

## MANUAL-NONMANUAL DISTINCTION, STATUS INCONSISTENCY AND CLASS IDENTIFICATION

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### INTRODUCTION

Class consciousness is an important concept in the study of social stratification and social behavior. Whatever criteria are used to identify classes, we do not have social classes unless there is class consciousness (Maclver, Page 1949). If individuals merely have similar placement on socioeconomic measures, they do not form classes unless they subjectively perceive themselves as identifying similar interests with others in similar positions.

We will examine the individual's identification with a certain class as measured by response to the familiar subjective class placement question (Centers 1949). Some researchers regard this as the lowest and most fundamental level of class consciousness (Giddens 1973; Vanneman 1980). We are especially interested in how class perception is shaped by objective socioeconomic factors, but we view these factors in a different way. According to Hodge and Treiman (1968 539) "... the failure of subjective class identification to crystalize around objective features of the stratification system is attributable to the fact that different objective aspects of one's position in the class structure do not themselves cumulate into a well-defined class system." No one has thoroughly investigated the ways in which this failure to crystalize takes place.

Past research has shown that among the more important determinants of class identification are occupational prestige, education, income, and blue collar versus white collar employment (Jackman, Jackman 1973; Vanneman, Pampel 1976). As prestige, education, and income increase, individuals are more likely to identify with the middle class as opposed to working class.

The failure of these factors to cumulate well as a basis for common interests explains the absence of a well-developed class system in the United States. There are at least two ways in which these objective factors could fail to cumulate: 1) Inconsistency among objective factors may impede identification with a social class. Skilled blue collar workers with high school education sometimes have income

fairly high in the income distribution. Public school teachers with advanced academic degrees often have incomes at or below the center of the income distribution. Both sets of individuals may have difficulty identifying with a particular class. 2) The determinants of class identification operate differently in different groups. Most determinants of class identification are less important for blacks than for whites (Legget 1968). This is generally attributed to the overriding significance of minority group membership as a determinant of class identity. Vanneman (1980) found that manual-nonmanual distinction was less important for women than for men. It is noted that prestige is less important as a determinant of class identity for blue collar than for white collar workers, and this is attributed to the overriding significance of being a manual worker (Vanneman, Pampel 1977).

### INCONSISTENCY AMONG EDUCATION INCOME AND PRESTIGE

Most observers agree that inconsistency among education, income, and prestige is an important feature of the American stratification system. But *how* does this inconsistency affect class identification? It is said that inconsistency generates confusion, and this is consistent with a pluralist view of American society, which assumes that there are several competing and inconsistent bases for political action or dimensions of the stratification system (Hodge, Treiman 1968). Much of this inconsistency among prestige, income and education arises from structural features of the labor market. We will consider only white full time employed males who have completed their education. For this group, education is constant throughout the work career, whereas income and prestige usually change. In this conceptual framework we can view education as a resource and income and prestige as rewards. We can then discuss inconsistency in terms of being underrewarded or overrewarded, based on a comparison of reward levels to education level. Education is not the only resource which workers carry into the labor market, but it is probably the most

important (Sorensen 1977)

There are at least three causes of being underrewarded. 1) Some people, through bad luck or misfortune, cannot capitalize on their resources as well as others, though this is not the main source of inconsistency, and may not be permanent. Over time, the effects of bad luck and misfortune can be overcome. 2) Young people are more likely to be underrewarded. They enter the labor market with a fixed set of resources, and careers consist of a gradual increase in rewards until they reach a reward level which matches their resources. Young workers are likely to see being underrewarded as temporary. 3) Much if not most of the underrewarding is due to the structure of certain careers. Several heavily populated occupations such as public school and college teaching and social work require high education levels, but income levels are at or below the center of prestige and income distributions.

There are at least two sources of being overrewarded. 1) Through hard work, luck, or good fortune, some people are able to achieve income and prestige levels in excess of what others with similar resources can achieve. Some with high school education become successful small businessmen with incomes relatively high in the income distribution. These are rather rare. 2) A more likely source of inconsistency is occupation or career. Unions succeed in raising the income of many workers. Skilled workers are likely to have income levels which exceed the level of their formal education. Foremen, office managers, and other low level supervisors are also likely to have a prestige level exceeding their education level.

Inconsistency impedes the effect of vertical status on class identification (Hodge, Treiman 1968). Thus, if inconsistency were not present, the effects of status would be stronger. We can test this argument by examining the effects of status without controlling for inconsistency, and comparing it to the effect of status after controlling for inconsistency. If the effects of status are greater after controlling for inconsistency, we can demonstrate that inconsistency among status dimensions is an important factor in the class identification process. Our first hypothesis is:

H1: *The effects of status will be greater after*

*controlling for the effects of status inconsistency.*

This means that status inconsistency suppresses the effects of status on class identification.

## **CLASS OF WORKERS AND CLASS IDENTIFICATION**

Blue and white collar workers have different economic and political interests, and these interests are reflected in a strong relation between the manual/nonmanual distinction and class identification (Jackman, Jackman 1973). As regards prestige, being a blue collar worker is such a powerful determinant of class identity that many more subtle status differences are unlikely to be as important for this group as for white collar workers (Van-neman, Pampel 1977).

Recent work on other aspects of stratification also suggests that the distinction between blue and white collar workers is very important: "... the central class division within the labor market is along the manual-nonmanual occupational divide ..." and manual workers have become increasingly disadvantaged relative to nonmanual workers, since the latter have some incentive to ally with capital (Gagliani 1981 259). Further, the contraction in the proportion of manual jobs and the rapid expansion in nonmanual jobs has led to increasing homogeneity of the blue collar labor force and the increasing heterogeneity of the white collar labor force. Consequently, we expect that not only is prestige less important for blue collar workers, but that other determinants of class identity are less important for blue than for white collar workers.

Along with objective status, we investigate three other factors which we expect to be more important for white than for blue collar workers: 1) union membership; 2) unemployment experience; 3) age. Past research indicates that union membership is *not* a significant determinant of class identity when other variables are included in the analysis (Jackman, Jackman 1973). However, this could be due to failure to consider its effects for different groups within the population. Some research on white collar occupations suggests that union membership might be a significant factor in this group. Not all manual jobs are desirable, because they involve hard,

degrading work, and some pay poorly (Gagliani 1981). Consequently, some non-manual workers identify as members of the working class. Membership in a union might enhance this identification, since membership in unions is one way in which nonmanual workers become polarized (Wright 1968).

Another aspect of the labor market experiences of individuals that might be related to class identity, and which has effects that will probably vary for blue and white collar workers is unemployment. This factor receives little attention in the recent class identification literature, though earlier work demonstrated its importance (Legget 1968). Recent unemployment experience is likely to help shape an individual's perceptions of the class structure and where s/he belongs in it. Though unemployment is generally more devastating for blue collar than for white collar workers, it is likely to have a larger effect on class identification for the latter, since the status of being a blue collar worker is so important.

Age is a neglected determinant of class identification. As individuals grow older, they accumulate property, such as automobiles, furnishings, and equity in a home. Their general life style improves, at least until retirement. Consequently, age is a variable which picks up these unmeasured changes in the quality of life. As individuals grow older they should be more likely to identify with the middle class. And we expect this variable to be less important for blue collar than for white collar workers. Our second hypothesis is:

H2: *Status and other determinants of class identification will be less important for blue collar workers than for white collar workers.*

### SPECIFYING INCONSISTENCY MODELS

Evaluating these two models requires ability to measure inconsistency among education, income, and prestige. The crucial step in studying status inconsistency is the assumption that there is a single underlying status dimension, and that inconsistency can be defined as orthogonal to that dimension (Hope 1975). Ignoring other possible independent variables for the moment, one possible model of class identification would be the following:

$$1: ID = b_1E + b_2I + b_3P$$

where ID = class identification;

E = education; I = income, and P = prestige. This is the basic model used by most researchers in the past, usually with some added independent variables. Three types of inconsistency among these variables are possible: inconsistency between income and education (I-E), inconsistency between prestige and education (P-E), and inconsistency between income and prestige (I-P). One statistically inappropriate way to examine inconsistency effects would be to retain the three separate measures of status and use difference terms to represent status inconsistency. This would result in the following model:

$$2: ID = b_1E + b_2I + b_3P + b_4(I-E) + b_5(P-E) + b_6(I-P)$$

But the covariance matrix of the variables in such a model would be singular, and no unique estimates of the b coefficients could be obtained. Another alternative would be to use interaction terms to represent inconsistency:

$$3: ID = b_1E + b_2I + b_3P + b_4IE + b_5PE + b_6PI$$

Here, interaction terms measure inconsistency plus other forms of interaction, and make it impossible to investigate linear forms of status inconsistency (Wilson 1979).

One appropriate way to assess the effects of inconsistency is to assume that there is an overall dimension of status and to define a number of types of inconsistency equal to the remaining degrees of freedom after creating the overall status measure (Hope 1975). We can create an overall measure of status called *socioeconomic status* (SES) which can be a weighted or unweighted sum of income, prestige and education. This leaves two degrees of freedom. Consequently, we must omit one type of inconsistency from the equation. In general, a model of n status variables generates a model of one overall measure of status and n-1 inconsistency variables. Trying to exceed this produces a singular covariance matrix. Assuming that we have some basis for choosing two of the possible forms of inconsistency over the other, we could arrive at the following model:

$$4: ID = b_1SES + b_2(P-E) + b_3(I-E)$$

There is question whether students of class identification want to give up the three separate status measures in order to

investigate status inconsistency. There are no methodological or statistical grounds for doing so. Equations 1 and 4 are technically the same, and would yield the same  $R^2$ , the same predicted value of ID, and identical coefficients for any other independent variables appearing in both models. The choice must be made between these models on theoretical grounds. The theoretical basis for choosing Equation 4 in our situation is that this model offers the only way to examine the impact of inconsistency on class identification.

## DATA

Our data are from the 1974, 1975, 1977, and 1978 General Social Surveys collected by the National Opinion Research Center. The 1976 GES was not used because it omitted the question about union membership. We look only at employed white males. Employed status is required because earnings from a job and the prestige of an individual's job are important variables in our analysis. Past analysis shows that the process of class identification is considerably different for nonwhites and women than for white males (Evers 1975; Goyder, Pineo 1974; Jackman, Jackman 1973; Ritter, Hargens 1975). Since sample sizes were similar, we did not weight each sample to the harmonic mean. After excluding cases with missing values our sample included 1628 white employed males.

## METHOD

Several alternatives can be used with a categorical dependent variable, including log linear models, probit analysis, and logit models (Goodman 1971; Vanneman, Pampel 1977; Feinberg, Mason 1979). In this analysis we use a linear logistic response model (logit; Haberman 1974). This model is appropriate for categorical dependent variables and both categorical and interval level independent variables. Assuming  $y$  is an independent binary random variable with values 0 or 1:

$$5: \Pr(y = 1) = p;$$

then the general logistic response model is:

$$6: \log [p / (1-p)] = BX$$

where  $X$  is a vector of independent variables, and  $B$  is a vector of coefficients. Thus, Equation 6 represents a model that is linear in

the logits. Maximum likelihood estimates of  $B$  are obtained and reported below.

We collapse 4 categories into 2: *working* (lower and working class) and *middle* (middle and upper class; Vanneman, Pampel 1977). For the hypothesis we estimate the following equation:

$$7: \log [p_m / (p_m - 1)] = b_1S + b_2(P - E) + b_3(I - E) + b_4M + b_5Un + b_6U + b_7A$$

where  $p_m$  = probability of being in the *middle class* category;  $S$  = status;  $M$  = manual;  $Un$  = unemployed;  $U$  = union; and  $A$  = age. Other terms are as previously defined.

## MEASURES

Education is measured in years of schooling, and occupational prestige applies the Siegel (1971) prestige scores. Measuring personal income is not as straightforward. Income responses were coded to categories based on uneven intervals, and it was not possible to standardize incomes for each year to a base year. Therefore we decided to convert the personal income variables to five ranks based on quintiles for each year, scoring the low quintile 1, and the high quintile 5. The composite measure of status (SES) was computed from factor loadings generated by a factor analysis of income, education, and prestige.

Inconsistency was defined in terms of the differences in rankings on *prestige and education* and *income and education*. Our basic measure of inconsistency was computed by subtracting standardized education from standardized income (Inc-Ed) and standardized education and standardized prestige (Pres-Ed). Four remaining variables are measured as follows: manual equals 1 for manual or blue collar worker, and 0 otherwise; Unemployment equals 1 if the respondent experienced at least one period of unemployment during the past 10 years, and 0 otherwise; Union equals 1 if the respondent belongs to a union during the survey year, and 0 otherwise. Age is measured in years.

## RESULTS

**Hypothesis 1.** For Model 1 in Table 1 the composite SES measure is used but inconsistency terms are excluded. The

goodness of fit test indicates that this model represents a significant improvement over the assumption that each person has the same probability of identifying with the middle class. The coefficients are metric, representing effects of the variable on the log of the odds of identifying with the middle class rather than the working class. A unit change in an interval variable modifies the log of the odds of identifying with upper class by the value of the coefficient, and for categorical variables, being in category 1 modifies the log of identifying with middle class by the value of the coefficient.

Being a manual worker diminishes the odds of middle class identification (-.438). This agrees with past research. Belonging to a union does not affect class identification, which also agrees with past research. The experience of unemployment reduces odds of middle class identity (-.179). This is as predicted, and suggests that unemployment operates as a variable in social class identification. Age is not significant. A significant effect appears for socioeconomic status (SES .765) which agrees with past research.

The test of Hypothesis 1 involves comparison of socioeconomic status in Model 1 to its effects in Model 2 of Table 1, which contains status inconsistency as well as status. The Chi-squared test of improvement in Table 2, which compares Model 2 with Model 1 shows that adding the inconsistency terms significantly improves ability to explain class identification. Further, the effects of socioeconomic status are substantially increased after controlling for status inconsistency: 1.034 in Model 2 compared to .765 in Model 1. Hypothesis 1 is supported. Inconsistency among the status measures suppresses the effect of status on class identification. When inconsistency effects are controlled, the effects of status increase.

Adding inconsistency terms has little impact on effect of being a manual worker, union membership, or unemployment experience. But adding inconsistency terms results in a significant effect on class identification for age (.015), suggesting that inconsistency also impedes the impact of age on class identification. This could occur from reduced likelihood of inconsistency, when education level exceeds income level with increased age.

**TABLE 1. DETERMINANTS OF CLASS IDENTIFICATION**

Variables	Model 1 with SES		Model 2: SES+ Inconsistency	
	Coeff.	t-test	Coeff.	t-test
Manual	-.438	-6.52	-.395	-5.74
Union	-.020	-0.34	-.066	-1.04
Unemployment	-.179	-2.92	-.174	-2.76
Age	.007	1.65	.015	3.38
SES	.765	9.07	1.034	10.74
Inc-Ed			.129	-2.19
Pres-Ed			-.552	6.94
Constant				-7.06
Chi <sup>2</sup> tests:	n = 1628, p = .001			
Goodness of fit	403.06; df = 5		457.04; df = 7	
Improvement test			53.98; df = 2	

t-test criteria:  $t_{.05} = 1.96$ ;  $t_{.01} = 2.58$ ;  $t_{.001} = 3.29$

**TABLE 2: DETERMINANTS OF CLASS IDENTITY: MANUAL AND NON MANUAL WORKERS**

Variables	Manual	Nonmanual	p
Union	.090	-.312	.004
Unemploy.	-.284	-.024	.050
Age	.011	.021	.277
SES	.757	1.331	.004
Inc-Ed	-.070	.358	.000
Pres-Ed	-.303	-.803	.002
Constant	-.992	-.682	
Chi <sup>2</sup> tests:	n = 1628		
Fit goodness	481.8; df = 7		.001
Improvement	24.7; df = 6		.001

Notes:

1. p significance level is that of interaction laws.
2. Improvement test compares Table 2 model to Model 2 of Table 1.

When we control for effects of inconsistency, the effects of age appear.

We made no predictions concerning the effects of the inconsistency terms. The results indicate that as the level of education increases, the likelihood of identifying with the middle class increases. However, as the level of prestige relative to the level of education increases, the likelihood of middle class identification decreases. We hesitate to attribute significance to these coefficients since we see

no a priori reason to predict the direction of their effects. We suspect that their effects are due primarily to structural positions in the United States labor market which produced the inconsistency, and not to the inconsistency per se.

**Hypothesis 2.** Table 2 contains the results of estimating a model that will allow us to test Hypothesis 2. The Chi<sup>2</sup> Test of Improvement indicates that this model represents a statistically significant improvement over the Model 2 of Table 1. This means that the effects of at least some of the determinants of class identification differ significantly for manual and nonmanual workers. The effects of belonging to a union support the hypothesis. Belonging to a union deters nonmanual workers from identifying with the middle class (-.312), but slightly increases the likelihood of middle class identification for manual workers (.090). This finding supports those who suggest that unionization may be one way to facilitate the identification of nonmanual workers with the working class (Wright 1976). The finding illustrates the importance of unionization as a determinant of class identification. The failure adequately to explore possible interaction in the past led to a premature decision that unionization had no direct impact on class identification.

The effects of unemployment do not support Hypothesis 2. Having experienced unemployment in the past 5 years has a much larger effect on class identification for manual workers (-.284) than for nonmanual workers (-.024). Perhaps unemployment is a more devastating experience for blue collar than for white collar workers.

Age effects also do not support Hypothesis 2. The slight difference in effect for nonmanual workers (.021) and manual workers (.011) is insignificant. The effects of socioeconomic status and inconsistency terms do support Hypothesis 2. Socioeconomic status is considerably more important in shaping the perceived class identity of nonmanual workers (1.331) than of manual workers (.757). Inconsistency between education and income has a larger effect for nonmanual workers (.358) than for manual workers (-.070). Inconsistency between prestige and education has a larger effect for nonmanual workers (-.803) than for manual workers (-.303). Thus

Hypothesis 2 is supported by 4 of the 6 variables. Only the effects of unemployment are the reverse of those predicted in Hypothesis 2. Most determinants of class identification are more important for non-manual than for manual workers.

## CONCLUSIONS

- 1) Inconsistency among measures of status does impede the effects of status on social class identification. With statistical control for inconsistency, the effect of an overall measure of status on class identification increases.
- 2) Union membership, socioeconomic status and inconsistency, as determinants of social class identification, are more important for nonmanual than for manual workers.
- 3) Important determinants of class identification which have been ignored or prematurely discarded in previous research include age, union membership, and unemployment experience.

Union membership and unemployment experience play different roles in class identification for blue collar and white collar workers. The effect of age is of particular interest, since it raises questions concerning class identification over the life course and the work career. The impact of status and other determinants of class identification may vary depending on the individual's career stage. The socioeconomic status of one's parents probably has an important impact on class identification early in adult life. This impact may decline with age as one's successes and failures come to play a larger role in the social class identification process.

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References concluded on Page 94

## CONCLUSION

While more analysts focus on the *stress* variable as an important indicator of psychological and social problems, they do so at the expense of ignoring the manner in which stress in the aggregate plays a vital role as sociological uncertainty. Being a good helping professional requires cognizance not only of one's particular therapy, but also of how this can be adjusted to suit ongoing changes in the nature of society. I have tried to sensitize human service practitioners to the effect of alterations in sociological uncertainty on human efforts to achieve normalcy. As a practitioner one must grow familiar with one's own version of current normalcy, but it is even more important to realize how transitory such normalcy is in the face of altering social pressures.

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## SANDEFUR, FINLEY continued from Page 88

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