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HUMAN CAPITAL, HEALTH AND MENTAL HEALTH OF WELFARE RECIPIENTS: CO-OCCURRENCE AND CORRELATES [1]

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Human Capital, Health and Mental Health of Welfare Recipients: Co-occurrence and Correlates

Abstract

Drawing on a large random sample of welfare recipients in the post – welfare reform era, this paper examines the prevalence of mental health disorders, substance dependence, and physical health or disability, their co-occurrence with human capital problems, and their relation to employment. Half of the participants have none of these potential barriers to employment, one-third have one barrier, and the remaining fifth have multiple barriers. Mental health and human capital problems, when present, tend to occur in isolation about half the time. In contrast, physical health and substance dependence are more likely to co-occur with at least one other type of problem. Women with co-occurring human capital, mental health, and physical health problems have the poorest work outcomes. The findings suggest the need to design and implement more assessment, referrals and service provision for health, mental health and human capital problems to support women to meet the challenges in the transition from welfare to work.

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In the few years since the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, most states have emphasized job search programs to move recipients quickly from welfare to work. Yet, few of the programs systematically assess the extent to which potential barriers to work, such as limited human capital, impaired physical and mental health, or dependence on drugs or alcohol, hamper recipients' ability to find and maintain employment. From a policy perspective, PRWORA will succeed if the new programs are efficient in moving recipients from welfare to work, if welfare mothers can keep the jobs they get, and if their family well-being improves. However, if a significant number of recipients have multiple potential barriers to employment, and if these characteristics are related to employment, then many welfare recipients may not be successful unless they receive appropriate assessment, support and assistance. If left unattended, these problems could leave women at risk of losing welfare without alternative means of support if fail to comply with work requirements, lose their jobs and are unable to re-qualify for assistance, or remain jobless and on assistance until time limits are reached.

Typically, discussions of work-limiting factors among welfare recipients have focused on human capital characteristics, such as a lack of schooling, training, and work experience. However, depression, alcoholism, and physical health problems may also make employment difficult, and increasingly, researchers are recognizing that mental and physical health problems are over-represented among low-income women and welfare recipients. Research has not yet established the extent to which these mental and physical health characteristics co-occur with

human capital problems among low income women. Designing programs to move women from welfare to work and help them become economically self-sufficient requires an understanding of the factors that either singly or in combination prevent recipients from leaving welfare for work, working steadily, or earning a living wage. In this paper, we review the evidence on the extent to which human capital, mental health, and physical health problems present difficulties for low-income single mothers and welfare recipients in the labor market. We then present an analysis of data from the Women's Employment Survey (WES), a study of low-income women drawn from the welfare rolls in the post-PRWORA era. With these data, we examine the prevalence of these different types of problems, their co-occurrence, and their association with women's labor market outcomes. We conclude with a discussion of policy and program implications.

Background

Analysts using national longitudinal datasets to track the transition from welfare to work report that a sizable minority of recipients are unable to keep jobs and tend to cycle between work and welfare (Bane & Ellwood, 1994; Harris, 1996). Evaluations of welfare-to-work demonstration projects suggest that while most participants get jobs, a large proportion lose those jobs within a year (Berg, Olson, & Conrad, 1991; Friedlander & Burtless, 1996; Gueron & Pauly, 1991; Hershey & Pavetti, 1997). Much of this research has focused on the human capital problems of welfare recipients to explain these phenomena. For example, about half of welfare recipients lack a high school diploma or a equivalency degree (GED), between 10 and 30 percent have only a grade school education, and few report recent work experience (Harris, 1993; 1996; Olson & Pavetti, 1996). Women with these characteristics are more likely to return to welfare after leaving work (Bane & Ellwood, 1994; Harris, 1996).

But, even among recipients with the same schooling, the same work experience and the same number of children, there is considerable variation in the probability of remaining at work and staying off welfare. And when welfare recipients are compared to non-recipients with the same schooling and family characteristics, recipients leave jobs at higher rates and have lower wages than do non-recipients (Hershey & Pavetti, 1997). These comparisons suggest that previously unmeasured factors, in addition to low schooling and lack of work experience, may constrain recipients' employment. What are these unmeasured characteristics? Increasingly, research is highlighting the potential importance of psychiatric disorders, substance abuse or dependence, and physical disability or illness.

Mental health and psychiatric disorders

Poor women and welfare mothers are at high risk for mental health problems. Whereas the rate of major depression among women aged 15-54 in a national sample is 13 percent (Kessler, McGonagle et al., 1994), rates range from 29 to 48 percent in convenience samples of poor or unemployed women (Bassuk, Weinreb et al., 1996; Belle, 1990). Many psychiatric disorders, including generalized anxiety, post-traumatic stress (PTSD), and depression, are more prevalent among women than men (Bassuk et al., 1996; Kessler, Foster, & Saunders, 1995). Virtually all such disorders are significantly and negatively associated with socioeconomic status, whether measured by income or education (Kessler et al., 1994). In previous research using a cross-section of the WES data, Danziger, Corcoran et al. (2000) found that recipients who meet the diagnostic screening criteria for major depression were significantly less likely to be working at least 20 hours per week than those who were not depressed. However, with cross-sectional studies it is difficult to sort out the causal order between employment and mental health

problems, because job loss and unemployment can also lead to depression and other types of psychological distress (Kessler, House, & Turner, 1987; Price, 1992).

Alcohol and substance use and dependence

Drug and alcohol dependence occur in about eight percent of the general population (Warner, Kessler et al., 1995), but the prevalence of self-reported nonmedical drug use is about twice as high among AFDC recipients (U.S. Department of Health and Human Services 1994; Olson & Pavetti, 1996). Substance use appears to be more common among those with other psychiatric disorders (Dickey & Azeni, 1996).

As with other types of psychological or mental health problems, Kaestner (1996) found that use of drugs (marijuana and cocaine) in the previous year was associated with welfare receipt in the subsequent year and a number of studies have found that alcohol and drug use negatively affect employment and earnings (Bryant, Jayawardhana, Samaranayake, & Wilhite, 1996; Kaestner, 1994). Previous analyses with the WES data found that women who were drug dependent were significantly less likely to be working at least 20 hours per week than those who were not dependent (Danziger et al., 2000).

Physical health and disability

Poor single mothers also score poorly on a number of physical health indicators (Olson & Pavetti, 1996). Loprest and Acs (1996) found that 17 to 19 percent of AFDC recipients report a work-limiting disability, and seven percent report having been confined to bed for over 30 days in the last year. In the general population, women who are employed full-time are healthier than women who work part-time, and women who work full- or part-time are in better health than women who are unemployed (Anson & Anson, 1987; Bird & Fremont, 1991; Herold & Waldron,

1985; Verbrugge & Madans, 1985). Ross & Mirowsky (1995) found that being in good health increased the odds of keeping or getting a full-time job for men and women.

Several evaluations of welfare-to-work demonstration programs report that health problems cause job loss among some recipients. Among mothers in California's Greater Avenues for Independence Program (GAIN) who received AFDC for more than two years, almost 30 percent had been deferred at some point for a medically verified illness. Hershey and Pavetti (1997) report that health problems accounted for 9 to 13 percent of all job losses in the New Jersey REACH program, the Minority Female Single Parent Demonstration, and the Massachusetts ET Choices demonstration programs. Fraker and Prindle (1996) found that 30 percent of a sample of Iowa recipients whose benefits were terminated due to non-compliance with the welfare-to-work program reported serious personal or health issues.

Co-occurrence of human capital, mental health, and physical health problems

In previous analyses of the WES data, we found employment to be strongly associated with a broad range of characteristics, including human capital and skills, as well as respondents' physical and mental health. The likelihood of employment decreased as the number of barriers a woman had increased, controlling for a wide range of demographic characteristics such as family structure, age, number of young children, urban residence, and prior years on welfare (Danziger et al., 2000).

Our own research and that of Olson & Pavetti (1996) suggest that the presence of one of these problems may not pose an insurmountable barrier to work, but the presence of multiple problems across more than one domain may constitute a more significant barrier. And, there may be certain combinations of these problems that are particularly important for women's employment and well-being. In our previous work, we examined the quantity of barriers to

work; but we did not examine the types of co-occurring barriers that respondents were experiencing. We know of no study that has demonstrated how potentially important barriers to work co-occur among welfare recipients and how different combinations of these problems limit employment.

Research questions

In this paper we address the following questions:

(1) What is the prevalence of potential barriers to work, as assessed by human capital limitations, mental health disorders, substance dependence, and physical health problems among post-PRWORA single mother recipients?

(2) To what extent do these problems co-occur? What are the most common patterns or risk profiles?

(3) How do women with different patterns of co-occurring problems fare in the labor market? Are certain combinations of problems more detrimental for employment outcomes?

Methods

Participants

This paper uses data from the first two waves of the Women's Employment Study (WES), a longitudinal study of a sample of women drawn from the welfare rolls in February 1997. The first wave of interviews was completed between August and December 1997 with a random sample of 753 single mothers who were welfare recipients in an urban Michigan county in February 1997. Michigan's Family Independence Agency (FIA) provided names and addresses of all single parent cases; a stratified random sample was drawn; completed interviews represented an 86 percent response rate. The second wave of interviews was completed in the Fall of 1998 with 693 respondents, representing a response rate of 92 percent. Because the WES

sample was drawn in February 1997, as the transition from the old welfare system to the new one under PRWORA was being implemented, it provides a good picture of the post-reform welfare caseload.

Sample description

The sample used in this paper includes only the 665 cases who do not have missing information on any of the analyzed variables over the first two waves of the survey. We also excluded 18 respondents who reported receipt of Supplemental Security Income(SSI) or disability payments.[2] Because the response rate for the second wave was 92%, sample attrition across the two waves should not bias our results.[3] Table 1 describes the employment status and demographic characteristics of the respondents at wave 1: 72.7 percent were still receiving a welfare check in the month prior to the interview, and 58.9 percent were working at least 20 hours per week, as required as a condition of TANF cash assistance in Michigan. Of those women who were employed at the time of the survey, 50 percent (data not shown) were working 35 hours per week or more. Fifty-six percent of respondents are African American and 44.5 percent are white.[4] The sample was limited to recipients between the ages of 18 and 54, and the average age was almost 30 — 27.7 percent were under 25, 46.5 percent were between the ages of 25 and 34, and 25.9 percent were 35 years old or older. Almost nine out of 10 (86.4%) lived in urban census tracts in the county. Twenty-four percent of the respondents were currently living with a spouse or partner, and 42.7 percent were the primary caregiver for at least one child under the age of two.

Measures

We explore the co-occurrence among a set of potentially important barriers to work among low-income single mothers in four general domains: (a) human capital; (b) mental health;

(c) substance dependence and (d) physical health problems. All of measures included in the survey in these and other domains are described elsewhere (see Danziger et al., 2000 for a more extensive description). The criteria we use to define a barrier in each domain and our rationale are as follows.

Human capital. A respondent is coded as having a human capital barrier if she had at least two of the following three characteristics: less than a high school degree or GED, employment in fewer than 20 percent of the years since she turned age 18, or experience with fewer than four job skills (out of nine) in previous or current jobs. The job skills include whether she has used reading, writing, mathematical/computational skills, and/or has used computers or other electronic instruments in a job; they were adapted from the work of Holzer (1996; 1998). A woman who has two of these three deficits (lack of schooling, work experience, and/or skills) is assessed as having a human capital barrier. Because having extensive work experience or skills can compensate for a lack of education in the hiring process, our definition requires at least two rather than one problem in defining a human capital barrier.

Mental health and substance dependence. Measures in these two domains are based upon diagnostic screening batteries for 12-month prevalence of selected psychiatric disorders, using the Composite International Diagnostic Interview (CIDI), derived from the National Comorbidity Survey (Kessler et al., 1994). The presence of a mental health problem is defined as the respondent's meeting the screening criteria for at least one of three psychiatric disorders -- major depression, generalized anxiety disorder, or post-traumatic stress disorder. The third domain -- substance dependence -- indicates the woman met CIDI screening criteria for either alcohol or drug dependence. Note that "dependence" on alcohol or drugs is more restrictive than a use or abuse measure, because the respondent has to meet criteria of likely needing treatment

and having functional impairment due to non-prescription drugs or alcohol (see Jayakody, Danziger, & Pollak, 2000).

Physical health. A respondent's health status is measured by her report of general well-being and the presence of a physical impairment or limitation. Using indicators in the SF-36 Health survey, we define a woman as having health problems if she both self-reports fair or poor health (as opposed to excellent, very good or good) and if she is in the lowest age-specific quartile of a physical functioning scale (where she rates any limitations in walking, climbing, lifting, carrying, etc.) (Ware, Snow, & Kosinski, 1993). Because having only one of these problems may indicate a temporary condition or less severe problem, we count her as health impaired only if she has both.

Results

Prevalence and co-occurrence of barriers in four domains

The prevalence of barriers in each domain is shown in Table 2. We categorized respondents into sixteen mutually-exclusive groups, based on whether or not a respondent had a barrier in any one of the four domains. The distribution of respondents in the sixteen groups is shown in column one, and the percentage of women within each category who has it singly versus in combination with other barriers is shown in column 2.

Close to half of the sample (47.4%) is barrier-free according to our criteria. Among those with barriers, having a mental health disorder is the most common; a third (34.7%) of the respondents meet the diagnostic criteria for depression, PTSD or generalized anxiety disorder (derived by summing the frequencies in column 1 of all rows in which mental health appears). Physical health and human capital problems are also quite prevalent. Close to a fifth (19.5%) of the sample reports having a physical health problem and a similar proportion (16.2%) report a

human capital limitation. However, only one in twenty cases (5.6%) is classified as substance dependent.

The percentage of women who have only one barrier in each of the four domains is shown in rows 1-4. Mental health barriers occur in isolation to a significant degree; just under a fifth of the total sample (18.5%) has a mental health barrier only, and over half of those with a mental health barrier do not have any other barriers (second column, 54%). Human capital limitations occur singly in about a tenth of the sample (8.7%), and, as with mental health, occur over half of the time in isolation. In contrast, physical health and substance dependence co-occur more frequently. Of those with a physical health problem, only a third are free of other barriers (34%), and only a sixth of those with substance dependence (17%) do not have other barriers. Women meeting the diagnostic criteria for substance dependence typically meet the criteria for one of the three mental health diagnoses as well. Substance dependence co-occurs with mental health in rows 8, 11, 14 and 15, totaling 4.5% of the sample.

Because substance dependence has a low prevalence and high comorbidity with other barriers, we combined all substance-dependent respondents into a single category for the remaining analyses, reducing the number of barrier profile groups to nine (including the group with zero barriers). We now turn to the question of whether these groups differ on demographic characteristics or employment outcomes.

Demographic correlates

We examined mean differences on a range of demographic characteristics including maternal age, race, number of very young children, and years on welfare. The group means are presented in Table 3. There were no significant differences between groups in the percentage that resided in urban areas and the number who were either married or cohabiting with a partner,

so these are not shown in the table. For continuous measures, we used an ANOVA procedure with F and Scheffé post-hoc tests to check for statistically significant differences between groups. For dichotomous measures, we used cross-tabulation and chi-square tests. The statistical test used and overall significance of group differences is noted at the bottom of the table. Differences between specific groups are indicated by the superscript numbers. The main difference between the groups was the average years on cash assistance (called Family Independence Program or FIP in Michigan). For group 7 (those with human capital, mental health and physical health problems) the average years is 16.5. This is much higher and is significantly different than the average years for almost all other groups. We found no differences across the groups in age, race, or percent with children under age two.

Differences in employment outcomes by group

Table 4 presents group differences on two measures of employment outcomes: the percentage of women who worked at least 20 hours per week at waves 1 and 2. There were no differences in the group profiles by the percent of women who received cash assistance at either wave of the survey (not shown in table).[5] We chose 20 hours per week as a cutoff for these two point-in-time employment measures because Michigan's welfare program rules required recipients to work 20 hours per week at the time of the wave 1 interview in 1997.

The employment outcomes vary significantly across the barrier profiles. Approximately 60 percent of the respondents were working at least 20 hours per week at both waves; the proportion working this amount among women with no barriers increased slightly over time, from 69.3 percent at wave 1 to 74.2 percent by wave 2. The wave 1 employment rate for the zero barrier group is significantly higher than that of most other groups. The women who were least likely to be working at wave 1 were those who had human capital problems only (group 1),

co-occurring human capital and mental health problems (group 4), co-occurring human capital and physical health problems (group 5), and co-occurring human capital, physical and mental health problems (group 7).

At wave 2, the percent of respondents working at least 20 hours per week in the zero barrier group is again significantly higher than all of the barrier profiles except for group 3 (physical health barriers only). The lowest point-in-time employment rates are again among groups 1, 4, 5 and 7 -- those in which a human capital deficit is present.

These findings suggest that our barriers categories differentiate between those meeting TANF's work requirements and those who are not. Not surprisingly, those with barriers in three domains (group 7) at wave 1 have the lowest point in time employment rates at each wave compared to women in any of the other groups. Table 4 also shows a strong bivariate association between many of the other barrier profiles and the employment outcomes. To further analyze these work differences, we now turn to a multivariate analysis of whether the barrier profiles are differentially associated with the percentage of months worked over time, between the two waves. This employment outcome includes more information on the variation in work effort than either of the point-in-time measures.

The measure of percentage of months worked was calculated by summing the number of months in which the respondent reported working for pay at all between waves 1 and wave 2 and dividing by the number of months between that respondent's two interviews, a period of approximately one year. We examine the proportion of months worked in the period following the wave 1 interview to establish the temporal priority of the barriers (measured at wave 1) relative to subsequent work effort.

In Table 5, we present two nested ordinary least squares (OLS) regression models of the determinants of the percentage of months worked. Model I includes only the nine barrier profile groups, entered alone as dummy variables coded 1 to indicate membership in the group. The reference category is having none of the barriers. The results of Model I are consistent with Table 4 work outcomes; they indicate that with the exception of the mental health only group[6], membership in each of the other groups is negatively and significantly related to the percentage of months worked. For example, women in groups 1,4,6 and 7 work about 30 percentage points less, and those in group 5, about 40 percentage points less, than women with zero barriers.

In model II, we add a series of demographic controls and a set of other characteristics that can impede employment of welfare recipients (see also Danziger et al., 2000). Race is entered as a dummy variable coded 1 for African American. Women are classified into three age groups: 18 to 24 (omitted), 25 to 34, and 35 to 54. We also use indicators for living in a census tract classified as urban by the 1990 census, and for cohabiting with a spouse or partner. We include two continuous control variables: the number of young children, and number of years of welfare receipt since the respondent turned age 18.

Model II also incorporates controls for three other potentially significant barriers to employment: lacking access to transportation, being the victim of severe domestic violence, and having a child with health problems. The transportation barrier is coded 1 if the respondent lacks a car or does not have a license. Experiences of severe domestic violence are measured using a subscale of the Conflict Tactics Scale (Straus & Gelles, 1986; 1990) that indicates whether the respondent had in the past twelve months been hit with a fist or object, beaten, choked, threatened with a weapon, or forced into sexual activity by a partner against her will. Child

health problems were measured by asking if the respondent if any of her children had a physical, learning, or emotional health problem that limits the child's activity.

The results of model II demonstrate that the relationships between the barrier profiles and the measure of over-time employment are attenuated only slightly when these demographic controls and additional potential barriers to work are included. Six of the profile coefficients that were significant in the first model remain significant and most diminish only slightly in strength. For example, profiles 1, 4, 5 and 6 are each associated with about a 25-point drop in the percentage of months worked, relative to women with no barriers.

Of the demographic variables, only the number of young children has a significant (though small) effect on the dependent variable. Each young child reduces the percentage of months worked by 6.5 points. Lacking a car or license is associated with a 15-point decrease in the percentage of months worked between waves, and having a child with a health problem is associated with a 6 point decrease.

Discussion

The most common barrier to employment among this sample of former and current welfare recipients is meeting the diagnostic screening criteria for having at least one of three possible psychiatric disorders within the last 12 months – either major depression, post-traumatic stress, or general anxiety. This limitation occurs among a third of the women, and, in half of these cases, it occurs in combination with barriers in the other domains. Human capital deficits and health problems each occur among slightly less than one-fifth of the women. Half of those with a human capital problem also have an additional barrier to work. Physical health problems occur in combination with other problems the majority of the time. Substance dependency is

rare and almost always occurs in combination with other barriers, most often with problems in the mental health domain.

We found few demographic differences across the nine group profiles in this analysis. The women do not vary significantly by race, age, or number of young children. One exception is that women with barriers in three areas -- human capital, health and mental health – have significantly longer welfare histories -- on average twice as many years of receipt -- than women in almost every other barrier combination group and than women with none or only one of the barriers.

With regard to the employment outcomes of the women in each of the barrier groups, we found that the three-barrier group (human capital, health and mental health) had the lowest rates of employment at both wave 1 and wave 2 relative to women with no barriers. In the multivariate analyses, employment was consistently and significantly lower among women with a human capital problem, either singly or in combination with other problems, relative to women with no barriers. This was true even when we controlled for additional potential barriers to work and demographic characteristics. Another detrimental combination was having a mental health and a physical health problem. However, among the combinations that were significant predictors of employment, no one particular combination of barriers stands out as having a particularly larger or smaller effect; having any combination of health, mental health, and human capital barriers along with having a human capital deficit alone are all important predictors of work.

Caution in interpreting these results is warranted. We link the prevalence of barriers at Wave 1 with employment at both waves and between waves, and add controls for other variables that could influence work outcomes. We do not control for changes in barriers and changes in

work outcomes across both waves of data. Further research can address the linking of the domains in more complex fashion. We have identified whether respondents have one or two problems in each of four theoretically and logically different domains. It may be that other ways of specifying these groups may yield different results in terms of comorbidity and correlates. Finally, the chronicity of these barriers is not addressed in this analysis, nor can we go beyond speculation about the potential impact of services and support for reducing the prevalence of barriers and their association with employment. Future studies of barriers to employment among post-PRWORA welfare recipients should add such measures to expand on these findings.

While these findings are from an urban post-PRWORA sample in one state, they are not likely to differ greatly if they had been based on recipient surveys in many other states. Michigan's welfare system changes, caseload declines and general economic climate, all of which can affect the characteristics of recipients and their employment prospects, mirror national averages. Michigan is similar to most states with respect to its work requirements and approach to serving recipients (Danziger & Seefeldt, 2000). In states where caseloads have decreased even more sharply than they have in Michigan due to diverting people from coming on the rolls or to more rapid and aggressive use of sanctions to terminate people from the rolls, the most employable of single mothers may be less likely to enroll or to remain on cash assistance. This would likely increase the prevalence and co-occurrence of barriers to employment among those who remain on welfare.

Policy implications

This findings from this research underscore the heterogeneity of the post-PRWORA caseload and the high prevalence and co-occurrence of several types of potential barriers to work

among women expected to comply with state and federal work requirements. The co-occurrence of these problems is associated with poorer employment outcomes.

Given that the combined presence of these problems significantly reduces the number of months in which women work in the subsequent year, it appears that reductions in or modifications of these problems could lead to improved work outcomes. This finding is not equivalent to one in which the actual provision of services in these domains is evaluated for effectiveness in modifying the barriers and/or increasing employment, but the study does suggest that left untreated, these problems significantly impair labor market success relative to that of women without barriers. And in and of themselves, the widespread prevalence and co-occurrence of problems of this severity in the health and mental health areas warrant further consideration by those who design and implement welfare-to-work services. Overcoming or treating these barriers will be necessary if the women are to succeed under the new welfare system, especially as time limits begin to take effect and families who fail to comply with work requirements face the loss of benefits.

The new federal welfare law gives states unprecedented flexibility to design and implement work-based cash assistance programs. Our research implies that states should perhaps use this flexibility to address a wide and multiple range of recipient problems that can interfere with becoming and staying employed. While most state programs do not provide education or training prior to requiring welfare recipients to seek employment, many are changing their programs to offer post-employment training opportunities. When human capital deficits co-occur with health or mental health problems, and when they are associated with other difficulties, such as lack of access to transportation, corrective human capital strategies should perhaps be undertaken prior to job search.

Taken together with other recent findings on the complex set of barriers to employment that welfare recipients may be facing (Danziger et al., 2000), the data suggest that the shift away from long term training and education programs under PRWORA may be counterproductive in terms of moving this group of women into the labor force. Moreover, the ten percent of respondents who have only human capital deficits (and not mental health or health problems) may be in a position to benefit most from training and education programs, particularly those programs with strong job placement foci, a program feature that has demonstrated the greatest benefit in previous welfare-to-work evaluation studies (Bloom 1997).

Few state welfare programs currently provide consistent, universal, quality assessments and ongoing case management services for health and/or mental health problems. While exemptions from work requirements are allowed for 20 percent of the caseload, few of the women with these conditions may become classified as exempt. All of the women in this sample, for example, were subject to work requirements, although some may have been granted temporary exemptions from participation during some point while enrolled in the program. However, only half of the women with combinations of physical and mental health problems were working at Wave 2. This indicates that current exemption processes may not be adequately serving the women with these barriers.

Given the high risk for these mental health disorders and health problems in this sample, it is likely that all states must contend with many clients who are at-risk for mental and physical health problems. Engaging in job search activities and focusing on positive employment prospects for the future may help to alleviate some milder forms of psychological disorders. For some women, however, these problems are very serious and require temporary or long-term exemptions 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). Similarly, recipients with severe or chronic health conditions could perhaps benefit from vocational rehabilitation services or workplace accommodations. However, in areas where such services are not available, the most viable option may be to temporarily exempt the client from work activities while the health problem is being addressed.

The findings regarding employment experience accumulated over time suggest that many women in the post-PRWORA caseload may be moving into fairly stable work trajectories. Others, however, will continue to fall behind without access to needed supports and services. Those who fall behind will often have problems co-occurring in these four domains. They are also more likely to suffer from lack of access to transportation and having children with health problems. These findings attest to the importance of expanding efforts to reduce or accommodate the serious problems women face as they attempt to meet the challenges in the transition from welfare to work.

Endnotes

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[2] Women receiving SSI or disability are not subject to TANF work requirements. Because our key outcome of interest is work, we omitted these 18 cases from the analysis.

[3] Analysis of respondents vs. nonrespondents at Wave 2 revealed no significant differences in race, education level, work status, or any of the potential barriers to employment examined in this paper and measured at wave 1. Although there are statistically significant differences in age and years on welfare, with wave 2 respondents being on average 2 years older and on welfare 2 years longer than wave 1 respondents, these are substantively small differences between the two groups.

[4] Given the demographic composition of this urban county, we excluded about 3 percent of cases in which the single parent was not a citizen and/or self-reported as Hispanic. In 1990, only 2 percent of the population was Hispanic.

[5] The lack of differences in whether a respondent received cash assistance at either wave is likely a function of Michigan's regulations. The state increased the earned income disregards, as did many other states, which allows more earnings to be waived as not counting against the grant calculation. The state also did not institute a maximum time limit for benefit eligibility. The overall percent of the sample receiving TANF is 73% in 1997 and 47% in 1998.

[6] It is important to note that although the mental health only category does not differ significantly from the zero barrier category in terms of work, we have found in earlier work (Danziger et al., 2000) that depression is significantly associated with work effort, whereas PTSD and anxiety disorder are not. The inclusion of the latter two variables with depression probably mask the effects of depression on work.

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Nathaniel Anderson is a Research Associate at the University of Michigan's Poverty Research and Training Center. He is currently working on data management and analysis of the Women's Employment Study, a longitudinal study of welfare recipients in an urban Michigan county. Anderson is also actively participating in an ongoing study of welfare reform implementation in Michigan, looking at variation in welfare-to-work program models and "best practices" across the state.

Table 1: Wave 1 Sample Characteristics[a]

Characteristic	Percent of Respondents
Current Welfare Recipients	72.7
Employment Status	
Works 20 hours per week or more	58.9
Race	
African-American	55.5
White	44.5
Age	
18 - 24 years	27.7
25 - 34 years	46.5
35 years or more	25.9
Residence	
Urban census tract	86.4
Rural census tract	13.6
Marital Status	
Living with spouse or partner at time of interview	24.4
Other	75.6
Presence of Young Children in Household	
Caregiven child under age 2	42.7
No caregiven child under age 2	57.3

[a]N = 665

Table 2: Co-occurrence of Barriers

Category Description	Freq (%)	Of those with this barrier, % with this barrier only
0) None	47.4	-
1) Human Capital Only	8.7	54.0
2) Mental Health Only	18.5	53.8
3) Substance Dependence Only	0.9	16.7
4) Physical Health Only	6.3	34.1
5) Human Cap. & Mental Health	2.6	-
6) Human Cap. & Sub. Dependence	0.0	-
7) Human Cap. & Health	2.1	-
8) Mental Health & Sub. Dependence	2.9	-
9) Mental Health & Health	7.1	-
10) Sub. Dependence & Health	0.2	-
11) Human Cap., M.H. & Sub. Dependence	0.6	-
12) Human Cap., M.H. & Health	2.0	-
13) Human Cap., Sub. Dependence & Health	0.0	-
14) M.H., Sub. Dependence & Health	0.8	-
15) All Four	0.2	-

N = 665

Table 3: Group Comparisons--Demographics

Group #	Description	% Of Sample[a]	Age	% African American	% with Children in HH Age 0-2	Years on FIP since age 18
0	No Barriers	47.4	28.9	56.2	44.4	6.8 (7)
1	Human Capital Only	8.7	30.2	63.8	39.7	8.8 (7)
2	Mental Health Only	18.5	29.3	53.7	46.3	6.8 (7)
3	Physical Health Only	6.3	32.7	59.5	47.6	7.5 (7)
4	Human Capital & Mental Health	2.6	28.2	64.7	58.8	8.2 (7)
5	Human Capital & Physical Health	2.1	29.3	57.1	42.9	8.5
6	Mental Health & Physical Health	7.1	31.9	44.7	36.2	8.0 (7)
7	Human Capital, MH & Physical Health	2.0	36.9	46.2	15.4	16.5 (0,1,2,3,4,6,8)
8	Substance Dependence (Any combination)	5.4	30.9	50.0	25.0	7.3
	TOTAL	100.0	29.8	55.5	42.7	7.4
	Test Statistic (df)		F (8/678) 4.4**	Chi Square (8) 5.8 ns	Chi Square (8) 12.9 ns	F (8/672) 6.1**

[a] N = 665

(0 – 8) Superscript numbers indicate statistically significant difference with noted group at .05 level (Scheffé post-hoc test).

* $p < .05$. ** $p < .01$.

Table 4: Group Comparisons—Work Outcomes

Group #	Description	Wave 1 % Working 20+ Hours/Week	Wave 2 % Working 20+ Hours/Week
0	No Barriers	69.3 (1,3,4,5,6,7)	74.2 (1,2,4,5,6,7,8)
1	Human Capital Only	33.3 (0,2,8)	41.4 (0,2,3)
2	Mental Health Only	65.0 (1,3,4,5,6,7)	59.3 (0,1)
3	Physical Health Only	45.2 (0,2)	61.9 (1)
4	Human Capital & Mental Health	29.4 (0,2)	41.2 (0)
5	Human Capital & Physical Health	35.7 (0,2)	50.0 (0)
6	Mental Health & Physical Health	46.8 (0,2)	52.2 (0)
7	Human Capital, MH & Physical Health	23.1 (0,2,8)	38.5 (0)
8	Substance Dependence (Any combination)	55.6 (1,7)	58.3 (0)
	TOTAL	58.9	63.3
	Test Statistic (df)	Chi Square (8) 53.7**	Chi Square (8) 39.9**

N = 665

(0 - 8) Superscript numbers indicate statistically significant difference with noted group at .05 level (Chi-square test)

* $p < .05$. ** $p < .01$.

Table 5: OLS Predicting Percent of Months Worked Between Wave 1 and Wave 2

	Model I		Model II	
	Beta	Std. Error	Beta	Std. Error
Barrier Profile				
1) Human Cap Only	-0.296 **	0.052	-0.241 **	0.052
2) MH Only	-0.048	0.039	-0.049	0.039
3) Health Only	-0.106 +	0.060	-0.060	0.060
4) Hum Cap & MH	-0.338 **	0.090	-0.248 **	0.089
5) Hum Cap & Health	-0.373 **	0.106	-0.278 **	0.106
6) MH & Health	-0.297 **	0.058	-0.268 **	0.058
7) Hum Cap, MH & Health	-0.286 **	0.102	-0.189 +	0.105
8) Sub Dep – combination	-0.137 *	0.065	-0.118 +	0.066
Demographics				
African American			-0.015	0.032
Age 25 – 34			0.011	0.039
Age 35 – 54			0.001	0.053
Urban Census Tract			0.010	0.044
Married or cohabitating			-0.053	0.035
# of Children Age 0 – 2			-0.065 *	0.025
Years on Welfare			-0.003	0.003
Additional Barriers				
No car/license			-0.156 **	0.030
Severe Abuse in Past Year			0.009	0.040
Child Health Problem			-0.064 +	0.035
Constant	0.764	0.020	0.895	0.053
N	653		653	
R-square	0.103		0.161	

+ p < .10; * p<.05 ; ** p<.01