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Correlates of Employment Among Welfare Recipients: Do Psychological Characteristics and Attitudes Matter?[1]

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This study examines whether and how a wide range of potential barriers to work, including psychological characteristics and attitudes, are associated with current employment in a recent sample of welfare recipients in Michigan (N = 672). *Psychological factors include measures of depressive symptoms, work attitudes, and perceived risks associated with leaving welfare. Over and above demographic, economic, and contextual factors, positive psychological characteristics and attitudes were found to be moderately associated with currently being employed. Implications for welfare-to-work programs and policy are discussed.*

KEY WORDS: psychological well-being; employment; welfare reform.

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 ended the federal guarantee of cash assistance for

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eligible low income families and replaced the Aid to Families with Dependent Children (AFDC) program with the Temporary Assistance for Needy Families (TANF) program. Under the AFDC program, states were entitled to unlimited federal funds as reimbursement for cash assistance paid to very low income families qualifying for benefits (U.S. House of Representatives, Committee on Ways and Means, 1996). In contrast, the PRWORA gives states a block grant of fixed size (generally based on the amount of federal funds spent during 1994 or 1995), places a 5-year lifetime limit on the receipt of federal welfare benefits, and requires most recipients of welfare benefits to go to work within 2 years of entering the program (Greenberg & Savner, 1996).

These reforms represent a significant departure from the prior system of assistance. Before 1996, certain recipients were expected to participate in work-related activities, including school or training, but the program's primary purpose was to provide income support for needy families. The PRWORA changed welfare into a work-based program, reflecting a belief that welfare should be a temporary support until families find employment. The success of welfare reform depends in part on how efficiently programs move recipients from welfare to work and on whether those receiving welfare can keep jobs once they begin working.

About half of all women receiving welfare benefits work at some point while on welfare, and work accounts for about half to two thirds of all welfare exits (Harris, 1993, 1996; Pavetti, 1993). Demographic factors related to obtaining and maintaining employment among welfare recipients include human capital characteristics (e.g., education and work experience), access to transportation and child care, and physical health characteristics (Brady, Meyers, & Luks, 1996; Friedlander & Burtless, 1996; Gueron & Pauly, 1991; Meyers, 1993; Ong, 1996).

Even among welfare recipients with the same schooling and work experience, however, there is considerable variation in the probability of being currently employed (Hershey & Pavetti, 1997). Furthermore, when welfare recipients are compared to nonrecipients with the same schooling and family characteristics, welfare recipients leave jobs at much higher rates than do nonrecipients (Pavetti, Olson, Pindus, Pernas, & Isaacs, 1996). These results suggest that unmeasured factors—in addition to low education, limited work experience, and child care and transportation problems—may be associated with employment.

Recently, researchers and policy makers have begun to explore whether these unmeasured factors might include psychological variables, that is, whether welfare recipients experience more psychological distress relative to the general population (Moore, Zaslow, Coiro, Miller, & Magenheim, 1995; Olson & Pavetti, 1996). Others have suggested that attitudes toward work

and welfare may also be associated with employment (Goodwin, 1982; Mead, 1992). Few studies, however, have included these variables when analyzing the employment of welfare recipients (Moffit, 1992; Neenan & Orthner, 1996).

This study investigates whether the psychological characteristics and attitudes of welfare recipients—including measures of depressive symptoms, work and welfare attitudes, and perceptions of the risks associated with leaving welfare—are associated with current employment, independent of demographic and human capital characteristics. Examination of these factors will extend our understanding of barriers to employment among welfare recipients and can inform the design of welfare-to-work programs and policies. For example, if psychological characteristics and attitudes are shown to be associated with current employment status, then programs to move welfare recipients into work may need to address these factors to become more effective.

BACKGROUND

Established Barriers to Work

Women with lower levels of education, less work experience, and more extensive welfare experience leave welfare for work less quickly and are more likely to return to the welfare rolls (Harris, 1993, 1996; Kunz & Born, 1996). In addition, child care and transportation problems have been identified as barriers to work. Problems with child care are associated with recipients' ability to find employment and their ability to work more hours. For example, Siegel and Loman (1991) found that child care problems kept 42% of single-parent welfare recipients from working full time and 39% from looking for work as much as they desired. Meyers' study of 255 welfare recipients found that women who were unhappy with their child care provider were more than twice as likely to quit a welfare-to-work program compared to those who were satisfied (Meyer, 1993). Kunz and Born (1996) studied 437 welfare recipients and found that recipients' perceptions of inadequate child care as well as transportation problems were positively associated with the length of welfare spells.

Access to transportation can promote broader job searches, improve work attendance, and minimize burdensome commutes (Ong, 1996). Conversely, lack of public or private transportation may limit the employment options of central city residents, particularly because job growth has been greater in suburban areas (Holzer, 1996). Ong (1996), for example, found that automobile ownership was significantly related to increased

employment rates and total earnings among 1,112 welfare recipients from California. Lack of transportation is a particular problem in rural areas. Rucker (1994) showed that nearly 40% of the rural populace live in areas with no public transportation and over half (57%) do not own a car.

Being in poor health, or having a disability or functional limitation, may also limit work for many welfare recipients (Wolfe & Hill, 1995). Poor health status is negatively associated with employment (e.g., Bird & Fremont, 1991; Herold & Waldron, 1985; Kessler, Turner, & House, 1987), and low income populations and welfare recipients suffer from greater health problems than the general population (Wolfe & Hill, 1995). The disability rate among welfare recipients (19%) is nearly twice that of the general population (10%; Adler, 1993). Loprest and Acs (1995) analyzed data from three national data sets (the number of families receiving AFDC in each survey sample ranged from about 500 to about 1,400) and found that about 18% of women receiving AFDC have some disability that limits work. In addition, these authors found that at least half of the women with a disability who receive AFDC have a serious disability (i.e., one that limits the performance of basic functions such as walking, dressing, or eating).

The health of children or other family members can also interfere with employment. Children in families that receive AFDC are more likely to suffer from physical disabilities and serious health problems (Olson & Pavetti, 1996). Using data on approximately 1,600 families from the state of California, Brady et al. (1998) found that 40% of welfare households reported some type of limiting condition for a child or mother and 14% had a severely disabled mother or child. In contrast, researchers estimate that only 6% of children of working-age adults have a physical, mental, or emotional limitation (Brady et al., 1998). Brady et al. found that welfare recipients caring for disabled and chronically ill children tended to work less, most likely because of the extra care needs of the children.

Psychological Characteristics and Individual Attitudes

A few studies have examined the role of psychological factors and individual attitudes in the employment of welfare recipients. These studies and their implications for employment are summarized below.

Depression

The rate of major depression among women aged 15–54, based on a national sample, is 13% (Kessler, et al., 1994). In contrast, rates ranging

from 29 to 48% are reported in convenience samples of poor or unemployed women (Bassuk et al., 1996; Belle, 1990). Belle (1990) reported that nearly one-half of a sample of low income mothers of young children had high depressive symptoms; those who were extremely low income, unemployed, or single were most likely to show symptoms of depression.

Some recent studies have examined rates of depression among women receiving welfare benefits. In an evaluation of 790 mothers of preschoolers in the Fulton County (GA) Child Outcomes Study of the Job Opportunities and Basic Skills (JOBS) program (a pre-PRWORA employment and training program for welfare recipients), 42% of the sample was found to be at risk of clinical depression (Moore et al., 1995). Similarly, results from the New Chance study of 2,079 low income mothers aged 16–22 indicated that 53% of the sample was at risk of clinical depression (Quint, Bos, & Polit, 1997). Krinitzky (1990) found that low income welfare recipients were significantly more distressed and depressed than low income mothers who were not receiving welfare benefits. Zill, Moore, Nord, and Stief (1991), using several national databases, reported that women receiving welfare benefits were more prone to depression than those not receiving benefits, and that rates of depression were lower among welfare recipients who had worked during the previous year.

Attitudes Toward Work and Welfare

The association of attitudes toward work with actual employment is unclear. Most welfare recipients say that they prefer work to welfare use (e.g., Edin & Lein, 1996; Hagen & Davis, 1994; Kalil, Schweingruber, Daniel-Echols, & Breen, 2000; Oliker, 1995). However, some scholars contend that welfare erodes recipients' work ethic (e.g., Murray, 1984), making it less likely that they will seek employment as an alternative to welfare use (Mead, 1992). Relatively few studies have linked welfare recipients' work attitudes to their work behavior. Greenwell, Leibowitz, and Klerman (1998) used data from 1,355 respondents in the National Longitudinal Survey of Youth (NLSY) and found that new mothers' chances of being employed were influenced by the attitudes toward work the women had held during adolescence. Although Greenwell et al. found no association between currently having positive attitudes toward work and having lived in a welfare-reliant household during adolescence, these researchers did not compare the current work attitudes of adult recipients of welfare to those of adult nonrecipients.

Finally, research suggests that some welfare recipients are concerned that leaving welfare may increase economic hardship, in part because of the

loss of medical insurance and other benefits that typically occurs immediately or within a short time after leaving welfare (e.g., Edin & Lein, 1996; Kalil et al., 2000; Pavetti, 1993). Edin and Lein's study of about 400 low income mothers suggests that considerations of the economic risks involved in leaving welfare can affect women's decisions to work.

In sum, a relatively wide range of barriers to employment among welfare recipients has been established, including demographic and human capital factors, child care and transportation barriers, and maternal and child health and disabilities. Emerging evidence, however, suggests that low income populations and welfare recipients may differ with respect to their psychological characteristics and attitudes relative to their nonwelfare counterparts. This study investigates the unique association of these factors with the current employment status of a recent sample of welfare recipients.

METHODS

Study Design

Data for this investigation are drawn from a face-to-face survey with 717 female AFDC recipients (all caring for at least one child under 18) in six geographic areas of Michigan. The survey, which was designed and conducted by the Michigan Family Independence Agency (FIA) in late 1995, identified problems and barriers to employment as perceived by welfare clients in order to improve the design of a multisite, state-sponsored, welfare-to-work demonstration program (Michigan Family Independence Agency, 1998). The intent of this demonstration program, called "Project Zero," was to reduce to zero the number of unemployed welfare recipients. All Project Zero sites implemented a case management approach within their local welfare offices, with the intent of having staff work with clients to remove barriers to employment (Seefeldt, Sandfort, & Danziger, 1997). Sites participating in the program also received additional funding to initiate a variety of service enhancements aimed at facilitating the transition from welfare to work. Each community used the survey data to ascertain the particular mix of services needed to meet the program's goal.

These data were collected prior to the implementation of Project Zero in order to provide guidance on barriers to employment that might be encountered in realizing the project's goal. As such, the purpose was to collect baseline data on AFDC participants and not to provide a specific evaluation of PRWORA or welfare-to-work programs, generally. Although prior to 1996 Michigan had obtained federal waivers to institute work requirements for some welfare recipients and to increase the incentives for work (e.g., by

allowing recipients to keep more of their earnings), time limits were not in effect at that time. Thus, it is possible that the employment rate among welfare recipients at the time these data were collected understates that which might be observed in later years, when welfare recipients face greater incentives to work. However, since Project Zero's goals are very similar to those of PRWORA, analyses of these data can provide insights for other states as they implement federal welfare reform.

Six geographic areas were selected to participate in the pilot program, and survey participants were drawn from the welfare rolls in these areas. The areas themselves were chosen based on demographic and geographic representation, urban/rural characteristics, and level of enthusiasm for the program from service providers in the community. Table I presents select characteristics of the sampled communities. The six sites consisted of four counties plus two areas within a fifth county, (the largest metropolitan area in the state). All regions of the state were represented, as were rural, suburban, urban, and mixed areas. With the exception of the large metropolitan area, the vast majority of the population in the study areas was White. Compared to the state average, four of the six sites posted higher than average unemployment rates in 1995. Poverty rates fluctuated widely around the state average.

The six locations were not randomly selected, and it is not claimed that these results represent characteristics of welfare recipients across the entire state. However, the overall average percent of respondents with income from formal (as opposed to informal or "under-the-table") employment in the six sites combined matched the statewide average (29%) at the time the sample was drawn (Diefenbach, 1996). This suggests that across the study communities, respondents did not differ substantially, on average, from welfare recipients in other areas of the state on the key study variable. Once the sites were selected, prospective participants were randomly sampled from administrative welfare caseload records that are centrally located and maintained by the FIA in Lansing, MI.

One of the original goals of the study was to compare the characteristics of welfare recipients in three groups: (1) those who were unemployed; (2) those who earned between $1 and $399 per week; and (3) those who earned $400 or more per week. In each of the six sites, 80 recipients were randomly selected from each of these three groups in order to identify a pool of potential respondents. Recruitment of participants continued until 40 recipients from each list had been interviewed and the target sample of 720 was reached. The target sample size was selected to assure that differences of 15% would be statistically significant within a site (Diefenbach, 1996).

Prospective respondents were sent a letter describing the goals of the study (e.g., to improve the quality of services available to support transitions

Table I. Select Characteristics of Study Sites

County	Type of area	Region of state	Area population[a]	Area racial composition[b]	% Unemployed[c]	% Poor[b]
A	Rural	North	30,581	99% White, <1% Black, <1% other	10.6	10.8
B	Rural	Upper Peninsula	24,534	98% White, <1% Black, <2% other	6.6	10.5
C	Mix of urban and rural	Mid-east	79,554	97% White, <1% Black, <2% other	5.1	8.5
D	Mix of urban and rural	Southwest	210,060	96%White, <1% Black, <4% other	3.2	3.8
E (Subarea 1)	Mix of urban and suburban neighborhoods	Southeast	21,811	57% White, 40% Black, <3% other	6.1	16.9
E (Subarea 2)	Mix of urban and residential neighborhoods	Southeast	87,296	22% White, 76% Black, <4% other	10.1	29.0
State			9,662,881	83% White, 14% Black, <3% other	5.3	10.2

[a] U.S. Bureau of Census, 1995 (estimates).
[b] U.S. Bureau of Census, 1990 (data will not add to 100% because of rounding).
[c] Michigan Employment Security Agency, 1995.

to work) and inviting participation. Participation was described as voluntary, and respondents were not paid for their participation. Letters were sent from the FIA, and prospective respondents were informed that a representative from the FIA would be contacting them to arrange an interview. In some cases, the FIA representatives and prospective respondents were known to each other, but none was specifically matched with respect to either race or ethnicity, or both. Prospective respondents were assured that the interview was confidential and that surveyors would not be contacting any other person or agency known to the respondent. Of those contacted about participating in the study, 91% agreed to be interviewed. Of those who did not participate, one third refused to participate for various reasons, and two thirds became nonparticipants due to broken appointments. The nonparticipation rate did not differ between unemployed and employed participants (Diefenbach, 1996).

Caseworkers received 2 days of training at FIA's central office in Lansing, MI. The interviews were conducted in respondents' homes and lasted approximately 45 minutes. Data collection took place between November 1995 and January 1996.

In late 1996, through a special arrangement with the Michigan FIA, the first author was offered the opportunity to conduct secondary analyses with these data, the results of which are reported in this paper.

Measures

Predictor Variables

Study Site. Study site was controlled in the analyses to account for variations in demographic characteristics and employment conditions across the six geographic areas.

Demographics, Welfare Experience, and Other Assistance. Demographic variables included family size, participants' age, and ethnicity. Ethnicity was coded in three categories: White, Black, and other minority ethnicity. The last group consisted of a small number (3% of the total sample) of participants who self-identified as Asian, Hispanic, or Native American. In the regression analyses, the reference category is White. Welfare experience was assessed by the length of the current welfare spell and was coded to distinguish long-term welfare receipt (more than 6 years) from short-term use because of current interest in "hard-to-serve" welfare clients (U.S. Department of Labor, 1998). Respondents' receipt of child support from an absent parent, housing assistance, and assistance from the Women, Infants, and Children (WIC) program was controlled for in the analyses.

Human Capital. Participant's human capital was represented by three different variables related to education and employment experience. Educational attainment was assessed by whether or not the respondent had earned a high school degree or GED. Data were also gathered on whether participants were currently attending school or a training program. Work experience was assessed by asking the length of longest period of paid employment, with responses coded to distinguish participants who had had a period of employment lasting at least 1 year.

Transportation and Child Care Barriers. Participants reported whether or not they had a valid driver's license and whether or not they owned a car that ran reliably. A single-item variable assessed participants' perceptions that lack of child care was a barrier to employment for them.

Physical Health Barriers. Participants indicated whether they personally suffered from a chronic disability and also whether any of their children had a chronic disability or severe illness.

Psychological Variables and Attitudes. To assess participants' psychosocial characteristics, data were gathered on (a) depressive symptoms, (b) attitudes toward work, and (c) perceptions of the economic risk associated with leaving welfare.

Depressive symptoms were measured with a 10-item scale using a subset of items from the Center for Epidemiological Studies depression scale (CES-D; Radloff, 1977). Participants were asked to rate the frequency of experiencing various symptoms of depressed and positive affect (e.g., lonely, depressed, happy, hopeful) in the past week. Answers were scored on a Likert scale with values ranging from 0 (*less than* 1 *day*) to 3 (5–7days). Possible scores on the scale (Cronbach alpha = .87) therefore ranged from 0 to 30, with higher scores indicating higher levels of depressive symptoms. Time constraints precluded the administration of the full CES-D scale, and thus a decision was made to omit 10 additional items reflecting somatic complaints and interpersonal problems. Shrout and Yager (1989) demonstrated that items from the CES-D can be dropped without much loss in sensitivity or specificity.

Attitudes toward work were assessed with a 4-item scale (Cronbach alpha = .67) asking mothers to disagree or agree with the following four statements: (a) "Every able-bodied person should work"; (b) "People should work so they can save money for the future"; (c) "Even boring, dirty, or unskilled work is better than not having a job"; and (d) "People should have a job to support their families." Possible answers ranged from 0 (*strongly disagree*) to 3 (*strongly agree*). A summary scale was created, with possible values ranging from 0 to 12 m higher values indicating more favorable attitudes toward work.

Beliefs about the risk of leaving welfare were assessed with a single item that asked respondents whether they were afraid that they would lose medical benefits for themselves and their family if they took a job or worked more hours.

Criterion Variable

The criterion variable was whether or not mothers were currently employed, as reported by the respondents themselves. Women working anywhere from 5 to 40 h per week were considered employed. Although underreporting of income from transfer programs (such as AFDC/TANF) may be a problem in household surveys, Moore, Stinson, and Welniak (1997) summarized evidence (much of it based on studies that included low income individuals) to suggest that self-reports of employment are not likely to be inaccurate. Their review also uncovered little bias in reports of wage and salary income when survey reports are compared to employer records. Kornfeld and Bloom (1997) report results from original research with a large and diverse sample of low income men and women that suggest that data from employer reports are comparable to those produced from surveys of individuals. Nevertheless, it is possible that the nature of the present study design may have affected the correspondence between respondent reports of extent of employment and official records (which were not available to the researchers). For example, respondents may have been reluctant to report income to surveyors known to be representatives of the local welfare office for fear of having their welfare benefits reduced or terminated.

The sampling procedure described here (stratification with fixed sample sizes) resulted in an overrepresentation of employed welfare recipients. In other words, although two thirds of the AFDC recipients who participated in this study were employed, administrative data (maintained by the state) show that only 29% of AFDC recipients, on average, were employed at the time of the survey. As described above, this overrepresentation was planned so as to facilitate comparisons between the three different employment groups within the sample. It is, however, necessary to apply weights to the data to make the data representative of the actual population from which they were drawn. These weights adjust for differences between the employment rate of study participants and the employment of the universe of AFDC recipients in each study site. Weights were derived from the known distribution (provided by the state employment office) of AFDC recipients in the three employment strata in each site. When weighted, the survey

Table II. Sample Description ($N = 672$)

Characteristic	%
Employed	31
White	51
Black	46
Other race/ethnicity	3
Receives child support	30
Receives WIC	31
Receives housing assistance	24
Respondent age[a]	30.93 (8.34)
Number of other householders[a]	2.54 (1.45)

Note: Data are weighted.
[a] Values are mean and *SD*, with the latter in parentheses.

data represent a random sample of AFDC recipients from the six sites. Sampling weights (presented in Appendix) were derived by the Office of Quality Assurance at the Michigan Family Independence Agency and supplied to the researchers for the analyses presented here.

Sample Description

Table II presents the demographic characteristics of the 672 participants for whom valid data on all study variables were available (these women did not differ on any study variable from the 717 who were interviewed). Thirty-one percent of the women were employed. Between about one quarter and one third of the sample received child support payments from an absent parent, housing assistance, or assistance from the WIC program. About two fifths were currently enrolled in school or a training program.

RESULTS

Descriptive Statistics

Table III presents information on potential barriers to work. About two thirds of the sample had a high school degree or its equivalent and almost two thirds had had a period of employment lasting at least 1 year. Just over one quarter were classified as long-term welfare recipients. About two thirds reported having a valid license or access to public transportation, but only one quarter owned a reliable car. About half perceived that child care problems posed a barrier to employment for them. Fifteen percent reported a permanent disability of their own, and another 15% reported that one of their children had a severe illness or permanent disability.

Table III. Potential Barriers to Employment ($N = 672$)

Variable	%
Long-term welfare recipient	29
Currently enrolled in school/training	19
High school graduate/has GED	66
Previous job tenure at least 1 year	63
Has valid driver's license	68
Owns reliable car	25
Perception of child care as barrier to work	52
Respondent has permanent disability	15
Child has chronic medical condition	15
Afraid of losing medical benefits	25
Abbreviated CES-D score[a]	10.49 (7.32)
Attitudes toward work[a]	8.75 (1.66)

Note: Data are weighted.
[a]Values are mean and *SD*, with the latter in parentheses.

The average score on the depressive symptoms scale was 10.5, with more than half (60%) of the sample having scores suggesting risk for clinical depression (i.e., scores of 8 or above; see Shrout & Yager [1989] for adjusting cutoff points for abbreviated versions of the CES-D). The respondents generally endorsed positive attitudes toward work, reporting an average score of 8.8 (out of 12 possible). However, one quarter reported they were afraid that if they worked more hours they would lose medical benefits.

Multivariate Analysis

Logistic regression analyses were conducted to test the association of psychological characteristics and attitudes with the probability of currently being employed, net of other barriers to employment. We present two models: the first includes the set of established barriers to work, excluding the psychological characteristics and attitudes and the second adds the three psychological characteristics and attitudes. The improvement in the model chi-square is observed to determine whether these variables add significantly to the explained variance. Table IV presents the beta coefficients, standard errors, and confidence intervals for the two models, as well as the relevant significance tests.

In Model I, significant variables included those from the group of human capital characteristics, transportation barriers, and physical health. As expected, mothers with previous employment lasting at least 1 year were more likely to be currently employed. In contrast, those who were currently enrolled in school or training were less likely to be working. Having a driver's license and owning a reliable car was associated with an increased likelihood

Table IV. Coefficients From Logistic Regression Predicting Employment ($N = 672$)

	Model I					Model II				
				95% CI for Exp (β)					95% CI for Exp (β)	
Predictor variables	β	SE β	Exp (β)	Lower	Upper	β	SE β	Exp (β)	Lower	Upper
Study site										
County A	.66	.56	1.93	.65	5.72	.80	.59	2.21	.70	7.05
County B	−.53	.73	.59	.14	2.45	−.47	.76	.63	.14	2.77
County C	.16	.48	1.17	.46	3.03	.18	.51	1.20	.44	3.22
County D	.95	.49	2.58	.98	6.78	1.11*	.52	3.05	1.10	8.45
County E subarea 1	−.16	.42	.85	.37	1.95	.02	.43	1.02	.44	2.39
County E subarea 2 (omitted)										
Demographics										
Maternal age	−.01	.01	.99	.96	1.01	−.01	.02	1.00	.97	1.03
Black	−.73	.37	.48	.23	1.01	−.63	.38	.53	.25	1.12
Other race/ethnicity	−.79	.62	.45	.13	1.52	−.67	.67	.51	.14	1.89
White (omitted)										
Number householders	−.08	.07	.92	.80	1.07	−.10	.08	.91	.78	1.06
Long-term recipient	.49	.25	1.63	.99	2.67	.42	.27	1.52	.90	2.57
Child support	.04	.22	1.04	.68	1.59	.09	.24	1.10	.69	1.75
Housing subisdy	−.10	.25	.90	.55	1.48	.10	.27	1.10	.68	1.79
WIC	−.41	.23	.67	.42	1.05	−.61*	.25	.54	.33	.88

Human capital										
High school graduate/ GED	.31	.23	1.37	.87	2.14	.10	.24	1.11	.68	1.79
Currently enrolled in school	−.91*	.27	.40	.24	.68	−1.19*	.29	.30	.17	.54
Work experience	.97*	.24	2.63	1.65	4.20	.72*	.26	2.05	1.24	3.38
Transportation and child care barriers										
Valid driver's license	.85*	.27	2.33	1.36	3.99	.93*	.29	2.53	1.42	4.50
Owns reliable car	.83*	.23	2.29	1.46	3.58	1.01*	.25	2.74	1.69	4.44
Child care is barrier to work	−.30	.21	.74	.49	1.11	.07	.22	1.08	.69	1.67
Physical health barriers										
Mothers' health poor	−.96*	.30	.38	.21	.70	−.66*	.33	.52	.27	.99
Child chronic disability	.41	.29	1.50	.86	2.63	.68*	.31	1.97	1.06	3.64
Psychological characteristics and attitudes										
Depressive symptoms						−.08*	.02	.93	.90	.95
Favorable attitudes toward work						.23*	.07	1.26	1.11	1.44
Fear losing medical benefits						−1.50*	.30	.22	.12	.40
–2 Log likelihood	676.77					610.61				
Model chi-square	155.79*					221.95*				

*$p < .05$.

of current employment. In contrast, having a disability or a chronic health condition was associated with a decreased likelihood of current employment.

Model II added the three psychological characteristics and attitudes and, as can be seen, this resulted in a significant improvement in the explanatory power of the measurement model. All three variables were significantly associated with employment. Specifically, women with greater depressive symptoms were less likely to be employed, as were those who feared losing medical benefits for themselves or their children if they worked more hours. Conversely, women who had positive attitudes toward work were more likely to be currently working.

One additional variable, disabled child, became significant with the addition of the psychological characteristics and attitudes to the model, suggesting that these variables are associated with having a child with a chronic disability. In contrast to our hypothesis, women with a disabled child were more likely to be currently employed.

To provide more insight into the relative importance of each of the predictor variables, we translated several coefficients of interest into estimated probabilities, where

$$P(y = 1) = \frac{e^{\Sigma \beta \chi}}{1 + e^{\Sigma \beta \chi}}.$$

To calculate these probabilities, we chose a base case of a White, urban metropolitan resident of average age and family size who is a high school graduate, is not currently enrolled in school or a training program, and receives child support, housing assistance, and WIC benefits. This hypothetical mother has an employment probability of .62 under the following conditions: she has work experience of at least 1 year, is not a long-term welfare recipient, has a car and license, perceives no child care barrier, has no personal or child health problems, has average levels of depression and work attitudes, and is not afraid of losing medical insurance. In Table V, we compare the difference in the probability of current employment in the presence of different barriers to work. Thus, for example, having all of the baseline characteristics described above but lacking only work experience (i.e., one barrier to work) lowers the probability of employment to .44. By comparison, having all of the baseline characteristics but lacking a high school degree lowers the probability of employment only slightly, to .59. A woman who has the baseline characteristics but lacks a car *and* a valid license (i.e., two barriers to work) has an employment probability of just .19. Being afraid of losing medical benefits also has a substantial effect on the probability of employment: it drops to .26 in the presence of this barrier.

Table V. Predicted Employment Probabilities by Selected Factors ($N = 672$)

Type of barrier	Predicted employment probability
None (base case)	.62
Child with chronic illness	.76
No high school degree	.59
One *SD* below average work attitudes	.52
One *SD* above average depressive symptoms	.48
Chronic health condition	.45
No work experience	.44
No driver's license	.36
Afraid of losing medical insurance	.26
No car or license	.19

Note: The hypothetical base case is a woman who is a White, urban metropolitan resident of average age and family size, a high school graduate, not currently enrolled in school or a training program, receiving child support, housing assistance, and WIC benefits. Her baseline employment probability is calculated as if she has work experience of at least 1year, is not long-term welfare recipient, has a car and license, perceives on child care barrier, has no personal or child health problems, has average levels of depression and work attitudes, and is not afraid of losing medical insurance. Numbers in the table represent the probability of employment given the characteristic in Column 1, with all other characteristics unchanged.

DISCUSSION

This study examined whether psychological characteristics and attitudes are associated with the current employment of welfare recipients, net of a wide range of well-established barriers to employment. We found not only that multiple types of barriers were associated with employment, but also that the level of depressive symptoms, attitudes toward work, and perceptions of risks associated with leaving welfare were significantly associated with current employment.

Overcoming barriers to employment will be a key component of recipient's success under the new welfare system, especially as time limits begin to take effect and families who fail to comply with work requirements face loss of benefits and potential economic suffering. These results extend current understanding of the potential barriers to employment that welfare recipients in the new work-oriented programs might face. The new welfare law gives states unprecedented flexibility to design and implement programs. The research reported here suggests that states may need to use this flexibility to address a wide range of client issues, including psychological characteristics and attitudes, if welfare recipients are to become successfully employed.

Given the higher risk for depression reported for welfare recipients, states likely must contend with clients who are at risk for depression or mental health problems more generally. Engaging in job search activities and focusing on positive employment prospects for the future may help to alleviate depressive symptoms. For some, however, these problems may be

very serious (e.g., diagnosable clinical depression) and require temporary or long-term exemption from work requirements and referral to mental health counseling. Oregon and Utah have integrated mental health professionals into their welfare systems (in some areas locating them within the local welfare offices) to provide short-term counseling and referrals for individuals with serious mental illnesses (Johnson & Meckstroth, 1998).

For others, these problems may be more situational, and could likely be addressed by short-term programs that offer job-readiness activities such as self-esteem building, the development of realistic employment goals, or awareness of personal barriers to self-sufficiency. In the past, these activities have been successfully incorporated into some welfare programs and are not incompatible with a programmatic emphasis on quick entry into the labor market (Pavetti et al., 1996).

Because so few low-wage jobs provide health insurance, continued receipt of medical benefits is crucial for welfare recipients as they move into the labor market. Prior to welfare reform, eligibility for Medicaid (the federal program providing medical coverage to low income, uninsured families) was tied to eligibility for AFDC. The PRWORA severed that link, so that many low income children and their parents who leave welfare or who are denied welfare benefits should now be eligible for Medicaid coverage for at least some period of time (Schott & Mann, 1998). States and local programs should publicize this policy change and perform outreach activities to ensure that eligible families receive the benefits to which they are entitled, especially given the striking association we found between recipients' fears of losing medical insurance and their current employment status.

With respect to the established barriers to work, results generally reflect those found in previous studies. For example, previous work experience lasting at least 1 year was related to current employment, illustrating the value of long-term job experience. This factor was among the more important predictors of current employment. Programs could assist welfare recipients in maintaining employment once jobs are found by providing postemployment services, such as periodic visits or phone calls to the recipient, that could help to resolve potential problems that may arise when recipients have to balance work with family responsibilities. These activities could help increase the tenure on the job. Utah offers up to 24 months of such postemployment services (Kramer, 1998).

Being currently enrolled in school or a training program was associated with being unemployed, suggesting that respondents were likely not combining work with school or training but rather were investing in future earning potential while they continued to receive welfare. However, under the current welfare law, recipients may only attend school or training if they first fulfill their work obligation (Greenberg & Savner, 1996).

As hypothesized, having a driver's license or a reliably running car was associated with increased likelihood of employment. Indeed, having neither a license nor a car had the strongest effect on current employment. A car and license may help women in their job searches or may help them to keep employment by providing a regular means of transportation. Welfare policies could be changed to allow welfare recipients to own higher value cars, or programs to help welfare recipients maintain and insure reliable automobiles could be implemented. In fact, prior to the recent reform, a number of states had received waivers from Federal program rules that allowed them to increase the equity value of a car not counted against a recipient's welfare benefits. Currently, California and Wisconsin are implementing programs that will allow welfare recipients to borrow money to purchase cars (Gross, 1997). Our results suggest that it would also be beneficial for these programs to help recipients learn how to obtain or reinstate a driver's license.

We found that respondents' own chronic illnesses or disabilities were associated with decreased likelihood of current employment. States are bound by mandates in the TANF program to have a certain proportion of welfare recipients engaged in work-related activities, but they may exempt up to 20% of the caseload from these requirements (although not from the time limit). The most viable option for recipients with severe or chronic health conditions may be to temporarily exempt them from work activities while the health problem is being addressed. In contrast, having a disabled child was associated with an increased likelihood of employment. Although this latter finding seems counterintuitive, it may be that mothers with disabled children incur more financial costs for their care and thus more acutely need the extra income from work. Work may also function as a respite from caring for an ill child. On the other hand, it is possible that SSI, rehabilitation benefits, and specialized education programs provide for specialized care and other support services that could make these women more available for work.

Caution in interpreting these results is warranted. The analyses are limited to data collected at one time point. Longitudinal data on women's trajectories of welfare and employment are necessary to test over-time effects of the predictor variables on welfare recipients' ability to find and keep employment. For example, the association between work attitudes and employment could mean that women who are working are consequently more likely to endorse favorable work attitudes (that have perhaps been acquired on the job) rather than that unemployed welfare recipients have attitudes that prevent them from getting or keeping a job. Other variables may also be endogenous to employment. For instance, unemployment itself may contribute to depression and other potential barriers to work (Kessler et al., 1987). Similarly, employment could increase automobile ownership by, for

example, making it possible for workers to buy a car outright or because they are more likely to be approved for a car loan (Ong, 1996). Longitudinal data would help illuminate the direction of the associations among these variables.

These data are limited to maternal reports of all study variables. We have no evidence to suggest that reports of, for example, employment are likely to be biased. Nevertheless, it would have been useful to have administrative data to compare to mothers' reports of employment or to have medical records to verify and elaborate upon maternal reports of chronic health problems among themselves and their children. Similarly, some of the constructs in the current measurement model could be improved with the addition of multiitem measures, objective reports (of, e.g., child care availability), diagnostic measures (of, e.g., health or depression), and data from other sources, such as administrative data (to, e.g., better assess previous welfare experience). For example, some child care resource and referral agencies maintain databases on local child care providers, number of openings, and costs.

Future research could further explore the pathways through which psychological characteristics and attitudes are associated with employment. For instance, is the level of depressive symptoms associated with women's persistence in job-search efforts? Are women with less positive attitudes toward work more likely to lose jobs, and does this explain why they are less likely to be employed at a particular point in time? Does women's knowledge of health insurance eligibility help to explain the links between perceptions of the risks of leaving welfare and current employment? These and other questions will become more important as increasing numbers of recipients are expected to find and maintain work and as they face loss of welfare benefits because of time limits under the PRWORA.

Future research could also investigate the role of a wider range of contextual variables and the interrelationships between psychological characteristics and attitudes with such variables. Important variables for future studies could include discrimination or harassment at the workplace, access to social networks, and employer preferences and hiring practices. These variables might mediate or moderate the association between the psychological characteristics and attitudes and employment. In addition, it may be useful to include other variables that operate at the family or individual level, such as women's experience of stressful life events, substance and drug dependence, experiences of domestic violence, parenting stress, and children's adjustment. Recent evidence suggests that low income and welfare recipients may experience these conditions to a significantly greater extent than their nonwelfare counterparts and that these conditions may be associated with women's success in time-limited welfare programs (Kalil et al., 1998).

APPENDIX

Sampling Weights for Total Sample

Earned income	Stratum 1 ($0)	Stratum 2 ($1–$399)	Stratum 3 ($400+)
County			
A	0.54	0.28	0.32
B	0.31	0.13	0.12
C	1.38	0.55	0.52
D	1.00	0.32	0.45
E (subarea 1)	3.28	0.92	1.04
E (subarea 2)	5.21	0.70	0.72

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