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Do displaced workers lose occupational prestige? ☆

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Abstract

Worker displacement has become a common feature of employment in the “flexible economy.” While studies of income losses and the duration of unemployment after displacement abound, and popular accounts argue that workers often lose status, less empirical attention has been paid to the quality or prestige of employment displaced workers are able to secure after a downsizing event. This paper helps to fill this gap in the literature by focusing on changes in occupational prestige among a nationally representative sample of displaced workers who became reemployed from the January 2004 Displaced Workers and Employee Tenure Supplement of the Current Population Survey. Our findings show that displaced workers with higher levels of education, net of other factors, fared significantly better than others in job quality upon reemployment, highlighting the importance of education in retaining status and privilege in the new economy.

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1. Introduction

The nature of employment in the US has changed dramatically over the past three decades. Workers are now less likely to spend their entire careers with one employer than ever before. The standard employment relationship, based on a set of institutionalized understandings between employers and employees for full-time and long-term work, has been dismantled to the point where some commentators have declared the “end of employment as we knew it” (Reich, 2000).

Perhaps more than anything else, the onset of corporate “downsizing” in the 1980s marked the beginning of this shift in the employment relationship. A large body of work in the academic, business, and popular presses has debated the merits or detriments of downsizing for both individual workers and the economy at large. The popular stories that focus on the plight of displaced workers often assume that workers lose status after displacement. For instance, in the film *Roger and Me* (1990), Michael Moore shows displaced autoworkers

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taking counter jobs in fast food restaurants. Ehrenreich (2005) and Uchitelle (2006) both describe the difficulty that downsized middle class professionals have in finding work after displacement that retains their middle class status. The academic literature, for its part, focuses on abstract accounts of business strategy or case-based accounts of displaced workers, with some notable exceptions. For instance, economists have studied workers' transitions into and out of involuntary unemployment and wage losses associated with them (see Fallick, 1996; Carrington, 1993; Mazerolle and Singh, 2004). While Newman (1999) observed that many displaced workers lost a degree of social or occupational status, we lack a representative assessment of whether or not displaced workers lose occupational prestige, and the social status stemming from it, upon reemployment.

In this paper, we focus on displaced workers (those who have experienced a downsizing event) as we analyze the reemployment patterns of this increasingly large segment of the labor market. Using nationally representative data on displaced workers, we examine changes in occupational prestige that workers experience between their pre- and post-displacement jobs. Specifically, we pose two sets of questions. The first regard whether or not displaced workers are able to find jobs of comparable status to those from which they were displaced. The second regard which individual- and structural-level factors mediate the effects of displacement on the displaced workers' status upon reemployment. If displacement affects certain workers or groups differently than others, it may perpetuate labor market inequalities in ways that conform to or differ from other labor market processes. Before answering these questions, we will provide a brief portrait of the current working environment marked by flexibility and displacement and a discussion of influences on changes of occupational prestige post-displacement.

1.1. Employment flexibility and worker displacement

Post-World War II employment followed a "Fordist" model of stability based on large firms, growth in consumer markets, and long career ladders. Once employees gained entry into the bottom rung of a career ladder that combined with others to create the bureaucratic firm, they could expect long-term employment and predictable advancement in internal labor markets (ILMs) in exchange for their loyalty to the firm. The strength of unions and the relative isolation of the US economy from global competition helped to reinforce this system of production and employment to the benefit of many. This "standard" employment relationship became so widespread that many have theorized that an underlying social and psychological "contract" governed the exchange of stability for loyalty between employers and employees (Rousseau, 1995; Osterman et al., 2001).

During the past 25 years, however, a combination of social, political, and economic forces have led to organizational restructuring and an overall dismantling of the Fordist model that characterized the post-War economy (Rubin, 1996). Firms now strive for flexibility in the face of constantly changing market conditions hastened by increasing global competition, rapid technological advancement, the rise of the service sector and emergence of flatter organizational forms. Since the 1980s, a growing number of firms have utilized "numerical flexibility" by making use of temporary and contingent employees or downsizing their labor forces in order to adjust their labor requirements (Smith, 1997). As a result, employment has become increasingly unstable, and employees can rarely expect to develop an entire career in a single firm (Pollert, 1988; Harrison, 1994).

As downsizing became more widespread across occupations and industries, scholarly attention to it increased dramatically (Moore, 2003). An influential body of work examined the institutional changes that have accompanied employment flexibility, instability, and downsizing (see Cappelli, 1999; Osterman, 1999), and empirical research on post-displacement income and unemployment spells showed the social and structural conditions associated with downsizing (see Fallick, 1996; Moore, 2003). While these and many other studies have provided valuable information regarding post-displacement income and unemployment spells, they have focused primarily on economic rewards to the neglect of the non-economic reward of social status. We contribute to these studies by focusing on occupational prestige. In the case of displaced workers, we are interested in determining how displacement affects individuals' upward or downward movement in the occupational structure that, in tandem with other work structures, remains an important determinant of individuals' market positions, life-chances, access to valued goods, job autonomy, and social prestige in our market economy (Weeden and Grusky, 2005).

1.2. Occupational prestige

Occupational prestige remains the object of a considerable amount of debate and study within the sociology of work and social stratification literatures (see, for example, Jones and McMillan, 2001; Zhou, 2005). One of the sources of debate is whether prestige should be defined as a relationship of deference, or simply the relative standing or desirability of certain occupations (Hauser and Warren, 1997, p. 188). In either case, there are conceptual and empirical strengths of occupational prestige. Conceptually, occupational prestige focuses on the occupation as a structural characteristic rather than characteristics of the individuals within the occupation. Empirically, occupational prestige rankings do not vary by the characteristics of the person rating, meaning that as an aggregate, people across different groups and even from different time periods accord similar reverence to similar occupations (Treiman, 1977). While the occupational categories to which prestige rankings are tied have been criticized for masking a significant amount of within-occupation heterogeneity, the significant heterogeneity that remains *between* occupations make them vital measures of differentiation and stratification and therefore worthy of examination (see Weeden and Grusky, 2005). In addition, occupational prestige is considered to be a measure with stronger theoretical meaning than related measures estimated by Socioeconomic Index (Hauser and Warren, 1997).

A recent reconceptualization of occupational prestige has helped to resolve the debates surrounding the measure (Zhou, 2005). In this new theoretical formulation, it is argued that the prestige tied to occupations does not arise simply out of power, an overly vague relationship that underlies many of the criticisms described above. Instead, Zhou (2005) argues, prestige rankings measure collective beliefs and values about the legitimacy particular occupations have in making claims to knowledge-based or technical authority. “In other words, processes of intersubjective evaluation of social positions (such as occupational prestige) [are] based on shared criteria that transcend the very socioeconomic boundaries created by resource-based variations in education and income” (Zhou, 2005, p. 98).

1.3. Educational, demographic, and work structural factors

Worker displacement and reemployment across the occupational structure has increased during a period characterized by growing economic flexibility and employment insecurity. The reemployment of displaced workers has become increasingly problematic, as economic and employment changes have altered mobility patterns and the opportunities available to different groups of workers (Smith, 2001). This flexibility has led analysts to re-assess the role of social class in stratification processes. According to some, market-based systems of distribution (of both commodities and workers) replace class-based social cleavages and stratification systems (Clark et al., 1993). In addition, as the growth of flexible labor markets and the rise of small entrepreneurial firms has ushered in an era in which people move more freely throughout the labor market and unions, craft guilds, and other agents of social closure may lose their influence (Smith, 2001). Others have argued that occupational groups have emerged as more salient interest groups and class locations (Weeden and Grusky, 2004). This greater flexibility, however, may not lead to equality in prestige for women or racial/ethnic minorities. In the following section, we examine demographic and work structural factors that may influence the quality of reemployment of displaced workers.

1.3.1. Education

The growing flexibility and greater returns to education that characterize the new economy may be resulting in a decline of social class as a meaningful set of social groupings in the post-industrial United States. In its place, some, such as post-industrialists and human capitalists, argue that a market-like scheme offers individuals more potential for mobility based on education or experience rather than the previous class-based conceptions based on relations to the means of production or shared experiences in the productive sphere (Bell, 1973; Becker, 1964).

While a variety of explanatory schemes exist (see Kingston, 2000 for a review), many theorists agree that returns to education have increased dramatically in recent decades as other more traditional labor market buffers, like union membership, have lost their salience. Hout (1988) found that in the 1980s, mobility patterns in the US became increasingly “open,” as education had a greater effect on occupational mobility independent of

social background, traditionally measured by father's occupation (cf. Blau and Duncan, 1967). This result, combined with growth in the number of college graduates in the labor force, may reduce the durability of class boundaries based on inter-generational status transmission. Some argue that people in advantaged positions can protect inter-generational privilege by transmitting cultural capital and private schooling to their children, and that higher education in the United States itself has features of a class structure (Soares, 2007).

Others have speculated more recently that the rapid growth of high-tech industries and the "market-driven workforce" provides rewards for those with skills, education, and adaptability (Cappelli, 1999). According to these accounts, membership in the "elite" strata of social and economic hierarchies is not determined by capital ownership or the ability to monopolize production or particular services, but instead by high levels of education and skill that are rewarded in an increasingly open labor market. Finally, there is evidence that credentialing has increased over the past thirty years. In an economy dominated by service industries, where products are often abstract and "skills" and potential productivity are hard to measure and predict, education becomes an important symbol upon which employers base decisions, and credentials serve as a mechanism in education-based status group domination (Brown, 2001, p. 20).

Overall, workers with higher levels of education are less likely to be displaced from their jobs (Attewell, 1999), and education helps workers to become reemployed more quickly and at higher wages (Neal, 1995). Indeed, for a long time, blue-collar occupations and jobs in manufacturing industries, which typically required less education than white-collar jobs, carried with them a higher risk of displacement than jobs in service industries and professional occupations (Attewell, 1999). However, in the 1990s, the risk of displacement in service industries and white-collar and professional occupations increased significantly (Gardner, 1995; Koerber, 2002). While the risk of displacement in service industries and white-collar and professional occupations increased significantly over the 1990s, highly educated workers continue to retain labor market advantages over less educated workers.

As education plays a vital role in determining position and labor market outcomes among displaced workers, we expect that:

H1: Displaced workers with higher levels of education will be less likely to lose occupational prestige upon reemployment.

1.3.2. Race and gender

Groups already at a disadvantage in the labor market face a higher risk of displacement, and experience more difficulty in finding comparable reemployment post-displacement. For instance, African-Americans experience a higher rate of displacement than whites (Moore, 1992; Kletzer and Fairlie, 1998), and once displaced, they suffer longer spells of unemployment, and are more likely to remain permanently unemployed after displacement (Spalter-Roth and Deitch, 1999). While women are not significantly more likely to be displaced than men, they do suffer a greater wage loss upon reemployment than men (Perrucci et al., 1997). In addition, women with children remained unemployed longer after displacement than those without (Smith and Rubin, 1997). While there may be racial differences in occupational prestige, and gender differences within racial groups (Xu and Leffler, 1993), this factor should have negligible influence on post-displacement occupational prestige because presumably, these differences would persist before and after displacement.

Given the race and gender disparities in displacement, and persistent labor market inequalities, we expect that:

H2: Displaced African-American workers will be more likely than displaced white workers to lose occupational prestige upon reemployment.

H3: Displaced female workers will be more likely than displaced male workers to lose occupational prestige upon reemployment.

1.3.3. Work structures

Many argue that social cleavages in the labor market remain, and that many important processes and outcomes, including the distribution of economic and social resources, are heavily influenced by work-related social structures. One way to preserve status is through the practice of social closure, where social groups

in the labor market create structural barriers that restrict access to jobs and the economic and social rewards associated with them, reserving job openings for insiders and the expense of outsiders (Murphy, 1988).

Unions have historically been one of the most effective practitioners of social closure in US labor markets. By successfully restricting the supply of labor in certain occupations, unions have secured rewards for their members mainly in the form of wages (Freeman and Medoff, 1984). Although union density and influence has declined in recent decades, there is evidence that unions continue to provide advantages to their members (Weeden, 2002). Because they restrict the supply of labor, we expect that displaced workers who are union members will move up in the labor queue when seeking reemployment, and are more likely to find similar or higher quality employment after displacement.

H4: Displaced workers who belong to unions will be less likely than non-union members to lose occupational prestige upon reemployment.

Occupations are more controversial, and possibly weaker, agents of closure, but there is evidence that they are important bases of collective action and interest definition and promotion (Grusky and Sørensen, 1998; Weeden and Grusky, 2005). Occupations shape attitudes and life-chances in more predictable ways than do the aggregate classes in previous conceptualizations as suggested by analysts such as Goldthorpe (1987). Occupations are also more thoroughly institutionalized in the labor market, and as a result remain more stable and durable social groupings than do “big” classes, which are more likely to ebb and flow with economic, industrial, and other institutional changes. Perhaps most importantly, “in many occupations, licenses and credentials serve as explicit gatekeeping devices, restricting entry to certain qualified eligibles and promoting social closure that generates distinctive cultures and reputations” (Weeden and Grusky, 2005, p. 151). These two occupation-specific processes—training and social closure—shape life-chances, enable the formation of coherent interaction groups, and maintain the class boundaries around these groups.

In some occupations, these mechanisms and processes are more highly developed and more directly related to job-related outcomes, such as income and job security. We expect that the ability of some occupational groups to benefit the members of those occupations in their quest for reemployment by restricting competition for job openings, thus reducing the likelihood of losing occupational prestige, as a displaced worker finding work in the same occupation would by definition not lose prestige. Two occupational groups in particular have developed the most elaborate and effective closure devices that are positively related to a variety of job rewards, mostly notably wages. The professions are a group of occupations that have been particularly successful at restricting entry and protecting the job-related benefits of their members through selective credentialing and licensing and by creating new demands and monopolizing the delivery of services that meet those demands (Abbott, 1988). Skilled trades have also organized effectively along occupational lines to protect their interests, and have used licensing as a mechanism to both ensure quality and restrict supply. As a result of this effective social closure, professional occupations and skilled trades experience higher wages than many other occupations (Weeden, 2002).

Given these occupational groups’ abilities to restrict the competition for jobs, we expect that those displaced from professional occupations and skilled trades will suffer less from displacement than other workers.

H5: Workers displaced from professional occupations are less likely to lose occupational prestige than workers displaced from other occupations.

H6: Workers displaced from skilled trades are less likely to lose occupational prestige than workers displaced from other occupations.

2. Data and methods

In order to test these hypotheses, we utilize data from the Displaced Worker, Employee Tenure, and Occupational Mobility Supplement of the Current Population Survey (CPS) conducted in January, 2004 (US Department of Commerce, 2004). The CPS is a monthly household survey of Americans with a specific focus on their labor force activities. The displaced worker supplement, conducted biannually since the mid-1980s,

provides comprehensive data on workers who, according to the CPS's definition, had lost a job in the 3 years previous to the survey due to one of three circumstances: (1) plant or company closing or moving, (2) position or shift abolished, or (3) insufficient work. Of the 156,887 CPS respondents, 7235 were displaced between 2001 and 2004. Of those displaced workers, 4510 were dropped because they (A) did not become reemployed by the time of the survey ($N = 1308$) or (B) did become reemployed, but had missing occupational data from which the dependent variable was constructed ($N = 3202$). Our final dataset consists of 2725 respondents. We present descriptive information on the sample and the main variables used in our analysis in Table 1.

The removal of these observations resulted in a substantial amount of missing data. In order to detect and control for possible selection bias, we undertook several measures which we discuss below. Sensitivity analyses of those who did become reemployed but were missing occupational data (scenario B described above) yielded no significant differences between those who were not missing this data. We also ran two-step selection models, which are described below and included in our full data presentation, to control for any bias the loss of the cases who did not become employed by the time of the survey (scenario A) might introduce into our final dataset.

The sample is 85.9% white, and approximately 8% African-American. Close to 6% come from other racial and ethnic categories, including American Indian/Alaskan natives, Asian, Hawaiian/Pacific Islanders, and those reporting two or more race/ethnic categories. Just under 40% of the sample is female. The mean age in the sample is just over 40 years, with a range of 20–80 years. Among the displaced workers in the sample, the average duration of displacement was just under 15 weeks (14.74). We explain the construction of our social–structural variables below, and provide descriptive statistics for these variables in Table 1.

Table 1
Descriptive statistics for variables included in the analysis ($N = 2725$)

	%	<i>N</i>
<i>Demographic variables</i>		
Age [mean (SD)]	40.01	(11.52)
Black	8.29	226
White ^a	85.94	2342
Other race	5.76	157
Female	39.93	1088
Male ^a	60.07	1637
<i>Industry variables</i>		
Extractive	1.21	33
Distributive	20.99	572
Transformative ^a	32.59	888
Producer services	25.32	690
Social services	8.59	234
Personal services	11.30	308
<i>Occupation variables</i>		
Executive, managerial, and adm	7.413	202
Professional occupations	24.22	660
White-collar occupations ^a	17.25	470
Technical occupations	6.02	164
Service occupations	19.08	520
Skilled blue-collar occupations	10.57	288
Low- and semi-skilled blue-collar	15.45	421
<i>Human capital variables</i>		
Less than high school	8.88	242
High school degree ^a	30.09	820
Some college	29.69	809
Bachelor's degree	22.68	618
Graduate degree	8.66	236
Union membership	8.40	231

^a Omitted category.

2.1. Independent and control variables

2.1.1. Demographic characteristics

In this analysis, we divide race/ethnicity into three categories: Black, Other (which includes American Indian/Alaskan natives, Asian, Hawaiian/Pacific Islanders, and those reporting two or more race/ethnic categories), and White, which serves as the reference category. Males are the excluded gender category. Because the effect of age on a variety of occupational outcomes has been found to be curvilinear (Rubin and Brody, 2005), we include first- and second- order age terms to control for these effects.

2.1.2. Industry

We collapsed the 51 detailed industries included in the survey into six-broad industrial categories based on the scheme developed by Browning and Singlemann (1978)—(1) extractive industries, which include fishing, mining, and forestry; (2) transformative industries, which includes construction, manufacturing, and utilities and serves as the reference category; (3) distributive industries, comprised of transportation, communication, and trade industries; (4) producer services, which contain a variety of business services; (5) social services, in which public sector industries and medical and educational services are located; and (6) personal services such as home and auto repair, lodging and entertainment. Controlling for industry helps to capture the major sectoral changes that have occurred in the latter part of the twentieth century and some of the heterogeneity in status and prestige within-occupational categories that are relevant to our analyses.

2.1.3. Occupation

Newman (1999, p. 14) argues that occupational affiliation affects whether or not people are experiencing downward mobility post-displacement. Using the Occupational Classification System Manual (US Department of Labor, 2001), we collapsed 505 3-digit detailed occupational classifications into seven larger ones: (1) professional occupations, which require specialized training and credentials and include such occupations as physicians, lawyers, and architects; (2) skilled blue-collar occupations that require licensing, including electricians, plumbers, and masons; (3) semi- and low-skilled blue-collar occupations, which include other manual labor occupations such as machine operators, fabricators, and laborers; (4) executive, management, and administrative occupations; (5) technical occupations such as dental hygienists and radiological technicians; (6) service occupations such as janitors, hairdressers and cooks (which includes extractive occupations because of their low representation in these data); (7) and white-collar occupations, which include sales, secretarial work, and clerical work, and serve as the reference category.¹

2.1.4. Education

Educational attainment is divided into five categories: less than high school; attended some college; four year degree; graduate degree; and the reference group, high school diploma or GED.

2.1.5. Job tenure

Job tenure is measured by the number of months worked in the job from which the respondent was displaced.

2.2. Dependent variable

In this paper, we examine the effects of several individual- and job-level characteristics on the magnitude of change in occupational prestige between respondents' pre-displacement and post-displacement jobs. To construct the dependent variable, change in occupational prestige, we relied on the updated occupational prestige scores proposed by Nakao and Treas (1994). Based on the 1989 General Social Survey in which adults were asked to evaluate the social standing of occupations, the Nakao and Treas index represents the first major

¹ We also constructed our dependent variable—occupational prestige—from these OCSM categories. However, the broad occupational categories contain occupations than span a wide range of prestige scores.

overhauling of occupational prestige scores since the 1960s (Duncan, 1961; Blau and Duncan, 1967). The new scale “has the advantage of being based on the occupational evaluations of contemporary Americans. Furthermore, [they] explicitly designed the 1989 survey to obtain evaluations of occupational titles representing the detailed occupational categories of the 1980 occupational classification system” (Nakao and Treas, 1994, p. 12). Nakao and Treas assigned the occupational prestige scores developed from the 1989 GSS to the detailed occupational categories used in the 1980 US Census. In 2000, the Census utilized new detailed occupational categories, and we matched the Nakao and Treas prestige scores to these new categories.² In order to construct the dependent variable, the prestige score for the occupation from which the respondent was displaced was subtracted from the prestige of the respondent’s occupation at the time of the survey to determine the change in occupational prestige ($P_2 - P_1$).³

2.3. Measuring change

Some controversy surrounds the use of change scores as the dependent variable in regression analyses. According to Allison (1990, p. 93), the standard measurement of change scores, which have been calculated by subtracting the value of the variable of interest at time 2 from its value at time 1 ($Y_2 - Y_1$) “has been widely criticized for their purported unreliability and their sensitivity to regression toward the mean.” Despite various suggestions for avoiding or solving these problems (see Bohrnstedt, 1969; Dalecki and Willits, 1991), which include controlling for the initial level of the dependent variable (Y_1), some maintain that Y_1 tends to be correlated with the error terms and may result in biased estimates of other independent variables (Liker et al., 1985). However, Allison (1990) argued that under certain circumstances, the “conventional” model of change score analysis may be appropriate. Specifically, he argues that a “halo effect” may result in a causal relationship between a variable at one point and the same variable at a latter point in time. Under these circumstances, controlling for the initial value of the variable in a regression model is appropriate. In the case of occupational prestige, “a high-prestige origin job may lead directly to a high-prestige destination job, irrespective of any characteristics of the job holder,” in which case a standard method of change measurement ($Y_2 - Y_1$) is appropriate (Allison, 1990: 108). Furthermore, change scores often produce identical results and are preferable to alternative methods for their substantive meaning and the ease of their interpretation (Dalecki and Willits, 1991).⁴

2.4. Missing data

Missing data on our dependent variable can be caused by (1) missing occupational data on the job from which a respondent was displaced or (2) missing occupational data on the job in which a respondent became reemployed. For the first source, the sensitivity analyses described above yielded no significant differences between those with missing data and those included in the analysis. For those missing data on the second occupation, the situation is more complicated. Some of this data may be missing due to non-response on this item. However, many respondents are missing data because they did not become reemployed by the time of the survey. This may introduce selection bias into our final dataset, because the process of reemployment is not a random one (Smith and Rubin, 1997; Spalter-Roth and Deitch, 1999). Some groups’ labor market disadvantage may result in their under-representation in our analyses.

In order to control for this possibility, two-step selection models were estimated simultaneously using maximum likelihood, which is preferable to Heckman’s two-step selection models that utilize ordinary least squared (OLS) regression, as OLS can produce inconsistent estimates that are sensitive to assumptions about

² Occupational prestige scores were matched to 3-digit detailed occupational categories provided in the CPS. While there are differences in the 1990 and 2000 occupational categories, we carefully matched detailed occupational categories with guidance from Scopp (2003) in order to prevent recoding problems.

³ It is likely that for some respondents, the occupations reported at the time of the survey were “stop-gap” measures to end unemployment while searching for a more suitable occupation. Unfortunately, the CPS data do not allow us to make such a distinction.

⁴ Following Dalecki and Willits (1991), we estimated models with an alternative measure of our dependent variable (P_2 , with P_1 as a control variable) which yielded identical results to those presented.

the distribution of the error term (Winship and Morgan, 1999). In the first step of this procedure, selection into the final sample is observed using the following equation:

$$z_i^* = w'i\gamma + u_i$$

$$z_i = \begin{cases} 1 & \text{if } z_i^* > 0 \\ 0 & \text{if } z_i^* \leq 0 \end{cases}$$

where Z_i is a dichotomous variable describing whether or not a respondent became reemployed by the time of the survey. The second step of the model then generates maximum likelihood estimates using the following log-likelihood function (Breen, 1996):

$$\ell = \sum_{i \in \{z_i=0\}} \ln[1 - \Phi(w'i\gamma)] + \sum_{i \in \{z_i=1\}} \left\{ \ln \phi\left(\frac{y_i - x_i'\beta}{\sigma}\right) - \ln \Phi\left(w'i\gamma + \rho \frac{y_i - x_i'\beta}{\sigma}\right) \right\}$$

3. Results

In Table 2, we present bivariate statistics summarizing the mean occupational prestige change on selected independent variables. Overall, displaced workers who became reemployed lost occupational prestige. A *t*-test indicated that post-displacement prestige scores differ significantly from pre-displacement scores. Despite their

Table 2
Mean prestige score changes by selected independent variables

	Mean	SD
Overall	-.627	12.272 (<i>t</i> = 41.571)
<i>Race</i>		
Black	.965	12.967
White	-.672	12.201
Other	.108	13.406
<i>Gender</i>		
Male	-.753	12.048
Female	-.437	12.607
<i>Education</i>		
Less than high school	-.831	8.485
High school/GED	-.347	10.950
Some college	-.648	12.632
College degree	-.845	14.365
Graduate degree	-.767	12.822
<i>Industry</i>		
Extractive	.061	11.261
Transformative	-1.144	10.949
Distributive	1.358	11.681
Producer service	-1.954	13.535
Social service	-2.932	13.725
Personal service	1.646	12.132
<i>Occupation</i>		
Service/extractive occupations	4.581	11.774
White-collar occupations	-.355	11.095
Technical occupations	-7.274	14.752
Executives, managers, and administrators	-4.667	13.297
Professional occupations	-5.044	13.050
Skilled blue-collar	-1.781	8.287
Semi/low-skilled blue-collar	1.469	10.651
Union members	-.602	8.624

We use the term “Black” instead of “African-American” in the tables to reflect the wording of the CPS.

relative advantage in many labor market and work-related outcomes, white respondents lost more occupational prestige than those reporting other races upon reemployment, and males lost more occupational prestige than females. Upon first glance, education did not mediate the prestige losses felt by the sample of displaced workers. However, those with a high school education lost less prestige than other workers, possibly reflecting the likelihood of their position in the middle of the prestige hierarchy and proximity to the mean prestige score. Workers displaced from extractive, distributive and personal service industries gained occupational prestige upon reemployment, while those in transformative, social services and producer service industries lost prestige. Surprisingly, and contrary to our expectations, professional workers and skilled blue-collar workers lost more occupational prestige upon reemployment than others. We explore and make sense of these findings below.

Table 3 presents the results of the two-step selection analyses of changes in occupational prestige after displacement. The significance of ρ in all of the models indicates that there was selection bias in the final sample. African-Americans, females, and those with lower educational attainment were significantly less likely to become reemployed in the time period under consideration, and were more likely to be dropped from the final dataset because those who did not become reemployed lacked data used to construct the dependent variable

Table 3
Two-step Selection models of prestige change on selected independent variables using maximum likelihood: Current Population Survey, January 2004^a

Independent variables	Model 1		Model 2		Model 3		Model 4	
	<i>B</i>	(SE)	<i>B</i>	(SE)	<i>B</i>	(SE)	<i>B</i>	(SE)
Intercept	12.659**	2.717	21.502***	(2.446)	23.600***	(2.627)	17.046***	(2.620)
<i>Demographic variables</i>								
Age	-.418**	(.132)	.115	(.119)	.151	(.119)	.031	(.119)
Age ² /100	.417**	(.158)	-.159	(.142)	-.194	(.141)	-.066	(.140)
Black	3.128***	(.920)	1.802*	(.838)	1.745*	(.835)	-1.091	(.833)
Other race	2.484*	(1.090)	3.235**	(.999)	2.754**	(.995)	-1.585	(.987)
Female	1.296	(.529)	1.501**	(.502)	1.285*	(.532)	-.698	(.523)
<i>Industry variables</i>								
Extractive			-.527	(1.906)	-1.717	(1.969)	-1.311	(1.937)
Distributive			-.275	(.529)	-1.101	(.629)	-1.502*	(.622)
Producer services			1.709**	(.572)	.876	(.611)	-.060	(.609)
Social services			2.118*	(.860)	.935	(.903)	-.707	(.902)
Personal services			-.078	(.737)	-1.172	(.778)	-1.589*	(.767)
<i>Occupation variables</i>								
Executive, management, and administrative occupations					-1.412	(.749)	-2.000**	(.736)
Professional occupations					2.422**	(.757)	1.961**	(.741)
Technical occupations					1.861	(1.134)	1.775	(1.126)
Skilled blue-collar occupations					-.677	(.887)	.647	(.884)
Semi-skilled blue-collar occupations					-1.524*	(.774)	-.908	(.767)
Service occupations					-.764	(.738)	.142	(.729)
<i>Human capital variables</i>								
Job tenure							.002	(.003)
Less than high school							-3.909***	(.873)
Some college							2.512***	(.591)
Bachelor's degree							8.207***	(.715)
Graduate degree							12.431***	(1.004)
Union member					-0.139	(0.774)	0.260	(0.774)
Prestige of displaced job			-.451***	(.017)	-.505***	(.023)	-.580***	(.023)
Rho	-.584***	(.070)	-.737***	(.028)	-.737***	(.023)	-.701***	(.051)
Log-likelihood		-13566		-13177		-13085		-12818

^a $N = 2725$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

(see [Appendix A](#)).⁵ However, the two-step selection model controls for this selection bias and produces robust estimates that are unaffected by it. Model 1 includes only the demographic covariates for race, gender, age, and a second-order age term. The first-order age term is negative and significant, indicating that up to a point, older workers lose prestige. The significant second-order term indicates that, after a point, older workers gain occupational prestige upon reemployment, possibly as they have accumulated significant amounts of experience or a higher occupational standing. African-Americans and those of other races each gained significantly more prestige upon reemployment than did white workers. Upon first examination, Hypotheses 2 and 3 are not supported. Standing alone, however, this model tells us nothing about the roles that achieved status and work-related social structures play in reemployment.

Model 2 includes industry measures. Workers displaced from producer and service industries gain significantly more prestige than those from transformative industries. As these industries include a large number of highly-skilled jobs such as physicians in medical services or analysts in business services, workers displaced from these industries do comparatively well upon reemployment. We also add prestige of the respondent's initial occupation in order to control for possible regression to the mean. When these new measures are added, both measures of age become non-significant predictors of prestige change, while females and non-whites gain significantly more occupational prestige than males and whites, respectively, likely due to their greater representation in growing service industries that allow for gains in prestige. Hypotheses 2 and 3 again are not supported.

Model 3 introduces the occupational measures relevant to the work structure predictions in Hypotheses 4, 5, and 6. The coefficient for union membership is not significant, indicating that unions did not, in-and-of themselves, help their members to secure higher quality employment than non-union members after displacement. Hypothesis 4 is not supported. Workers displaced from professional occupations find significantly more prestigious employment than those from white-collar occupations, supporting Hypothesis 5. Professional workers, whether because of their highly specialized training and expertise or their successful collective occupational closure through credentialing and self-regulation, appear to fare the best in their efforts to become reemployed. In reality, we believe that both of these factors likely contribute to this outcome. Professionals' skills are in high demand, and are often highly generalizable, which make them valuable commodities in the labor market. However, much of this persistently high value is due to their success in restricting growth and monopolizing areas of service in the face of competition from others ([Abbott, 1988](#)). Workers displaced from skilled blue-collar occupations, however, do not find significantly better jobs after displacement than those displaced from white-collar occupations, and Hypothesis 6 is not supported. This may be because of the decline of the manufacturing sector in which these jobs predominated.⁶

In Model 4, educational variables are included in order to test Hypothesis 1. It is clear that there is a positive and significant relationship between educational attainment and one's ability to find quality reemployment after displacement. Respondents with less than a high school education fare significantly worse in their reemployment efforts than do those who completed high school. Further, as educational attainment beyond high school increases, the degree of difference in occupational prestige becomes larger and remains highly significant. Those with some college experience gain, on average, 2.51 more prestige points upon reemployment than those with a high school diploma. Those who complete a four year degree gain fully 8 more points than high school graduates, and those with a graduate degree experience a 12.4 point advantage in post-displacement occupational prestige. Because the range of prestige scores in the Nakao and Treas index has a range of approximately 67, from a low ranking of 19.1 to a high of slightly over 86, each of these differentials represent substantively large (and statistically significant) gains in occupational prestige for each educational level ([Nakao and Treas, 1994](#)). This lends significant support for Hypothesis 1.

⁵ The model for the first step of the selection model includes independent variables measuring basic demographic and educational characteristics that are strongly related to employment and unemployment outcomes.

⁶ Social closure is a powerful mechanism for race and gender inequality in labor markets (see [Tomaskovic-Devey and Skaggs, 2002](#); [Reskin, 2003](#)). While beyond the focus of this paper, analyses conducted, but not presented here indicate that women in two occupational categories, technical and skilled blue-collar, gained significantly more occupational prestige compared to a limited comparison group of white-collar males, while women in executive and managerial occupations lost significantly more occupational prestige than this comparison group. Thus, it appears that women who experience displacement suffer more from social closure than from training closure ([Weeden, 2002](#); cf. [Tomaskovic-Devey and Skaggs, 2002](#)).

In addition, when measures of educational attainment are included, those displaced from executive, managerial, and administrative occupations lose prestige points upon reemployment. This is likely due to firms' continued likelihood of shedding of layers of middle management as the notion of the "flexible firm" continues to inform managerial ideology and personnel decisions. Surprisingly, when controls for educational attainment are added, the differences between women and men, and non-whites and whites, are no longer significant. These "non-findings" run counter to common patterns of stratification and the relationships predicted in Hypotheses 2 and 3. However, research on gender stratification in labor markets has found that women tend to hold prestigious occupations that often receive less compensation than men (e.g. England, 1992; Tomaskovic-Devey and Skaggs, 2002). Therefore, on the metric of stratification examined here, displacement does not affect women adversely. However, stratification processes are multi-faceted and women continue to be at a disadvantage in those not analyzed here. For non-whites, we speculate that while race in-and-of itself may not seem to affect the quality of displaced workers' reemployment, many groups' under-representation in professional occupations and in the highest ranks of educational attainment likely leaves them at a disadvantage when looking for work after displacement.

4. Discussion and conclusions

We posed two questions at the outset of this paper: are displaced workers losing occupational prestige when they become reemployed, and which factors affect changes in occupational prestige between the jobs displaced workers held before and after the displacement spell? Clearly, there is not a simple answer to the first question. While on the whole, workers do lose prestige as a result of displacement, some workers lose more than others. Our answers to the second question point to a clear and striking pattern in the contemporary labor market. The significant effects of education and occupation on changes in occupational prestige lend support to the notion that the increasingly common phenomenon of involuntary displacement has disparate consequences for different workers.

Those with high levels of education do better upon reemployment than those with less education. Many features of the "old" employment model, such as internal labor markets rewarded workers for longevity and loyalty and buffered them from labor market competition and market-based returns to education. As the employment relationship changes, however, and institutions such as ILMs are replaced with new, more flexible ones, education continues to be an important asset in the labor market. While they cannot speak definitively on the subject, our results do lend support to the idea that traditional conceptualizations of social class based on one's location in the production process, whether to the means of production, in an authority hierarchy, or in an occupational group, need to take individual's education into account. While professionals appear particularly effective at protecting their interests, another group of occupations with strong social closure—those in skilled blue-collar occupations—did not experience the same benefits in reemployment (also see Dudley, 1994). After testing for collinearity among industry, occupation, and union membership, we did not find evidence of any protective mechanisms for the skilled blue-collar workers or union members. We suspect that part of the problem for such workers is the result of industry and sectoral shifts in the changing economy that produce fewer opportunities for such workers to find comparable employment immediately (Uchitelle, 2006).

Our findings highlight the importance of educational attainment and individual skills in determining one's location in contemporary systems of stratification. Technology plays an overwhelmingly important role in the modern economy, and those with higher levels of education are more likely to have (or are perceived to have) the skills necessary for many jobs and are, therefore, in greater demand (Autor et al., 2003). Skills, creativity, and adaptability have contributed to the growing flexibility in the labor market, and have, according to many, replaced class as the new dividing line between the haves and have-nots (Kalleberg et al., 2000; Florida, 2002; Barley and Kunda, 2004). As firms grow and shrink in rapid response to market and technological changes, workers must continually navigate the flexible labor market to secure employment. Those with advanced education and developed skill sets are better prepared to compete in the new labor market (Levy and Murnane, 2004). In addition, as returns to education are high in the "new" economy, labor market rewards, including occupational prestige, are being distributed in a polarized manner, with highly-skilled workers able to reap benefits, and those with little formal training or outdated skills relegated to poor quality jobs which offer few rewards and little security.

Others argue that the importance of education in the new economy is not because of the human capital it confers upon those who have it, but because of the increasing importance of symbolic credentials. While our analysis cannot determine precisely which educational mechanism is at work, we believe that the abstract and uncertain nature of “skills” and job requirements in an increasingly service-based economy make education a symbolically valuable resource that is used as a proxy for general skills that are important in many service occupations and industries (Murphy, 1988).

Future research on this topic must look more closely at how education and work structures interact with race and gender to create new kinds of inequality in the new economy. Some important questions surrounding these issues remain unanswered by our findings and should be addressed by future research: are the returns to education that are so important to gaining quality employment “blind,” or are groups traditionally at a disadvantage in educational and labor markets hit doubly hard as a result of the increasing importance of education? Will improving education and educational attainment for disadvantages groups help them to fare better in the new economy? Do the increasing returns to education found here and in other work indicate that the salience of class boundaries are declining, or are the bases of class changing in post-industrial economies?

Labor market and employment restructuring has been widespread over the past two decades. One of the most important consequences of these changes is increasing employment insecurity. As insecurity resulting from displacement becomes a common feature of working in the 21st century, research must continue to address the role it plays in career development and social mobility. While more research is needed to fully understand the role that displacement plays in work and employment, this paper provides an important step in our understanding of labor market stratification in the new and flexible economy.

Appendix A. ML estimates for selection equation modeling likelihood of become reemployed (step one of two-step selection model-full model)^a

Independent variables	<i>B</i>	SE
Intercept	0.361 ***	(0.040)
<i>Demographic variables</i>		
Black	−0.278 ***	(0.065)
Other race	−0.340 ***	(0.777)
Female	−0.227 ***	0.065
<i>Human capital variables</i>		
Less than high school	−0.295 ***	(0.067)
Some college	0.053	(0.049)
Bachelor's degree	0.371 ***	(0.058)
Graduate degree	0.432 ***	(0.083)

^a *N* = 4364.

*** *p* < .001.

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