Disability and Employment for Single Mothers, 1989-2004

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ABSTRACT

This paper investigates trends in employment for single mothers with and without disabilities from 1989 to 2004, using annual data for single mothers ages 25-54 from the March Current Population Surveys (CPS). Results show, first, a growing employment rate gap between those with and without disabilities, net of common control variables. Second, this trend is unlikely to result largely from greater access to disability benefits. Third, single mothers, especially those with disabilities, have become more likely to live in extended households; implications of this trend depend on the form of household extension. Finally, disability has significant interactive effects for Black single mothers, those with college degrees, and those with greater other household income. This is consistent with the suggestion that single mothers with disabilities are especially likely to remain out of the labor force if they cannot get jobs adequate to cover the costs their labor force entry would incur.

INTRODUCTION

Sociologists have long studied employment problems for single mothers, the group of women who most need jobs for economic security and for the wellbeing of their children -- and for whom employment poses the most direct challenge to their unpaid carework responsibilities. This research has addressed such issues as racial-ethnic differences in employment rates (Cohen 2002; England, Garcia-Beaulieu, and Ross 2004) human capital, industrial restructuring and welfare effects (Browne 1997; Browne 2000), and household structure (Cohen 2002). However, this literature has not considered the role of women's disabilities, even when such information was available in the datasets they used. More recently, research and public debates over the 1990s welfare reform have raised the issue of increased burdens imposed on women with disabilities, or women who have children with disabilities (Brandon and Hogan 2004; Gardiner and Fishman 2001; Litt 2004; Wolfe & Hill 1995). However, this literature on disabilities has not drawn heavily from the previous sociological literature on women's employment. At the same time, economists have debated the causes of a decline in the employment rates of people with disabilities. Some attribute the trend to the increased availability of disability insurance, while others blame perverse effects of the Americans with Disabilities Act (Acemoglu and Angrist 2001; Bound and Waidmann 2004). However, this economics literature has not (to my knowledge) focused on the special problems of single mothers in the wake of welfare reform.

In this paper, I will attempt to bring these disparate perspectives together into one analysis that brings us up to 2004, straddling the recessions at the beginning and end of the 1990s and the 1996 welfare reform. I will investigate the trends in employment for single mothers with and without disabilities from 1989 to 2004, using annual data for single mothers ages 25-54 from the March Current Population Surveys (CPS).[1] I will examine four questions.

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[1] Unlike some previous research, which includes all women (e.g., England et al. 2004), or only those who head their own households (e.g., Browne 1997), I use the CPS to include single mothers who live with their own children, regardless of whose households they live in (London 1998).

First, I will examine whether the observed decline in employment for people with disabilities also occurred among single mothers, even as overall employment rates for this group increased in the 1990s (Sayer, Cohen, and Casper 2004), and whether common control variables account for this trend.

Second, I will look at the role that welfare (AFDC/TANF), disability insurance, and Supplemental Security Income (SSI) play in explaining the employment rate gap between single mothers with and without disabilities. Some researchers suggest that state governments have attempted to move women with disabilities from TANF to SSI in order to reduce state TANF caseloads (Timmons 2001).

Third, I will test the role of household extension for single mothers with disabilities. Extended households play an important role in the coping (or not) mechanisms for some groups of single mothers (Cohen 2002; Angel and Tienda 1982; London 2000; Tienda and Glass 1985), but we do not know if these patterns and effects differ for those with disabilities -- which has become more salient after the decline of welfare support. By living in the homes of others, or having others live in their homes, single mothers with disabilities might on the one hand gain access to child care and other forms of support, increasing the ease with which they could take jobs. Or on the other hand, such cost sharing and support could reduce the necessity of employment, allowing mothers to remain out of the labor force rather than take jobs that would not cover the costs of day care, health care and housing.

Finally, I will see whether mothers' disability has disparate effects across race/ethnic, education, or other lines. It is possible that, for women who can expect to obtain worse jobs -- such as women with less education, Blacks and Latinas -- having disabilities that further weaken their job prospects might make taking jobs even less feasible (or desirable). Or, such women may face additional barriers to getting and keeping jobs, even if they set out to (Baldwin & Johnson 1995).

PRELIMINARY ANALYSIS AND RESULTS

In this abstract, I will describe the analysis I have begun and briefly review the preliminary results. The final paper is expected to cover roughly this ground, but more

thoroughly and with a more complete exploration of alternative explanations and integration of previous research.

Descriptive results

The CPS has since 1989 asked respondents whether they (or the household members they are describing) have any disability that limits the amount or kind of work they can do, or prevents them from having a job.[2] Figure 1 shows the prevalence of work-limiting or -preventing disabilities as reported in the CPS, by race/ethnicity. The overall disability rate increased about 2% through the early 1990s and then leveled off.[3] Figure 2 shows the employment rates for the same groups of women, separated by disability status. The figure shows the pattern of increasing employment rates for non-disabled single mothers that we have seen before (Sayer et al. 2004), with faster increases for Black and Latina mothers starting in 1995 or 1996 (before federally-imposed welfare time limits were reached). These rates peak at the end of the 1990s economic expansion, then pull back in the following years. However, the figure also shows that employment rates fell for White single mothers with disabilities in the early 1990s, and were flat or slightly downward for other groups.

Could the greater availability of disability-related benefits account for the decrease in single mothers' employment? This would be the case if the available income tipped the decision-making balance in favor of remaining out of the labor force – given the pay, benefits, and hours necessary to work at the available jobs. More sophisticated analyses of this problem have suggested that some of the decrease could be the result of increased disability benefits for men and women in general (Bound and Waidmann 2004) and for older men in particular (van der Klaauw and Chen 2005). That is consistent with

[2] Since 1995 the survey has also asked respondents for the general health of each household member, on a five-point scale ranging from "excellent" to "poor". In this analysis I use the disability question for two reasons. First, it extends back to the period before the 1990s welfare reform. Second, many people with disabilities that affect their ability to work for pay report very good or excellent health. Because I am principally interested in women's ability to secure adequate employment, I focus on work-related disabilities rather than general health.

[3] Some analysts have raised concerns about the "work-related" disability question because of its potential endogeneity with employment (Bound and Waidmann 2004), but this problem has not to my knowledge been tested.

my simple analysis from the CPS. Figure 3 shows the percentage of non-employed single mothers with disabilities receiving AFDC/TANF, SSI (which includes disability income for people regardless of their previous employment), and disability benefits (which are tied to previous employment). The figure shows a dramatic drop in welfare receipt from more than 50% in the early 1990s to less than 25% at the end of the period. That drop has been only partially compensated for by an increase in SSI receipt, from about 18% to about 30%, while disability benefits have remained fairly constant. As a result, the overall receipt of benefits among this group has dropped by 20 percentage points, from about 80% to about 60%.

What about living arrangements? Previous research has suggested that extended households might serve as an important resource for single mothers (Tienda and Glass 1985), although those benefits may depend on the form of household extension (Cohen 2002), which implies that reliance on such structures in the post-welfare era is tenuous. Figure 4 shows the rate at which single mothers (here excluding those who are cohabiting[4]) live with their children in the households of others (most likely their parents), whom I call "guests"; or have other adults living with them in their households, whom I refer to as "hosts" (Cohen and Casper 2002). The percentage of single mothers living in extended households has increased, but the rates of increase have been faster for single mothers with disabilities, especially for those living as guests, which climbed from 8% to 14%. Because these women have lower employment rates (see Figure 5), this increase could account for some of the decrease in disabled single mothers' employment rates. The increase may reflect growing difficulties in achieving independence from their parental homes associated with housing costs, employment problems, day care costs or availability. Looked at another way -- living in someone else's home may reduce costs enough to make it feasible to stay out of the labor force, allowing mothers the choice to do so.

[4] Cohabitation has been measured directly in the CPS only since 1995. Prior to that I use the "Adjusted POSSLQ" measure, which identifies unrelated opposite-sex housemates with no other adults present as presumed cohabitors (Casper and Cohen 2000).

Multivariate analysis

In several pooled time-series logistic models, I examine each of these questions in a multivariate context. Table 1 shows the means of variables I use in the preliminary multivariate models, drawn from the previous discussion and earlier research. The strategy I employed in the preliminary analysis was to estimate separate models predicting employment for each year from 1989 to 2004, and then examine the coefficients for trends over the period. The analysis showed that the effects of AFDC/TANF receipt in the previous year, and disability status, moved consistently across the models. Both of these trends were close to linear, so I entered time interactions for these variables. For the rest of the variables, I treated their effects as fixed across years.[5]

The regression models in Table 2 confirm that the employment rate gap between single mothers with and without disabilities widened from 1989 to 2004, even with a wide array of common variables controlled. Single mothers with disabilities are much less likely to be employed than those without disabilities, and that gap has increased significantly in the last 15 years. Clearly, also, adding disability status and its year interaction improves the fit of the model.

Second, the models show that these disability effects persist when receipt of AFDC/TANF and SSI benefits in the previous calendar year are controlled.[6] If the increasing disability effect was largely the result of women moving to other forms of welfare, especially SSI, I would not expect such a strong disability trend once SSI and AFDC/TANF were controlled. The models show that single mothers who received AFDC/TANF or SSI are less likely to be employed in March, but the effect of AFDC/TANF has declined steeply over the period. Closer examination of the year-by-year models shows that this decline was concentrated in the late 1990s, which coincides with the welfare reform, with less change in the early 1990s and 2000s. This declining effect reflects the greater tendency of women to leave welfare and enter employment,

[5] This preliminary method does not rule out other trends in the effects of these variables over the period. Some may have nonlinear trends, or distinct period differences. The final analysis will more rigorously consider these alternatives.

[6] In the regressions, disability benefits have no significant benefit when disability is also in the model, and showed no trend in the effect; I therefore dropped it from the analysis.

which has been documented extensively elsewhere. Note also that the control for other income in these models is intended to capture the dollar effect of these other benefits, leaving the dummy variables to capture program participation effects.

Third, we have already seen that single mothers, especially those with disabilities, have become more likely to live in extended households over the past 15 years, with combined guest and host rates approaching one-in-four (Figure 4). The regression models show that these living arrangements are associated with differences in employment rates. Those single mothers who live as "guests" in the households of others are less likely to be employed, net of other factors, while those who have others living with them are more likely to be employed. It is important to note that the causal direction here is not clear. Single mothers may live with others *because* they are not employed, and other relatives or friends may be more likely to come live with single mothers when those single mothers already have jobs. These differences warrant further attention.

Finally, Table 3 shows a model in which disability is permitted to interact with each of the other independent variables, to test whether disability effects differ across groups of single mothers. Three significant interactions deserve comment here. First, the effect of having completed college on single mothers' employment is stronger for those with disabilities. Put another way, the gap between those with and without college degrees is greater in this group. Second, the effect of being Black is also greater (although the Latina effect is not, $p = .29$). Both of these interactions are consistent with the suggestion that single mothers with less earning potential are less likely to enter the labor market given the costs they would incur there. The interactions could also show that Black women with disabilities and those without college degrees have an even harder time getting jobs at all. However, the fact that other income also has a stronger effect for those with disabilities lends support to the first interpretation. Given the availability of household income from other sources, single mothers with disabilities are more likely to stay out of the labor market than are those without disabilities.[7]

[7] Note also that the effect of AFDC/TANF, and the change in that effect, are weaker for single mothers with disabilities. This is consistent with previous research showing that women with disabilities are slower to move out of welfare, even under the pressure of punitive welfare reform (Brandon & Hogan 2004).

CONCLUSION

These preliminary results underscore the importance of pursuing these questions further. Although the CPS has less depth in the health area than sources such as the Health Interview Survey, and less depth in the program participation area than the Survey of Income and Program Participation, the survey has the advantage of providing the best estimates of labor force participation, and the most recent large-sample annual estimates of household structure and income, in addition to disability and employment.

Why have employment rates for single mothers with disabilities stayed flat or fallen, even as those without disabilities experienced a period of rapid employment growth? Answering this question is not only important for understanding structural economic as well as policy effects on a vulnerable population, including children -- it may also provide important insights into what drives women's employment, and understanding that remains central to broader questions of gender and inequality.

References

Acemoglu, Daron and Joshua D. Angrist. 2001. "Consequences of Employment Protection? The Case of the Americans with Disabilities Act." *Journal of Political Economy* 109(5):915-957.

Angel, Ronald and Marta Tienda. 1982. "Determinants of Extended Household Structure - Cultural Pattern or Economic Need." *American Journal of Sociology* 87(6):1360-1383.

Baldwin, Marjorie L. and William G. Johnson. 1995. "Labor Market Discrimination Against Women with Disabilities." *Industrial Relations* 34(4):555-577.

Bound, John and Timothy Waidmann. 2004. "Accounting for Recent Declines in Employment Rates Among Working-Aged Men and Women With Disabilities." *Journal of Human Resources* 37(2):231-50.

Brandon, Peter D. and Dennis P. Hogan. 2004. "Impediments to Mothers Leaving Welfare: the Role of Maternal and Child Disability." *Population Research and Policy Review* 23(4):419-36.

Browne, I. 1997. "Explaining the Black-White Gap in Labor Force Participation Among Women Heading Households." *American Sociological Review* 62(2):236-52.

———. 2000. "Opportunities Lost? Race, Industrial Restructuring, and Employment Among Young Women Heading Households." *Social Forces* 78(3):907-29.

Casper, Lynne M. and Philip N. Cohen. 2000. "How Does POSSLQ Measure Up? New Historical Estimates of Cohabitation." *Demography* 37(2):237-45.

Cohen, Philip N. 2002. "Extended Households at Work: Living Arrangements and Inequality in Single Mothers' Employment." *Sociological Forum* 17(3):445-63.

Cohen, Philip N. and Lynne M. Casper. 2002. "In Whose Home? Multigenerational Families in the United States, 1998-2000." *Sociological Perspectives* 45(1):1-20.

England, P., C. Garcia-Beaulieu, and M. Ross. 2004. "Women's Employment Among Blacks, Whites, and Three Groups of Latinas - Do More Privileged Women Have Higher Employment?" *Gender & Society* 18(4):494-509.

Gardiner, Karen N. and Michael E. Fishman. 2001. *Employing Welfare Recipients With Significant Barriers to Work: Lessons From the Disability Field*. Baltimore: Annie E. Casey Foundation.

Litt, Jacquelyn. 2004. "Women's Carework in Low-Income Households: the Special Case of Children With Attention Deficit Hyperactivity Disorder." *Gender & Society* 18(5):625-44.

London, R. A. 1998. "Trends in Single Mothers' Living Arrangements From 1970 to 1995: Correcting the Current Population Survey." *Demography* 35(1):125-31.

———. 2000. "The Dynamics of Single Mothers' Living Arrangements." *Population Research and Policy Review* 19(1):73-96.

Sayer, Liana C., Philip N. Cohen, and Lynne M. Casper. 2004. *Women, Men, and Work*. New York: Russell Sage Foundation & Population Reference Bureau.

Tienda, Marta and Jennifer Glass. 1985. "Household Structure and Labor-Force Participation of Black, Hispanic, and White Mothers." *Demography* 22(3):381-94.

Timmons, J., Foley, S. M., Whitney-Thomas, J., & Green, J. (2001). "The Path to Employment for Individuals with Disabilities in the Welfare System." *Journal of Poverty* 3(5), 87–112.

van der Klaauw, Wilbert and Susan Chen. 2005. "The Work Disincentive Effect of the Disability Insurance Program in the 1990s."

Wolfe, Barbara L. and Steven C. Hill. 1995. "The Effect of Health on the Work Effort of Single Mothers." *Journal of Human Resources* 30(1):42-62.

FIGURE 1
Percent with Work-Limiting or -Preventing Disability:
Single Mothers Ages 25-54, 1989-2004 (three-year averages)

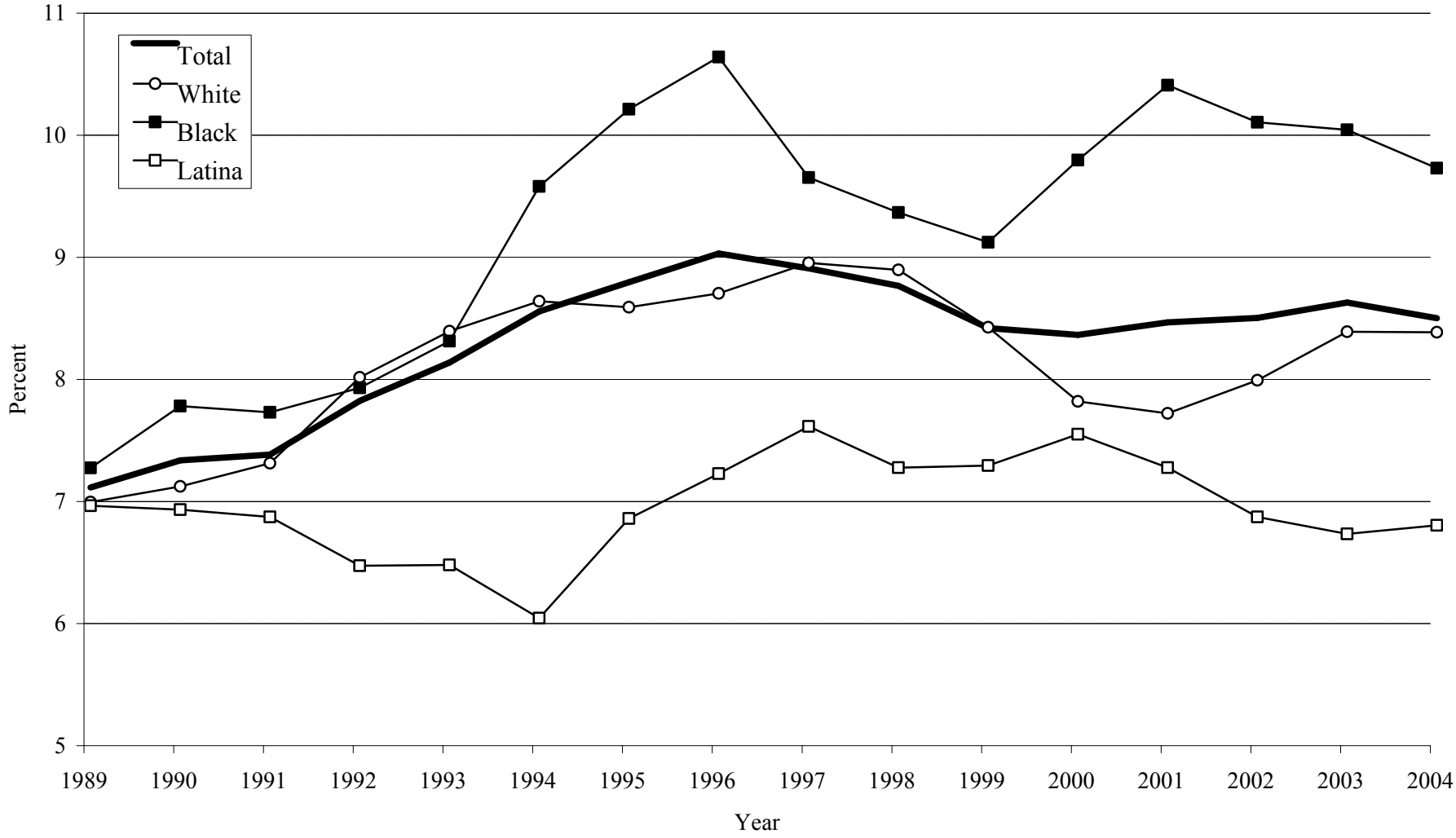

FIGURE 2
Employment Rates by Race/Ethnicity and Disability Status:
Single Mothers Ages 25-54, 1989-2004

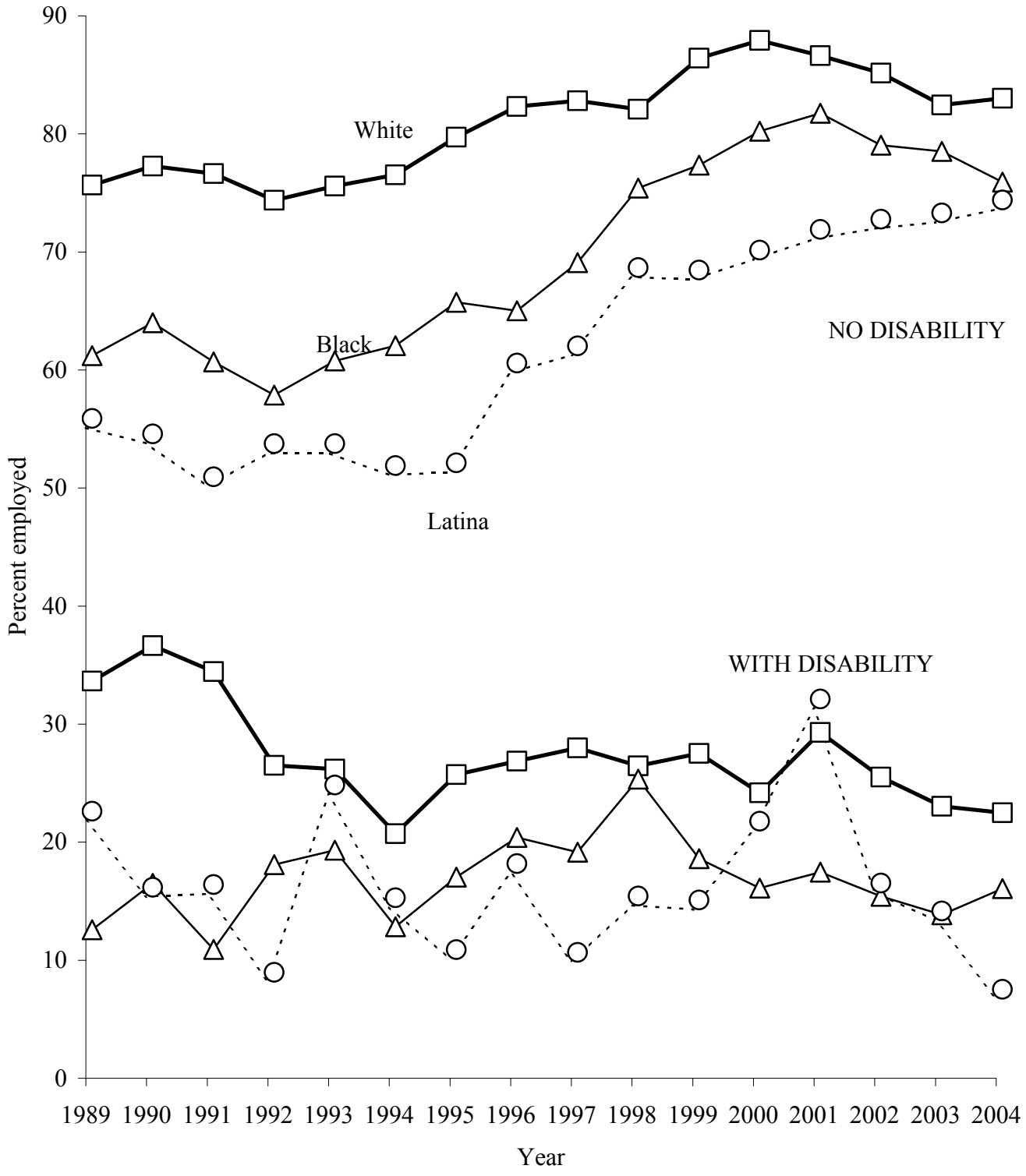

FIGURE 3
Benefits Received by Non-Employed Single Mothers with Disabilities:
1989-2004 (cumulative rates; three-year averages)

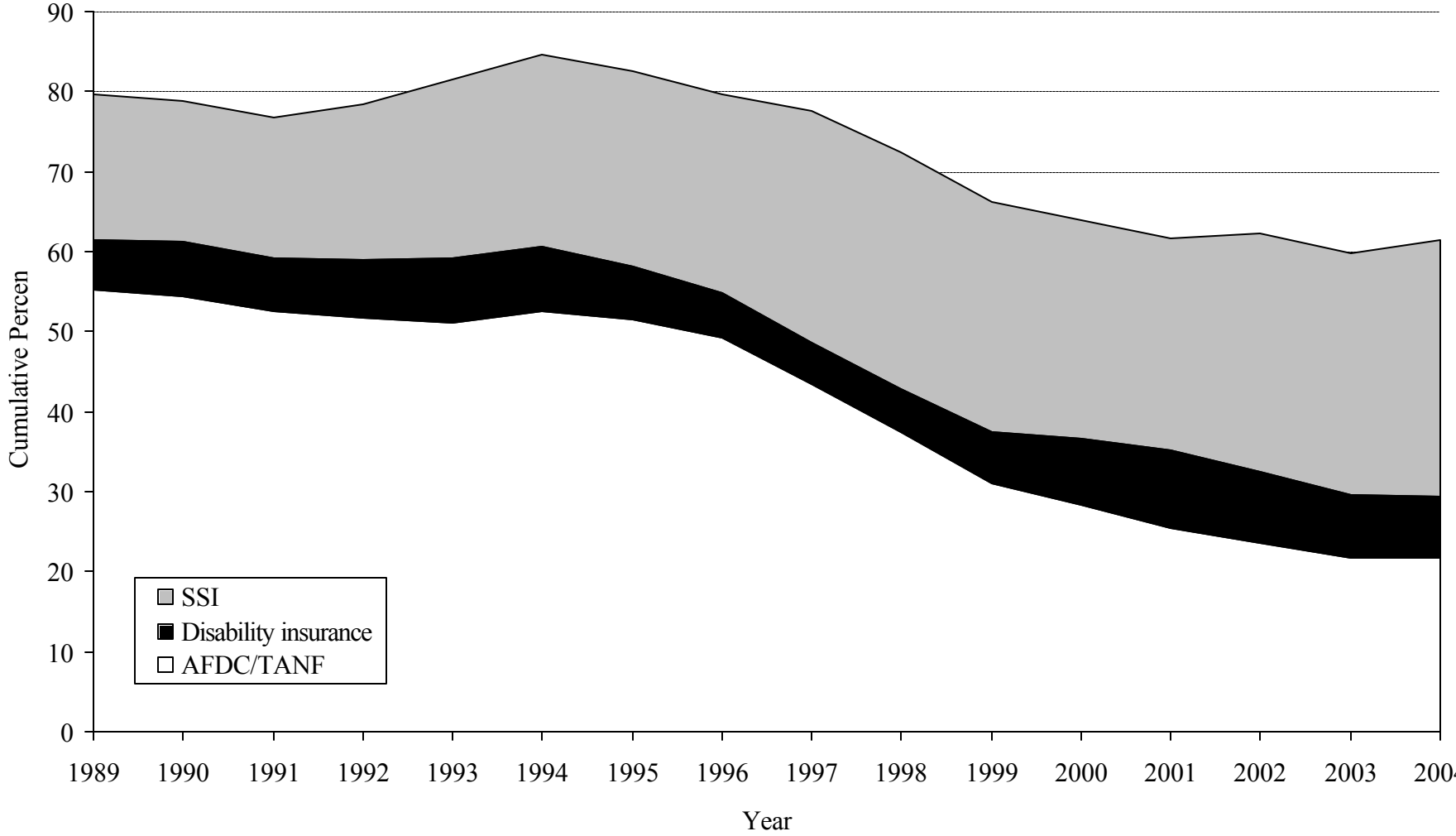

Table 1. Descriptive Statistics, by Disability and Employment Status

Single Mothers Ages 25-54: 1989-2004 (pooled years)

	No disability		With disability	
Variable	*Employed*	*Not employed*	*Employed*	*Not employed*
Formerly married	.66	.53	.71	.62
Never married	.24	.37	.22	.30
Cohabiting[a]	.10	.10	.07	.08
Extended HH guest[b]	.12	.16	.09	.12
Extended HH host[c]	.07	.07	.07	.06
Any child under 6	.29	.50	.23	.26
Children under 18	1.66	2.16	1.62	1.75
Age	36.5	34.0	37.7	38.1
Less than high school	.12	.36	.16	.37
High school graduate	.38	.38	.38	.37
Some college	.34	.22	.33	.22
BA or more	.16	.05	.13	.04
Midwest	.23	.20	.28	.22
Northeast	.18	.23	.15	.21
South	.38	.34	.34	.38
West	.21	.23	.23	.20
Non-metro area	.32	.30	.37	.34
Black	.28	.36	.26	.36
Latina	.12	.21	.09	.13
Other race/ethnicity	.03	.04	.02	.03
Other income (ln)[d]	7.39	8.44	7.99	8.96
AFDC/TANF previous year	.07	.44	.18	.40
SSI previous year	.04	.08	.11	.26
N	50,600	18,115	1,312	4,871

Source: 1989-2004 March Current Population Surveys.

[a] "Adjusted POSSLQ" 1989-1994; Unmarried partner 1995-2004.

[b] Mother lives with child(ren) in another's home.

[c] Other adults (excluding cohabitor) live with mother and child(ren) in their home.

[d] All household income less mother's earned income in the previous year.

Table 2. Logistic Regression Coefficients for Employed Status
Single Mothers Ages 25-54: 1989-2004

	Model 1	Model 2
Intercept	.606 *	.354
1990	-.044	-.042
1991	-.110 +	-.085
1992	-.222 ***	-.201 ***
1993	-.225 ***	-.184 **
1994	-.251 ***	-.201 ***
1995	-.138 *	-.086
1996	-.130 *	-.049
1997	-.111 +	-.016
1998	-.055	.043
1999	-.026	.118 +
2000	-.029	.128 *
2001	-.037	.120 +
2002	-.300 ***	-.129 *
2003	-.376 ***	-.225 ***
2004	-.383 ***	-.233 ***
Formerly married	.168 ***	.166 ***
Cohabiting	.202 ***	.124 **
Extended HH guest	-.183 ***	-.245 ***
Extended HH host	.300 ***	.248 ***
Any child under 6	-.411 ***	-.453 ***
Children under 18	-.130 ***	-.171 ***
Age	.081 ***	.097 ***
Age^2	-.001 ***	-.001 ***
High school graduate	.865 ***	.822 ***
Some college	1.176 ***	1.115 ***
BA or more	1.786 ***	1.657 ***
Northeast	-.418 ***	-.452 ***
South	-.126 ***	-.141 ***
West	-.185 ***	-.203 ***
Non-metro area	-.024	-.018
Black	-.292 ***	-.286 ***
Latina	-.196 ***	-.291 ***
Other race/ethnicity	-.412 ***	-.480 ***
Other income (ln)	-.091 ***	-.079 ***
AFDC/TANF previous year	-2.507 ***	-2.466 ***
AFDC/TANF * years since 1989	.089 ***	.097 ***
SSI previous year	-1.256 ***	-.941 ***
Disability	--	-1.752 ***
Disability * years since 1989	--	-.067 ***
Liklihood ratio chi-square	21,217 (37 d.f.)	25,939 (39 d.f.)
Percent concordant	80.1	82.9

$^{+}p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$ (two-tailed tests)

Table 3. Logistic Regression Coefficients for Employed Status
Single Mothers Ages 25-54: 1989-2004

	Main effects	Disability Interactions
Intercept	.273	--
Formerly married	.155 ***	.102
Cohabiting	.128 **	-.157
Extended HH guest	-.248 ***	-.032
Extended HH host	.240 ***	.020
Any child under 6	-.462 ***	.250 **
Children under 18	-.180 ***	.167 ***
Age	.098 ***	-.163 **
Age^2	-.001 ***	.002 *
High school graduate	.826 ***	-.024
Some college	1.116 ***	-.020
BA or more	1.615 ***	.457 **
Northeast	-.437 ***	-.208 +
South	-.120 ***	-.228 *
West	-.196 ***	-.051
Non-metro area	-.036	.171 *
Black	-.263 ***	-.226 *
Latina	-.292 ***	.137
Other race/ethnicity	-.492 ***	.271
Other income (ln)	-.075 ***	-.045 **
AFDC/TANF previous year	-2.531 ***	.982 ***
AFDC/TANF * years since 1989	.099 ***	-.045 *
SSI previous year	-.899 ***	-.214 +
Disability	1.801 +	--
Disability * years since 1989	-.053 ***	--
Liklihood ratio chi-square	26,180 (61 d.f.)	
Percent concordant	83.0	

+ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)