Job Performance and Retention among Welfare Recipients

Harry J. Holzer Georgetown University and The Urban Institute E-mail: hjh4@georgetown.edu

Michael A. Stoll UCLA E-mail: mstoll@ucla.edu

Douglas Wissoker The Urban Institute E-mail: dwissoke@ui.urban.org

August 2001

The authors gratefully acknowledge the financial support of the Joyce Foundation and of the Assessing the New Federalism project at the Urban Institute.

IRP publications (discussion papers, special reports, and the newsletter *Focus*) are available on the Internet. The IRP Web site can be accessed at the following address: http://www.ssc.wisc.edu/irp/

Abstract

In this paper we use data from a recent survey of employers to analyze the job performance and retention rates of recently hired welfare recipients. In particular, we analyze (1) whether or not the employer experienced each of a set of problems with that employee, (2) subjective employer ratings of worker performance, and (3) employee turnover. The results indicate that most welfare recipients perform as well as or better than employees in comparable jobs, and that their turnover rates appear fairly low.

Still, absenteeism is pervasive and is often linked to child care and transportation problems. Problems such as poor attitudes toward work and poor relations with coworkers are observed fairly frequently as well. These problems are strongly related to job performance and retention difficulties and often plague those who quit as well as those who are discharged. Several particular characteristics of the workers, their employers, and the jobs they hold are also associated with performance and retention difficulties among working welfare recipients.

Job Performance and Retention among Welfare Recipients

INTRODUCTION

It is well established that welfare rolls have declined dramatically over the past several years and that employment rates among current and former welfare recipients have increased substantially as well. These developments seem to reflect the welfare reform legislation that was passed and implemented during the late 1990s, as well as very tight labor markets and a variety of supports for the working poor (Meyer and Rosenbaum, 2000; Blank and Schmidt, 2001).

However, the annual earnings and income levels of current and former welfare recipients who are working remain quite limited. Wages among those who work are relatively low, and growth in their earnings over time appears to be modest (Strawn and Martinson, 2000). At least for some, a lack of steady employment limits annual earnings and growth of income over time. Consequently, job retention and advancement have emerged as major issues in current discussions of welfare reform (Haskins, Sawhill, and Weaver, 2001; Kazis and Miller, 2001).

Still, relatively little is known about job retention among welfare recipients. For instance, how serious a problem is job turnover, and is it primarily voluntary or involuntary? To what extent is it linked to poor workplace performance or family difficulties? What are the sources of any performance difficulties—do they more often reflect a lack of basic or job-related skills, or other attitudes and behaviors of the workers? Are performance and retention problems most frequently associated with certain characteristics of workers, employers, and/or the jobs they fill? If so, what public policies are most appropriate for dealing with these issues?

Since job performance and retention are clearly a function of the "match" between workers and their jobs, these issues might be best analyzed with data on particular employers and jobs as well as the characteristics of welfare recipients who have recently filled them. But the availability of such workplace data has been extremely limited to date.

In this paper, we analyze job performance and retention rates among recently hired welfare recipients. We use data from a new survey of employers in several large metropolitan areas that was administered in 1998–1999. The survey gauged employer willingness to hire welfare recipients as well as experiences with any recipients who had recently been hired. The latter includes measures of employment duration and retention, and overall performance ratings. The presence of a series of workplace problems was gauged as well. Finally, a wide range of characteristics of the recently hired welfare recipients, the employers who hired them, and the jobs they filled were also included. All of these data are analyzed and presented below.

In the next section, we review what we have learned from the recent literature on employment stability among welfare recipients. Then we describe the employer data used here, and our estimation strategy. Summary and regression results are presented in the following sections, before concluding with a discussion of our findings and their policy implications.

PREVIOUS LITERATURE

Earlier studies of employment stability among welfare recipients and other low-wage workers, as well as its effects on their wages over time, have relied heavily on data from the National Longitudinal Survey of Youth (NLSY) from the 1980s and early 1990s. Studies of employment retention for recipients include Hershey and Pavetti (1997), while Holzer and Lalonde (2000) focus on less-skilled young women and men more broadly. Both studies find somewhat high turnover rates and relatively short job spells among unskilled workers with little experience; in particular, Hershey and Pavetti report average job durations of 37 weeks (or 9 months) for recipients, while Holzer and Lalonde find average weekly turnover rates of about 2 percent (and therefore median job durations of about 6 months).¹

¹Holzer and Lalonde find that transition rates are as high as 4–5 percent per week when young and less-educated workers first enter the labor market, but decline to 2 percent or less within their first 6 months.

Also, both Burtless (1995) and Cancian and Meyer (2000) note that wage or earnings growth among welfare recipients in the NLSY who leave the rolls has been modest. Cancian and Meyer indicate that most former recipients do not work full-time and full-year, even several years after leaving the rolls. These findings are consistent with those of Gladden and Taber (2000), who report similar returns to actual work experience in percentage (or log) terms among very unskilled and more-skilled workers, but less overall wage growth among the least-skilled due to their employment instability.

Although these studies are clearly relevant to the issues of employment retention and wage growth among welfare recipients, they largely reflect behavior in an earlier period when employment for welfare recipients was much more a matter of choice (therefore reflecting self-selection) than it is today. More recent findings are reported in Strawn and Martinson (2000) and Strawn, Greenberg, and Savner (2001), drawing from evaluations of various welfare-to-work programs from the early and mid-1990s. These findings, which are fairly consistent with earlier work, indicate that significant fractions of welfare recipients leave work within 3–6 months, and most do so within less than 1 year.² The findings also indicate that the majority of job leavers among welfare recipients leave voluntarily, though often due to personal and family reasons (such as health and child care).

Finally, data on welfare recipients generated during the period following implementation of federal welfare reform efforts continue to show broadly similar findings to those described above, but with results improving over time as current and former welfare recipients gain additional labor market experience. For instance, the median job spell for welfare recipients in a study from Michigan was about 9 months in 1997–1999, with lower rates earlier and higher ones after a year or so (Johnson, 2001).³ A study of welfare recipients hired in New Jersey within the past 2 years (by Mathematica Policy Research)

²For instance, a study of very unskilled participants in a Chicago-based program (Project Match) found average job durations of about 6 months (Hershey and Pavetti, 1997), while the Post-Employment Services Demonstration project found average durations of about 7 months (Rangarajan, 1998).

³These data are based only on job-to-nonemployment turnover. About one-third of separations in these data are job-to-job, but these include many job changes within the same establishment, so they are not included in our calculations here.

has found employment durations of roughly 16 months on average, and data from the National Survey of America's Families show median durations of well over a year for employment spells in progress in 1999.⁴

Thus, even though fairly consistent evidence has emerged on average employment spells and the nature of turnover, many questions remain unanswered. For instance, what are the determinants of retention and turnover among welfare recipients, and to what extent do these vary with characteristics of the workers themselves as well as their jobs? Some evidence on the personal determinants of employment activity among recent welfare recipients has appeared (e.g., Danziger et al., 2000; Zedlewski and Loprest, 2001), but few other studies have yet analyzed the determinants of turnover and retention on either the worker or the employer/job side of the labor market.

Evidence on job performance as a possible measure of advancement opportunities has been even more limited. Survey data drawn by the Welfare-to-Work Partnership (1999) from its own members indicate a good deal of reported employer satisfaction with welfare recipients hired, though this sample of employers is very nonrandom. Preliminary tabulations of performance and workplace issues appear in our own earlier work (Holzer and Stoll, 2001), though multivariate analyses of these employer data are quite limited there. Thus, a good deal more remains to be learned about both job retention and performance among welfare recipients in the current, postreform environment.

EMPLOYER DATA AND ESTIMATION METHODS

The data used in this paper come from a 20-minute telephone survey administered to approximately 750 establishments in each of four large metropolitan areas: Chicago, Cleveland,

⁴These tabulations were kindly provided to us by Pam Loprest, who reports that comparable spells measured in the 1997 data were significantly shorter. The data from New Jersey were provided by Anu Rangarajan, to whom we are grateful as well.

Milwaukee, and Los Angeles.⁵ The survey was administered between October 1998 and May 1999, a period in which labor markets in the United States were unusually tight. Employers were drawn from lists compiled by Survey Sampling Inc. (SSI), primarily from telephone directories. To the extent possible, phone interviews were targeted at the person in the establishment responsible for entry-level hiring.⁶

The surveyed firms were chosen from a sample stratified ex ante by establishment size, with establishments in each category drawn to reflect the fraction of the workforce employed in that size category. Thus, the sample should be representative of the distribution of the workforce across establishment size categories without any need for additional size-weighting. Comparisons of these data with the U.S. Census Bureau's *County Business Patterns* for our four metropolitan areas indicate similar one-digit industrial distributions of employment.

The survey focuses on overall establishment characteristics (e.g., establishment size, industry, presence of collective bargaining, location in a central city, distance to nearest public transit stop) and on prospective future or actual past hiring of welfare recipients. In particular, employers were asked whether they had hired any welfare recipients in the past 2 years, and then asked an extensive set of questions about the known recipient whom they had hired most recently.⁸

⁵The specific counties in which employers were surveyed include Cook, Dupage, and McHenry in Chicago; Cuyahoga, Geauga, Lake, and Medina in Cleveland; Milwaukee, Ozaukee, Washington, and Waukesha in Milwaukee; and Los Angeles County in Los Angeles.

⁶Response rates averaged about 70 percent, conditional on having made contact with the correct individual at the establishment. These response rates compare favorably to those in other surveys of employers (Holzer, 1996; Kling, 1995).

⁷The size distributions used were 20 percent in the 1–19 employees category, 30 percent in the 20–99 category, and 50 percent in the 100 and above category. Since response rates for smaller establishments are a bit below those of larger ones, the actual distributions are a bit more skewed toward larger establishment sizes.

⁸All questions about the specific recipient are asked only if the employer is either "definitely sure" or "fairly sure" that the person had been on welfare, either currently or in the recent past. Unlike earlier years, recipients now have greater incentives to inform employers of their recipiency and employers have a greater incentive to find out, so that the former can meet work requirements for remaining on welfare, and because the latter might qualify for a variety of tax credits.

We limit our analysis here to the sample of roughly 720 welfare recipients and ex-recipients who had been hired since the beginning of 1997. Questions asked regarding the worker included some personal demographics (such as race, education, and whether the person had any general or specific work experience), characteristics of the job filled by the worker (such as starting wage and benefits, opportunity for advancement, tasks performed daily, and occupation), and recruitment and screening methods used when filling the job (such as use of an agency or criminal background checks, the relative importance of dress and appearance as well as recommendations, and whether any tests were administered).

Of particular relevance to this study is a series of questions regarding job retention. Employers were asked the date the person was hired and, if the employee had left, the date on which the separation occurred. The hire and separation dates were used to calculate the length of employment for those no longer with the employer; the hire and interview dates were used to calculate a length of employment as of the interview date. For those recipients who had left, the reason for the separation (i.e., quit, discharge, layoff, etc.) was also gauged.

Employers were also asked whether or not each of a series of problems on the job had been experienced with that employee. These included problems with absenteeism, attitude toward work, basic or job-related skills, substance abuse, and relations with coworkers. Among those reporting absenteeism problems, the causes of these problems were also asked—e.g., physical or mental health, child care, transportation, domestic violence, etc. Finally, employers were asked to rate the worker's overall performance "relative to the typical one whom you hire into that position"; ratings included "much better," "a little better," "about the same," "a little worse," or "much worse."

Using these data, we can estimate a set of equations of the following general form:

(1)
$$PROB_{ijk} = f(X_i, X_j, X_k) + u_{ijk}$$

⁹We chose this date because it reflects the point at which welfare reform at the federal level had been signed into law and was at least beginning to be implemented in all states. Also, the date is recent enough (relative to the dates at which the survey was administered) so that information about individual workers can be regarded as fairly accurate and not subject to severe memory biases.

- (2) $PERF_{ijk} = g(X_i, X_j, X_k; PROB_{ijk}) + v_{ijk}$
- (3) $SEP_{ijk} = h(X_i, X_j, X_k; PROB_{ijk}; PERF_{ijk}) + z_{ijk}$

where i, j, and k denote the individual worker, the job filled, and the establishment, respectively; and the Xs denote characteristics of each. More specifically, we will present results of estimated equations below for three sets of outcomes: (1) whether each of a set of problems was experienced with that employee (PROB); (2) the overall performance rating of the worker (PERF); and (3) whether the employee has left the firm (SEP), overall and by type of separation.

Models of whether problems are experienced are estimated as linear probability models, while the model of performance rating is estimated using an ordered logit. We model the rate or speed at which workers leave the job using Cox's proportional hazard framework. This model requires relatively weak assumptions about how the likelihood of exit varies with duration of employment. The key assumption is that the independent variables have fixed proportionate effects on the rate of exit that do not depend on the duration of employment. We model quit and discharge rates using similar models. In each model, persons who leave for a reason other than that of interest (e.g., in the quit model, persons who are fired or laid off) are treated as though they have an incomplete spell.

The individual worker's characteristics include her race/ethnicity, whether she has a high school diploma, and whether she had any recent general or specific work experience when she was hired. The relevant establishment characteristics include the metropolitan area in which the establishment is located, whether it is located near a public transit stop, establishment size and job vacancy rate, industry, and when the individual was hired. Characteristics of the job include starting wage, occupation, whether the

¹⁰Modeling the hazard rate is parallel to modeling the duration of employment, since the hazard is roughly the inverse of the duration. Hazard models account for the right-censoring in the duration of employment that results from interviewing firms while the worker is still employed at the firm.

¹¹High school diplomas are considered distinct from GEDs. Although the survey included questions about both, only the former bore any significant relation to outcomes in our estimated equations, so we include only that one in the equations we report here.

¹²Proximity to public transit is measured by whether the establishment is located within one-quarter of a mile of a public transit stop and also whether that stop is within a 30-minute ride from the center of downtown.

employer contributes to health benefits, and whether opportunities exist for promotion if job performance is satisfactory. Finally, recruitment and screening methods include whether a test was administered, whether dress/appearance or personal recommendations were at least somewhat important in the hiring decision, whether an agency was used, and whether criminal background checks were conducted.

The estimated equations include reduced-form models, in which only the X variables appear as underlying determinants of outcomes, and a recursive model, in which problems such as absenteeism are considered exogenous determinants of performance and both problems and performance are considered exogenous determinants of job retention. Several specifications of the absenteeism and performance equations are presented; the reduced-form models appear with only individual-level characteristics first, and then with establishment, job, and recruitment variables added sequentially.

Several econometric issues are raised by the specification that we lay out above. For one thing, a few different sample selection issues are generated here. Clearly, the hired recipients are not a random sample of all welfare recipients in the labor market, but rather a sample that is conditional on being "matched" to employers. Depending on the types of employers to which different welfare recipients apply and the types who then select different applicants, the estimated effects of various characteristics on observed outcomes may tell us more about who gets matched to whom in this market than about the exogenous effects of characteristics on outcomes. Furthermore, the estimated effects of establishments on outcomes might reflect the unobserved characteristics of workers at these establishments rather than their effects per se. Even so, these effects may give us insight into the matching process, and any positive outcomes or difficulties for either side that might arise from it.

_

Other research has shown that welfare recipients are much more reliant on public transit for travelling to work than are other workers (Ong, 1996; O'Regan and Quigley, 1999). Other measures of location of the establishment that we tested were whether it is located in the central city or in the suburbs, and its average distance to low-income populations in the metropolitan area. The latter was calculated as a weighted average of distances to other census tracts in the metropolitan area, weighted by the percentage of that group's population that is located in each of those other census tracts. Since all three of these variables are quite highly correlated with one another (roughly .4–.5), and since the transit measure is most related functionally to the outcomes we consider here (and is defined for the entire sample), we used it in our equations and report on it below.

Another selection issue involves the fact that we observe no more than one hired welfare recipient per establishment, even though our survey indicates that many establishments have hired more than one. On the one hand, we are likely to have missed some shorter completed spells at such establishments, thus leading to upwardly biased estimates of duration; on the other hand, we might also miss other spells currently in progress that are likely to be longer.¹³ The net effect of these omitted spells on our outcomes, or on their estimated relationships to observed worker or establishment characteristics, is not clear.

However, the likely omission of "informal" jobs from the sample may also result in estimates of performance or retention that are upwardly biased, though the magnitude of this effect is hard to discern. The relatively large percentage of duration data for which values are missing (about 30 percent) may also generate upward biases in the mean of that particular variable, since they are more likely to be missing from those who have already separated from their employers and whose spells are generally shorter than those still attached, as we note below. However, these upward biases in the mean of the duration measure should not effect our estimated coefficients from hazard models presented below. ¹⁴

Finally, some of our outcome variables, such as the performance rating attached to specific employees and the assessment of problems (especially bad attitudes), are based only on *employer perceptions* of these employees, which are inherently subjective. Such variables are subject to considerable measurement error; however, if such error is in the dependent variable only and it is uncorrelated with any regressors, our estimates should remain unbiased and consistent. ¹⁵ In the case of the performance ratings, ratings are measured "relative to the typical employee in that job," which means that

¹³Longer spells are more likely to be observed at a moment in time than shorter ones, but the former are also truncated or censored if they are still in progress. Empirically, the former bias seems to dominate. These issues are discussed further below.

¹⁴Below, we estimate models of the exit rate using the Cox proportional hazard model. The Cox model estimates the effect of the Xs relative to the baseline hazard; the baseline hazard is essentially differenced out in a manner similar to putting dummies for each time period in the model. As a result, we expect relatively little bias in the coefficients on the Xs due to understating exit rates for shorter cases, assuming that the proportional effects of the Xs remain unchanged.

unobserved fixed characteristics of the employer and his/her rating system should be differenced away from these estimates. ¹⁶ The fact that some of the problems experienced by employers (such as absenteeism) are more objective than others, and that a large number of them are considered here, allows us to check for the sensitivity of our estimates to problems created by this subjectivity.

A further problem with these subjective variables is that employers are asked about them ex post, in many cases after the employee has already left the establishment. In these cases, the problems reported for any employee or her performance rating could be endogenous with respect to her retention status rather than vice versa. However, given the fact that all of these equations are first estimated using a reduced-form specification, and that many specifications are attempted and reported, we have many estimates that should not be plagued by these difficulties.

EMPIRICAL RESULTS

Summary Results

In Table 1 we present summary data on the three outcomes analyzed here:

- (1) whether each of a set of problems was experienced with this worker (panel A);
- (2) employer ratings of performance by welfare recipients on the job, relative to "typical" workers in that job (panel B); and
- (3) separation rates and durations of employment spells (panel C).

¹⁵When subjective measures are included as independent variables, there is a risk of bias due to errors in variables. Bias would also result if errors in assessing, say, performance are correlated with the assessment of problems.

¹⁶However, any subjectivity of the employer that might vary across employees, especially related to prejudices of the employer in favor or against certain kinds of employees, may not be eliminated by this wording.

TABLE 1
Job Retention and Performance among Recently Hired Welfare Recipients:
Summary Statistics

	J	
A.	Employer encountered problems with	
	Absenteeism ^a	.407
	Due to	
	Child care	.264
	Health	.141
	Mental health	.019
	Transportation	.170
	Domestic violence	.042
	None of the above	.039
	Attitude toward work	.181
	Basic skills	.117
	Job skills	.094
	Substance abuse	.022
	Relations with coworkers	.157
В.	Performance rating, relative to typical employee in this job	
	Much better	.155
	A little better	.191
	Same	.493
	A little worse	.112
	Much worse	.049

		Still Employed		
C. Retention	Total	Yes	No	
Still employed (as of survey date)	.753	-	-	
Duration of job				
(months)				
Mean	8.682	9.456	5.774	
Median	8.0	8.5	4.0	
25th percentile	4.0	5.0	2.0	
75th percentile	11.0	12.0	8.0	
Reason for leaving				
Quit	.563			
Discharge	.328			
Layoff	.063			

^aEach potential cause of absenteeism is evaluated for the full sample of hired individuals, and multiple responses could be given. Only the last category ("None of thee above") is mutually exclusive of the others.

The problems considered in panel A include absenteeism, as well as absenteeism linked to particular causes (such as health, child care, and transportation); difficulties with attitude toward work; basic or job-related skill deficiencies; substance abuse; and relations with coworkers. Quite strikingly, over 40 percent of employers complain about absenteeism among these workers. The most frequent sources of this absenteeism, not surprisingly, are child care and transportation problems, followed by physical health issues. As for other problems, those associated with attitude toward work and relations with coworkers are observed most frequently, while basic job-related skill problems are experienced somewhat less often.

Absenteeism, attitude toward work, and relations with others might generally be considered part of a category known as "soft" skills, in contrast to the "hard" cognitive and job-related skills (e.g., Moss and Tilly, 2001). According to this interpretation, soft skills are more frequently lacking among hired welfare recipients than are hard skills, or at least they are the ones with which these employers are most concerned (e.g., Regenstein, Meyer, and Hicks, 1998).

However, a few cautionary notes are in order. For one thing, absenteeism and related difficulties may tell us more about the quality of the match between workers and jobs than about some exogenous set of skills (whether hard or soft) that the workers bring to the jobs. For instance, if employer location and work schedule are not compatible with availability of transportation or family needs, absenteeism might be a likely outcome. However, to the extent that worker skills matter in this market, other evidence suggests that some minimal competence with cognitive skills is necessary before individuals are hired into these jobs (Holzer and Stoll, 2001). Welfare recipients who are lacking in these basic cognitive skills are known to have extremely limited work experience, even today, and are likely to be excluded from many of these jobs in the first place. Thus, it still seems likely that a combination of hard and soft (or cognitive and noncognitive) skills, along with matches to appropriate jobs, is necessary for even minimal success in the labor market among these recipients.

The data on performance ratings in panel B of Table 1 indicate that over a third of these workers are considered better than the typical employee in comparable positions, while about half are rated as being similar. Thus, *less than one-sixth of welfare recipients are considered worse than other employees in these jobs*. Overall, this appears consistent with the evidence cited earlier from the Welfare-to-Work Partnership on employer satisfaction with welfare recipients as employees. However, it must also be remembered that the "typical" employees in these jobs are likely to be young and/or unskilled, and therefore constitute a very weak reference group. Whether these positive experiences would have been observed had recipients been hired into a better set of jobs remains unclear as well.

Panel C of Table 1 presents data on retention and durations of employment, both among those with complete or incomplete (i.e., right-censored) employment spells. Roughly three-fourths of the welfare recipients considered here are still working for their employers. The job durations indicate longer spells among those that are still in progress, as has been observed elsewhere (e.g., Bane and Ellwood, 1983), even though these spells are right-censored (see footnote 13). The completed spells have a median duration of just 4 months, and a quarter of these have ended within just 2 months. But the spells in progress already have durations that average 8–9 months, even though they are right-censored, and these will likely be well over a year when they are completed

A hazard analysis of the turnover rates suggests that only 21 percent of the workers hired into these jobs leave within a year. ¹⁷ Such a turnover rate is much lower than that experienced by the nation's workforce overall (Anderson and Meyer, 1994), though we have reason to believe that our estimate is downward biased (as we noted earlier). Furthermore, average turnover rates of the workforce are highly skewed toward the young and less-skilled (Holzer and Lalonde, 2000). Thus, the turnover rates observed here for welfare recipients are lower than those generally observed among other inexperienced and

¹⁷This analysis is based on a simple discrete hazard analysis that accounts for the variation in how long individuals are observed. A Kaplan-Meier analysis yields similar results, showing that 22.5 percent of the workers hired leave within a year.

unskilled workers, though likely higher than those generally experienced by most working adults. The results are also fairly consistent with the evidence reported for the same time period above from the National Survey of American Families or the New Jersey study, though somewhat longer than that implied in the Michigan study.¹⁸

The data also indicate that a majority of welfare recipients who end a job spell do so voluntarily, consistent with evidence cited earlier. In general, voluntary exits from a job are more likely than involuntary exits to be associated with subsequent wage growth and rapid movements into other jobs (Gladden and Taber, 2000; Holzer and Lalonde, 2000). Whether these quits are associated with such positive outcomes cannot be directly inferred from these data; however, the evidence presented below on the job performance of those who quit casts some doubt on this.

Before proceeding to our regression analyses, Tables 2 and 3 present some cross-tabulations of the three sets of outcomes. In particular, Table 2 presents tabulations of the performance ratings and the problems experienced with welfare recipients by whether or not they have been retained, and, if not, whether they quit, were discharged, or were laid off. Table 3 presents tabulations of the problems experienced by employers with welfare recipients by the performance ratings they have received.

The results in Table 2 indicate that those who have been retained receive much more positive performance ratings than those who have left. Also, employers claim to have experienced more of virtually every problem with the "leavers," but especially absenteeism and poor attitudes. The performance ratings are worst and the problems experienced most frequent among those who have been discharged. However, those who quit have low performance ratings and experience problems frequently as well—indeed, the ratings and experience of problems among quitters are more similar to those who have been discharged than to those who have been retained in their jobs. Thus, voluntary exits among

¹⁸The Michigan data (Johnson, 2001) are from an urban county with very high unemployment rates in the 1980s and 1990s, which likely contributed to longer welfare durations and lower employability of the recipients there. The demographics of those on the rolls at the outset of the study were worse than those reported below for the hired recipients in this study.

TABLE 2
Relative Performance Measures and Problems Encountered by Job Retention Status

	Still E	Employed		
	Yes	No: Total	Quit	Discharged
A. Performance				
Much better	.185	.064	.052	.054
Little better	.223	.094	.113	.089
Same	.517	.415	.474	.288
Little worse	.065	.257	.217	.339
Much worse	.010	.170	.144	.232
B. Problems				
Absenteeism	.293	.747	.701	.879
Due to				
Child care	.202	.458	.479	.473
Health	.103	.256	.240	.281
Mental health	.010	.048	.033	.073
Transportation	.114	.339	.340	.345
Domestic violence	.016	.094	.112	.075
None of the above	.019	.109	.072	.190
Attitude toward work	.102	.422	.333	.552
Basic skills	.101	.166	.131	.183
Job skills	.072	.160	.121	.228
Substance abuse	.006	.071	.031	.123
Relations with coworkers	.114	.286	.242	.397

TABLE 3
Problems Encountered by Relative Performance Ratings

		Relativ	e Rating		
	Bet	tter	Same	Wo	orse
Problems	Much	Much Little		Little	Much
Absenteeism	.140	.275	.402	.818	.882
Due to					
Child care	.084	.172	.269	.581	.438
Health	.037	.108	.128	.320	.364
Mental health	.009	.023	.006	.069	.065
Transportation	.028	.123	.164	.419	.344
Domestic violence	.009	.008	.034	.101	.107
None of the above	.019	.015	.030	.104	.176
Attitude toward work	.056	.076	.111	.584	.727
Basic skills	.028	.100	.108	.231	.265
Job skills	.019	.084	.047	.286	.324
Substance abuse	.009	.008	.015	.040	.121
Relations with coworkers	.083	.053	.117	.403	.618

welfare recipients are much less likely to be associated with positive performance and upward mobility in the labor market than appears to be true for others.

Of course, at least some of the association between retention and performance noted here might reflect an ex post endogeneity of performance with respect to the retention. In other words, employers who are angry over a recent departure might be more likely to rate the employee negatively than they would have before that worker left. On the other hand, we expect that this is less likely to be true for specific problems that are more objective (such as absenteeism). The problem of ex post negative ratings is also likely to be more relevant for workers who have quit rather than those who have been discharged. The fact that the latter show worse performance and more serious problems than the former also indicates that at least some of the negative association between retention and performance is real.

The results of Table 3 show that performance ratings of employees are much lower when employers perceive particular problems among these employees. Again, absenteeism and attitude are the problems most frequently associated with poor performance ratings by the employer. While attitude might be considered very subjective, the experience of absenteeism presumably is a good deal less so, thereby giving us somewhat greater confidence in these results.

Thus, whereas overall retention and performance measures among hired welfare recipients tell a quite positive story about these workers, a minority of hired recipients experience retention and performance difficulties. These difficulties are often related to pervasive absenteeism and other problems usually associated with "soft skills."

Regression Estimates: Absenteeism and Other Problems

In Tables 4 and 5 we present estimates of equation 1, in which the dependent variable is whether the employer has experienced one or more of a specific set of problems with the welfare recipient in question. Table 4 presents results from equations in which absenteeism, regardless of source, is the

TABLE 4
Regression Equations for Absenteeism: Any Source

	1	2	3	4
Recipient				
Black	.010	.040	.037	.053
	(.045)	(.046)	(.048)	(.050)
Hispanic	160	065	079	075
	(.063)	(.066)	(.070)	(.072)
High school graduate	077	064	069	064
	(.043)	(.042)	(.044)	(.045)
General work experience	004	025	019	020
	(.045)	(.045)	(.046)	(.047)
Specific work experience	105	076	089	105
	(.043)	(.042)	(.044)	(.045)
Establishment				
Chicago		200	184	161
		(.056)	(.060)	(.061)
Cleveland		131	154	143
		(.052)	(.054)	(.056)
Los Angeles		272	264	258
		(.061)	(.065)	(.067)
Near public transit		091	082	077
		(.041)	(.042)	(.043)
1998–1999 hire		141	140	128
		(.053)	(.058)	(.060)
Size				
1–19		.000	025	043
		(.063)	(.069)	(.072)
20–49		044	053	083
		(.055)	(.058)	(.061)
50–99		.033	.023	.009
		(.056)	(.060)	(.061)
Vacancy rate		.245	.245	.186
, and the second		(.196)	(.205)	(.237)

table continues

TABLE 4, continued

	1	2	3	4
Job				
Starting wage			.004	.005
Health insurance			(.010) 062	(.011) 073
			(.049)	(.051)
Promotion chances			103	089
			(.048)	(.049)
Screening				
Test used				072
				(.045)
Dress/appearance				.016
D 1.6				(.048)
Recommendation				037 (.044)
Agency				.015
rigency				(.052)
Criminal check				077
				(.045)
R^2	.033	.099	.112	.131
N	575	568	524	502

Note: Standard errors are in parentheses.

dependent variable. Four specifications are presented here, beginning with individual characteristics only, then adding establishment and job characteristics as well as recruiting behaviors respectively. ¹⁹

Before proceeding to the results, we note that the means (and standard deviations) of all independent variables appear in Table A.1. These descriptive statistics give some indication of the kinds of welfare recipients being hired and the nature of the establishments and jobs into which they are hired. The data show that about two-thirds of the recipients are black or Hispanic; almost two-thirds have high school diplomas and have had general work experience in the recent past. Thus, the most disadvantaged recipients, who are frequently not employed at all, are not heavily represented here (Danziger et al., 2000; Zedlewski and Loprest, 2001). The establishments are divided quite evenly among the main size categories, but average job vacancy rates exceed local unemployment rates and are therefore extremely high, reflecting very tight labor markets. Average starting wages are just a bit higher than those reported in other studies of welfare "leavers" (e.g., Acs and Loprest, 2001). The percentage of employers providing health insurance does appear high relative to other studies, but we are capturing offers of health insurance, and take-up rates for this population are often low in the presence of substantial copayments and deductibles. Finally, many different kinds of screens are used by employers in the hiring process.

A number of results appear in Table 4. The data indicate that several characteristics of workers, their employers, and the jobs they fill affect the likelihood that they will experience absenteeism problems. The exact levels of statistical significance may vary, but we generally find that²²

¹⁹Occupation and industry dummies have also been included in many estimated specifications. But, since they almost never affected the results qualitatively and are heavily correlated with many of the underlying establishment and job characteristics whose effects we are trying to estimate, we have omitted them from the equations presented below.

²⁰Unemployment rates averaged 2–4 percent in all of the metropolitan areas represented here at the time of the survey. Abraham (1983) and Holzer (1989) have noted the rarity with which unemployment rates exceed job vacancy rates in local labor markets. However, the mean vacancy rate estimated here is close to that generated by a recent survey of establishments in Minnesota (Minnesota Department of Economic Security, 2001) and therefore appears to be quite plausible. The median vacancy rate among the establishments, at 2 percent, was much lower than the mean.

²¹Median (as opposed to mean) starting wages in these data are about \$7.00 per hour.

²²The results reported below generally are significant at the .10 level or better in one-tailed tests.

- high school graduates, those with some specific recent work experience, and (to a lesser extent) Hispanics have lower rates of absenteeism than do others;
- location in a particular metropolitan area has important effects, with those in Milwaukee (the omitted category) experiencing the most absenteeism and those in Los Angeles the least;
- location within the metropolitan area also matters, as those with proximity to public transit experience less absenteeism than those without it;
- establishments with high job vacancy rates experience somewhat more absenteeism than those with lower rates;
- those in jobs with employer-provided health insurance or chances of future promotion experience less absenteeism; and
- Those employers who do more screening, mostly through testing and criminal background checks, experience lower rates of absenteeism. ²³

How should we interpret these findings? Despite the questions noted above regarding the exact causal mechanisms at work here, the findings are strongly suggestive. For instance, Milwaukee (as part of the W-2 program in Wisconsin) has been through a far more aggressive effort to push welfare recipients into the workforce than have the other metropolitan areas, while Los Angeles has been through the least aggressive. Because of this, employment rates of welfare recipients in Milwaukee (and also Cleveland) have outpaced those in Chicago and Los Angeles to date (Holzer and Stoll, 2001) The more rapid entry of welfare recipients into the labor market in Milwaukee is consistent with less selectivity among employers hiring them, and consequently more absenteeism problems. The strong positive effect of job vacancies on absenteeism, and also on the hiring of welfare recipients, is consistent with this interpretation as well. Without controls for vacancy rates, smaller establishments appear to experience rates of absenteeism that are comparable to or higher than those of larger establishments as well.²⁴ And establishments with some proximity to public transit are likely more accessible to welfare recipients, thereby making it easier for them to show up on time more regularly as well.

 $^{^{23}}$ The *F*-statistic on all of these screens together indicates that they are jointly significant at about the .05 level.

²⁴For instance, absenteeism problems are reported in .44, .41, and .38 of establishments in the 1–19, 20–99, and 100 or above size categories, respectively.

Regarding job characteristics, the results suggest that those who might receive employer-provided health insurance and/or a future promotion for good performance are more motivated to show up regularly for work. Though it is also possible that these job characteristics are simply capturing unmeasured attributes of those who obtain them, the results are consistent with other evidence (e.g., Holzer and Lalonde, 2000; Strawn and Martinson, 2000) in which job characteristics appear to affect retention rates independently of observed worker attributes.

Finally, the joint effects of employer screens suggest that those who obtain more information about recipients have some ability to improve the quality of the "matches" that they generate, though the modest size and unevenness of these estimated effects imply that employers cannot expect screening to dramatically reduce absenteeism problems.

Overall, a wide range of employer/job and personal characteristics seem to affect absenteeism rates among welfare recipients. Do all of these effects vary greatly across different sources of absenteeism? Table A.2 presents estimates of equations in which the dependent variable is the experience of absenteeism difficulties generated from a particular source, such as child care, transportation, health problems, mental health, or domestic violence, or none of the above. The results indicate that absenteeism attributable to physical health, child care, or transportation have relatively similar determinants to one another and to those listed above. Interestingly, the experience of absenteeism attributable to transportation or child care problems is reduced in establishments that are easily accessible by public transit. On the other hand, the determinants of absenteeism associated with mental health/domestic violence or other sources differ a bit from those associated with health, child care, or transportation.²⁵ For instance, those working in smaller establishments have greater frequencies of absenteeism due to mental health and domestic violence. Minorities have relatively greater frequencies of absenteeism associated with nonspecified causes, while agencies are a bit more successful in screening them out.

 $^{^{25}}F$ -tests for pooling reject the hypothesis that the coefficients are the same in these cases, as they are for the other sources of absenteeism.

Table 5 presents equations for the employer's experience of a broader range of problems on the job—the total number of problems (including absenteeism), basic/job (or hard) skills, and any of the other (soft) problems. The results of Table 5 indicate similar findings to those presented for absenteeism in Table 4. The greatest number of problems among working welfare recipients (at least as perceived by employers) are associated with blacks, high school dropouts, and those without specific work experience; those in Milwaukee, hired earlier than 1998, and in small establishments; those with little chance of promotion; and those who have gone through less screening. Comparing hard versus soft skill problems indicates that both blacks and Hispanics are relatively more likely than whites to experience the former set of problems, while Hispanics seem to compensate somewhat on the soft skills. However, it is important to remember once again that these results are conditional on employer hiring decisions, and that most Hispanics hired in Los Angeles have been hired by employers who could be relatively more selective. Employer prejudices and biases might also influence their perceptions, especially across racial groups.

The determinants of specific problems such as attitudes toward work and relations with coworkers appear in Table A.3 and are very similar to those of absenteeism in Table 4 and other problems in Table 5. A few anomalies might be noted in these results. For instance, high school graduation seems to have greater effects on soft skills than on hard skills, while screening for dress/appearance seems to have opposite effects. Likely, these factors are not directly causal, but are correlated with the unobserved characteristics of individuals who experience relatively more of one problem than the other.

Regression Estimates: Performance Ratings

In Table 6 we present estimated equations for the performance rating of the welfare recipient, where 1 is best and 5 is worst (thus, negative coefficients indicate better performance). The first four equations of the table are the reduced forms, comparable to those presented in panel A of Table 4. The fifth equation includes controls for the specific problems analyzed above. Panel B presents the

TABLE 5
Regression Equations for Problems Experienced

	No. of I	Problems	Basic / J	Basic / Job Skills		roblems	
	1	2	1	2	1	2	
Recipient							
Black	.083	.293	.036	.062	006	.052	
	(.113)	(.123)	(.036)	(.040)	(.046)	(.050)	
Hispanic	238	.001	.032	.081	161	039	
- Comp with the	(.158)	(.179)	(.050)	(.058)	(.064)	(.073)	
High school graduate	227	178	029	008	088	070	
8 8	(.107)	(.112)	(.034)	(.036)	(.043)	(.045)	
General work experience	054	071	010	009	.021	019	
P	(.103)	(.116)	(.036)	(.038)	(.046)	(.047)	
Specific work experience	320	342	099	128	130	132	
P	(.108)	(.113)	(.034)	(.037)	(.044)	(.046)	
Establishment							
Chicago		327		.068		148	
8		(.152)		(.049)		(.062)	
Cleveland		463		021		136	
		(.138)		(.045)		(.056)	
Los Angeles		506		014		285	
C		(.166)		(.054)		(.068)	
Near public transit		159		.027		083	
•		(.107)		(.035)		(.043)	
1998–1999 hire		399		119		151	
		(.149)		(.048)		(.060)	
Size		` ,		, ,		, ,	
1–19		.354		117		.006	
		(.181)		(.058)		(.071)	
20–49		.206		.108		.004	
		(.151)		(.049)		(.061)	
50–99		.151		.042		.031	
		(.149)		(.049)		(.061)	
Vacancy rate		.407		.210		.355	
		(.582)		(.191)		(.239)	
		table contin	ues				

TABLE 5, continued

	No. of	Problems	Basic /	Job Skills	Other Problen	
	1	2	1	2	1	2
Job						
Starting wage		.025		001		.012
		(.028)		(.009)		(.011)
Health insurance		014		.036		035
		(.127)		(.041)		(.052)
Promotion chances		331		041		094
		(.122)		(.039)		(.049)
Screening		, ,		, ,		` /
Test used		145		.026		098
		(.113)		(.037)		(.046)
Dress/appearance		175		098		.021
		(.119)		(.039)		(.048)
Recommendation		.029		.011		.006
		(.109)		(.036)		(.045)
Agency		025		.000		048
		(.129)		(.042)		.(052)
Criminal check		175		012		074
		(111)		(.076)		(.045)
R^2	.039	.183	.024	.085	.037	.148
N	557	488	574	502	575	502

Note: Standard errors are in parentheses.

TABLE 6 Equations for Performance Ratings: Ordered Logits

	1	2	3	4	5
A. Effects of worker, firm, and job chara-	cteristics				
Recipient					
Black	.186	.226	.237	.268	.067
	(.174)	(.184)	(.193)	(.202)	(.219)
Hispanic	232	087	.127	.164	.215
•	(.244)	(.267)	(.285)	(.296)	(.329)
High school graduate	.126	162	206	157	003
	(.167)	(.171)	(.180)	(.184)	(.201)
General work experience	287	318	294	281	441
•	(.174)	(.177)	(.187)	(.190)	(.209)
Specific work experience	477	385	487	556	224
•	(.117)	(.171)	(.182)	(.189)	(.205)
Establishment					
Chicago		653	524	490	310
•		(.231)	(.248)	(.252)	(.271)
Cleveland		540	687	690	305
		(.210)	(.221)	(.230)	(.253)
Los Angeles		716	977	924	480
-		(.251)	(.272)	(.279)	(.298)
Near public transit		219	247	300	160
-		(.163)	(.171)	(.177)	(.180)
1998–1999 hire		.012	.022	005	.421
		(.234)	(.242)	(.234)	(.285)
Size					
1–19		141	.028	067	005
		(.267)	(.291)	(.304)	(.329)
20–49		095	.011	.071	.150
		(.224)	(.237)	(.248)	(.269)
50–99		.008	030	008	.037
		(.226)	(.242)	(.245)	(.267)
Vacancy rate		1.268	1.572	.927	018
•		(.777)	(.811)	(.921)	(.964)

table continues

TABLE 6, continued

	1	2	3	4	5
Job					
Starting wage			.076	.076	.076
			(.043)	(.046)	(.052)
Health insurance			.011	032	009
			(.201)	(.206)	(.226)
Promotion chances			-1.053	-1.037	870
			(.203)	(.208)	(.231)
Screening					
Test used				061	.213
				(.184)	(.201)
Dress/appearance				318	263
				(.190)	(.209)
Recommendation				192	235
				(.180)	(.193)
Agency				.045	039
				(.208)	(.228)
Criminal check				036	.119
				(.182)	(.200)
With controls for problems	no	no	no	no	yes
Log-likelihood	-756.9	-737.1	-653.1	-624.1	-499.6
Pseudo R ²	.013	.025	.054	.058	.174
N	571	564	520	499	457
	table continues	S			

TABLE 6, continued

		1	2	3	4	5
B.	Effects of problems					
	Number of problems	.969	-	-	-	-
		(.076)				
	Skills	-	.922	-	-	-
	04 11		(.202)			
	Other problems	-	1.603	-	-	-
	Absenteeism	_	(.164)	1.182	_	
	Absenceism	_	_	(.177)	_	_
	Due to			(.177)		
	Health	-	-	-	.444	040
					(.276)	(.342)
	Child care	-	-	-	.706	.857
					(.236)	(.284)
	Transportation	-	-	-	.172	.194
					(.272)	(.326)
	Mental health/domestic violence	-	-	-	.760	1.400
					(.408)	(.518)
	Other	-	-	-	1.812	1.293
	Auto I i I I			1.500	(.424)	(.498)
	Attitude toward work	-	-	1.520	1.629	2.034
	Basic skills			(.265) .528	(.285) .623	(.373) .904
	Dasic skills	-	-	(.248)	(.261)	(.315)
	Job skills	_	_	(.248) .497	.750	.337
	300 SKIIIS			(.290)	(.329)	(.389)
	Substance abuse	_	_	.689	.319	.731
				(.616)	(.672)	(.771)
	Relations with coworkers	-	-	.704	.542	.432
				(.252)	(.266)	(.319)
Wor	ker/establishment/job characteristics	no	no	no	no	yes
- Lo	g-likelihood	-794.5	-945.3	-787.6	-730.7	-499.6
Pseu	ndo R ²	.106	.077	.114	.115	.174
N		656	673	656	617	457

Note: Equations 1–4 in panel A are different from those in panel B, while equation 5 is the same in both panels of the table.

coefficients on these problems in a variety of specifications. All equations are estimated through ordered logits.

Turning first to panel B of Table 6, the results indicate that

- "other problems" (or soft skills) are more important than problems with basic and job-related (or hard) skills as determinants of negative performance ratings;
- among these other problems, absenteeism and poor attitude have the largest negative effects;
- absenteeism that is not associated with any of the specific sources listed above is considered the
 most negative, while that associated with transportation difficulties is considered the least
 negative; and
- these problems account for a fairly large part of the effects of worker, firm, and job characteristics on performance, as many of the coefficients on the latter weaken significantly once the former are included as controls.

The determinants of performance ratings broadly resemble those of attitudes and other problems noted in earlier tables. A few differences can also be noted—for instance, black employees are rated more negatively (because of the problems noted), and general experience in work matters for performance as well as more specific experience.

Still, the broad outlines noted above seem to hold. Performance on the job seems strongly related to whether or not employers have experienced absenteeism and other specific problems, reflecting both hard and soft skills, but especially the latter. A wide range of personal, employer, and job attributes are associated with these problems and performance more broadly.

Regression Estimates: Retention and Types of Separations

In this section, we examine the variation in the rate at which workers leave the firm with individual, job, and employer characteristics and the employer's perceptions of the worker.

Reduced-Form Estimates. Table 7 presents estimates of three reduced-form models of the rate of exit from the firm. The first column reports coefficients from a model of the rate of all exits, while the second and third columns report coefficients from models of the quit and discharge rates. Because the

TABLE 7
Cox Proportional Hazard Model of Exit Rate, Reduced Form, by Reason for Exit

*			
	All Exits	Quit	Discharge
Recipient			
Black	048	271	.434
	(.233)	(.324)	(.381)
Hispanic	766	413	-1.708
-	(.401)	(.482)	(1.068)
High school graduate	244	345	017
	(.223)	(.304)	(.363)
General work experience	.076	209	.299
1	(.238)	(.320)	(.395)
Specific work experience	020	.424	233
	(.220)	(.309)	(.349)
stablishment	` '	` ,	` '
Chicago	539	823	285
	(.301)	(.450)	(.461)
Cleveland	735	550	-1.050
	(.265)	(.360)	(.420)
Los Angeles	512	354	-1.003
C	(.337)	(.429)	(.651)
Near public transit	219	751	.386
•	(.209)	(.298)	(.349)
Size	, ,	, ,	` /
1–19	.465	.401	.461
	(.291)	(.414)	(.450)
20–49	214	.175	-712
	(.305)	(.396)	(.523)
50–99	223	.010	605
	(.327)	(.425)	(.576)
Vacancy rate * 100	.026	.027	.026
•	(.009)	(.011)	(.015)
ob	` ,		· · · ·
Wages	.015	.049	014
-	(.055)	(.075)	(.091)
Health insurance	.006	.277	336
	(.243)	(.340)	(.385)
Promotion chances	.258	.226	.341
	(.098)	(.133)	(.161)

table continues

TABLE 7, continued

	All Exits	Quit	Discharge	
Screening				
Test used	474	174	857	
	(.242)	(.322)	(.401)	
Dress/appearance	.094	079	.475	
	(.233)	(.321)	(.365)	
Recommendation	033	.101	288	
	(.216)	(.290)	(.356)	
Agency	.275	.140	.328	
	(.263)	(.364)	(.443)	
Criminal check	218	526	.105	
	(.229)	(.324)	(.352)	
Log-likelihood	-426.261	-248.446	-174.601	
N	473	473	473	

coefficients are from the Cox proportional hazard model, the exponent of each coefficient estimates the factor by which the hazard rate changes with a one-unit change in the independent variable.

The model for overall exit rates shows effects broadly similar to those found above for absenteeism and performance. Significance levels again show some variation, but exit rates tend to be somewhat lower for Hispanics than for blacks and whites. Workers in Milwaukee leave jobs at higher rates than those in the other metropolitan areas, consistent with the notion that they are less job-ready than recipients in the other cities. Higher exit rates are observed at small establishments and those with higher vacancy rates, perhaps due to lower-quality workers or poorer work conditions at those firms. Jobs with promotion potential have a somewhat lower exit rate, as expected if workers stay at jobs based on expectations regarding future income. Finally, firms that require tests have a lower exit rate.

At least a few characteristics of jobs that we expected to influence exit rates failed to do so. For instance, wages and employer contributions to health insurance, two essential indicators of the desirability of a job, are not associated with exit rates. The lack of effect of wages is uncommon in models of employment transitions (e.g., Holzer and Lalonde, 2000) and may reflect scarcity of other opportunities for welfare recipients or too little variance to generate any influence.

Examination of the separate models for quits and discharges reveals some patterns that are hidden in the model of all exits. For instance, the overall exit model shows little effect of public transportation; the separate models show that nearby public transportation is associated with a lower quit rate, but a slightly higher discharge rate. The lower quit rate likely results from public transportation making the journey to work easier, while the discharge rate presumably reflects lower average quality among those workers using that mode of transportation. We also find that criminal checks are associated with lower quit rates (while discharge rates appear unaffected) and that provision of tests for screening is associated with a lower discharge rate, but has little effect on the quit rate.

Relationship between Performance/Problems and Exit Rates. We next examine the relationship between employers' perception of employees' problems or performance and the exit, quit, and discharge

rates of employees. Table 8 presents models that relate these hazard rates to the employer's overall perception of the employee and indicators of problems with the worker (as described by the employer).

As can be seen at the top of the table, the more negative the employer's overall perception of the worker, the higher the exit, quit, and discharge rates. Given that the perceptions are those of the employer, we might expect a stronger relationship between the perceptions of the employer and the discharge rate than with the quit rate.²⁶ This is confirmed as we see somewhat stronger effects for discharges than for quits, with the effect on all exits falling in the middle.

Table 8 also presents the relationship between specific problems and the various exit rates. We see strong effects of absenteeism due to child care or "other" problems, which are associated with higher exit, quit, and discharge rates. Generally, we tend to see more effects on the discharge rate than the quit rate. For instance, substance abuse and absenteeism due to health and mental health/domestic violence only affect the discharge rate, but not the quit rate, and attitude has a stronger effect on discharges than on quits. Again, since these are the employers' perceptions of problems, their relatively greater estimated impact on retention behavior makes sense.

Finally, Table 8 reports the effects of problems grouped into those related versus unrelated to basic/job skills (or hard versus soft skills, as noted above). Problems unrelated to skills are positively associated with exit, quit, and discharge rates. Problems related to skills, however, are unrelated to exit, quit, and discharge rates, after controlling for nonskill-related problems.²⁷ A simple explanation may be that employers expect welfare recipients to have below-average skills, so that low skills only affect the likelihood of a discharge if the worker creates disruption in the work place.

The joint effects of employer perceptions of problems/performance and person, job, and employer characteristics on quit and discharge rates are reported in Table 9. Comparisons between these results and

²⁶We still expect an effect on the quit rate as long as the worker incorporates the employer's perception as a measure of likelihood of success at the job.

²⁷Prior to controlling for nonskill-related problems, we find positive and significant relationships of skill-related problems to the discharge rate (though not the quit rate).

TABLE 8
Cox Proportional Hazard Model of Exit Rate, Including Only Performance Measures, by Reason for Exit

1				Quit		Discharge		
	2	3	1	2	3	1	2	3
.826 (.093)	-	-	.722 (.119)	-	-	1.024 (.158)	-	-
,			,			,		
-	.282	-	-	.094	-	-	.610 (453)	-
-	.734	-	-	.886	-	-	1.053	-
-	.198	-	-	.327	-	-	350	-
-	(.260) .485	-	-	(.324) .240	-	-	(.460) .812	-
	(.348)			(.485)			(.509)	
-		-	-		-	-		-
-	.745	-	-	.557	-	-	.948	-
-	.395	-	-	.230	-	-	.545	-
-	094	-	-	.000	-	-	224	-
-	1.046	-	-	196	-	-	2.023	-
-	.061	-	-	126	-	-	.454	-
-	-	010 (216)	-	-	166 (295)	-	-	.134 (.349)
-	-	1.807 (.234)	-	-	1.467 (.274)	-	-	3.212 (.728)
-545.017	-513.971	-539.554	-357.372	-344.418	-357.616	-198.587	-173.079	-189.442 616
		282 (.268) 734 (.246) 198 (.260) 485 (.348) 1.382 (.325) 745 (.230) 395 (.280) 094 (.288) 094 (.288) 061 (.242) 	282	282	282094 (.268)	282		282

TABLE 9
Cox Proportional Hazard Model of Exit Rate, Complete Model, by Reason for Exit

*		• •	
	All Exits	Quit	Discharge
Performance rating	.685	.581	.850
<u> </u>	(.125)	(.164)	(.224)
Problems			
Skill-related	181	261	350
2	(.256)	(.363)	(.431)
Nonskill-related	1.473	1.239	2.78
1,011,011,11	(.310)	(.390)	(.764)
Recipient	,	,	,
Black	354	417	060
Black	(.270)	(.365)	(.475)
Hispanic	652	221	-1.760
mspanic	(.426)	(.509)	(1.117)
High school graduate	230	395	.310
riigii school graduate	(.242)	(.323)	(.423)
General work experience	.015	(.323) 181	.200
General work experience	(.249)	(.329)	(.447)
Specific work experience	.560	(.329) .775	.740
Specific work experience	(.232)	(.313)	(.398)
E (LE L)	(.232)	(.515)	(.570)
Establishment Chicago	259	509	030
Chicago			
Cleveland	(.315)	(.467)	(.493)
Cieveiand	468 (204)	119	-1.130
T A1	(.294)	(.391)	(.513)
Los Angeles	209	.011	880
NI	(.350)	(.448)	(.683)
Near public transit	.010	582	.820
Size	(.231)	(.318)	(.416)
1–19	.159	.199	.240
1–19			
20–49	(.318)	(.442)	(.540)
20–49	439	.122	-1.300
50.00	(.325)	(.418)	(.582)
50–99	593	186	-1.190
Vacancy mate * 100	(.344)	(.440)	(.612)
Vacancy rate * 100	.018	.025	.000
	(.011)	(.013)	(.026)

table continues

TABLE 9, continued

	All Exits	Quit	Discharge
Job			
Wages	081	012	190
-	(.056)	(.076)	(.097)
Health insurance	.077	.283	080
	(.268)	(.366)	(.461)
Promotion chances	.051	.043	.070
	(.106)	(.139)	(.193)
Screening			
Test used	123	.124	440
	(.255)	(.337)	(.442)
Dress/appearance	.279	.079	.720
	(.248)	(.341)	(.408)
Recommendation	.224	.314	070
	(.232)	(.309)	(.394)
Agency	.264	.044	.550
-	(.286)	(.389)	(.506)
Criminal check	.223	154	.980
	(.255)	(.351)	(.433)
Log-likelihood	-365.98	-221.5558	-134.7829
N	455	455	455

those in Table 7 show us the extent to which our measures of problems and performance can account for any observed relationships between these characteristics and exit rates. Similarly, comparisons between these results and those in Table 8 tell us the extent to which observed effects of problems and performance on exits are accounted for by measurable characteristics of workers, firms, and jobs.

As before, the effects of the overall assessment of the worker and of nonskill-related problems on exit, quit, and discharge rates remain strong and positive, while the effects of skill-related problems are weakly negative. Thus, the estimated effects of worker performance and problems on exits are not accounted for by the observable characteristics of individuals, employers, or jobs for which we can control. On the other hand, the effects of several of these characteristics on exits in the reduced-form model no longer matter after controlling for employer perceptions of worker performance and problems. For instance, the pattern of exits across cities becomes negligible, perhaps indicating that worker quality does indeed account for variation in exit rates across cities. Furthermore, the effect of the vacancy rate on discharges disappears after controlling for employer perceptions, consistent with the view that high-vacancy firms are more likely to hire problem workers.

However, a few results in this table are somewhat anomalous. For instance, work-specific experience has a strong and positive effect in both the quit and discharge rates models after adding controls for performance. The effect on the quit rate makes sense if those with work experience are more likely to leave a situation where they are not appreciated. We find a negative effect of wages on the discharge rate, but not the quit rate—a finding at odds with our expectation. And we find positive effects on the discharge rate of both screening for criminal records and taking dress and demeanor into account.

Nevertheless, the models of Table 9 do underscore the importance of worker quality and performance in the jobs into which they have been hired in accounting for differences in retention among welfare recipients who have entered into the workplace.

CONCLUSION

The evidence presented above suggests, on the one hand, that overall job performance and retention rates among welfare recipients who work appear to be quite favorable. In particular, most employees are considered to be as good as or better than the typical employees hired into these jobs, and average retention rates appear fairly high (though they might be upward biased to some extent). On the other hand, a fraction of these workers do experience serious difficulties with performance and retention, and certain problems—like absenteeism and other "soft skill" deficiencies—are quite pervasive.

Much of the variation in these outcomes across individual welfare recipients is difficult to explain with the variables that we have, but we were able to account for at least some of it. Not surprisingly, those without high school diplomas or work experience had greater difficulties, as did blacks (at least in the views of their employers). Establishments that hire many welfare recipients experienced more difficulties, such as those in Milwaukee or with high job vacancy rates. It seems unlikely that the performance and retention difficulties associated with these characteristics can be easily improved, though greater work experience among welfare recipients should generate improved performance as time proceeds.

But some of the findings imply at least a potential for employers and/or public policymakers to improve the quality of job matches with welfare recipients. For instance, child care and transportation difficulties were the primary sources of absenteeism problems; access to public transit seems to reduce absenteeism and improve retention. Provision of better child care and transit services might therefore reduce absenteeism rates quite significantly and thereby improve performance and retention. Indeed, those few employers that already provide child care or transportation assistance to employees experience fewer absenteeism problems than those who do not.²⁸

²⁸The percentages of employers that currently provide child care or transportation assistance to hired welfare recipients are just 9 percent and 10 percent, respectively. Those who provide assistance experience absenteeism associated with those problems among 18 percent and 14 percent of recipients hired, while comparable estimates for those not providing assistance are 26 percent and 17 percent, respectively.

Placement services (perhaps through intermediaries) that help match workers to better jobs, including those that offer promotion possibilities and perhaps health insurance, hold some promise as well. To the extent that the degree of screening of these applicants can be improved (whether through an intermediary or by the employer directly), better matches would apparently result as well. And, since soft skills seem to affect job performance and retention to a greater extent than hard skills, the appropriate kinds of work-readiness training or job mentoring may be relatively cost-effective ways of addressing these problems.²⁹

Of course, any specific policy recommendation in this area would require a more careful evaluation of the magnitudes of costs and benefits involved. And there is at least some potential downside to these strategies. For instance, greater screening by employers or intermediaries might mean that some recipients have a harder time getting placed at all, and they might require alternatives to employment (such as greater investment in basic skills or community-service employment) in the short term.

The generally positive overall rates of retention and performance noted here also imply that, for many or most welfare recipients in the workforce, these are not serious problems. This has a few important implications. For one thing, any retention services should perhaps be targeted only at those who are likely to experience retention difficulties. Indeed, some have speculated that this lack of targeting is one reason (among others) why the Post-Employment Services Demonstration failed to generate very positive impacts on retention (Rangarajan, 1998). Newer efforts to deal with performance and retention should perhaps be more selective in the targeting of such services. Furthermore, among those not experiencing retention and performance problems in their current jobs, we should perhaps be concerned with more serious human capital enhancement and occupational mobility that will ultimately lead to greater earnings growth (Strawn, Greenberg, and Savner, 2001).

²⁹We note again the apparent importance of hard skills for gaining employment at all or for promotions and other forms of upward mobility.

Finally, we need to remember that retention rates will likely decline quite dramatically in any economic downturn, and that provisions need to be made to ensure that an adequate safety net exists for all workers at that time (Holzer, 2000).

³⁰The Employment Retention Assistance demonstration now being implemented by the Manpower Demonstration Research Corporation in several local areas across the country is based on this notion and provides an eclectic group of treatments.

TABLE A.1 Worker, Establishment, and Job Characteristics

	Means	Standard Deviations
Recipient:		
Black	.520	(.500)
Hispanic	.148	(.356)
High school graduate	.626	(.484)
General work experience	.659	(.474)
Specific work experience	.486	(.500)
Establishment		
Chicago	.214	(.410)
Cleveland	.277	(.448)
Los Angeles	.202	(.402)
Near public transit	.517	(.500)
1998–1999 hire	.844	(.363)
Size		
1–19	.135	(.341)
20–49	.171	(.377)
50–99	.156	(.363)
Vacancy rate * 100	.064	(.115)
Job		
Wages	7.592	(2.169)
Health insurance	.703	(.457)
Promotion chances	.750	(.433)
Screening		
Test used	.395	(.489)
Dress/appearance	.305	(.461)
Recommendation	.401	(.490)
Agency	.246	(.431)
Criminal check	.414	(.493)

TABLE A.2 Regression Equations for Absenteeism—Particular Sources

	Physical Health	Child Care	Transport- ation	Mental Health/ Domestic Violence	Other
Recipient					
Black	031	002	.046	019	.042
	(.035)	(.046)	(.031)	(.022)	(.021)
Hispanic	121	081	048	068	.073
_	(.050)	(.067)	(.056)	(.032)	(.031)
High school graduate	036	056	021	002	004
	(.031)	(.042)	(.036)	(.020)	(.019)
General work experience	008	010	.009	.009	.006
-	(.033)	(.043)	(.037)	(.021)	(.020)
Specific work experience	013	034	022	049	044
•	(.032)	(.042)	(.036)	(.020)	(.019)
Establishment					
Chicago	091	121	087	041	.005
	(.043)	(.057)	(.048)	(.027)	(.020)
Cleveland	101	130	098	058	.010
	(.038)	(.052)	(.044)	(.025)	(.024)
Los Angeles	097	188	082	038	042
	(.047)	(.062)	(.053)	(.030)	(.029)
Near public transit	029	051	057	.010	024
1	(.030)	(.039)	(.034)	(.019)	(.018)
1998–1999 hire	063	163	181	044	.030
	(.042)	(.056)	(.047)	(.025)	(.026)
Size	()	()	(11)	(** -)	(** *)
1–19	.014	104	065	.045	.026
	(.050)	(.066)	(.057)	(.032)	(.031)
20–49	032	114	035	034	.017
	(.042)	(.056)	(.048)	(.027)	(.026)
50–99	.049	.000	.079	.018	018
	(.042)	(.056)	(.047)	(.027)	(.026)
Vacancy rate * 100	.312	.206	.344	051	059
	(.165)	(.217)	(.186)	(.104)	(.101)

table continues

TABLE A.2, continued

	Dhygiaal		Transport	Mental Health/ Domestic	
	Physical Health	Child Care	Transport- ation	Violence	Other
Job					
Wages	001	007	001	006	.008
-	(800.)	(.010)	(.009)	(.005)	(.005)
Health insurance	.001	029	044	.060	025
	(.036)	(.047)	(.040)	(.023)	(.022)
Promotion chances	077	.035	034	017	013
	(.034)	(.045)	(.038)	(.022)	(.021)
Screening					
Test used	026	038	006	024	019
	(.032)	(.042)	(.036)	(.020)	(.019)
Dress/appearance	005	037	006	010	.002
	(.034)	(.044)	(.038)	(.021)	(.020)
Recommendation	028	.000	027	.001	116
	(.031)	(.041)	(.035)	(.019)	(.019)
Agency	036	.072	.031	.011	031
	(.036)	(.048)	(.041)	(.023)	(.022)
Criminal check	027	073	.022	012	.006
	(.031)	(.041)	(.035)	(.020)	(.019)
R^2	.086	.097	.084	.083	.048
N	497	492	494	482	502

TABLE A.3 Regression Equations for Specific Problems

	Attitude Problems		Relations wit	h Coworkers
	1	2	1	2
Recipient				
Black	.011	.064	025	.041
	(.036)	(.040)	(.034)	(.038)
Hispanic	077	032	.107	017
	(.051)	(.059)	(.051)	(.056)
High school graduate	050	041	028	007
	(.035)	(.036)	(.033)	(.035)
General work experience	.006	007	008	017
	(.037)	(.038)	(.035)	(.036)
Specific work experience	068	071	055	069
-	(.035)	(.037)	(.033)	(.035)
Establishment				
Chicago		086		067
		(.050)		(.047)
Cleveland		075		082
		(.045)		(.043)
Los Angeles		084		119
		(.054)		(.052)
Near public transit		049		032
		(.035)		(.033)
1998–1999 hire		089		042
		(.048)		(.046)
Size				
1–19		.050		.103
		(.058)		(.056)
20–49		.053		.087
		(.049)		(.047)
50–99		.001		.092
		(.049)		(.047)
Vacancy rate * 100		.319		.359
-		(.191)		(.184)

table continues

TABLE A.3, continued

	Attitude Problems		Relations with Coworkers	
	1	2	1	2
Job				
Wages		.009		.019
		(.009)		(.009)
Health insurance		033		.031
		(.041)		(.039)
Promotion chances		108		076
		(.040)		(.038)
Screening				
Test used		040		045
		(.037)		(.035)
Dress/appearance		034		030
		(.039)		(.037)
Recommendation		010		.069
		(.036)		(.034)
Agency		033		065
		(.042)		(.039)
Criminal check		090		038
		(.036)		(.034)
R^2	.018	.100	.016	.098
N	574	501	577	504

References

- Abraham, Katherine. 1983. "Structural/Frictional v. Demand-Deficient Unemployment." *American Economic Review* 73: 708–724.
- Acs, Gregory, and Pamela Loprest. 2001. "Initial Synthesis Report of the Findings from ASPE's Leavers' Grants." Washington, DC: Urban Institute.
- Anderson, Patricia, and Bruce Meyer. 1994. "The Extent and Consequences of Job Turnover." *Brookings Papers on Economic Activity: Microeconomics*. Pp. 177–248.
- Bane, Mary Jo, and David Ellwood. 1983. "The Dynamics of Dependence: The Routes to Self-Sufficiency." Report to the U.S. Department of Health and Human Services.
- Blank, Rebecca, and Lucie Schmidt. 2001. "Work, Wages and Welfare Reform." Paper prepared for the Conference on the New World of Welfare, Washington, DC, February 1–2, 2001.
- Burtless, Gary. 1995. "The Employment Prospects of Welfare Recipients." In *The Work Alternative*, edited by D. Nightingale and R. Haveman. Washington, DC: Urban Institute.
- Cancian, Maria, and Daniel Meyer. 2000. "Work after Welfare: Women's Work Effort, Occupation, and Economic Well-Being." *Social Work Research* 24: 69–86.
- Danziger, Sandra, Mary Corcoran, Sheldon Danziger, Colleen Heflin, Ariel Kalil, Judith Levine, Daniel Rosen, Kristin Seefeldt, Kristine Siefert, and Richard Tolman. 2000. "Barriers to Employment of Welfare Recipients." In *Prosperity for All? The Economic Boom and African-Americans*, edited by R. Cherry and W. Rodgers. New York: Russell Sage Foundation.
- Gladden, Tricia, and Chris Taber. 2000. "Wage Progression among Less Skilled Workers." In *Finding Jobs: Work and Welfare Reform*, edited by D. Card and R. Blank. New York: Russell Sage Foundation.
- Haskins, Ronald, Isabel Sawhill, and Kent Weaver. 2001. "Welfare Reform Reauthorization: An Overview of Problems and Issues." Washington, DC: Brookings Institution.
- Hershey, Alan, and LaDonna Pavetti. 1997. "Turning Job Finders into Job Keepers." In *The Future of Children* 7 (1): 74–86.
- Holzer, Harry J. 1989. *Unemployment, Vacancies, and Local Labor Markets*. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.
- Holzer, Harry J. 1996. *What Employers Want: Job Prospects for Less-Educated Workers*. New York: Russell Sage Foundation.
- Holzer, Harry J. 2000. "Unemployment Insurance and Welfare Reform: What to Do When the Recession Comes." Urban Institute Policy Brief.
- Holzer, Harry J., and Robert J. Lalonde. 2000. "Employment and Job Stability among Less-Educated Young Workers." In *Findings Jobs: Work and Welfare Reform*, edited by D. Card and R. Blank. New York: Russell Sage Foundation.

- Holzer, Harry J., and Michael A. Stoll. 2001. "Employers and Welfare Recipients: The Effects of Welfare Reform in the Workplace." San Francisco: Public Policy Institute of California.
- Johnson, Rucker. 2001. "Welfare Recipients' Road to Economic Self-Sufficiency: A Study of the Job Transition Patterns of Welfare Recipients." Unpublished manuscript, University of Michigan.
- Kazis, Richard, and Mark Miller, eds. 2001. *Low Wage Workers in the New Economy*. Boston: Jobs for the Future.
- Kling, Jeffrey. 1995. "High Performance Work Systems and Work Performance." *Monthly Labor Review* 118 (5): 19–36.
- Meyer, Bruce, and Dan Rosenbaum. 2000. "Making Single Mothers Work: Recent Tax and Welfare Policy and Its Effects." National Bureau of Economic Research Working Paper W7491.
- Minnesota Department of Economic Security. 2001. *Help Wanted: 2001 Minnesota Job Vacancy Survey*. Research and Statistics Office. January.
- Moss, Philip, and Chris Tilly. 2001. Stories Employers Tell. New York: Russell Sage Foundation.
- Ong, Paul. 1996. "Work and Car Ownership among Welfare Recipients." *Social Work Research* 20: 255–262.
- O'Regan, Katherine, and John Quigley. 1999. "Spatial Isolation and Welfare Recipients: What Do We Know?" Working Paper W99-003, Program on Housing and Urban Policy, University of California, Berkeley.
- Rangarajan, Anu. 1998. "Keeping Welfare Recipients Employed: A Guide for States Designing Job Retention Services." Princeton, NJ: Mathematica Policy Research.
- Regenstein, Marsha, Jack Meyer, and Jennifer Hicks. 1998. "Job Prospects for Welfare Recipients: Employers Speak Out." Assessing the New Federalism Occasional Paper, Urban Institute.
- Strawn, Julie, Mark Greenberg, and Steven Savner. 2001. "Improving Employment Outcomes under TANF." Paper prepared for the Conference on the New World of Welfare, Washington, DC, February 1–2, 2001.
- Strawn, Julie, and Karin Martinson. 2000. *Steady Work and Better Jobs: How to Help Low-Income Parents Sustain Employment and Advance in the Workforce*. New York: Manpower Demonstration Research Corporation.
- Welfare-to-Work Partnership. 1999. "Member Survey: Promotion and Partnership." No. 1, Washington, DC.
- Zedlewski, Sheila, and Pamela Loprest. 2001. "How Well Does TANF Fit the Needs of the Most Disadvantaged Families?" Paper prepared for the Conference on the New World of Welfare, Washington, DC, February 1–2, 2001.