser and Warren (1997).

The choice of male-based versus total-based socioeconomic measures has important consequences for analyses of gender-based patterns of occupational inequality. Powers and Holmberg (1978), Stevens and Featherman (1981), Featherman and Stevens (1982), Boyd and McRoberts (1982), Cooney, Clague, and Salvo (1982), Boyd (1986), and Nakao and Treas (1994) each found that conclusions about male-female differences in the process of occupational attainment are significantly different when male-based composite measures and total-based composite measures are used in attainment research. But there are more choices to be made than simply choosing between a male-based scale and a total-based scale. We might choose between an SEI or a prestige scale or a more direct measure of an occupation's characteristics (for

example, task complexity, occupational education, authority level, etc.) If a composite measure is chosen, should it be a Duncan SEI or Nam-Powers SES? If a Duncan SEI is chosen, should a total-based or male-based score be used? If a total-based Duncan SEI is used, does it matter which SEI (Stevens-Cho, Nakao-Treas, or Hauser-Warren) is chosen? By what criteria might we decide which measure of occupational standing is best to use in a given circumstance?

We see three major criteria that researchers have used to choose one scale of occupational standing over another. The first criterion is simply convenience. Analysts use the SEI that has been used in previous studies; they use the measure that is easiest for them to access in their computing environment; they use the measure that has been pre-coded as a variable in the dataset they are using; they choose the measure that they have used in the past. Thoughtful choice might be given to whether the Duncan SEI or the Nam-Powers SES should be used, or whether a male-based or a total-based SEI scale should be used, but rarely is a conscious choice made among all of the available scales, scores, or indexes. This is not all bad: It increases comparability, but perhaps at the cost of other forms of validity.

Second, in occupational mobility studies, explained variance and model fit have been used as criteria to assess the usefulness of SEI. For example, the consensus in the stratification literature is that composite measures of occupational socioeconomic standing are preferred over prestige scales for the purpose of hierarchically ranking occupations (Featherman, Jones and Hauser, 1975; Featherman and Hauser, 1976a; Treas and Tyree, 1979; Featherman and Stevens, 1982). As Featherman and Hauser (1976b) argue, "more variance in occupational status attainment is explained when the process is measured by socioeconomic units than by prestige units" so prestige scores can be seen as "error-prone" estimates of the socioeconomic position of occupations.

The criterion of explained variance was also used in Hauser and Warren's (1997) evaluation of their composite SEI measure. They estimated structural equation models of intergenerational occupational inheritance. They found that occupational earnings is not strongly linked from generation to generation—rather, occupational education is the essential feature of occupations that persists across careers and across generations. Hauser and Warren argue against the use of composite measures like SEI (including their own SEIs) in favor of occupational education, if maximization of explained variance in occupational attainment is the criterion for choosing a measure of occupational standing. This is not a narrow technical issue. In this context, since the units (occupational categories) are the same, while metrics vary, maximization of explained variance means choosing the metric that best accounts for the observed degree of intergenerational occupational persistence.⁶

The third, and by far the most common criterion for choosing an occupational status scale is whether observations of the variable confirm what we already know: That is, does the scale have face validity? Maximizing intergenerational occupational status correlation is one example of this criterion. Another expectation we might have of an occupational scale is that gender differences in labor market success should be reflected in the scale values of men and women. We know that women are disadvantaged in the labor market compared to men. Men make more money than women in the same job (Treiman and Terrell, 1975b; Featherman and Hauser, 1978; Suter and Miller, 1973; Marini, 1980; Goldin, 1990), they have more authority in the workplace (England, 1979; Robinson and Kelley, 1979; Wolf and Fligstein, 1979a; Wolf and Fligstein, 1979b; Reskin and Roos, 1992; McGuire and Reskin, 1993), and so on. It is thus reasonable to expect that a valid measure of occupational standing would reflect these inequalities between women and men in the labor force.

GENDER AND OCCUPATIONAL STANDING

Despite the expectation that men are advantaged in occupational standing, a common finding in research on occupational stratification is that, on average, men and women hold jobs that are equal on composite measures of occupational socioeconomic standing.⁷ For example, Tyree and Treas (1974), McClendon (1976), and Featherman and Hauser (1976b) each found that men's and women's current occupations have roughly equal means on the Duncan SEI. Similarly, a number of researchers have found little difference between men's and women's occupations on scales of occupational prestige (Treiman and Terrell, 1975b; Treiman and Terrell, 1975a; England, 1979). While most of these analysts note that the distributions of men's and women's occupations are not the same (Tyree and Treas, 1974; Treiman and Terrell, 1975b; McClendon, 1976; England, 1979; Marini, 1980; Sewell, Hauser and Wolf, 1980), these findings of equality in measures of central tendency are paradoxical because of the well-documented and long-standing disparities between men and women in earnings and workplace authority.

In some cases, analyses showing that men and women work in occupations of equal standing have been viewed as inherently invalid (England, 1979; Acker, 1980; Huber, 1980; Jacobs, 1986; Boyd, 1986).⁸ Some have proposed abandoning occupational standing as an indicator of social standing, while others have attempted to explain the paradox. We think that the evidence of the validity of occupational standing as an indicator of social standing is so compelling that we are reluctant to abandon it (Hauser and Warren, 1997). We do not claim either that occupational standing is the best indicator of social standing or that the use of available measures of occupational standing in gender comparisons is unproblematic. In fact, our purpose here is to illuminate some of the problems in the use of occupational standing – particularly composite scales – in gender comparisons and thus to encourage more complex and

thoughtful analyses of gender differences in occupational standing.

We think it is worth asking why analyses of occupational standing fail to validate other findings about gender differences in employment. Fligstein and Wolf (1978), for example, wondered whether findings of equality in occupational standing might be due to the fact that successful women are over-represented in samples of working women. They concluded, however, that the biases caused by this selection problem are minimal. Sewell, Hauser, and Wolf (1980) and Boyd (1982) argued that a life-course perspective on occupational attainment, which considers changes in men's and women's occupational statuses over time, leads to findings that are more in line with what stratification researchers "expect" to find. As Sewell, Hauser, and Wolf (1980) noted, "if in the life cycle the occupational standing of women is at first higher and then lower than that of men, a sex differential in occupational standing need not appear in a sample that is heterogeneous with respect to age."

Another common but paradoxical finding is that the process of occupational stratification is more or less the same for men and women when composite measures of occupational socioeconomic standing are used to represent individuals' occupations (DeJong, Brawer and Robin, 1971; Treiman and Terrell, 1975a; Featherman and Hauser, 1976b; McClendon, 1976). That is, relationships among variables representing social background, schooling, and occupational attainment are similar for women and men. For example, DeJong, Brawer, and Robin (1971) found that "generalizations about occupational mobility which have been made for males apply to females," and McClendon (1976) found "no substantial differences" between the processes of occupational stratification for men and women. However, if women are often discriminated against in the labor market (that is, if men and women with equal qualifications are not equally rewarded in the labor market), or if women frequently put aside occupational goals

for the sake of family obligations (Sweet, 1973; Marini, 1980; Boyd, 1982; Bielby and Bielby, 1989), then how can there be so much similarity in the underlying processes through which men's and women's family backgrounds, educational attainments, and prior experiences are converted into occupational rewards?

In contrast, Havens and Tully (1972), Tyree and Treas (1974), Chase (1975), Marini (1980), Sewell, Hauser, and Wolf (1980), and Boyd (1982; 1986) have all found important differences in processes of occupational stratification among women and men. Marini (1980), for example, found that "males experience a greater increase in occupational prestige than females," and that this difference "appears to be primarily attributable to sex differences in educational attainment at entry into the labor force and sex differences in the effects of marital and family events after entry."

With these paradoxical findings in mind, researchers in the early 1980s were persuaded by the arguments of England (1979), Acker (1980), Huber (1980), and others that prestige and composite measures of occupational socioeconomic standing are inappropriate for studying gender differences in occupational attainment. Unfortunately, many of these arguments were based less on analysis of the defects of available measures than on a lack of interest in any measures of labor market success that failed to show that women are worse off than men. Beyond warning users about the pitfalls associated with using the measures, these authors did little to explain the troubling paradoxes or to suggest ways to make these measures more useful for such research.

For example, Mutchler and Poston (1983) looked at male-female differences in occupational standing on the Duncan SEI and the Nam-Powers SES in several metropolitan areas and found that the latter measure yielded large differences favoring men, while the former did

not. Following a common, but erroneous line of reasoning, they argued that the difference occurred because “SEI scores are ... grounded in the prestige hierarchy” (p. 357) and concluded that “the Nam-Powers metric should be used instead of the Duncan SEI in studies of occupational status of women and men” (p. 353). To be sure, the weights of the components of the Duncan SEI were estimated with prestige as criterion, while the weights of the components of the Nam-Powers SES were arbitrarily equated. However, differences in the behavior of the two indexes depends only on the actual weights, not on how they were chosen.⁹ Like other analysts, Mutchler and Poston (1983) failed to identify the fundamental problem in using composite socioeconomic indexes to compare women and men.

In the end, researchers moved toward studies of earnings, workplace authority, and the structure of labor markets and away from studies of occupation-based gender inequalities.¹⁰ Researchers who did continue to study sex differences in occupational attainment continued to use composite scales of occupational standing (Grusky and DiPrete, 1990; Seibert, Fossett and Baunach, 1997).

Prior research demonstrates the tension in the use of different criteria to choose among occupational measures. Boyd (1986) argues that total-based composite measures have the desirable property of yielding results that are closer to what we would "expect" from prior research on gender-based differences in the labor market. This is because total-based measures reflect the facts that men and women are concentrated in different occupations and that women earn less money than men even in occupations which are predominantly female. In contrast, based on other statistical properties of their SEIs, Stevens and Featherman (1981) recommend the use of their male-based SEI, rather than their total-based SEI. Even if the criterion used is the face validity of gender differences, conclusions differ on which measure is best. England

(1979), Acker (1980), Huber (1980) essentially reject the use of composite and prestige measures because they do not yield results that confirm what we already know about the relative socioeconomic positions of men and women, while Mutchler and Poston (1983) use the same criteria when they recommended the use of the Nam-Powers SES. Boyd (1986) uses similar criteria in selecting total-based scores over male-based scores.

Given the availability of so many measures of occupational standing -- the Duncan SEI and its relatives, the Nam-Powers indexes, and prestige -- in this paper we look at the influence of choosing one measure of occupational standing over others on our understanding of gender differences in the process of occupational attainment. Our initial goal is to elaborate the extent to which conclusions about the role of gender in the process of occupational stratification depend on the way in which occupational standing is measured. More important, we wish to pick up where the critics of occupational measures left off. That is, we hope to understand why composite measures of occupational socioeconomic standing tend to reveal few differences between men and women in occupational standing or in the process of occupational attainment, to discuss possible criteria for accepting or rejecting measures of occupational standing, and to consider the ways in which occupational measures might be appropriately used in research on gender-based labor market inequalities.

ANALYSIS STRATEGY

How do substantive findings about the causes and consequences of occupational standing depend on how occupational standing is expressed? How does the way in which occupational measures are constructed affect such findings? Is it possible to determine which is the “best” measure of occupational standing for any particular analysis? What criteria lead to the conclusion that one measure is better than others? To answer these questions we use data from

two nationally representative surveys, the 1994 General Social Survey (GSS) and the 1986 through 1988 Surveys of Income and Program Participation (SIPP).

Each set of data has its own strengths and limitations. In 1994 the GSS asked respondents about their first full-time occupation after leaving school for the last time; this is an important question because a life-course perspective on occupational attainment provides important insights into the process of occupational stratification (Sewell, Hauser and Wolf, 1980; Boyd, 1982). However, we also use SIPP because of the relatively small size of the GSS; there were 2,992 GSS respondents in 1994. Although SIPP does not include information about respondents' first full-time occupations, it does contain enough cases for us to conduct separate analyses for Blacks, Hispanics, and non-Hispanic Whites (hereafter Whites) of each sex. Although racial differences are not the primary focus of our paper, we distinguish among Blacks, Whites, and Hispanics in our analyses because patterns of gender differences may not be the same among these groups.

Using these data we repeat a series of analyses of gender differences in occupational attainment 15 times, each time using a different measure of occupational standing. Each of these measures can be used with occupations coded to the standards of the 1980 Census occupational classification system. We begin by comparing men's and women's average scores on the 15 measures of occupational standing. Next, again using these 15 measures, we examine intergenerational occupational correlations, separately for men and women. Finally, we estimate a series of regression models that describe the process of occupational stratification and that show how findings about that process are affected by the measure of occupational standing.

Table 1 describes the variables used in our analyses. Because of differences in question wording and response coding between GSS and SIPP, we provide details about the ways in

which we have attempted to make variables comparable across the surveys. As the table indicates, we have limited our samples to individuals who were between the ages of 25 and 64 at the time that they were interviewed (which could have been in 1986, 1987, 1988, or 1994). In describing a respondent's family background, we consider mother's education, father's education, mother's occupation, father's occupation, the size of their sibship, whether their family was intact when the respondent was 16, whether the respondent has a farm background, and whether the respondent is of Southern origin.

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Table 1 About Here
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For the respondent's education we used the number of years of schooling that he or she completed. However, based on information about the highest degrees that respondents obtained, we adjusted the "years of schooling" variable in some cases. Table 1 describes these adjustments in some detail. Considering parents' educations, there is some discrepancy in coding between the GSS and SIPP samples. The GSS reports the highest year of school which the parent completed and got credit for. However SIPP reports the highest year of school that the parent had completed when the respondent was 16. In addition, because SIPP reports parents' educations in broad categories of years of school completed, we assigned average values for SIPP parents within each category on the basis of the educational distributions of parents in the 1986 through 1988 GSS data.

Finally, we note that there are slight conceptual differences between GSS and SIPP in the occupation variables. For respondents in SIPP, we have a 3-digit Census occupational code for the job that the respondent held in the four months prior to the interview. In the GSS sample, we have a 3-digit Census occupational code for the type of work that the respondent does now or

normally does.¹¹ In looking at parents' occupations, in SIPP we have a measure of each parents' occupation when the respondent was 16, whereas in GSS we have a measure of each parents' occupation when the respondent was growing up.

FAMILY BACKGROUND AND EDUCATIONAL AND OCCUPATIONAL ATTAINMENTS

Table 2 describes the family background and educational attainment of Whites in SIPP and GSS; Table 3 describes the same characteristics of Blacks and Hispanics in SIPP. In these tables we report the characteristics of individuals in the full samples and in samples that only include cases in which the respondent reported a current or last occupation; the latter will constitute our analysis samples. Tables 2 and 3 show that, all in all, the samples are very similar. However, GSS respondents appear to have completed about one half of a year more schooling than SIPP respondents. Of course we can only make this comparison for Whites.

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Table 2 About Here
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Table 3 About Here
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Regardless of race or sample, men and women differ little in terms of family background characteristics, their parents' educational attainments, or their own educational attainments; it is generally true that men have completed more years of formal schooling, but this difference is very small. However, comparing SIPP respondents in different racial groups, Whites have completed more years of schooling and tend to come from families with fewer children and that are more often intact and not on a farm. In addition, Blacks are considerably more likely than either Hispanics or Whites to have been born in the South.

Next, we examine more closely the 15 measures of occupational standing employed in

this paper. In Table 4, we show the unweighted correlation among all 15 measures across the 503 1980-basis Census occupation categories. These correlations are quite high, usually on the order of 0.90 or higher. Lower correlations are frequently observed when prestige or Nam-Powers scores are involved, and the lowest correlations are associated with occupational wage rate scores. We also computed correlations based on the rank-positions of each of the 503 occupations for each measure. These correlations were quite similar to the correlations based on scale scores; on average, within 0.02 (the largest difference was 0.065). The consistently high correlation among the 15 measures, and the lack of major differences between the scale correlations and the rank correlations, convince us that none of the scales is wildly out of synchrony with any of the others, and all are generally ranking occupations in a similar manner.

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Table 4 About Here
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Next we compare men's and women's average occupations using our 15 measures. Table 5 reports means and standard deviations of occupational standing for Whites in SIPP and GSS; Table 6 reports the estimates for Blacks and Hispanics in SIPP. Figures 1 and 2 report mean male-female differences in graphical form. In order to render the several scales comparable, the figures report the differences in units of pooled, within-sex standard deviations. Here and throughout the remainder of our analyses we limit both samples to cases in which the respondent reported a current or last occupation.

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Table 5 About Here
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Table 6 About Here
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Figure 1 About Here

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Figure 2 About Here

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Looking at respondents' first occupations (which we can do only for White GSS respondents) in the first panel of Figure 1, we note that men appear to have higher standing occupations when we use the Nam-Powers SES or occupational earnings, but that women appear to have higher occupational standing when we use occupational education, prestige, male-based SEIs, or the Hauser-Warren female-based SEI. In fact, using the Stevens-Cho and Nakao-Treas male-based SEIs, women appear to be in much higher status occupations than men. When we use any of the occupational education scores as our measure of occupational standing we find that women score significantly higher than men; when we use any of the occupational earnings scores we find just the opposite. Apparently, women's first occupations tend to be ones in which incumbents are better educated, whereas men's first occupations tend to be ones in which incumbents are better paid.

Turning to White respondents' current or last occupations (the second and third panels in Figure 1), we find that for Whites the measures behave similarly across the GSS and SIPP samples. For Whites in both samples we find that men appear to have substantially higher standing occupations when we use Nam-Powers SES scores and occupational earnings. On the other hand, when we use the male-based SEIs produced by Stevens-Cho or Nakao-Treas we observe that women have higher standing occupations. For example, using the Nakao-Treas male-based SEI, female GSS respondents score about four and one half points higher than male GSS respondents. Finally, as we saw for first occupations in GSS, women have higher

occupational education scores (whether total, male, or female-based) than men, and men have higher occupational wage rate scores than women.

In Table 5 we can also compare White GSS respondents' first full-time occupations to their current or last occupations. Men usually gain slightly more than women, regardless of the measure; we hasten to point out that (excepting the Nam-Powers SES) these differences are small. The exceptions to this rule are the Stevens-Cho and Nakao-Treas total-based SEIs, where women gain slightly more than men. Furthermore, men also gain slightly more between their first and current or last occupations when we use any of the occupational education or occupational wage rate scores.

Returning to current or last occupations, the same general patterns observed for Whites appear to hold for Hispanics in SIPP, with a couple of exceptions. As shown in the upper-right panel of Figure 2, Hispanic men have equal or higher standing occupations than Hispanic women using the Hauser-Warren total-based or female-based indexes, the Nakao-Treas total-based index, or the Nam-Powers SES. Hispanic women, on the other hand, have slightly higher occupational standing using the Hauser-Warren male-based or Stevens-Cho total-based indices (although these differences are not statistically significant) and remarkably higher occupational standing using either the Stevens-Cho or Nakao-Treas male-based SEIs. Finally, as among Whites, occupational education scores always favor Hispanic women and occupational wage rate scores always favor Hispanic men.

For Blacks, however, we note that with one exception women appear to have higher standing occupations no matter which composite measure of occupational standing we use; the Nam-Powers SES is that exception. The strongest advantages for Black women appear when we use either the Stevens-Cho or Nakao-Treas male-based SEIs. For example, using the Nakao-

Treas male-based index, Black women score nearly six points higher than Black men. Finally, occupational education scores always favor Black women and occupational wage rate scores always favor Black men. The bottom panels of Figure 2 confirm what we might expect when racial differences in occupational standing are considered: No matter which measure we use, Whites always have significantly higher occupational status scores than Blacks, and this is true for both men and women.

To summarize, we observe the following broad patterns in Tables 5 and 6 and Figures 1 and 2. First, except among Blacks, men appear to have roughly equivalent or slightly higher occupational standing when we use the Nam-Powers SES, any of the Hauser-Warren SEIs, or either the Stevens-Cho or Nakao-Treas total-based SEIs. Second, when we use the Stevens-Cho or Nakao-Treas male-based SEIs, women appear to have dramatically higher standing occupations than men. Third, when we use occupational education scores as our measure, we always observe that women have higher standing occupations. When we use occupational wage rate scores, we observe just the opposite. Fourth, using nearly any of our measures of occupational standing, White men in GSS appear to gain slightly more between the first and current or last occupations than White women in GSS. Fifth, among Black SIPP respondents, women have higher standing occupations than men, unless we use the Nam-Powers SES or occupational earnings scores.

We find the first two patterns most intriguing. Why might women appear to have dramatically higher status occupations than men when we use male-based SEIs? What is different about the Hauser-Warren male-based SEI that makes this finding disappear? The works of Boyd (1986) and Jacobs and Powell (1987) help us understand why women have higher SEI scores when the SEI is male-based by reminding us that most women are concentrated in a

few, heavily female-dominated occupations and that male-based indexes are based on the characteristics of men in each occupation. Men earn more than women in nearly every occupation, including occupations whose incumbents are predominantly female (Williams, 1995; Reskin and Padavic, 1994). Furthermore, men in predominantly female fields have attained higher levels of education than women in those fields, perhaps because of the "glass escalator" effect described by Christine Williams (1995). For example, males comprise only 16.7 percent of all librarians, yet they receive 21.3 percent of all master's degrees and 47.8 percent of all doctoral degrees in library science (Williams, 1995). Because men in female-dominated occupations have higher earnings and more education than the women in these occupations, these occupations appear to be relatively high in standing when we consider only men's characteristics than they do when women's characteristics are considered. Consequently, women in female-dominated occupations have artificially high male-based SEI scores. We believe that this problem disappears in the Hauser-Warren male-based SEI because of the differential weighting of occupational categories in the regressions used to construct the Hauser-Warren SEIs. In constructing their male-based SEI, Hauser and Warren weighted each occupation by the number of male occupational incumbents in that occupation. Thus, female-dominated occupations were less consequential than other occupations in determining the parameters of the male-based SEI prediction equation.

To make this point more clearly, Table 7 reports unstandardized coefficients for occupational education and occupational earnings or wage-rate in the prediction equations for each of the Duncan-style SEIs we use in our analyses. It also includes coefficients reported in Hauser and Warren (1997) for an unweighted male-based SEI prediction equation. In the third column, note that the ratio of the coefficient of occupational earnings to that of occupational

education is usually between 0.4 and 0.7. For the (weighted) Hauser-Warren male-based SEI, however, the occupational earnings coefficient is actually higher than that of occupational education (with a ratio greater 1). This seems to be strictly because of the weighting, as the ratio of the coefficients looks similar to the other male-based scales when the Hauser-Warren male-based SEI is constructed without weighting occupations by the number of male incumbents. Recall, also, that the equal weights of occupational education and occupational earnings used by Nam-Powers in the construction of their scale also gives a relatively larger weight to occupational earnings than in the unweighted SEIs.

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Table 7 About Here
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In order to better understand the reasons for the patterns described above, we undertook two auxiliary analyses. First, we performed our analyses again after eliminating from the sample all respondents who reported farm occupations. The standing of farmers is often anomalously low, relative to their prestige or socioeconomic status ratings; that is, farmers are "outliers" in models of occupational stratification. It has thus become common to include a dummy variable for "farm origins" in those models. In order to determine whether our findings might be driven to some extent by the unique properties of this one type of occupation, we dropped farmers for the purposes of this auxiliary analysis. However, in both the SIPP and GSS samples, this procedure had little effect on any of the occupational standing measures and little or no effect on the observed patterns of gender differences.

Second, given the apparently consequential role of female-dominated occupations in our analyses, we performed our analyses again after dropping individuals in the 15 female-dominated occupations that employed the largest numbers of women in 1990; in each of these 15

occupations, more than two-thirds of the incumbents were female in 1990.¹² This procedure changed our findings dramatically.¹³ After eliminating all respondents in female-dominated occupations, women in all three race-ethnic groups and in both samples had higher SEI and occupational education scores than men, regardless of which SEI or occupational education measure we selected. However, men still had higher occupational wage rate scores. Apparently, women in female-dominated occupations do worse (in terms of education and earnings) relative to women who are not in female-dominated occupations. Since about 40 percent of all women worked in these 15 occupations in 1980, this further demonstrates the inadequacy of using male-based SEIs, which are based only on the characteristics of male occupational incumbents, in assigning occupational status scores to women.

INTERGENERATIONAL CORRELATIONS IN OCCUPATIONAL STATUS

Before performing regression analyses of gender differences in occupational attainment, we examine intergenerational correlations in occupational standing in order to see more directly the differences among measures. In Table 8 (for Whites in GSS and SIPP) and Table 9 (for Blacks and Hispanics in SIPP) we present correlations between respondents' and parents' occupational standing using each of the 15 measures of occupational standing. The correlations are also presented graphically in Figures 3 and 4. Although other correlations are available and are equally interesting (i.e., correlations between education and occupational standing or correlations between the standing of respondents' first and current or last occupations), we have limited our presentation to intergenerational correlations in occupational standing for the sake of brevity and space.

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Table 8 About Here
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Table 9 About Here

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Figure 3 About Here

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Figure 4 About Here

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Among Hispanics and Whites, concentrating just on total-based SEIs, we observe general agreement across indexes in the degree of intergenerational transmission of occupational standing from mothers and fathers to sons and daughters.¹⁴ For example, among White men in GSS, the correlations between father's and son's occupational statuses range from .37 to .38; the correlations between mother's and son's SEI scores range from .21 to .24. Quite similarly, for White women in GSS, the correlations between father's and daughter's SEI scores range from .29 to .30, and the correlations between mother's and daughter's scores range from .26 to .27. Here, it appears that our choice of one total-based SEI over another does not make a great deal of difference in how we perceive the intergenerational transmission of occupational standing. Likewise, turning to male-based SEIs, we note that our choice of index does not make a tremendous difference. For example, using male-based indexes among Hispanics in the SIPP sample, the correlations between father's and son's SEI scores range from .33 to .38 and the correlations between father's and daughter's SEI scores range from .21 to .26. Finally, we observe that when we use the Hauser-Warren female-based SEI, the correlations between respondents' and parents' occupations appear lower relative to total- or male-based indexes, especially for Black men. However, for White women in both GSS and SIPP the correlations between respondents' current or last occupational standing and mothers' occupational standing

are a bit higher using the female-based Hauser-Warren SEI.

Still looking at Hispanics and Whites, when we use occupational education scores as our measure of occupational standing, the correlations between respondent's and parents' occupational statuses are frequently as high or higher than when we use SEIs. Especially for men, the use of occupational education scores yields the highest estimates of the intergenerational transmission of occupational standing. However, just the opposite is true for prestige, the Nam-Powers SES, and occupational wage rate scores, especially for Whites. In general, using these three types of measures the correlations between respondent's and parents' occupations are significantly lower than the correlations between SEI or occupational education scores. That is, using prestige, the Nam-Powers SES, or occupational wage rate scores as a measure of occupational standing frequently minimizes the estimated persistence in occupational standing from one generation to the next, especially for Whites. Note, however, that the intergenerational correlations for Hispanic men using occupational wage rate scores are quite high (between .31 and .34 for father/son correlations), but that these correlations are still smaller than those using occupational education scores.

Among Black men the choice between total-based, male-based, or female-based SEI scores is much more consequential than the choice within total-based indexes or within male-based indexes. That is, for Black men each total-based index yields similar correlations between respondent's and parents' occupational standing, and the same can be said of male-based SEIs. In contrast, for Black women, we observe that the choice of one total-based SEI over another or the choice of one male-based SEI over another leads to markedly different estimates of the intergenerational transmission of occupational standing, especially when we look at the correlations between Black women's current or last occupations and their fathers' occupations.

The correlation between Black women's total-based occupational SEI and the total-based SEI of their fathers' occupation is highest using the Hauser-Warren index, but the correlations using male-based SEIs are highest using the Nakao-Treas SEI. For both Black men and Black women, the Hauser-Warren female-based SEI yields lower correlations between respondents' and parents' occupational standing. Next we note that for Black men occupational education scores yield correlations similar to those observed when we used SEIs and that prestige, the Nam-Powers SES, and occupational wage rate scores yield extremely low correlations between respondent's and parents' occupations. However, the same cannot be said for Black women. Among Black women, the Nam-Powers SES and occupational wage rate scores generally yield higher correlations than any of the SEIs, the occupational education scores, or prestige; we are at a loss to explain this rather anomalous finding.

Comparing male and female respondents, we note that father's occupational standing is more highly correlated with son's occupational standing than with daughter's occupational standing, except perhaps among Blacks. Conversely, among Whites, mother's occupational standing is more highly correlated with daughter's occupational standing than with son's occupational standing. We observe no meaningful differences across measures in these comparisons.

To summarize the correlation analysis, we make the following observations.¹⁵ First, among Whites, Hispanics, and Black men, the choice of total-based versus male-based SEIs is consequential, but once that choice is made, the choice between the Hauser-Warren, Stevens-Cho, and Nakao-Treas SEIs is not. Second, among all groups, the Hauser-Warren female-based SEI yields the lowest estimates (among the SEIs) of the intergenerational transmission of occupational standing. Third, among Whites, Hispanics, and Black men, occupational education

scores yield correlations between respondents' and parents' occupational standing that are as high or higher than those yielded by any of the SEIs. Fourth, except among Black women, occupational wage rate scores, the Nam-Powers SES, and prestige yield extremely low estimates of the persistence of occupational standing from one generation to the next compared to occupational education scores. The one exception leads us to wonder about the sorts of occupations in which Black women are concentrated, and it is clear that further study is warranted. Fifth, in comparing the occupational mobility of sons and daughters, each of the SEIs and the occupational education scores produce similar results.

What is it about occupations that persists within and between generations? Apparently, it is not prestige or occupational earnings, which are here expressed as wage rate scores.

Occupational education scores, and not occupational wage rate scores or prestige, appear to most adequately capture the persistence of occupational standing.¹⁶ The Nam-Powers SES, which gives equal weight to occupational education and occupational earnings, also yields low estimates of intergenerational occupational persistence because of the large role (relative to the SEIs) that occupational earnings play in the construction of that index.

REGRESSION ANALYSES

Again using the 15 measures of occupational standing, we estimated a series of regression models of the process of occupational attainment. Our models examine the influence of family background (parents' educations, parents' occupational standing, and other variables pertaining to respondents' social origins), educational attainment, and the occupational standing of respondents' first occupations on the standing of respondents' first and current or last occupations. Our analyses are similar to those carried out by Boyd (1986) and Featherman and Stevens (1982), who each estimated similar models in an effort to determine whether male-based or total-based SEIs were preferable for these purposes. The goal of our analyses is to examine how inferences about the role of gender, race, and other factors in the process of occupational stratification change when we use different measures of occupational standing.¹⁷

We estimate three sets of models in our analyses. First, using the GSS data, we estimate the effects of gender, family background, and education on the standing of respondents' first occupations. Second, again using the GSS data, we estimate the effects of gender, family background, education, and the standing of respondent's first occupations on the standing of respondents' current or last occupations. Third, using the SIPP data, we estimate the effects of gender, race, family background, and education on the standing of respondents' current or last occupations. In all, then, we report the results of 45 separate regression equations: Three separate models for each of the 15 measures of occupational standing. In all models, gender is interacted with each of the other independent variables; likewise, in the SIPP models, race and gender are interacted with each of the other independent variables. The purpose of these interaction terms is to investigate the ways in which the effects of family background, education, and the standing of respondent's first occupations differ by race and gender. The regression

model is written so the main effects pertain to White men, while the interaction terms represent differences between White men and respondents in other racial, ethnic, or gender groups in the effects of the predetermined variables on the dependent variable.

Our SIPP and GSS samples are restricted to cases with no missing data on the main outcome variable of interest, which is the respondent's current or last occupation. For the GSS regression analyses, we have further restricted the sample to cases with no missing data on the respondent's first occupation.¹⁸ However, in both GSS and SIPP there is missing data for each of the other variables in our models. Consequently, for each of the age, family background, and education variables, we imputed the gender- and race-specific mean for that variable and created a dummy variable indicating whether the observation was imputed. Each of these imputation dummy variables was included in our regression models. Because the coefficients for these imputation dummy variables were very seldom statistically significant or large in magnitude, we have ignored them in the presentation of our findings.

In each model, we specify respondent's and parents' education in terms of three variables. The first indicates the number of years of grade school that the person completed; this variable has a maximum value of 12. The second is a dummy variable that indicates whether or not the person completed one or more years of college. Finally, the third indicates the number of years of college that the person completed; this variable has a maximum value of 8. The purpose of this specification is to allow for non-linearities in the effects of education on occupational outcomes.

In each model we specify age in terms of four dummy variables. The first indicates whether the respondent was between 25 and 34 years of age, the second whether the respondent was between 35 and 44 years of age, the third whether the respondent was between 45 and 54

years of age, and the last whether the respondent was between 55 and 64 years of age. The variables representing sibship size, intact family, farm origin, and Southern origin are specified as indicated in Table 1.

REGRESSIONS OF THE STANDING OF FIRST OCCUPATIONS ON GENDER, FAMILY BACKGROUND, AND EDUCATION IN THE 1994 GSS

The left half of Table 10 presents the results of the regression of the standing of first occupations on gender, family background, and education in which respondent's and parents' occupations are specified in terms of the Hauser-Warren total-based SEI. The results of this model are entirely plausible. Among men, the significant predictors of the standing of first occupations include whether the father went to college, how many years of college he completed,¹⁹ the father's occupation, the respondent's number of years of grade school and college completed, and membership in the 55 to 64 year old age group. Interestingly, for women whether the father attended college matters more than for men; how many years of college the father actually completed matters less than for men; father's occupation matters more than for men; and farm origins are a handicap for men but a benefit for women. With an R² of .57, the model has a good deal of explanatory power.

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Table 10 About Here
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The problem is that we do not obtain precisely these results when we choose another measure of the respondent's and parents' occupational standing. While we do not present the full findings for all 15 models, we provide a summary of them in Table 11. In this table, a "+" indicates that a variable is statistically significant at the .05 level and positive, while a "-" indicates that a variable is statistically significant at the .05 level and negative. The main effects

(the effects for White men) are shaded in Table 11, while the interaction effects (the differences between White men and White women in GSS) are left unshaded. In the models of Table 11 the main effect of gender is never statistically significant. In a model without gender interaction effects, the main effect of gender would tell us whether there were gender differences in occupational success when other variables were controlled. Here, this coefficient is of no special import because the model also includes interaction effects of gender with all other variables; the main effect is conditional on specific values of other variables and does not tell us about the overall difference in occupational outcomes. However, several gender differences in the process of occupational attainment appear elsewhere in the models.

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Table 11 About Here
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Before we look at the gender differences in occupational attainment, indicated by the interaction terms, a quick look at the main effects of background variables on standing of first job (the effects for GSS men) show some interesting differences among the 15 scales of occupational standing. For father's education, the Nakao-Treas total-based scale, the Nam-Powers SES, and occupational wage rate scores behave differently than other SEI scales or occupational education scores. Using SEI (except the Nakao-Treas total-based SEI) or occupational education scores, father's college attendance has a negative effect on occupational standing for men, while the number of years of college has a positive effect. When the Nam-Powers SES or the occupational wage rate score is used, however, there is no significant effect of father's years of college, and father's attendance at college is only negatively significant for total-based and male-based occupational wage rate scores—not for female-based wage rate scores, or for the Nam-Powers SES. The effects of father's education using occupational

prestige behave much like SEIs and occupational education scores for White men in GSS.

The effects of mother's education on men's occupational standing in first jobs shows a similar pattern to that found for father's education. Some SEI scores and all occupational education scores behave alike, with a positive effect of mother's years of college on first job. The effects of mother's education are similar when the Nam-Powers SES and occupational wage rate scores are used; that is, there are no significant effects. In the case of mother's education, occupational prestige scores behave more like Nam-Powers SES and occupational wage rate scores, with no effects of mother's education on respondent's first job.

The Nam-Powers SES and occupational wage rate scores yield similar results for the effect of father's occupation on first job standing for GSS men. There are no effects of father's occupation on respondent's first job using these measures, while models using SEIs and occupational education scores show a significant negative effect of father's occupational standing on respondent's first job. In this case, occupational prestige behaves like the Nam-Powers SES and occupational wage rate scores. Other variables in this analysis—respondent's education, age, number of siblings, intact family, southern birth and farm background—show similar effects regardless of which measure of occupational standing is used.

To investigate gender differences in occupational attainment, we look next at the interaction effects in this model. Interaction effects represent differences between men and women in GSS. We find a pattern for GSS women that is similar to that found for men in the effects of social background on standing of first job. Specifically, models using Nam-Powers SES and occupational wage rate scores tend to yield similar sex differences in effects on occupational attainment, while models using SEIs and occupational education scores also yield effects similar to each other. Occupational prestige scores tend to behave a bit differently than

either of these. Again looking at the first half of Table 11, we see that for women, father's college attendance matters more than it does for men if an SEI score is used or if occupational education scores are used, but that there is no difference between the sexes in the effects of father's college attendance on first job standing. Similarly, the number of years father attended college matters less for women than for men if SEIs or occupational education scores are used in the occupational attainment model, but there is no gender difference if occupational wage rate scores or the Nam-Powers SES is used. If prestige is used, then there is no gender difference in the effects of father's college attendance, but the number of years father attended college matters more for women than for men.

Similarly, the effects of father's occupational standing on respondent's first job matters more for women than for men if SEIs or occupational education scores are used; but there is no gender difference if occupational wage rate scores or the Nam-Powers SES are used to measure occupational standing. Models using occupational prestige scores also show no gender differences. A similar pattern can be seen for the interaction effects of sibship size.

Summarizing, SEIs and occupational education scores tend to behave similarly in models predicting first job standing, and tend to show similar gender differences. The Nam-Powers SES and occupational wage rate scores tend to behave similarly as well, and further, tend to show fewer gender differences than when SEIs and occupational education scores are used. The R^2 for models run using SEI scores and occupational education scores tend to be higher than the R^2 for models which used Prestige, Nam-Powers, or occupational wage rate scores. We might expect this difference in explained variance from the correlation analysis of intergenerational occupational standing. However, the finding of fewer gender differences using the Nam-Powers and occupational wage rate scores is striking, when one considers that these scores show the

expected result of male privilege in average levels of occupational standing.

REGRESSIONS OF THE STANDING OF CURRENT OR LAST OCCUPATIONS ON GENDER, FAMILY BACKGROUND, EDUCATION, AND THE STANDING OF FIRST OCCUPATIONS IN THE 1994 GSS

The right half of Table 10 presents estimates of the regression of the standing of current or last occupations on gender, family background, educational attainment, and the standing of first occupations when occupational standing is expressed in the Hauser-Warren total-based SEI. Again, the results of this model are hardly surprising: Years of college completed and the standing of first occupations have strong and positive effects on the standing of respondents' current or last occupations, and none of the other variables (including gender) has such effects.

Table 11 shows that these findings are fairly consistent across the 15 measures of occupational standing. The effects of father's education (13 and up) are positive for men when occupational standing is expressed as occupational prestige. The effects for men of respondent's education (0 to 12) and membership in the age 45-54 bracket are positive when the Nam-Powers SES is used; the effect of membership in the 35-44 age bracket is positive when occupational education scores (male- or female-based) are used; and membership in the age 45-54 age bracket has a positive effect on current occupation when occupational wage rates are used. Compared to the model for first occupation, we see in this model that the effects are generally similar across measures among men.

We also observe few gender differences in the effects of the independent variables on the standing of current or last occupation. For models that measure occupational standing in prestige units, Nam-Powers scores, or female-based occupational wage rate scores, women's first job standing has a stronger effect on current job standing than men's first job standing. Other

significant gender differences include a less-detrimental effect of farm background for women when Nam-Powers scores are used, and a stronger effect of number of years of college for men when the Stevens-Cho male-based SEI is used.

Examining the R^2 statistics for these models, we observe the same pattern as when standing of the first job was the dependent variable. The share of variance explained is much lower when occupations are expressed in prestige, Nam-Powers SES, and occupational wage rate scores than in any of the models using SEIs or occupational education scores.

REGRESSIONS OF THE STANDING OF CURRENT OR LAST OCCUPATIONS ON GENDER, FAMILY BACKGROUND, AND EDUCATION IN SIPP

Table 12 presents estimates of the regression of the standing of current or last occupations on gender, family background, and education, separately for White, Black, and Hispanic SIPP respondents; these particular models express respondents' and parents' occupations in terms of the Hauser-Warren total-based SEI. Here we see that the significant predictors of respondents' occupational standing vary across racial groups.

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Table 12 About Here
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Among White men, father's occupation, each of the variables measuring respondent's education, age, and farm origin have statistically significant coefficients. The statistically significant interaction terms in these models suggest that women benefit less from mother's years of college completed, more from mother's occupation, and less from membership in the two older age groups than White men in SIPP. In contrast, White women benefit more than White men if they have completed at least one year of college and suffer less than men if they grew up on a farm.

While few family background variables were statistically significant for Whites, the same cannot be said for Blacks. Among Black men, parents' education, coming from a non-intact family, college attendance, years of college completed, and age are significant predictors of occupational standing. In this model the gender coefficient is not significant, but the interaction terms suggest that Black women benefit more than Black men from father's years of college completed and mother's college attendance, while they benefit less from mother's years of college completed and farm origin.

Finally, among Hispanic men, Table 12 reports that years of college completed, membership in the 45 to 54 year old age group, size of sibship, and farm origins are all significant predictors of the standing of current or last occupations. The main effect of gender is not significant in this model, and the only significant interaction term suggests that Hispanic women benefit less than Hispanic men from father's occupation.

From the models in Table 12 it is not possible to say much about the causes of racial differences in occupational standing or about the ways in which the effects of certain variables differ for each racial group. To begin to do so, and to compare findings based on the 15 measures of occupational standing, we have pooled the separate race or ethnic-based samples in SIPP and estimated a series of models that include terms for race-ethnicity and interactions between race-ethnicity and each of the other independent variables in the model, including the gender terms. That is, for each independent variable the coefficient expresses its effect on White men's current or last occupational standing, and the interaction terms reflect the ways in which the effect of that variable differs for White women, Black men, Black women, Hispanic men, and Hispanic women. We do not report the full set of estimates from any of these 15 models, primarily because they each contain 114 independent variables.

To summarize the findings from these analyses, Table 13 shows which of the coefficients were statistically significant at the .05 level in each model, for each measure of occupational standing, as well as whether each significant coefficient was positive or negative. Looking first at the main effects of this model (the shaded lines), representing effects for White men, we see few differences in the results among the 15 measures. The Nam-Powers SES shows a positive effect of mother's occupational standing on respondent's current or last occupation; SEI scores by Stevens-Cho and Nakao-Treas and occupational education scores show a negative effect of size of sibship while other measures do not; and the Hauser-Warren male-based scale, prestige scores, Nam-Powers SES, and male-based occupational wage rate scores show a positive effect of Southern birth where other measures do not. In these models the effects for White men are usually similar, regardless of how occupational standing is expressed, except the Nam-Powers SES yields divergent results.

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Table 13 About Here
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Next, we examine the interaction terms that express male-female differences in effects for Whites. The differences we observe vary depending on the measure we select. The number of years mother attended college matters less for White women than for White men when SEIs or occupational education scores are used; however this is not true when we use Nakao-Treas SEIs and the Stevens-Cho total-based SEI. There is no significant difference between White men and women when the Nam-Powers SES or occupational wage rate scores are used to express occupational standing. Mother's occupational standing has a stronger effect for White women than for White men when the total-based or female-based Hauser-Warren SEIs are used, and when occupational education scores are used, but not when other scales are used. Membership

in the age 35-44 age bracket has less effect on occupational standing for White women than for White men if the Nam-Powers SES is used, or if total-based or male-based occupational wage rate scores are used.

The most interesting gender differences among Whites in the SIPP sample appear for respondent's education. Our results show that there is a stronger effect of attending college on occupational standing for White women than for White men, unless any kind of total-based measure is used (excepting the Hauser-Warren total-based SEI). At the same time, gender differences in the effects of years of college completed depend to an important extent on which measure is used. That is, in some cases years of college is more important for White women than for White men, and sometimes it is less important. If we use male-based SEIs or total- or male-based occupational education scores, then the effect of an additional year of college on the current occupational standing is stronger for White men than for White women. If the Hauser-Warren female-based SEI, the Nam-Powers SES, or occupational wage rate scores are used in the analysis, then White women have a higher return to an additional year of college than White men. Finally, if the Hauser-Warren total-based SEI, the Nakao-Treas total-based SES, occupational prestige, or female-based occupational education scores are used, then there is no gender difference among Whites in occupational standing for an additional year of college. Especially striking here is that the seven different SEIs yield a wide variety of results. Models using occupational education scores tend to produce similar results, as do those using occupational wage rate scores. As we noted earlier, the Nam-Powers SES tends to produce results that are similar to those using occupational wage rate scores.

To compare the occupational attainment of Black men and women to White men in SIPP, refer to the second and third interaction terms in the unshaded sections of Table 13. Black men

tend to benefit more than White men from fathers' college attendance, and they benefit less than White men from fathers' additional years of college completed. This is true regardless of the measure used in the analysis. Results for mother's education are less consistent. For Black men, an additional year of mother's grade school completed has a stronger effect on current occupational standing than for White men, unless a Stevens-Cho SEI or Prestige scale is used. An additional year of mother's college attendance is more beneficial for Black men's current occupation than for White men's, unless occupational wage rate scores are used, the Stevens-Cho total-based SEI is used, or the Hauser-Warren female-based SEI is used. Here, in contrast to earlier findings, the results using the Nam-Powers SES are not similar to those using occupational wage rate scores. For Black women, mother's college attendance has a stronger effect on occupational standing than does the college attendance of White men's mothers, but only when occupational education scores or the Hauser-Warren female-based SEI is used. Whether the respondent was raised in a non-intact family has a more positive effect on current occupational standing for Black men than for White men, unless occupational prestige, Nam-Powers SES scores, or occupational wage rate scores are used. Here, models using Nam-Powers or occupational wage rate scores produce similar results.

Looking at the effects of respondent's educational attainment on occupational attainment, we see the same, varied results when comparing Black women and men to White men that we noted when comparing White men and women.²⁰ Black women's college attendance affects their occupational attainment more than White men's if the measure used to express occupational standing is the Hauser-Warren female-based SEI, occupational prestige, or female-based occupational education scores. An additional year of college for both Black women and Black men has a stronger effect on occupational attainment than for White men, unless occupational

education scores or Stevens-Cho SEI scores are used to measure occupations. Here, the models using Nam-Powers scores and occupational wage rate scores have similar effects.

Results for Hispanics appear in the last two lines of each unshaded section in Table 13. Differences between White men and Hispanic women and men include the effects of father's occupation, where Hispanic women receive lower returns to father's occupational standing than White men using any measure except Nakao-Treas male-based SEI. Differences in the effects of age between Hispanic women and men and White men are quite varied. If occupational education scores are used, Hispanic women have a higher return to being in the age 35-44 bracket than White men; when Steven-Cho SEI, Nakao-Treas SEI, or Nam-Powers scores are used, Hispanic women have a lower return to membership in the 45-54 age bracket relative to White men; when male-based Hauser-Warren SEI, any Steven-Cho SEI, any Nakao-Treas SEI, or any occupational education scores are used, then Hispanic men have a lower return to membership in the age 55-65 bracket compared to White men. Using Nam-Powers or occupational wage rate scores (total- or male-based), Hispanic men experience more negative effects of size of sibship than do White men. Finally, Southern birth has a more positive effect on occupational standing for Hispanic women relative to White men when occupational education scores and most SEIs are used, but not when Prestige, Nam-Powers SES, or occupational wage rate scores are used. Returning to the effects of respondent's education on occupational standing, we again observe different results using different SEIs. Hispanic men's additional years of college affect their current occupational standing less than White men's if a Stevens-Cho SEI is used. The same is true for Hispanic women. Additionally, if a Nakao-Treas male-based SEI or total- or male-based occupational education scores are used, this disadvantage for Hispanic women relative to White men also is significant.

Finally, the R^2 statistic has the same pattern we observed in the GSS data. Models using occupational prestige, Nam-Powers SES, and occupational wage rate scores explain less variance than any of the models using SEI scores. Models using occupational education scores explain the most variance.

To summarize our findings in these many regression models of occupational attainment:

- In the GSS, models that predict current or last occupation and that include respondent's first occupation as an independent variable yield similar results regardless of which measure we select.
- Models using the Nam-Powers SES or any of the occupational wage rate scores tend to yield similar results. These results tend to be different from those using occupational education scores, or any SEI.
- Models using occupational prestige as a measure of occupational standing tend to yield results that are different from models using other measures.
- The results for models using occupational education scores tend to be similar to those using composite SEIs, but different from those using any other measure.
- All models using occupational education scores (total-, male-, or female-based) produce similar results.
- All models using occupational wage rate scores (total-, male-, or female-based) produce similar results.
- Models that use composite SEIs or occupational education scores tend to explain more variance. Models that use the Nam-Powers SES or occupational wage rate scores to express occupational standing tend to explain the least variance. This is in line with both the correlation analysis presented above, and the findings of Hauser and Warren (1997),

which showed that intergenerational transmission of occupational standing is maximized when occupational education scores are used and minimized when occupational wage rate scores are used. SEIs tend to weight occupational education heavily, while the Nam-Powers SES weights occupational earnings heavily.

- Models that use occupational prestige to express occupational standing tend to explain less variance than models using occupational education scores or SEIs. This is consistent with the correlation analysis presented above, and with the earlier work of Featherman and Hauser (1978).

DISCUSSION

In this paper we have reported three comparative analyses of the occupational standing of women and men, each of which was repeated using 15 different measures of occupational standing. Although each measure had been reconciled to the 1980 Census occupational classification, the measures varied with respect to construct - prestige, occupational education, occupational earnings, or a mixture - with respect to population referents - men, women, or all workers, and with respect to temporal referent -- characteristics of workers in 1970, 1980, or 1990. First, we compared the average standing of the first and current or last occupations of White, Black, and Hispanic men and women. Second, we compared intergenerational occupational correlations, focusing on the extent to which each of the 15 measures accounted for intergenerational occupational persistence from father to son, father to daughter, mother to daughter, or mother to son. Finally, we estimated the effects of race, gender, family background, and educational attainment on occupational standing, both at career beginnings (among Whites) and across the life course (among Whites, Blacks, and Hispanics). Throughout these analyses, ranging from pure description of occupational distributions to multivariate models of the

stratification process, our findings were sensitive to the measure of occupational standing. That is, our substantive conclusions depended in part on how occupational standing was expressed. Moreover, these variations were systematic with respect to variations in the content and construction of the measures.

The sensitivity of findings to the choice of measures is potentially troubling. At the least, it requires us to read past work with a better sense of the scope and limits of reported findings. How many journal articles, books, and dissertations would have been quite different had the author selected a different measure of occupational standing? Might Grusky and DiPrete's (1990) analysis of change in occupational stratification have found an increase in returns to schooling for women if they had selected a measure of occupational standing which did not favor women, such as the occupational wage rate, rather than using the Duncan SEI? How might Seibert, Fossett, and Baunach's (1997) trend analysis of gender differences in occupational standing have differed if they had used a measure of occupational standing that was less heavily based on occupational earnings? Would the "upgrading" of female occupational standing in the 1980s that they reported have been apparent if occupational education scores were used to rank occupations? Or, more to the point, what would they have learned from separate analyses of changing gender differentials in occupational education and occupational earnings? Such observations lead us to ask what occupation measures would be most useful in providing a full, descriptive and analytic account of gender differences in occupational stratification.

How does the selection of a measure of occupational standing affect findings? In the first part of our analysis, we found that men (except Black men) have occupations of higher standing when we use any of the Hauser-Warren SEIs, the Nam-Powers SES, or any total-based SEI. In contrast, we found that women have higher occupational standing when we use prestige or the

Stevens-Cho or Nakao-Treas male-based SEIs. Finally, we found that women have consistently higher occupational education scores than men, but consistently lower occupational wage rate scores. The temporal referent of the occupation measures made little difference in our findings, and the population referent mattered only insofar as the use of male-based measures tended to overstate the status of women workers.

What is the right measure of occupational standing for the purposes of comparing men's and women's occupations? The key findings from the first part of our analysis are that there is no gender difference in occupational prestige, that occupational education always favors women, and that occupational wage rates always favor men; the composite measures show varying gender advantages, depending on the weight given to occupational earnings relative to occupational education. These findings in themselves would appear to demonstrate the limited validity and usefulness of any composite measure of occupational socioeconomic standing.

If our criterion for choosing a measure of occupational standing is that it must show a sizable advantage for men - as others have often argued - then we should choose either occupational wage rates or a composite measure like the Nam-Powers SES that is heavily weighted by occupational earnings. We would argue, however, that the role of gender in labor market success cannot be understood merely by reference to the variables on which women are manifestly disadvantaged. We should neither evaluate the overall success of women in the labor market solely by their parity or superiority in some areas, nor solely by their disadvantage in other areas. Rather, we should attempt to understand how the mixture of advantage and disadvantage has come about, and how advantage, parity, and disadvantage co-exist in the working lives of women. We suggest that this cannot be done with composite measures of occupational standing, which combine an occupational characteristic in which women are

advantaged compared to men (occupational education) with one which women are disadvantaged compared to men (occupational wage rates or earnings).

In the second part of our analyses, we examined correlations in intergenerational occupational standing. Our findings depended on whether we used total-based, male-based, or female-based SEIs; they did not depend as much on which total- or male-based SEI we chose (except among Black women). In addition, we found that occupational education scores yield the highest estimates of intergenerational persistence in occupational standing, and that (again, except among Black women) prestige, the Nam-Powers SES, and occupational wage rate scores yielded the lowest estimates.

What is the right measure of occupational standing for the purposes of examining intergenerational occupational mobility? If our criteria for selecting a measure is to produce results that maximize our estimates of intergenerational occupational persistence, then we should choose occupational education scores. Prestige, the Nam-Powers SES, and occupational wage rate scores, on the other hand, would be especially poor choices. If we want to use a single, scalar measure of occupational standing to measure the association between the standing of women's or men's occupations and the standing of their parents' occupations, the association is maximized using occupational education scores and minimized using occupational wage rate scores. Given that composite measures of occupational socioeconomic standing are nothing more or less than weighted averages of occupational education and occupational wage rates or earnings, estimates of occupational persistence based on those measures will be larger or smaller to the extent that they express occupational wage rates or earnings. Again, there is no clear rationale for the use of a composite measure of occupational socioeconomic standing. If we truly want to know about the persistence of occupational earnings or wage rates, or about the

persistence of occupational prestige, then we should use those measures, but always recognizing that each fails to reflect a large part of the intergenerational correlation of occupational positions.

In the final part of our analyses we regressed occupational standing on race, gender, family background, education, and (for the GSS sample) the standing of first occupations. Although the models using each of the 15 measures of occupational standing did not yield identical results, the main conclusions were fairly consistent. The standing of first occupations appears to depend in large measure on father's education, father's occupation, respondent's education, age, and farm background. Without considering first occupations, the standing of current or last occupations depends largely on father's occupation, respondent's education, age, and farm background. If we add first occupation to the model, then the standing of current or last occupations depends heavily on the respondent's education and the standing of his or her first occupation.

However, despite these general consistencies, it is not at all clear that researchers using exactly the same data, but different measures of occupational standing, would come to the same conclusions regarding the role of gender in the process of occupational stratification. Do years of college matter more or less for women than for men in determining the standing of first occupations, and do they matter more or less for different race and gender groups in determining the standing of current or last occupations? Does mother's occupational status matter, and if so, does its effect differ across race and gender groups? These are important questions, and one would answer them quite differently depending on one's choice of measure of occupational standing. As we have just summarized our findings, it is clear that in the multivariate models, as in our descriptive and correlation analysis, the different findings are systematically related to the concept and construction of the several occupational measures.

For example, in comparing measures of occupational standing, we note that models using occupational education scores fit better than models using SEI measures, and that models using prestige, the Nam-Powers SES, and occupational wage rates fit worse. This finding is consistent with Hauser and Warren's (1997) conclusion, using more sophisticated modeling techniques, that occupational education best captures whatever it is about occupations that persists across and within generations. This does not say that occupational education scores alone are the "right" way to express occupational standing in multivariate models of the role of gender in the process of occupational attainment. If the models that use occupational wage rates as a measure of occupational standing explain a smaller share of variance than those using occupational education scores, that does not invalidate a finding that an additional year of college has a larger effect on initial occupational standing for White women than for White men.²¹ The finding stands that an additional year of college for White women appears to increase their presence in better paid occupations more than an additional year of college does for White men. Obversely, the negative interaction for occupational education says that the same additional year of college allows men to move more often than women into occupations where people are better educated. Both results are saying different things; both results are "right"; neither finding appears when most composite measures of occupational status are used.

Our reading of the present findings leads to one conclusion and three recommendations. The conclusion is that there is no one scalar concept or measure of occupational standing that will satisfy all research uses of the concept of occupational standing. Available measures differ as indicators of the success of women and men in the labor market, and they differ as indicators of status persistence across generations or within the career. No doubt, those measures differ in other contexts as well, e.g., as indicators of health and well-being. We should not continue to

pretend that the occupational structure is one-dimensional, even in its hierarchical aspect, or that indicators of occupational standing are interchangeable.

This conclusion leads to three recommendations. First, we can think of no reason, possibly excepting comparability with past research, to continue to use any of the composite measures of the socioeconomic standing of occupations - not the Duncan SEI, not the Nam-Powers SES, nor any of the variants of the SEI. Composite measures of the socioeconomic standing of occupations have outlived their usefulness, and where comparable findings are also comparably invalid, we see little value in comparability. When the educational and economic components of such measures are homogeneous in their causes, consequences, or correlates, a composite has no advantage over one of its components. When the behavior of the components is heterogeneous, findings based on a composite will vary arbitrarily as a function of the weighting of the composite - as we have seen in comparisons between the Nam-Powers SES and several variants of the Duncan SEI.

Second, by considering measures of occupational standing that are single, well-defined properties of occupations rather than composite measures, we can choose those measures that best address our research questions. For example, if we want to study intergenerational or career persistence of occupational standing, then we should use a measure such as occupational education, which maximizes this persistence. If we want to study women's wage disadvantage in the labor market relative to men, then we ought to look at occupational wages or earnings. We have considered three such single, well-defined properties of occupations in this study-- occupational prestige, occupational education, and occupational wage rates. Surely, there are other occupational characteristics we might wish to measure if we want to obtain a full understanding of the role of occupations in the labor market and in the formation and persistence

of social inequality--for example, average levels of authority in an occupation, average amounts of "control" over one's work in an occupation, or percentage of part-time workers in an occupation.

Third, as the list of occupational characteristics expands, researchers should, wherever possible, incorporate all those measures which are relevant to their research problem, whether by mechanically repeating analyses as we did here, or incorporating all relevant constructs into a larger model.²² In this way one can test the sensitivity of findings to the choice among occupational measures and, we hope, move toward a better understanding of occupational stratification and inequality in labor markets. If future research moves in this direction, we will at least know what it is about occupations we are discussing when we incorporate "occupational standing" in our models.

REFERENCES

- Acker, Joan. 1980. "Women and Stratification: A Review of Recent Literature." Contemporary Sociology 9:25-39.
- Bielby, William T. and Denise Bielby. 1989. "Family Ties: Balancing Commitments to Work and Family in Dual Earner Households." American Sociological Review 54:776-89.
- Blishen, Berndard R and William K. Carroll. 1978. "Sex Differences in a Socioeconomic Index for Occupations in Canada." Canadian Review of Sociology and Anthropology 15:352-71.
- Bose, Christine E. 1973. Jobs and Gender: Sex and Occupational Prestige. Baltimore: The Johns Hopkins University, Center for Metropolitan Planning and Research.
- Bose, Christine E. and Peter H. Rossi. 1983. "Prestige Standings of Occupations as Affected by Gender." American Sociological Review 48:316-30.
- Boyd, Monica. 1982. "Sex Differences in the Canadian Occupational Attainment Process." Canadian Review of Sociology and Anthropology 19:1-28.
- _____. 1986. "Socioeconomic Indices and Sexual Inequality: A Tale of Scales." Canadian Review of Sociology and Anthropology 23(4):457-80, 4.
- Boyd, Monica and Hugh A. McRoberts. 1982. "Women, Men, and Socioeconomic Indices: An Assessment." Pp. 129-59 in Measures of Socioeconomic Status: Current Issues, edited by Mary G. Powers. Washington, D.C.: American Association for the Advancement of Science.
- Chase, Ivan D. 1975. "A Comparison of Men's and Women's Intergenerational Mobility in the

- United States." American Sociological Review 40:483-505.
- Cooney, Rosemary, Santana Sokolove Clague, and Joseph J. Salvo. 1982. "Status Attainment of Young White Men and Women: Two Socioeconomic Measures." Pp. 161-99 in Measures of Socioeconomic Status: Current Issues, edited by Mary G. Powers. Washington, D.C.: American Association for the Advancement of Science.
- DeJong, Peter Y., Milton J. Brawer, and Stanley S. Robin. 1971. "Patterns of Female Intergenerational Occupational Mobility: A Comparison with Male Patterns of Intergenerational Occupational Mobility." American Sociological Review 36:483-505.
- Duncan, Otis Dudley. 1961. "A Socioeconomic Index for All Occupations." Pp. 109-38 in Occupations and Social Status, edited by Albert J. Reiss, Jr. New York: Free Press.
- England, Paula. 1979. "Women and Occupational Prestige: A Case of Vacuous Sex Equality." Sign: Journal of Women in Culture and Society 5:252-65.
- Featherman, David L. and Robert M. Hauser. 1976a. "Changes in the Socioeconomic Stratification of the Races, 1962-1973." American Journal of Sociology 82:621-51.
- _____. 1976b. "Prestige or Socioeconomic Scales in the Study of Occupational Achievement?" Sociological Methods and Research 4(4):403-22, 4.
- _____. 1978. Opportunity and Change. New York: Academic Press.
- Featherman, David L., F. Lancaster Jones, and Robert M. Hauser. 1975. "Assumptions of Social Mobility Research in the U.S.: The Case of Occupational Status." Social Science Research 4:329-60.
- Featherman, David L. and Gillian Stevens. 1982. "A Revised Socioeconomic Index of Occupational Status: Application in Analysis of Sex Differences in Attainment." Pp. 93-129 in Measures of Socioeconomic Status, edited by M. Powers. Boulder: Westview

Press.

Fligstein, Neil D. and Wendy C. Wolf. 1978. "Sex Similarities in Occupational Status Attainment: Are the Results Due to the Restriction of the Sample to Women?" Social Science Research 7:197-212.

Fox, John. 1991. Regression Diagnostics. Edited by Michael S. Lewis-Beck. Quantitative Applications in the Social Sciences, vol. 07-079. Newbury Park, California: Sage.

Friendly, Michael. 1991. SAS System for Statistical Graphics. . In SAS Series in Statistical Applications. Cary, North Carolina: SAS Institute.

Goldin, Claudia. 1990. Understanding the Gender Gap: An Economic History of American Women. New York: Oxford University Press.

Grusky, David B. and Thomas A. DiPrete. 1990. "Recent Trends in the Process of Stratification." Demography 27(4):617-37, 4.

Hauser, Robert M. and John Robert Warren. 1997. "Socioeconomic Index of Occupational Status: A Review, Update, and Critique." Sociological Methodology Forthcoming.

Havens, Elizabeth and Judy Corder Tully. 1972. "Female Intergenerational Occupational Mobility: Comparisons of Patterns?" American Sociological Review 57:774-79.

Hodge, Robert W., Paul M. Siegel, and Peter H. Rossi. 1964. "Occupational Prestige in the United States, 1925-63." American Journal of Sociology 70:286-302.

Hout, Michael. 1984a. "Status, Autonomy, and Training in Occupational Mobility." American Journal of Sociology 89:1379-409.

_____. 1984b. "Occupational Mobility of Black Men in the United States, 1962-1973." American Sociological Review 49:308-22.

_____. 1988. "More Universalism, Less Structural Mobility: The American Occupational

- Structure in the 1980s." American Journal of Sociology 93(6):1358-400, 6.
- _____. 1996. "Speed Bumps on the Road to Meritocracy: Occupational Mobility of Women and Men in the United States, 1972-1994." Working Paper. Berkeley, CA: Survey Research Center.
- Huber, Joan. 1980. "Ransacking Mobility Tables." Contemporary Sociology 9:5-8.
- Jacobs, Jerry A. 1986. Review of Jobs and Gender: A Study of Occupational Prestige by Christine Bose. American Journal of Sociology 92:481-82.
- Jacobs, Jerry A. and Brian Powell. 1987. "Women's Occupational Status: A Revised Metric for Comparing Men and Women." Unpublished manuscript. University of Pennsylvania.
- Marini, Margaret Mooney. 1980. "Sex Differences in the Process of Occupational Attainment: A Closer Look." Social Science Research 9:307-61.
- McClendon, McKee J. 1976. "The Occupational Status Attainment Processes of Males and Females." American Sociological Review 41:52-64.
- McGuire, Gail M. and Barbara Reskin. 1993. "Authority Hierarchies at Work: The Impacts of Race and Sex." Gender and Society 7:487-506.
- Mutchler, Jan E. and Dudley L. Poston, Jr. 1983. "Do Females Necessarily Have the Same Occupational Status Scores as Males? A Conceptual and Empirical Examination of the Duncan Socioeconomic Status Index and Nam-Powers Occupational Status Scores." Social Science Research 13:363-92.
- Nakao, Keiko and Judith Treas. 1991. "Bringing Occupational Prestige Scores Up to Date: Construction and Evaluation of the New Scale," manuscript.
- _____. 1994. "Updating Occupational Prestige and Socioeconomic Scores: How the New Measures Measure Up." Pp. 1-72 in Sociological Methodology, 1994, edited by Peter

- Marsden. Washington, D.C.: American Sociological Association.
- Nam, Charles B. 1963. Methodology and Scores of Socioeconomic Status. U.S. Bureau of the Census Working Paper No. 15. Washington, D.C.: U.S. Bureau of the Census.
- Nam, Charles B. and Mary G. Powers. 1983. The Socioeconomic Approach To Status Measurement (with a Guide to Occupational and Socioeconomic Status Scores). Houston: Cap and Gown Press.
- Nam, Charles B. and E. Walter Terrie. 1988. "1980-Based Nam-Powers Occupational Status Scores." Working Paper 88-48. Tallahassee, Florida: Center for the Study of Population, Florida State University.
- Nam, Charles B., E. Walter Terrie, and Carl P. Schmertmann. 1994. "Comparison of the 1980 Updated Duncan and Nam-Powers Occupational Scores." Working Paper 94-112. Tallahassee, Florida: Center for the Study of Population, Florida State University.
- Pineo, Brian and John Porter. 1967. "Occupational Prestige in Canada." Canadian Review of Sociology and Anthropology 4:42-40.
- Powell, Brian and Jerry Jacobs. 1984. "Gender Differences in the Evaluation of Prestige." The Sociological Quarterly 25:173-90.
- Powers, Mary G. and Joan J. Holmberg. 1978. "Occupational Status Scores: Changes Introduced by the Inclusion of Women." Demography 15:183-204.
- Reiss, Albert J., Jr. 1961. Occupations and Social Status. New York: Free Press of Glencoe.
- Reskin, Barbara and Irene Padavic. 1994. Women and Men at Work. Thousand Oaks, California: Pine Forge Press.
- Reskin, Barbara and Patricia Roos. 1992. "Jobs, Authority, and Earnings Among Managers: The Continuing Significance of Sex." Work and Occupations 19:342-65.

- Robinson, Robert V and Jonathan Kelley. 1979. "Class as Conceived by Marx and Dahrendorf: Effects on Income Inequality and Politics in the United States and Great Britain." American Sociological Review 44:38-58.
- Seibert, M. Therese, Mark A. Fossett, and Dawn M. Baunach. 1997. "Trends in Male-Female Status Inequality, 1940-1990." Social Science Research 26:1-24.
- Sewell, William H., Robert M. Hauser, and Wendy C. Wolf. 1980. "Sex, Schooling and Occupational Status." American Journal of Sociology 86:551-83.
- Siegel, Paul M. 1971. "Prestige in the American Occupational Structure," doctoral diss. University of Chicago.
- Stafford, M. Therese and Mark A. Fossett. 1988. "Male-Female Occupational Inequality in Southern Nonmetropolitan Counties, 1960-1980." Working Paper 10.09. Austin, Texas: University of Texas at Austin.
- _____. 1991. "Measuring Occupational Sex Inequality Over Time Using Nam-Powers SES Scores." Working Paper 12.01. Austin, Texas: University of Texas at Austin.
- Stevens, Gillian and Joo Hyun Cho. 1985. "Socioeconomic Indexes and the New 1980 Census Occupational Classification Scheme." Social Science Research 14:74--168.
- Stevens, Gillian and David L. Featherman. 1981. "A Revised Socioeconomic Index of Occupational Status." Social Science Research 10(4):364-95, 4.
- Suter, Larry E. and Herman P. Miller. 1973. "Income Differences Between Men and Career Women." American Journal of Sociology 78:962-74.
- Sweet, James A. 1973. Women in the Labor Force. New York: Seminar.
- Treas, Judith and Andrea Tyree. 1979. "Prestige Versus Socioeconomic Status in the Attainment Processes of American Men and Women." Social Science Research 8:201-21.

- Treiman, Donald J. 1975. "Problems of Concept and Measurement in the Comparative Study of Occupational Mobility." Social Science Research 4:183-230.
- _____. 1977. Occupational Prestige in Comparative Perspective. New York: Academic Press.
- Treiman, Donald J. and Kermit Terrell. 1975a. "The Process of Status Attainment in the United States and Great Britain." American Journal of Sociology 81:563-83.
- _____. 1975b. "Sex and the Process of Status Attainment: A Comparison of Working Women and Men." American Sociological Review 40:174-200.
- Tyree, Andrea and Judith Treas. 1974. "The Occupational and Marital Mobility of Women." American Sociological Review 39:293-302.
- Williams, Christine L. 1995. Still a Man's World: Men Who Do "Women's Work." Berkeley: University of California Press.
- Wolf, Wendy C. and Neil D. Fligstein. 1979a. "Sexual Stratification: Differences in Power in the Work Setting." Social Forces 58:94-107.
- _____. 1979b. "Sex and Authority in the Work Place." American Sociological Review 44:235-52.

ENDNOTES

¹ Subsequent analyses have demonstrated that occupational prestige rankings are virtually invariant with respect to the gender of the rater (Bose, 1973; Treiman, 1977; Bose and Rossi, 1983) and do not differ greatly by the gender composition of rated occupations (Siegel, 1971; Bose, 1973; England, 1979). However, see Powell and Jacobs (1984) and Jacobs (1986). Likewise, these scores are highly correlated across time periods (Hodge, Siegel and Rossi, 1964) and between countries (Treiman, 1975; Treiman, 1977).

² This history has been reviewed in detail by Hauser and Warren (1997).

³ Although they did not account for labor supply in constructing their 1970-basis SEI scores, Featherman and Stevens (1982) argued that labor supply issues might account for the better performance of male-based (as opposed to total-based) scores in their analyses. They note that "using wage rates, rather than income, in the estimation equations for the socioeconomic scores might eliminate some errors in TSEI2 [their preferred total-based specification] that arise from the differentials in part-time versus full-time work by men and women in the same occupation."

⁴ Whereas an ordinary logit equals $\ln(p/(1 - p))$, Hauser and Warren's started logit equals $\ln((p + 0.01)/(1 - p + 0.01))$. Following Hauser and Warren (1997), we specify occupational education as a started logit of the proportion of individuals in an occupational category who had attended at least some college as of 1990; we specify occupational wage rate as a started logit of the proportion of individuals in an occupational category who earned more than \$14.30 per hour in 1989.

⁵ The Stevens-Cho, Nakao-Treas, and Hauser-Warren indexes are based on characteristics of

occupational incumbents in three successive Censuses, those of 1970, 1980, and 1990. However, on the basis of our prior work with socioeconomic components of the Nakao-Treas and Hauser-Warren indexes, we believe that differences between years contribute little to the differential behavior of the indexes.

⁶ One critic has asked us why one would want to choose a scale that maximizes intergenerational correlation. The point is not to produce a larger or smaller intergenerational correlation, but to put occupations into a metric that best reflects the actual level of intergenerational occupational persistence.

⁷ This is especially true of the Duncan SEI and its relatives, which use prestige as a criterion to establish the relative weights of occupational education and occupational earnings. It is less true of Nam-Powers SES scores because they give relatively more weight to occupational earnings (Mutchler and Poston, 1983; Stafford and Fossett, 1988; Stafford and Fossett, 1991).

⁸ These critiques are far from homogeneous. For example, England's (1979) analysis of prestige and gender is both clear and compelling, and her discussion of the Duncan SEI is thoughtful and nuanced. On the other hand, Acker (1980) and Huber (1980) both fail to draw any distinction between prestige and socioeconomic measures for occupations.

⁹ A yet more extreme version of this error maintains that the Duncan SEI is a measure of occupational prestige.

¹⁰ Of course, jobs and occupations have played an important role in analyses of earnings disparities by gender, through analyses of comparable worth and pay equity.

¹¹ Following Hauser and Warren (1997), we do not use the 1980-basis occupation codes which are provided on the public-release version of the GSS data. Because of concerns over the quality of the GSS occupation codes (Nakao and Treas, 1994), Hauser and Warren (1997) reviewed the text of responses to occupation questions in the 1994 GSS, sorted them by their initial codes, and revised more than 28 percent of them. The new codes are available at <http://dpls.dacc.wisc.edu/saf>. Details of this recoding are available from the authors.

¹² The 15 female-dominated occupations (with their 1990 percentages female in parentheses) are: 313-Secretaries (99 percent), 156-Elementary school teachers (78 percent), 276-Cashiers (79 percent), 095-Registered Nurses (94 percent), 337-Bookkeepers, accounting and auditing clerks (90 percent), 447-Nursing aides, orderlies, and attendants (87 percent), 274-Sales workers, other commodities (66 percent), 379-General office clerks (82 percent), 435-Waiters and waitresses (80 percent), 468-Child care workers, except private household (96 percent), 319-Receptionists (96 percent), 744-Textile sewing machine operators (88 percent), 458-Hairdressers and cosmetologists (90 percent), 315-Typists (94 percent), 449-Maids and housemen (81 percent).

¹³ Again, we credit Boyd (1986) and Jacobs and Powell (1987) for suggesting the importance of female-dominated occupations in this context.

¹⁴ The higher correlations for men in GSS than in SIPP are puzzling to us. We thought at first that they might have been caused by differences in the items used to ascertain father's occupation in the two surveys, but this could not account for smaller deviation between the two surveys among women than among men. We do note that the variances are uniformly higher in

SIPP than in GSS among men, while the reverse pattern occurs among women.

¹⁵ As in the comparisons of men's and women's scores, we also performed our analyses of intergenerational occupational mobility twice more, in the first case eliminating individuals with farm occupations and in the second case eliminating individuals in female-dominated occupations. After eliminating respondents in female-dominated occupations, the correlations between parents' and daughter's statuses rose modestly, and the correlations involving occupational wage rates performed less poorly. In general, however, neither of these steps had any significant bearing on our primary conclusions.

¹⁶ Hauser and Warren (1997) have estimated structural models of occupational attainment that test and confirm the centrality of occupational education in the process of occupational stratification.

¹⁷ Here again, we performed our regression analyses twice more, once eliminating respondents in farm occupations and once eliminating respondents in female-dominated occupations. In both cases, our general findings about the determinants of occupational status (that is, the effects of father's and respondent's education and respondent's first-job status) remained the same, but some of the details changed (e.g., regarding the influence of mother's education or farm origins).

¹⁸ Because the first-occupation items were asked only of a randomly selected half of all GSS respondents in 1994, this reduces our GSS sample by about half.

¹⁹ It seems odd that the effect of the father attending college is negative unless one considers the coding of the education variables. If the "attended college" dummy variable equals 1, then the

"years of college completed" variable must equal at least one. As a result, the overall effect of the father attending a single year of college is positive.

²⁰ As in the case of gender, because the variables for race and ethnicity are interacted with all other regressors in the models, we have not offered any interpretations of the main effects of those variables. That is, the models specify that occupational differences between racial and ethnic groups depend on the values of other regressors.

²¹ See Table 11.

²² Michael Hout's analyses of trends and differentials in occupational mobility are exemplary in this respect (Hout, 1984a; Hout, 1984b; Hout, 1988; Hout, 1996).

Table 1. Construction of Variables, SIPP (1986-1988) and GSS (1994)

Variable	Coding in SIPP (1986-1988)	Coding in GSS (1994)
Sex	0 = Male; 1 = Female	0 = Male; 1 = Female
Age	Age in Years (Between 25 and 64)	Age in Years (Between 25 and 64)
Number of Siblings	Top-coded at 10	Top-coded at 10
Non-Intact Family	1 = Not living with both Natural Parents at Age 16; 0 = Otherwise	1 = Not living with both Natural Parents at Age 16; 0 = Otherwise
South	Respondent was Born in DE, MD, WV, VI, NC, SC, GA, FL, DC, KY, TN, AL, MS, AR, OK, LA, or TX	At Age 16, Respondent Lived in DE, MD, WV, VI, NC, SC, GA, FL, DC, KY, TN, AL, MS, AR, OK, LA, or TX
Farm	Father's or Mother's 1980-Basis Census Occupation Code was Between 473 and 479 When Resp. was 16	Father's or Mother's 1980-Basis Census Occupation Code was Between 473 and 479 When Resp. was Growing Up
Respondent's Education	Years of School Completed, Adjusted on the Basis of Degree Information. (If highest degree is HS Diploma or GED, then Years of School is 12; If highest degree is Some College w/o a Degree, then Max. Years of School is 15; If highest degree is Associate's Degree,	Years of School Completed, Adjusted on the Basis of Degree Information. (If highest degree is HS Diploma or GED, then Years of School is 12; If highest degree is Some College w/o a Degree, then Max. Years of School is 15; If highest degree is Associate's Degree,

then Years of School is 14; If highest degree is Bachelor's Degree, then Years of School is 16; If highest degree is Master's Degree, the Years of School is 18; If highest degree is Professional, Ph.D., or M.D., then Years of School is 20).

then Years of School is 14; If highest degree is Bachelor's Degree, then Years of School is 16; If highest degree is Master's Degree, the Years of School is 18; If highest degree is Professional, Ph.D., or M.D., then Years of School is 20).

Mother's and
Father's Education

Highest Year Completed When Resp. was 16 (SIPP Reported Parents' Years of School in Categories; For the Categories 0-8, 9-11, and 13-15 a Value was Selected on the Basis of the Distribution of Years of School Completed by Parents in the 1986 through 1988 GSS)

Highest Year Parent Completed and Got Credit For.

Respondent's First
Full-Time Occupation

Not Available

1980-Basis Census Occupational Classification of Resp.'s First Full-Time Occupation

Respondent's Current or
Last Occupation

1980-Basis Census Occupational Classification of Job Resp. Worked at for the 4 Months Prior to the Interview

1980-Basis Census Occupational Classification of Job Resp. Normally Does

Mother's and
Father's Occupation

Parent's 1980-Basis Census Occupational Classification when Resp. was 16

Parent's 1980-Basis Census Occupational Classification when Resp. was Growing Up

Table 2.

Means and Standard Deviations of Family Background and Education Variables for Non-Hispanic Whites in SIPP (1986-1988) and GSS (1994)

	All Non-Hispanic Whites				Non-Hispanic White Men				Non-Hispanic White Women			
	No Missing Data				No Missing Data				No Missing Data			
	Full Sample		on R's C/L Occ.		Full Sample		on R's C/L Occ.		Full Sample		on R's C/L Occ.	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
SIPP (1986-1988)												
Proportion Female	0.51	(0.50)	0.45	(0.50)	-	-	-	-	-	-	-	-
Age in Years	41.74	(11.48)	40.37	(10.66)	41.54	(11.37)	40.49	(10.72)	41.92	(11.58)	40.23	(10.57)
Number of Siblings	3.02	(2.29)	2.95	(2.23)	3.00	(2.28)	2.96	(2.24)	3.03	(2.30)	2.93	(2.22)
Prop. from Non-Intact Fam.	0.23	(0.42)	0.22	(0.41)	0.22	(0.42)	0.22	(0.41)	0.24	(0.42)	0.23	(0.42)
Prop. Born in the South	0.25	(0.44)	0.24	(0.43)	0.25	(0.43)	0.24	(0.43)	0.26	(0.44)	0.25	(0.43)
Prop. from Farm Origin	0.12	(0.32)	0.11	(0.31)	0.12	(0.33)	0.11	(0.32)	0.11	(0.32)	0.10	(0.31)
Respondent's Educ. (in Years)	13.06	(2.72)	13.35	(2.65)	13.23	(2.93)	13.43	(2.84)	12.91	(2.48)	13.26	(2.39)
Mother's Educ. (in Years)	11.03	(3.11)	11.27	(2.99)	11.18	(3.07)	11.34	(2.98)	10.77	(3.82)	11.19	(3.01)
Father's Educ. (in Years)	10.84	(3.81)	11.09	(3.74)	10.93	(3.80)	11.10	(3.74)	10.90	(3.14)	11.08	(3.75)
Maximum N	35,548		27,468		17,229		15,053		18,319		12,415	

General Social Survey (1994)

Proportion Female	0.54	(0.50)	0.54	(0.50)	-	-	-	-	-	-	-	-
Age in Years	42.08	(10.57)	42.11	(10.46)	41.68	(10.22)	41.83	(10.17)	42.41	(10.85)	42.35	(10.70)
Number of Siblings	3.15	(2.33)	3.15	(2.32)	3.09	(2.29)	3.10	(2.28)	3.20	(2.37)	3.19	(2.35)
Prop. from Non-Intact Fam.	0.23	(0.42)	0.23	(0.42)	0.23	(0.42)	0.22	(0.41)	0.24	(0.43)	0.24	(0.42)
Prop. Lived in the South, Age 16	0.29	(0.45)	0.29	(0.45)	0.29	(0.45)	0.29	(0.46)	0.29	(0.45)	0.29	(0.45)
Prop. from Farm Origin	0.10	(0.30)	0.10	(0.30)	0.10	(0.30)	0.10	(0.30)	0.09	(0.29)	0.09	(0.29)
Respondent's Educ. (in Years)	13.58	(2.48)	13.61	(2.43)	13.65	(2.59)	13.63	(2.59)	13.52	(2.39)	13.60	(2.29)
Mother's Educ. (in Years)	11.60	(2.88)	11.61	(2.87)	11.75	(2.79)	11.74	(2.79)	11.48	(2.95)	11.49	(2.93)
Father's Educ. (in Years)	11.50	(3.71)	11.49	(3.70)	11.54	(3.71)	11.49	(3.69)	11.47	(3.71)	11.50	(3.71)
Maximum N	1,781		1,724		812		793		969		931	

Table 3.

Means and Standard Deviations of Family Background and Education Variables for Blacks and Hispanics in SIPP (1986-1988)

	All Blacks				Black Men				Black Women			
	Full Sample		No Missing Data		Full Sample		No Missing Data		Full Sample		No Missing Data	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
			on R's C/L Occ.				on R's C/L Occ.				on R's C/L Occ.	
Proportion Female	0.55	(0.50)	0.52	(0.50)	-	-	-	-	-	-	-	-
Age in Years	40.14	(11.26)	39.43	(10.45)	40.11	(11.29)	39.26	(10.61)	40.16	(11.23)	39.59	(10.30)
Number of Siblings	4.56	(3.08)	4.49	(3.04)	4.61	(3.11)	4.62	(3.08)	4.53	(3.05)	4.36	(3.00)
Prop. from Non-Intact Fam.	0.45	(0.50)	0.43	(0.49)	0.43	(0.49)	0.42	(0.49)	0.47	(0.50)	0.44	(0.50)
Prop. Born in the South	0.57	(0.49)	0.57	(0.50)	0.56	(0.50)	0.55	(0.50)	0.59	(0.49)	0.59	(0.49)
Prop. from Farm Origin	0.19	(0.39)	0.18	(0.38)	0.19	(0.39)	0.18	(0.39)	0.19	(0.39)	0.17	(0.38)
Respondent's Educ. (in Years)	11.94	(2.90)	12.43	(2.74)	11.84	(3.03)	12.20	(2.90)	12.02	(2.78)	12.65	(2.57)
Mother's Educ. (in Years)	9.72	(3.34)	10.01	(3.29)	9.75	(3.36)	9.98	(3.34)	9.70	(3.33)	10.04	(3.24)
Father's Educ. (in Years)	8.90	(3.70)	9.22	(3.70)	8.90	(3.62)	9.15	(3.65)	8.90	(3.76)	9.28	(3.74)
Maximum N	3,883		2,646		1,610		1,186		2,273		1,460	

	All Hispanics				Hispanic Men				Hispanic Women			
			No Missing Data				No Missing Data				No Missing Data	
	Full Sample		on R's C/L Occ.		Full Sample		on R's C/L Occ.		Full Sample		on R's C/L Occ.	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Proportion Female	0.51	(0.50)	0.40	(0.49)	-	-	-	-	-	-	-	-
Age in Years	39.15	(10.71)	38.11	(9.95)	38.68	(10.62)	37.75	(9.96)	39.60	(10.77)	38.65	(9.93)
Number of Siblings	4.81	(2.96)	4.68	(2.96)	4.76	(2.97)	4.76	(2.96)	4.85	(2.96)	4.56	(2.95)
Prop. from Non-Intact Fam.	0.29	(0.45)	0.29	(0.45)	0.28	(0.45)	0.29	(0.45)	0.29	(0.45)	0.28	(0.45)
Prop. Born in the South	0.20	(0.40)	0.22	(0.41)	0.20	(0.40)	0.21	(0.40)	0.20	(0.40)	0.23	(0.42)
Prop. from Farm Origin	0.30	(0.46)	0.28	(0.45)	0.31	(0.46)	0.30	(0.46)	0.30	(0.46)	0.25	(0.43)
Respondent's Educ. (in Years)	10.62	(3.87)	11.13	(3.78)	10.81	(4.03)	11.03	(3.95)	10.43	(3.71)	11.29	(3.49)
Mother's Educ. (in Years)	7.21	(4.40)	7.54	(4.37)	7.42	(4.47)	7.44	(4.49)	7.01	(4.32)	7.68	(4.20)
Father's Educ. (in Years)	7.39	(4.71)	7.77	(4.73)	7.47	(4.77)	7.59	(4.78)	7.32	(4.66)	8.00	(4.66)
Maximum N	2,724		1,911		1,288		1,094		1,436		817	

Table 4.

Correlations Among 15 Measures of Occupational Standing Across 1980-Basis Census Occupation Categories

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. Hauser-Warren Total-Based SEI	1.00														
2. Hauser-Warren Male-Based SEI	0.97	1.00													
3. Hauser-Warren Female-Based SEI	0.96	0.91	1.00												
4. Stevens-Cho Total-Based SEI	0.94	0.91	0.91	1.00											
5. Stevens-Cho Male-Based SEI	0.93	0.92	0.90	0.99	1.00										
6. Nakao-Treas Total-Based SEI	0.97	0.94	0.93	0.96	0.95	1.00									
7. Nakao-Treas Male-Based SEI	0.94	0.94	0.90	0.94	0.95	0.97	1.00								
8. NORC Prestige Score	0.88	0.85	0.84	0.87	0.86	0.87	0.84	1.00							
9. Nam-Powers SES Score	0.90	0.90	0.84	0.83	0.83	0.90	0.88	0.82	1.00						
10. logit[Occ. Educ. (Total)]	0.94	0.91	0.91	0.92	0.93	0.95	0.95	0.83	0.84	1.00					
11. logit[Occ. Educ. (Men)]	0.90	0.89	0.86	0.89	0.91	0.91	0.94	0.80	0.80	0.98	1.00				
12. logit[Occ. Educ. (Women)]	0.92	0.87	0.95	0.90	0.90	0.92	0.91	0.81	0.81	0.96	0.92	1.00			
13. logit[Occ. Wage Rate (Total)]	0.84	0.86	0.78	0.73	0.71	0.80	0.75	0.72	0.86	0.66	0.60	0.66	1.00		
14. logit[Occ. Wage Rate (Men)]	0.87	0.92	0.80	0.76	0.77	0.83	0.82	0.75	0.88	0.73	0.69	0.71	0.97	1.00	
15. logit[Occ. Wage Rate (Women)]	0.82	0.82	0.84	0.74	0.72	0.79	0.75	0.72	0.79	0.68	0.62	0.71	0.91	0.87	1.00

Table 5.

Occupational Standing of Non-Hispanic Whites in SIPP (1986-1988) and GSS (1994)

	SIPP (1986-1988)						GSS (1994)					
	All Whites		White Men		White Women		All Whites		White Men		White Women	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
First Full-Time Occupation							(N=827)		(N=363)		(N=464)	
Hauser-Warren Total-Based SEI	-	-	-	-	-	-	33.70 (15.30)	33.78 (15.63)	33.64 (15.05)			
Hauser-Warren Male-Based SEI	-	-	-	-	-	-	32.98 (14.99)	32.21 (15.95)	33.58 (14.18)			
Hauser-Warren Female-Based SEI	-	-	-	-	-	-	33.51 (15.00)	33.06 (14.86)	33.87 (15.12)			
Stevens-Cho Total-Based SEI	-	-	-	-	-	-	34.31 (18.54)	34.11 (20.18)	34.47 (17.17)			
Stevens-Cho Male-Based SEI	-	-	-	-	-	-	36.36 (19.17)	34.04 (21.23)	38.17 (17.19)			
Nakao-Treas Total-Based SEI	-	-	-	-	-	-	45.04 (18.84)	45.54 (19.73)	44.64 (18.12)			
Nakao-Treas Male-Based SEI	-	-	-	-	-	-	47.74 (18.04)	44.89 (19.94)	49.97 (16.09)			
NORC Prestige Score	-	-	-	-	-	-	41.44 (14.48)	40.85 (14.99)	41.90 (14.08)			
Nam-Powers SES Score	-	-	-	-	-	-	46.42 (26.54)	49.33 (28.27)	44.17 (24.91)			
logit[Occ. Educ. (Total)]	-	-	-	-	-	-	0.18 (1.41)	-0.03 (1.46)	0.34 (1.35)			
logit[Occ. Educ. (Men)]	-	-	-	-	-	-	0.43 (1.47)	0.07 (1.55)	0.70 (1.34)			
logit[Occ. Educ. (Women)]	-	-	-	-	-	-	0.09 (1.37)	-0.08 (1.38)	0.22 (1.35)			
logit[Occ. Wage Rate (Total)]	-	-	-	-	-	-	-1.44 (1.10)	-1.11 (1.07)	-1.69 (1.05)			
logit[Occ. Wage Rate (Men)]	-	-	-	-	-	-	-1.05 (1.04)	-0.91 (1.09)	-1.16 (0.99)			
logit[Occ. Wage Rate (Women)]	-	-	-	-	-	-	-1.82 (1.02)	-1.63 (1.00)	-1.96 (1.01)			

Current or Last Occupation	(N= 27,468)		(N= 15,053)		(N= 12,415)		(N=1,724)		(N=793)		(N=931)	
Hauser-Warren Total-Based SEI	37.62	(14.24)	38.57	(14.26)	36.44	(14.13)	37.55	(14.16)	37.87	(13.86)	37.28	(14.42)
Hauser-Warren Male-Based SEI	37.28	(13.92)	37.73	(14.28)	36.72	(13.44)	37.12	(13.81)	36.96	(13.82)	37.25	(13.80)
Hauser-Warren Female-Based SEI	36.50	(13.92)	36.90	(13.82)	36.00	(14.01)	36.68	(13.97)	36.44	(13.52)	36.89	(14.35)
Stevens-Cho Total-Based SEI	38.98	(18.83)	39.50	(19.73)	38.33	(17.63)	39.01	(18.92)	38.22	(19.39)	39.69	(18.49)
Stevens-Cho Male-Based SEI	41.33	(19.50)	40.69	(20.88)	42.12	(17.60)	41.19	(19.42)	39.09	(20.50)	42.97	(18.27)
Nakao-Treas Total-Based SEI	49.91	(18.73)	51.17	(19.02)	48.35	(18.25)	49.88	(18.68)	50.05	(18.82)	49.73	(18.57)
Nakao-Treas Male-Based SEI	51.68	(18.23)	50.58	(19.48)	53.04	(16.47)	51.79	(18.15)	49.35	(19.38)	53.86	(16.76)
NORC Prestige Score	44.64	(13.24)	44.84	(13.36)	44.41	(13.09)	44.84	(13.30)	45.06	(12.88)	44.66	(13.66)
Nam-Powers SES Score	56.85	(24.74)	60.79	(24.05)	51.99	(24.71)	56.10	(24.46)	59.87	(23.48)	52.88	(24.83)
logit[Occ. Educ. (Total)]	0.40	(1.35)	0.33	(1.41)	0.50	(1.28)	0.44	(1.35)	0.26	(1.38)	0.59	(1.30)
logit[Occ. Educ. (Men)]	0.63	(1.42)	0.45	(1.49)	0.85	(1.29)	0.67	(1.41)	0.37	(1.46)	0.93	(1.31)
logit[Occ. Educ. (Women)]	0.29	(1.30)	0.23	(1.32)	0.36	(1.27)	0.33	(1.30)	0.19	(1.30)	0.45	(1.29)
logit[Occ. Wage Rate (Total)]	-1.00	(1.02)	-0.69	(0.89)	-1.37	(1.04)	-1.06	(1.02)	-0.72	(0.88)	-1.35	(1.05)
logit[Occ. Wage Rate (Men)]	-0.64	(0.97)	-0.46	(0.93)	-0.86	(0.96)	-0.69	(0.97)	-0.50	(0.91)	-0.85	(0.99)
logit[Occ. Wage Rate (Women)]	-1.50	(0.93)	-1.32	(0.88)	-1.73	(0.95)	-1.54	(0.94)	-1.34	(0.87)	-1.70	(0.97)

Table 6.

Occupational Standing of Blacks and Hispanics in SIPP (1986-1988)

	Blacks in SIPP (1986-1988)						Hispanics in SIPP (1986-1988)					
	All Blacks		Black Men		Black Women		All Hispanics		Hispanic Men		Hispanic Women	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Current or Last Occupation	(N= 2,646)		(N= 1,186)		(N= 1,460)		(N= 1,911)		(N= 1,094)		(N= 817)	
Hauser-Warren Total-Based SEI	31.43	(13.44)	31.26	(12.60)	31.58	(14.17)	29.95	(13.06)	30.48	(12.89)	29.16	(13.28)
Hauser-Warren Male-Based SEI	31.16	(13.41)	30.21	(12.91)	32.04	(13.80)	29.57	(13.26)	29.33	(13.33)	29.91	(13.15)
Hauser-Warren Female-Based SEI	30.82	(13.27)	30.50	(12.17)	31.11	(14.21)	29.21	(12.57)	29.52	(12.27)	28.76	(12.99)
Stevens-Cho Total-Based SEI	31.40	(17.20)	30.13	(16.52)	32.59	(17.73)	30.02	(16.34)	29.71	(16.38)	30.47	(16.27)
Stevens-Cho Male-Based SEI	32.49	(18.37)	30.10	(17.90)	34.72	(18.52)	31.30	(17.89)	29.87	(17.93)	33.42	(17.61)
Nakao-Treas Total-Based SEI	41.85	(17.56)	41.53	(16.65)	42.15	(18.37)	40.23	(16.78)	40.82	(16.52)	39.35	(17.13)
Nakao-Treas Male-Based SEI	43.60	(17.81)	40.88	(17.35)	46.14	(17.86)	41.59	(17.47)	40.07	(17.22)	43.84	(17.60)
NORC Prestige Score	39.50	(12.98)	38.34	(12.59)	40.58	(13.25)	38.04	(12.48)	37.98	(12.42)	38.13	(12.58)
Nam-Powers SES Score	44.34	(25.54)	45.79	(24.92)	42.98	(26.04)	42.33	(25.75)	44.52	(25.64)	39.08	(25.58)
logit[Occ. Educ. (Total)]	-0.13	(1.29)	-0.31	(1.23)	0.03	(1.32)	-0.30	(1.23)	-0.38	(1.21)	-0.18	(1.24)
logit[Occ. Educ. (Men)]	0.10	(1.37)	-0.21	(1.31)	0.39	(1.36)	-0.10	(1.32)	-0.29	(1.29)	0.18	(1.32)
logit[Occ. Educ. (Women)]	-0.22	(1.24)	-0.33	(1.14)	-0.11	(1.32)	-0.37	(1.18)	-0.41	(1.14)	-0.31	(1.23)
logit[Occ. Wage Rate (Total)]	-1.42	(0.97)	-1.19	(0.87)	-1.64	(1.00)	-1.46	(0.96)	-1.24	(0.91)	-1.80	(0.93)
logit[Occ. Wage Rate (Men)]	-1.07	(0.94)	-0.98	(0.91)	-1.15	(0.97)	-1.13	(0.94)	-1.04	(0.95)	-1.28	(0.91)
logit[Occ. Wage Rate (Women)]	-1.86	(0.88)	-1.74	(0.82)	-1.98	(0.91)	-1.95	(0.84)	-1.82	(0.84)	-2.15	(0.81)

Table 7.

Unstandardized Coefficients of Nine Indices of Socioeconomic Status

SEI Scale	Unstandardized Coefficient			Ratio of Occ. Earnings to Occ. Education
	Occupational Education	Occupational Wage Rate/Income	Education	
<u>Male-based SEI Scales:</u>				
Stevens-Cho *	0.589	0.232		0.39
Nakao-Treas	0.546	0.406		0.74
Hauser-Warren, Weighted	0.303	0.454		1.50
Hauser-Warren, Unweighted	0.511	0.319		0.62
<u>Total-based SEI Scales:</u>				
Stevens-Cho *	0.508	0.338		0.67
Nakao-Treas	0.620	0.276		0.45
Hauser-Warren, Weighted	0.436	0.287		0.66
Hauser-Warren, Unweighted	0.592	0.249		0.42
<u>SES Scale:</u>				
Nam-Powers SES	0.500	0.500		1.00

* Stevens-Cho SEI scores are not directly predicted from a regression of occupational prestige on occupational education and occupational earnings. The reported coefficients are from the 1970-basis Stevens-Featherman SEI (Stevens and Featherman, 1981), from which Stevens and Cho created their SEI scale. Male-based coefficients are for MSEI2; Total-based coefficients are for TSEI2.

Table 8.

Correlations Among Respondent's and Parents' Occupational Standing:

Non-Hispanic Whites in GSS (1994) and SIPP (1986-1988)

	Non-Hispanic White Men in GSS						Non-Hispanic White Women in GSS					
	Total-Based		Male-Based		Female-Based		Total-Based		Male-Based		Female-Based	
	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's
	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.
<i>Hauser - Warren SEI</i>												
Resp.'s Current or Last Occupation	0.37	0.21	0.38	0.20	0.32	0.20	0.29	0.26	0.28	0.25	0.27	0.28
<i>Stevens - Cho SEI</i>												
Resp.'s Current or Last Occupation	0.38	0.24	0.40	0.24	-	-	0.30	0.27	0.31	0.28	-	-
<i>Nakao - Treas SEI</i>												
Resp.'s Current or Last Occupation	0.38	0.23	0.42	0.25	-	-	0.29	0.26	0.29	0.28	-	-
<i>Occupational Education Scores</i>												
Resp.'s Current or Last Occupation	0.41	0.25	0.43	0.27	0.34	0.22	0.29	0.27	0.29	0.23	0.27	0.28
<i>NORC Prestige Scores</i>												
Resp.'s Current or Last Occupation	0.30	0.19	-	-	-	-	0.23	0.22	-	-	-	-
<i>Nam-Powers SES Scores</i>												
Resp.'s Current or Last Occupation	0.32	0.16	-	-	-	-	0.24	0.25	-	-	-	-
<i>Occupational Wage Rate Scores</i>												
Resp.'s Current or Last Occupation	0.20	0.04	0.27	0.08	0.20	0.08	0.20	0.18	0.22	0.22	0.19	0.23

	Non-Hispanic White Men in SIPP						Non-Hispanic White Women in SIPP					
	Total-Based		Male-Based		Female-Based		Total-Based		Male-Based		Female-Based	
	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's
	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.

Hauser - Warren SEI

Resp.'s Current or Last Occupation	0.28	0.22	0.28	0.22	0.26	0.22	0.26	0.26	0.26	0.25	0.25	0.28
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Stevens - Cho SEI

Resp.'s Current or Last Occupation	0.29	0.25	0.30	0.26	-	-	0.26	0.26	0.26	0.26	-	-
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Nakao - Treas SEI

Resp.'s Current or Last Occupation	0.29	0.22	0.30	0.24	-	-	0.27	0.25	0.27	0.26	-	-
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Occupational Education Scores

Resp.'s Current or Last Occupation	0.31	0.25	0.31	0.25	0.27	0.25	0.27	0.28	0.27	0.27	0.25	0.29
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NORC Prestige Scores

Resp.'s Current or Last Occupation	0.22	0.18	-	-	-	-	0.21	0.23	-	-	-	-
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Nam-Powers SES Scores

Resp.'s Current or Last Occupation	0.24	0.19	-	-	-	-	0.23	0.21	-	-	-	-
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Occupational Wage Rate Scores

Resp.'s Current or Last Occupation	0.17	0.12	0.21	0.15	0.16	0.15	0.17	0.17	0.20	0.18	0.19	0.22
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Table 9.

Correlations Among Respondent's and Parents' Occupational Standing: Blacks and Hispanics in SIPP (1986-1988)

	Black Men in SIPP						Black Women in SIPP					
	Total-Based		Male-Based		Female-Based		Total-Based		Male-Based		Female-Based	
	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's
	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.
<i>Hauser - Warren SEI</i>												
Resp.'s Current or Last Occupation	0.21	0.32	0.23	0.34	0.15	0.30	0.23	0.26	0.25	0.29	0.21	0.25
<i>Stevens - Cho SEI</i>												
Resp.'s Current or Last Occupation	0.19	0.30	0.22	0.32	-	-	0.16	0.28	0.19	0.32	-	-
<i>Nakao - Treas SEI</i>												
Resp.'s Current or Last Occupation	0.20	0.30	0.25	0.34	-	-	0.19	0.29	0.23	0.33	-	-
<i>Occupational Education Scores</i>												
Resp.'s Current or Last Occupation	0.22	0.32	0.23	0.34	0.16	0.29	0.19	0.27	0.18	0.27	0.18	0.25
<i>NORC Prestige Scores</i>												
Resp.'s Current or Last Occupation	0.10	0.24	-	-	-	-	0.13	0.18	-	-	-	-
<i>Nam-Powers SES Scores</i>												
Resp.'s Current or Last Occupation	0.17	0.24	-	-	-	-	0.24	0.30	-	-	-	-
<i>Occupational Wage Rate Scores</i>												
Resp.'s Current or Last Occupation	0.11	0.22	0.17	0.27	0.07	0.23	0.23	0.21	0.26	0.26	0.22	0.22

	Hispanic Men in SIPP						Hispanic Women in SIPP					
	Total-Based		Male-Based		Female-Based		Total-Based		Male-Based		Female-Based	
	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's	Dad's	Mom's
	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.	Occ.

Hauser - Warren SEI

Resp.'s Current or Last Occupation	0.37	0.32	0.38	0.31	0.32	0.32	0.19	0.24	0.23	0.26	0.15	0.23
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Stevens - Cho SEI

Resp.'s Current or Last Occupation	0.33	0.33	0.33	0.34	-	-	0.18	0.21	0.21	0.22	-	-
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Nakao - Treas SEI

Resp.'s Current or Last Occupation	0.33	0.30	0.35	0.31	-	-	0.18	0.23	0.26	0.28	-	-
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Occupational Education Scores

Resp.'s Current or Last Occupation	0.36	0.36	0.37	0.35	0.30	0.34	0.20	0.28	0.23	0.30	0.14	0.24
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NORC Prestige Scores

Resp.'s Current or Last Occupation	0.25	0.29	-	-	-	-	0.15	0.24	-	-	-	-
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Nam-Powers SES Scores

Resp.'s Current or Last Occupation	0.31	0.27	-	-	-	-	0.20	0.21	-	-	-	-
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Occupational Wage Rate Scores

Resp.'s Current or Last Occupation	0.31	0.20	0.34	0.22	0.31	0.23	0.11	0.15	0.17	0.17	0.13	0.17
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Table 10.

Regressions of Standing of First and Current or Last Occupations on Gender, Family Background, and Education,
 Non-Hispanic White GSS Respondents: Occupational Standing Expressed as Hauser-Warren Total-Based SEI

	First Full-Time Occupation			Current or Last Occupation		
	B	S.E.	t-stat	B	S.E.	t-stat
Sex (1 = Female)	6.09	(11.76)	(0.52)	-16.22	(11.26)	(-1.44)
Father's Education (0 to 12)	0.01	(0.30)	(0.03)	0.37	(0.29)	(1.29)
Interaction Term	-0.16	(0.39)	(-0.41)	-0.53	(0.37)	(-1.43)
Dad Attended College? (1 = Yes)	-7.89	(2.85)	(-2.77)	-0.73	(2.75)	(-0.27)
Interaction Term	9.59	(3.76)	(2.55)	-2.01	(3.62)	(-0.56)
Father's Education (13 and Up)	1.54	(0.74)	(2.07)	1.04	(0.72)	(1.45)
Interaction Term	-2.25	(0.99)	(-2.28)	-0.29	(0.95)	(-0.31)
Mother's Education (0 to 12)	0.24	(0.33)	(0.73)	-0.01	(0.32)	(-0.03)
Interaction Term	-0.20	(0.43)	(-0.46)	0.32	(0.41)	(0.78)
Mom Attended College? (1 = Yes)	-2.34	(2.92)	(-0.80)	-1.48	(2.80)	(-0.53)
Interaction Term	1.33	(3.78)	(0.35)	0.53	(3.62)	(0.15)
Mother's Education (13 and Up)	1.89	(0.98)	(1.92)	-0.08	(0.95)	(-0.08)
Interaction Term	-1.81	(1.23)	(-1.47)	-0.40	(1.18)	(-0.34)
Father's Occupational Status	-0.14	(0.06)	(-2.39)	0.04	(0.06)	(0.63)
Interaction Term	0.25	(0.08)	(3.14)	0.00	(0.08)	(0.06)
Mother's Occupational Status	0.05	(0.06)	(0.82)	-0.08	(0.06)	(-1.39)
Interaction Term	-0.02	(0.08)	(-0.20)	0.13	(0.08)	(1.69)
Respondent's Education (0 to 12)	1.74	(0.57)	(3.03)	0.19	(0.56)	(0.33)
Interaction Term	-0.68	(0.91)	(-0.75)	1.00	(0.88)	(1.13)

Resp. Attended College? (1 = Yes)	-2.13	(2.01)	(-1.06)	-1.24	(1.93)	(-0.65)
Interaction Term	-0.12	(2.61)	(-0.05)	3.51	(2.50)	(1.40)
Respondent's Education (13 and Up)	5.65	(0.46)	(12.34)	2.31	(0.53)	(4.32)
Interaction Term	-0.01	(0.63)	(-0.01)	-0.72	(0.72)	(-0.99)
Resp.'s First Job Occupational Status				0.41	(0.05)	(7.60)
Interaction Term				0.01	(0.07)	(0.20)
Age 35 - 44	1.11	(1.44)	(0.77)	2.23	(1.38)	(1.62)
Interaction Term	0.39	(1.93)	(0.20)	1.32	(1.85)	(0.72)
Age 45 - 54	1.66	(1.54)	(1.07)	1.57	(1.48)	(1.06)
Interaction Term	0.06	(2.13)	(0.03)	2.41	(2.04)	(1.18)
Age 55 - 65	7.05	(2.04)	(3.46)	-0.46	(1.99)	(-0.23)
Interaction Term	-3.50	(2.59)	(-1.35)	3.18	(2.51)	(1.27)
Size of Sibship	0.32	(0.25)	(1.28)	-0.11	(0.24)	(-0.47)
Interaction Term	-0.48	(0.33)	(-1.46)	-0.21	(0.32)	(-0.66)
Broken Family @ Age 16	2.22	(1.57)	(1.41)	1.66	(1.51)	(1.10)
Interaction Term	0.16	(1.83)	(0.09)	-0.30	(1.75)	(-0.17)
Lived in the South	-0.07	(1.24)	(-0.06)	-0.02	(1.19)	(-0.02)
Interaction Term	-0.85	(1.65)	(-0.52)	0.63	(1.58)	(0.40)
Raised on a Farm	-2.56	(1.99)	(-1.28)	-1.11	(1.91)	(-0.58)
Interaction Term	7.45	(2.72)	(2.73)	2.05	(2.62)	(0.78)
(Constant)	2.08	(7.74)	(0.27)	15.96	(7.41)	(2.16)

R-Squared 0.57 0.57

N 827 827

Table 11.

Signs of Significant Coefficients in Regressions of Standing of First and Current or Last Occupations on Gender, Family Background, and Education in GSS (1994)

	First Full-Time Occupation												Current or Last Occupation																													
	Hauser-Warren			Stevens-Cho			Nakao-Treas			Pres- Nam-			Occup. Educ.			Occup. Wage Rate			Hauser-Warren			Stevens-Cho			Nakao-Treas			Pres- Nam-			Occup. Educ.			Occup. Wage Rate								
	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.									
Sex (1 = Female)																																										
Father's Education (0 to 12)																																										
Interaction Term																																										
Dad Attended College? (1 = Yes)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Interaction Term	+	+	+	+	+	+	+			+	+	+																														
Father's Education (13 and Up)	+	+	+	+	+		+	+		+	+	+																														
Interaction Term	-	-	-	-	-	-	-	+		-	-	-																														
Mother's Education (0 to 12)																																										
Interaction Term																																										
Mom Attended College? (1 = Yes)																																										
Interaction Term																																										
Mother's Education (13 and Up)			+			+						+			+																											
Interaction Term																																										

Broken Family @ Age 16

Interaction Term

Lived in the South

Interaction Term

Raised on a Farm

Interaction Term

+ + + + + + + + + + + + + +

R-Squared 0.57 0.59 0.56 0.57 0.56 0.58 0.58 0.49 0.54 0.58 0.60 0.56 0.51 0.52 0.50 0.57 0.54 0.58 0.54 0.53 0.55 0.55 0.47 0.46 0.60 0.59 0.59 0.47 0.45 0.50

Table 12.

Regressions of Standing of Current or Last Occupations on Gender, Family Background, and Education,

SIPP Respondents: Occupational Standing Expressed as Hauser-Warren Total-Based SEI

| | Non-Hispanic Whites | | | Blacks | | | Hispanics | | |
|---------------------------------|---------------------|--------|---------|--------|--------|---------|-----------|--------|---------|
| | B | S.E. | t-stat | B | S.E. | t-stat | B | S.E. | t-stat |
| Sex (1 = Female) | -5.74 | (2.43) | (-2.36) | -2.25 | (5.38) | (-0.42) | -4.03 | (4.17) | (-0.97) |
| Father's Education (0 to 12) | 0.07 | (0.08) | (0.94) | -0.20 | (0.24) | (-0.83) | 0.21 | (0.18) | (1.16) |
| Interaction Term | 0.10 | (0.09) | (1.13) | -0.05 | (0.30) | (-0.17) | -0.16 | (0.26) | (-0.61) |
| Dad Attended College? (1 = Yes) | -0.34 | (0.40) | (-0.85) | 3.85 | (1.47) | (2.62) | 0.03 | (1.51) | (0.02) |
| Interaction Term | 0.06 | (0.44) | (0.15) | -2.93 | (1.75) | (-1.67) | 0.75 | (2.12) | (0.35) |
| Father's Education (13 and Up) | 0.01 | (0.08) | (0.13) | -1.93 | (0.44) | (-4.34) | -0.14 | (0.41) | (-0.35) |
| Interaction Term | -0.17 | (0.12) | (-1.43) | 1.93 | (0.60) | (3.23) | 0.25 | (0.62) | (0.41) |
| Mother's Education (0 to 12) | 0.01 | (0.08) | (0.09) | 0.66 | (0.22) | (3.04) | -0.14 | (0.16) | (-0.88) |
| Interaction Term | 0.06 | (0.10) | (0.56) | -0.50 | (0.28) | (-1.77) | 0.37 | (0.24) | (1.55) |
| Mom Attended College? (1 = Yes) | 0.14 | (0.38) | (0.36) | -3.22 | (1.16) | (-2.78) | 1.69 | (1.33) | (1.27) |
| Interaction Term | 0.32 | (0.40) | (0.78) | 4.36 | (1.38) | (3.16) | -1.53 | (1.94) | (-0.79) |
| Mother's Education (13 and Up) | 0.10 | (0.09) | (1.13) | 1.01 | (0.39) | (2.56) | -0.29 | (0.51) | (-0.58) |
| Interaction Term | -0.31 | (0.13) | (-2.37) | -1.21 | (0.53) | (-2.29) | 0.36 | (0.80) | (0.45) |
| Father's Occupational Status | 0.56 | (0.10) | (5.60) | 0.05 | (0.46) | (0.12) | 0.71 | (0.43) | (1.65) |
| Interaction Term | -0.20 | (0.15) | (-1.35) | 0.48 | (0.64) | (0.75) | -1.50 | (0.64) | (-2.36) |
| Mother's Occupational Status | 0.05 | (0.12) | (0.40) | -0.10 | (0.39) | (-0.25) | 0.51 | (0.51) | (0.99) |
| Interaction Term | 0.36 | (0.18) | (2.01) | 0.30 | (0.52) | (0.57) | -0.36 | (0.77) | (-0.47) |

| | | | | | | | | | |
|------------------------------------|-------|--------|---------|-------|--------|---------|-------|--------|---------|
| Respondent's Education (0 to 12) | 0.33 | (0.13) | (2.60) | 0.26 | (0.24) | (1.08) | 0.24 | (0.18) | (1.29) |
| Interaction Term | 0.13 | (0.23) | (0.55) | 0.32 | (0.41) | (0.78) | 0.34 | (0.30) | (1.15) |
| Resp. Attended College? (1 = Yes) | 3.02 | (0.49) | (6.23) | 3.40 | (1.03) | (3.31) | 2.06 | (1.15) | (1.80) |
| Interaction Term | 1.76 | (0.79) | (2.22) | 1.23 | (1.60) | (0.77) | 1.44 | (1.81) | (0.80) |
| Respondent's Education (13 and Up) | 3.73 | (0.04) | (83.19) | 4.12 | (0.20) | (20.95) | 3.48 | (0.21) | (16.35) |
| Interaction Term | 0.14 | (0.07) | (1.88) | 0.30 | (0.26) | (1.15) | 0.02 | (0.35) | (0.05) |
| Age 35 - 44 | 1.00 | (0.22) | (4.49) | 1.63 | (0.71) | (2.31) | 1.04 | (0.73) | (1.44) |
| Interaction Term | -0.31 | (0.33) | (-0.95) | 0.51 | (0.98) | (0.53) | 1.25 | (1.15) | (1.09) |
| Age 45 - 54 | 3.10 | (0.26) | (12.05) | 2.96 | (0.86) | (3.44) | 3.14 | (0.90) | (3.50) |
| Interaction Term | -1.66 | (0.38) | (-4.31) | -0.78 | (1.19) | (-0.66) | -2.12 | (1.37) | (-1.54) |
| Age 55 - 65 | 3.68 | (0.30) | (12.48) | 2.49 | (1.04) | (2.38) | 1.36 | (1.17) | (1.17) |
| Interaction Term | -3.26 | (0.45) | (-7.31) | 0.60 | (1.43) | (0.42) | 2.31 | (1.84) | (1.26) |
| Size of Sibship | -0.07 | (0.04) | (-1.73) | -0.11 | (0.10) | (-1.05) | -0.24 | (0.12) | (-2.04) |
| Interaction Term | -0.01 | (0.06) | (-0.14) | -0.02 | (0.14) | (-0.15) | 0.16 | (0.18) | (0.89) |
| Broken Family @ Age 16 | -0.14 | (0.26) | (-0.54) | 1.52 | (0.69) | (2.21) | -0.42 | (0.82) | (-0.51) |
| Interaction Term | -0.08 | (0.36) | (-0.23) | -1.12 | (0.89) | (-1.26) | 1.56 | (1.14) | (1.38) |
| Born in the South | 0.38 | (0.21) | (1.77) | -0.10 | (0.62) | (-0.16) | 1.23 | (0.78) | (1.56) |
| Interaction Term | -0.24 | (0.32) | (-0.75) | -0.17 | (0.86) | (-0.20) | 1.40 | (1.21) | (1.16) |
| Raised on a Farm | -2.66 | (0.32) | (-8.34) | 1.11 | (0.98) | (1.13) | -3.28 | (0.92) | (-3.54) |
| Interaction Term | 2.05 | (0.48) | (4.26) | -3.64 | (1.33) | (-2.73) | 0.00 | (1.47) | (0.00) |
| (Constant) | 21.57 | (1.44) | (15.01) | 16.01 | (3.56) | (4.50) | 21.47 | (2.66) | (8.08) |

| | | | |
|-----------|--------|-------|-------|
| R-Squared | 0.42 | 0.45 | 0.41 |
| N | 27,468 | 2,646 | 1,911 |

Interaction Term - Hispanic Male

Interaction Term - Hispanic Female

Father's Occupational Status + + + + + + + + + + + + + + +

Interaction Term - Non-Hisp. White Female - -

Interaction Term - Black Male - -

Interaction Term - Black Female +

Interaction Term - Hispanic Male

Interaction Term - Hispanic Female - - - - - - - - - - - - - - -

Mother's Occupational Status +

Interaction Term - Non-Hisp. White Female + + + + +

Interaction Term - Black Male

Interaction Term - Black Female

Interaction Term - Hispanic Male

Interaction Term - Hispanic Female

Respondent's Education (0 to 12) + + + + + + + + + + + + + + +

Interaction Term - Non-Hisp. White Female

Interaction Term - Black Male

Interaction Term - Black Female

Interaction Term - Hispanic Male

Interaction Term - Hispanic Female

Resp. Attended College? (1 = Yes) + + + + + + + + + + + + + + +

Interaction Term - Non-Hisp. White Female + + + + + + + + + + + + + + +

Interaction Term - Black Male

Interaction Term - Black Male

Interaction Term - Black Female

- - -

Interaction Term - Hispanic Male

- - - - - - - - -

Interaction Term - Hispanic Female

Size of Sibship

- - - - - - - - -

Interaction Term - Non-Hisp. White Female

Interaction Term - Black Male

Interaction Term - Black Female

Interaction Term - Hispanic Male

- - -

Interaction Term - Hispanic Female

Broken Family @ Age 16

Interaction Term - Non-Hisp. White Female

Interaction Term - Black Male

+ + + + + + + + + + +

Interaction Term - Black Female

Interaction Term - Hispanic Male

Interaction Term - Hispanic Female

Born in the South

+ + + + + + + + +

Interaction Term - Non-Hisp. White Female

Interaction Term - Black Male

-

Interaction Term - Black Female

-

Interaction Term - Hispanic Male

+

Interaction Term - Hispanic Female

+ + + + + + + + +

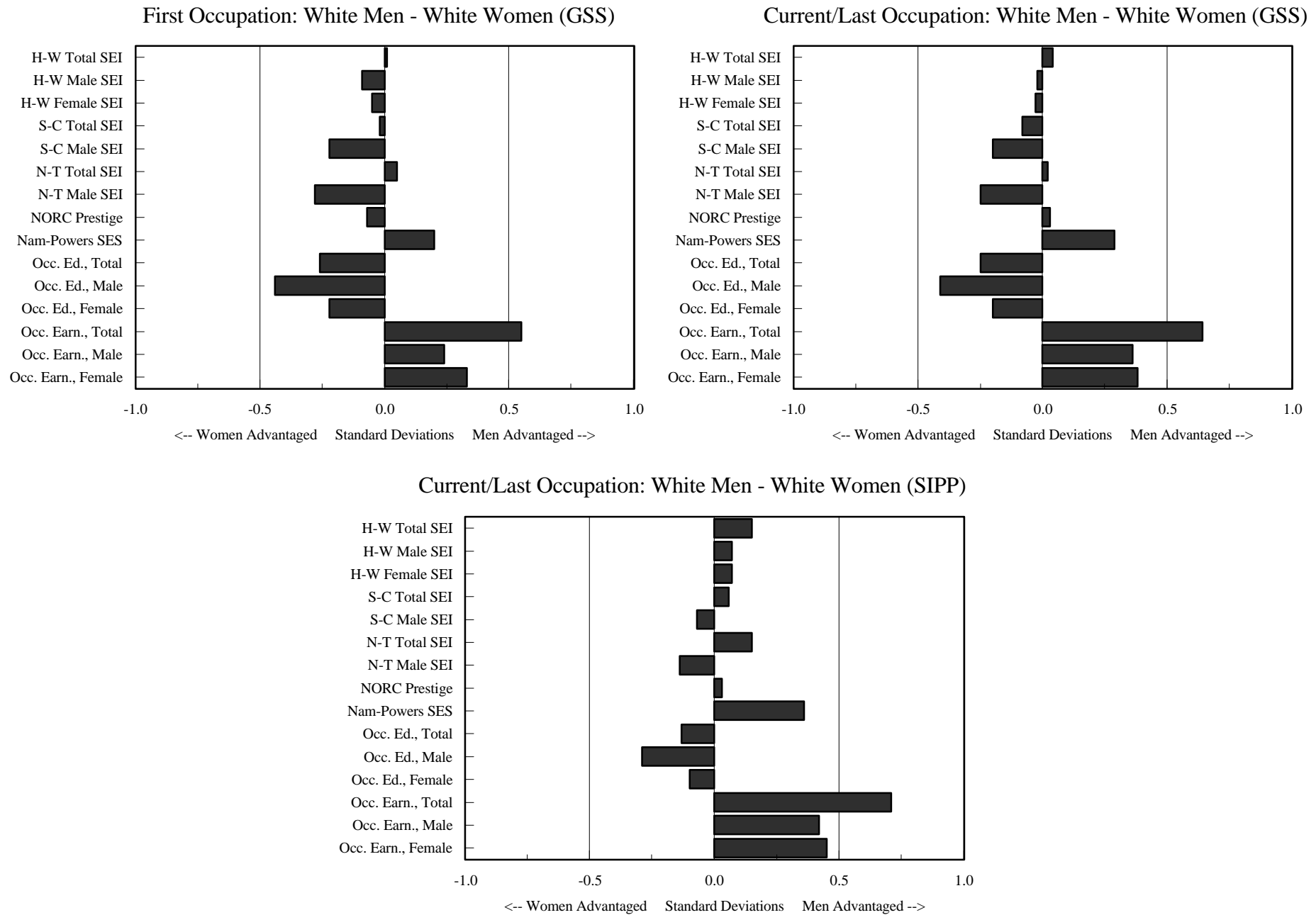
Raised on a Farm

- - - - - - - - - - - - - - -

| | | | | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Interaction Term - Non-Hisp. White Female | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Interaction Term - Black Male | + | + | + | + | + | + | + | | + | + | + | + | + | + | + |
| Interaction Term - Black Female | | | | | | | | | | | | | | | |
| Interaction Term - Hispanic Male | | | | | | | | | | | | | | | |
| Interaction Term - Hispanic Female | | | | | | | | | | | | | | | |
| R-Squared | 0.44 | 0.42 | 0.43 | 0.45 | 0.43 | 0.44 | 0.43 | 0.36 | 0.35 | 0.47 | 0.47 | 0.45 | 0.34 | 0.32 | 0.33 |

Figure 1.

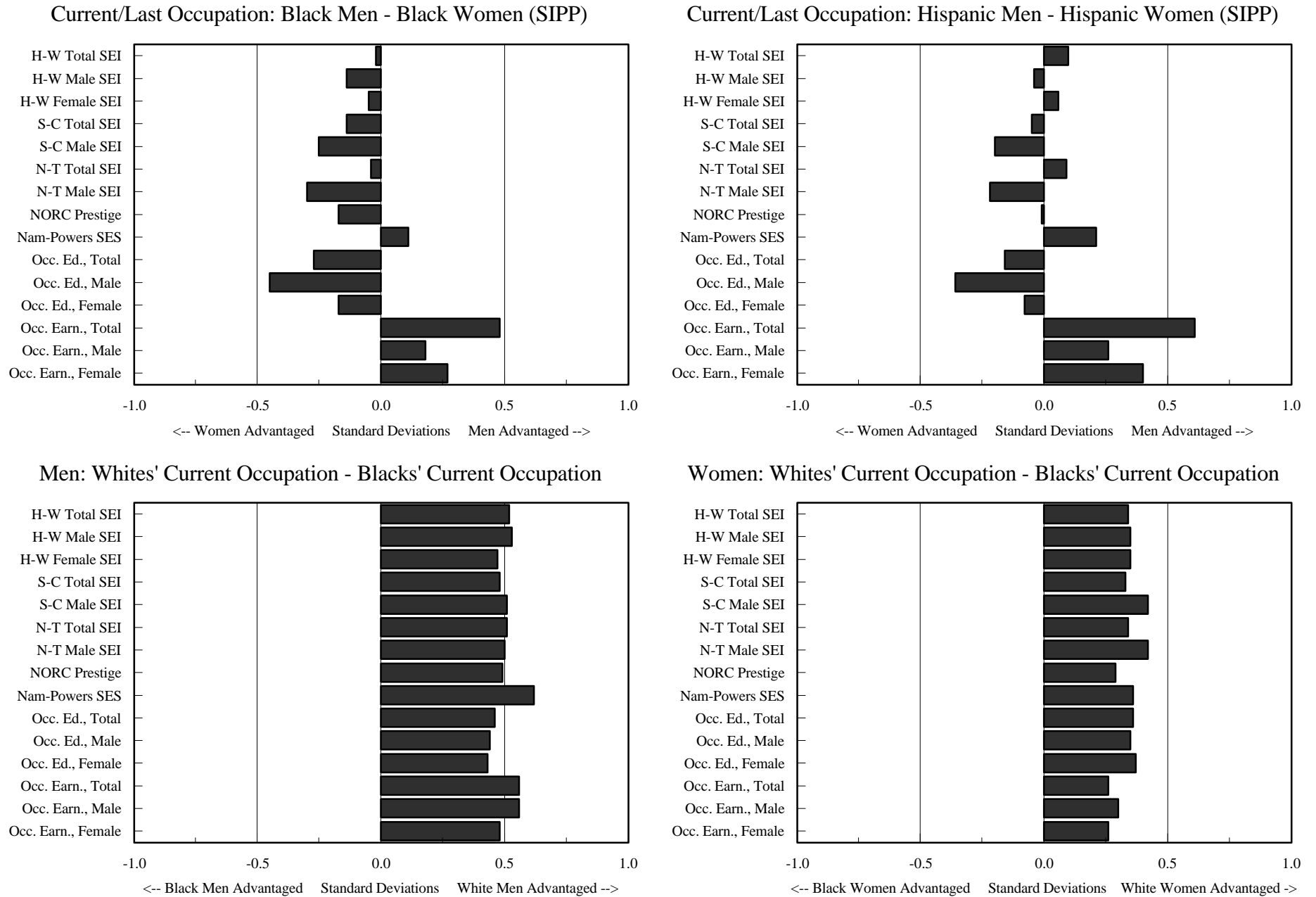
Comparing the Mean Occupational Standing of Men and Women's First and Current/Last Occupations, 1994 GSS and 1986-88 SIPP



Note: In each graph, the y-axis is in standard deviation units. To find the standardized score for the difference in occupational standing between groups A and B, with means avg_a and avg_b , standard deviations sd_a and sd_b , and sample sizes n_a and n_b , we computed: $(avg_a - avg_b) / \sqrt{((sd_a^2 \times n_a) + (sd_b^2 \times n_b)) / (n_a + n_b)}$.

Figure 2.

Comparing the Current/Last Occ. Standing of Blacks and Whites, Black Men and Women, and Hispanic Men and Women, SIPP

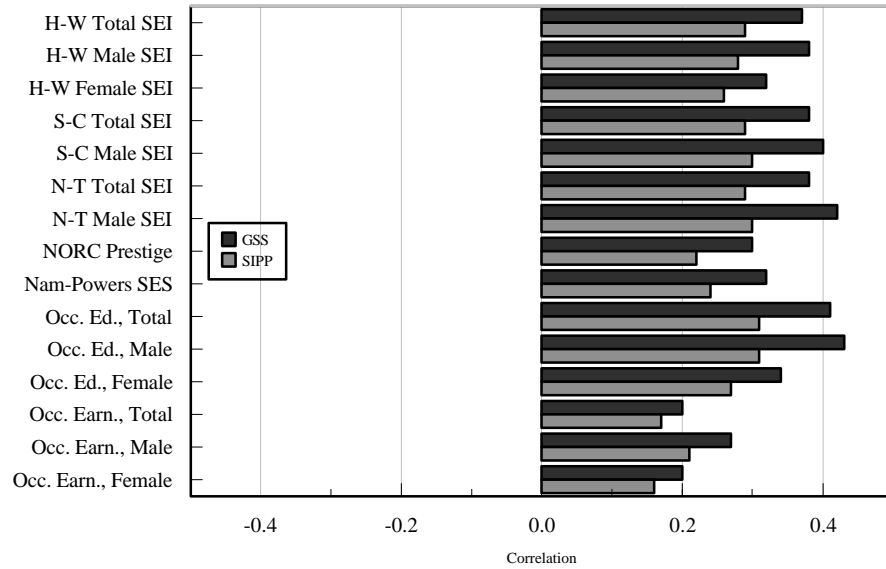


Note: In each graph, the y-axis is in standard deviation units. To find the standardized score for the difference in occupational standing between groups A and B, with means avg_a and avg_b , standard deviations sd_a and sd_b , and sample sizes n_a and n_b , we computed: $(avg_a - avg_b) / \sqrt{((sd_a^2 \times n_a) + (sd_b^2 \times n_b)) / (n_a + n_b)}$.

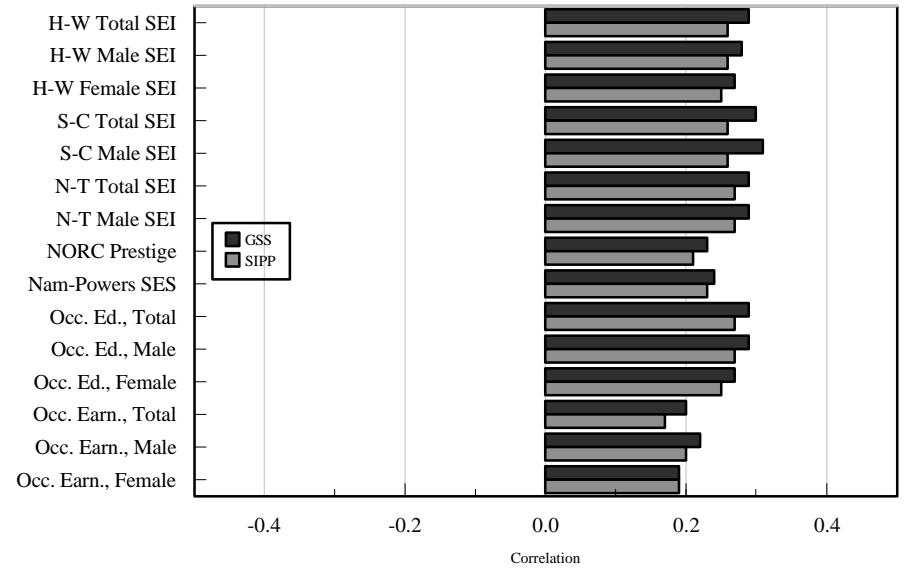
Figure 3.

Correlations Between Parents' and Respondents' Current/Last Occupations, Non-Hispanic Whites in GSS and SIPP

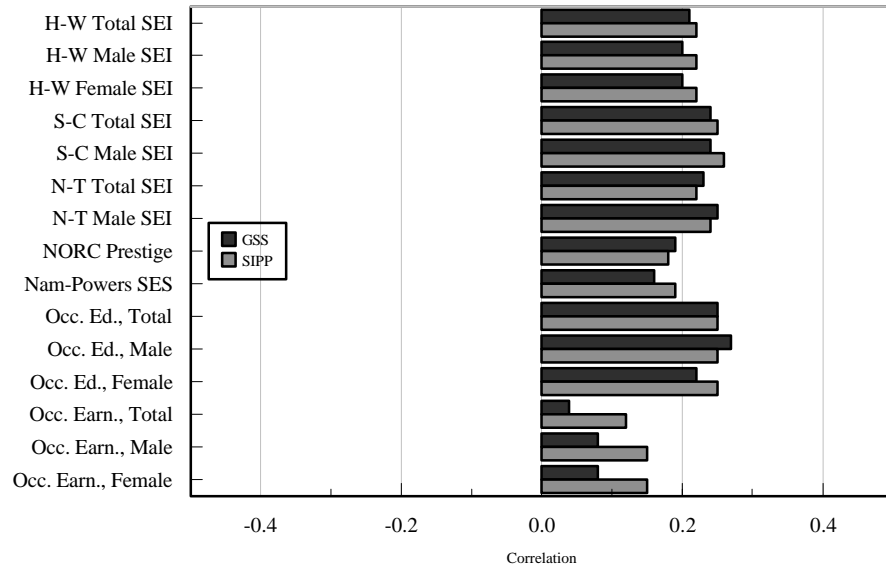
Non-Hispanic White Men and their Fathers in GSS and SIPP



Non-Hispanic White Women and their Fathers in GSS and SIPP



Non-Hispanic White Men and their Mothers in GSS and SIPP



Non-Hispanic White Women and their Mothers in GSS and SIPP

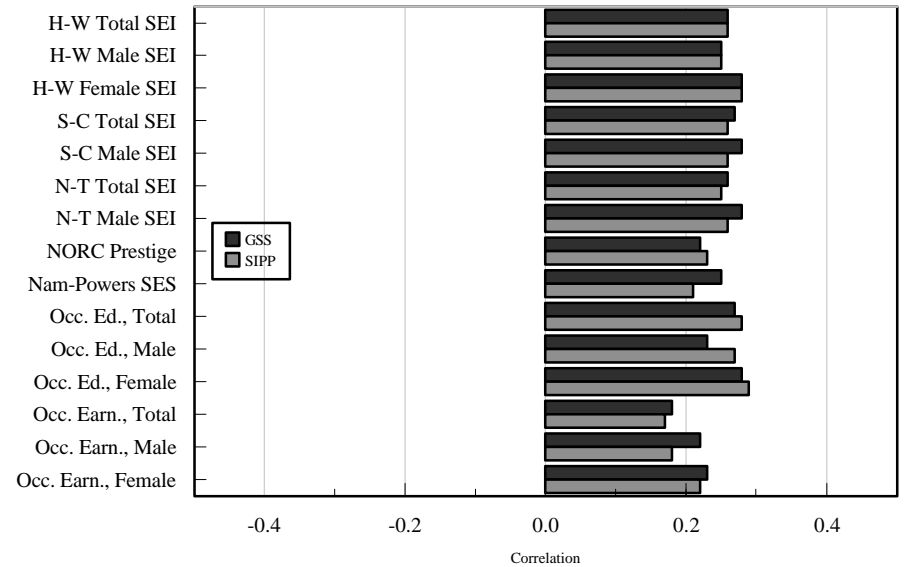
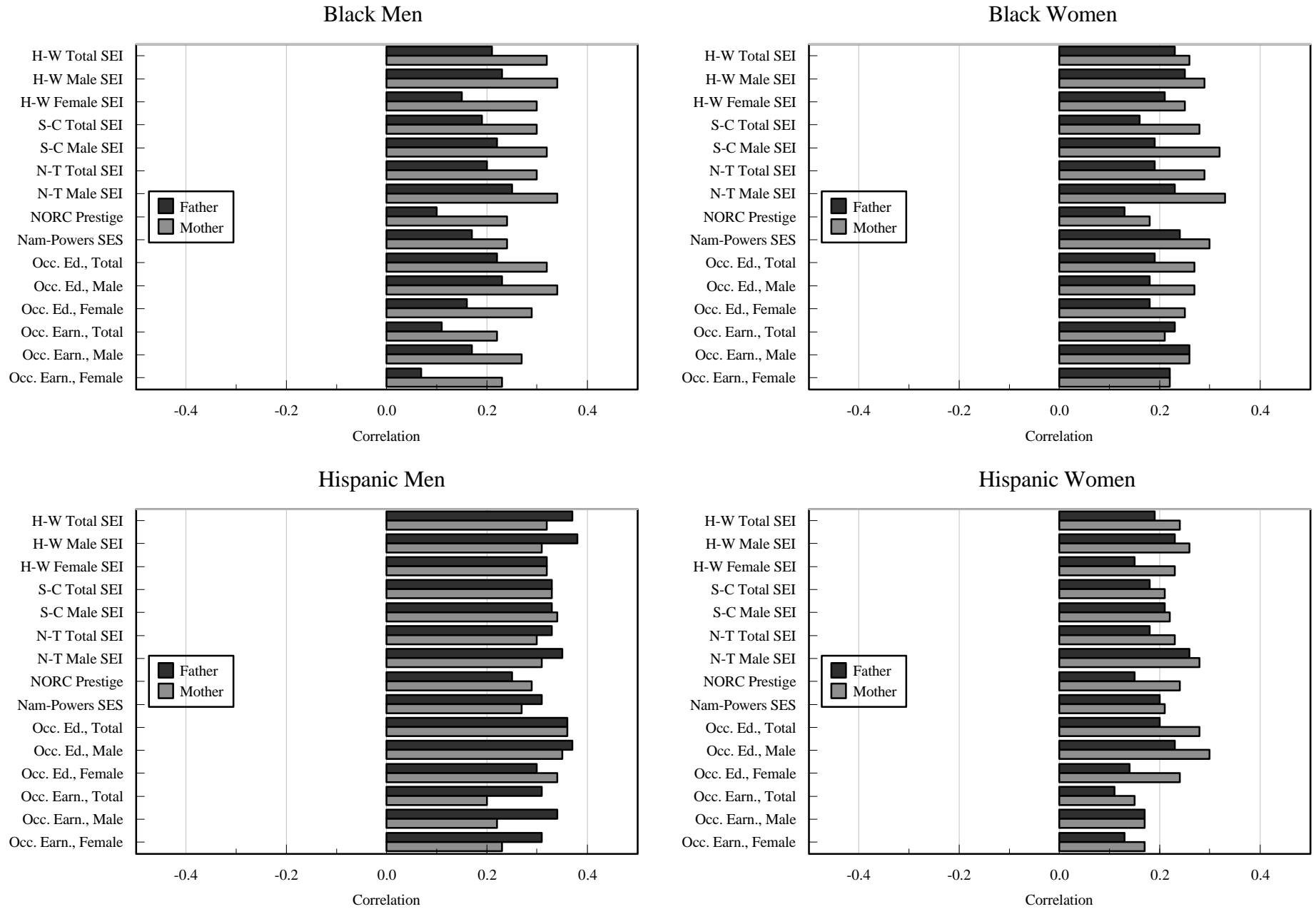


Figure 4.

Correlations Between Parents' and Respondents' Current/Last Occupations, Blacks and Hispanics in SIPP



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