

**The Impact of Disabilities on Mothers' Work Participation:
Examining Differences between Single and Married Mothers***

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Abstract

This study examines the prevalence of disabilities among mothers and children and analyzes how these disabilities influence mothers' work participation. Our analyses focus on differences between single and married mothers. We also consider the effect of social support coming from family configurations and living arrangements by including the age structures of children with and without a disability, and the number of other adults in the family. We find that mothers' own disability status has a profound impact on mothers' work participation—both continuous and partial work activities. Child disability also has a significant impact on mothers' work participation, but not to as great an extent as the mother's own disability. The impact of child disability also varies by children's age between single and married mothers. Older healthy children have a positive influence on maternal work only among married mothers, while older children with a disability increase single mothers' partial work activities. Having other adults in the family does not facilitate work participation of either single or married mothers.

Introduction

A growing number of recent studies have examined the influence of health status among family members on mothers' labor force participation. Some studies have focused on the mother's own disability status, while many others have paid close attention to the effect of children's disabilities on mothers' work participation. Many mothers leave the labor force or reduce their working hours when they have young children at home. Mothers who have children with disabilities are likely to face greater demands on their time in caring for children with special needs. Understanding the impact of disabilities on mothers' work participation is especially important for low-income families, given the prevalence of disability in this segment of the population (Loprest and Acs 1996; McNeil 2001) and recent policy changes emphasizing work participation among low-income families (U.S. General Accounting Office 2002). Many low-income families are also headed by single mothers, who face greater challenges in balancing work and family needs compared with married mothers.

Low-income mothers facing significant barriers to work have, in the past, sought income support from the Aid to Families with Dependent Children (AFDC) program. Yet, the 1996 welfare reform legislation—the Personal Responsibility and Work Opportunity Reconciliation Act—profoundly changed the system of income support for low-income families by replacing AFDC with the Temporary Assistance to Needy Families (TANF) block grant. Unlike AFDC, TANF imposes strict work requirements, sanctions, and lifetime limits on cash benefits. Some low-income children as well as adults with disabilities are eligible to receive cash assistance under the Supplemental Security Income (SSI) program, but the 1996 welfare reform also restricted the definition of disability for children, eliminating benefits for children with less severe disabilities. Many low-income families who have children with disabilities, therefore,

not only lost SSI benefits for their children, but also were subject to TANF work requirements and time limits unless granted an exemption (Károly, Klerman, and Rogowski 2001; Loprest 1997). While strict work requirements can provide strong incentives for some low-income families to find and maintain a job, they can exacerbate economic hardship for many families where health limitations among mothers or children pose a serious obstacle to employment.

This study examines the prevalence of disability among mothers and children in both low-income and higher-income families, and investigates the relationship between disability and mothers' work participation with a focus on differences in family structures. Mothers who are single and mothers who are married are likely to face quite different challenges when they have a disability of their own or a child with a disability, both in their economic necessity for paid work and in their ability to accommodate the special needs for child care. According to previous research, mothers' own disability significantly reduces labor force participation for both single and married mothers (Blank 1989; Porterfield 2002; Wolfe and Hill 1995). The impact of child disability, on the other hand, has shown somewhat diverging and inconsistent results, due to differences in the definition of child disability, sample sizes, model specifications, and so forth (Kimmel 1997; Porterfield 2002; Powers 2003; Salkever 1982; Wolfe and Hill 1995). It is critical to understand the different influences of disability on labor force participation between single and married mothers in order to improve specialized services and support programs that can help the economic well-being of families both within and outside the welfare system.

Using data from the 1996 panel of the Survey of Income and Program Participation, we examine how disabilities of mothers and children influence work participation between single and married mothers. This study extends past research by exploring various aspects of disability such as the level of severity and type of disability among mothers and children, and by assessing the relative importance of disability status of mothers and children in influencing mothers' work

activities. We also consider the effect of family configurations and living arrangements by including the ages of children with and without a disability, and the number of other adults in the same household, since older children or other adults in a family may provide social support (e.g., child care) that facilitates mothers' work participation.

The next section reviews previous literature regarding the impact of disability on mothers' labor force participation and is followed by a presentation of key research questions that are addressed in the study. The description of the data and methods is presented next. We then turn to descriptive results by discussing the prevalence of disability among mothers and children, and various demographic, family, and economic characteristics of single and married mothers. Multivariate analyses assessing the importance of disability follow with two models of mothers' work participation. We conclude by discussing the policy implications of the study and directions for future research.

Previous Research

One's own health has long been considered to be an important factor underlying employment and earnings (Smith 1999). In recent years, a growing number of studies have examined the effects of women's and children's health problems on mothers' work participation. Given recent changes in welfare policies that require work participation among welfare recipients, many studies have particularly focused on how health problems among low-income families affect maternal employment vis-à-vis welfare participation (e.g., Acs and Loprest 1999; Brandon and Hogan 2001; Earle and Heymann 2002; Meyers, Brady, and Seto 2000).

Health issues are of particular importance for low-income families, given higher rates of disabilities among welfare-recipient families than among the general population. According to a report based on data from the Survey of Income and Program Participation (SIPP) collected in

1997, about 23 percent of the total population aged 15 and older have a disability of some kind and 15 percent have a severe disability (McNeil 2001). This report also notes that the presence of severe disability is associated with a higher likelihood of receiving welfare benefits. A recent report (U.S. General Accounting Office 2001b) using 1999 data from the SIPP estimates that about 44 percent of TANF recipients have a disability and 38 percent have a severe disability. Since women constitute the majority of welfare recipients, examining the relationship between their health status and employment is extremely important in evaluating policies that encourage work activities among this population.

A mother's health can be considered as part of the human capital that affects her productive capacity in the labor market (e.g., Schultz 1961). A physical or mental disability can be a serious impediment to work, because health problems can limit job search activities, opportunities to receive training, and the kinds of jobs taken, and can ultimately affect potential wage rates. Studies in this area overall show consistent negative effects of women's disabilities on their work efforts, although the effects vary somewhat depending on the particular population under analysis and the measures of disabilities used (Acs and Lopreset 1999; Blank 1989; Brandon and Hogan 2001; Porterfield 2002; Wolfe and Hill 1995). Among single mothers, several different measures of disabilities all decrease the likelihood of employment and hours of work, while increasing the probability of receiving AFDC (Blank 1989; Wolfe and Hill 1995). A study by Acs and Loprest (1999), which included measures of the variety, type, and level of disabilities among women, shows that women with severe disabilities are significantly less likely to leave AFDC for employment than women with less severe disabilities. The same conclusion is reached by Meyers et al. (2000) in their study of welfare recipients in California. And when women with disabilities enter the workforce, their health limitations tend to increase the likelihood of job loss (Earle and Heymann 2002).

In addition to mothers' own health problems, having a child with health problems is likely to create a serious obstacle to maternal employment. Having young children at home usually exerts constraints on mothers' time for labor force activity (Blau, Ferber, and Winkler 1998; Leibowitz and Klerman 1995), in large part because of the need for and costs of child care services (Connelly 1992). Having children with disabilities may further constrict mothers' time since caring for these children is likely to be more time-consuming if they have special care needs or require frequent medical attention. Finding appropriate child care services can also be more difficult for children with disabilities, and more costly, when they are available (Brandon 2000; LeRoy and Johnson 2002; U.S. General Accounting Office 2001a). While these time demands and child care needs for children with disabilities suggest a negative impact on mothers' work participation, their effects may differ depending on the family composition, that is, between single mothers and married mothers. Having a child with a disability can be "expensive" not only because of medical costs but also because of other nonmedical costs such as transportation expenses, special diets, or special care services (Leonard, Brust, and Sapienza 1992; Salkever 1985). For single mothers whose employment provides the sole economic support for the family, the financial burden of having a child with a disability may impose an even greater need for employment unless other sources of income are available, at the same time that parenting such a child makes it more difficult to devote time to paid employment.

Previous research on the impact of child disability on mothers' work participation has shown somewhat inconsistent results depending on the family type under study, the measures of disabilities, and the sample sizes. Earlier studies that used several different measures of children's health limitations in a small sample of families found significant negative effects of child disability on married mothers' employment, but not on single mothers' employment (Breslau, Salkever, and Staruch 1982; Salkerver 1982). More recent studies using large national samples of

families also show somewhat mixed results.¹ Using 1984 SIPP data that defined child disability as a long-lasting physical or mental condition limiting physical or school activities, Wolfe and Hill (1995) found that child disability has a significant negative effect on single mothers' work participation, equivalent to the effect of having a pre-school child. Kimmel (1997), on the other hand, using a narrower definition of disability in a smaller sample of the 1987 SIPP, reported no significant effect of child disability on single mothers' work. A recent study by Powers (2003) which includes alternative definitions of child disability and various aspects of mothers' employment (e.g., probability of working, hours of work, changes in work hours) showed a more consistent negative effect of child disability among single mothers than among married mothers. The effect of child disability seems to differ depending on the ages of children with disabilities as well. Porterfield (2002) found that only pre-school children with disabilities have a significant negative effect on single mothers' work decisions, whereas among married mothers, children with disabilities at all ages have a negative effect on their work participation.

Among the welfare population in particular, findings on the effect of child disability also vary. Some research failed to find a significant negative effect on mothers' leaving welfare for work (Acs and Loprest 1999), while others reported a significant negative effect of certain types of child disability (Brandon and Hogan 2001) and of having a child with a severe disability (Meyers et al. 2000). Among former welfare recipients who are employed, having a child with a disability is also shown to increase the probability of job loss (Earle and Heymann 2002).

These complex and inconsistent results regarding the impact of child disability on maternal employment raise several methodological and conceptual questions that are the focus of the current study. First, it is important to explore a variety of child disability measures, but only in sufficiently large samples. Past studies indicate that examining several disability measures in a

¹ See Powers (2003) for a detailed review on this topic.

small sample of families is likely to attenuate the overall importance of child disability on maternal work participation (Brandon and Hogan 2001; Salkever 1982). So does the consideration of varying types of child disability without incorporating some severity measures (Acs and Loprest 1999).

Second, the effect of child disability tends to vary depending on whether mothers' own health measures are examined simultaneously: that is, the effect of child disability on mothers' work participation tends to be relatively small when it is analyzed together with mothers' own disabilities. This suggests that there may be a high correlation between mothers' and children's disabilities, especially in the low-income population. Thus, it is important to consider the effects of disabilities among mothers and children simultaneously and assess their relative importance. In addition, to the extent that low-income families face multiple barriers to employment including a lack of basic skills and education (Danziger et al. 2000; Olson and Pavetti 1996), it is important to investigate whether disabilities of children and mothers—each alone and together—present the primary barrier to employment or an additional barrier to already existing disadvantages.

Third, it is crucial to examine the impact of child disability in the context of family configurations: for example, the ages of children who have health problems and who do not. Several studies demonstrate that the effect on work participation of having a child with a disability is comparable to having a child less than a year old or a pre-school child (Earle and Heymann 2002; Porterfield 2002; Powers 2003; Wolfe and Hill 1995). Having older healthy children, on the other hand, appears to facilitate mothers' work participation to a certain extent (Powers 1999), suggesting that these children may be able to ease mothers' heavy child care burden and mitigate some other barriers to employment. In that sense, it is also important to consider whether particular living arrangements have a specific impact on the likelihood of employment, especially when mothers have children with disabilities. Since a relatively high

proportion of single mothers and low-income mothers live with other relatives or live as subfamily units in a household (Hartmann and Spalter-Roth 2003; London 2000), it is important to explore whether having other adult members in the family or in the household facilitates or deters work participation among mothers who have children with disabilities or who themselves have a disability.

Research Questions

The specific research questions and expected findings of the study are as follows.

- (1) How prevalent are disabilities among mothers and children, and what are the prevailing types and levels (severity) of disabilities among them? How do overall disability rates and specific types and levels of disability vary by income level and by family type, particularly between single-mother and married-mother families?

Based on prior research regarding the relationship between socioeconomic status and health, we expect to find higher rates of disabilities among children and mothers in poorer economic circumstances. Likewise, we expect to find higher rates of disabilities among single-mother families than married-mother families, given generally lower economic status among the former than the latter.

- (2) To what extent does a mother's disability—evaluated by severity and type of disability—impede her employment? How does its impact vary between single mothers and married mothers?

We expect a mother's disability to have a significant negative influence on her employment. In particular, the more severe the mother's disability is, the greater its negative impact on her employment is expected to be. Given many single mothers' economic necessity for employment, we expect a moderate disability will have a weaker negative effect on single mothers' work participation than on married mothers' participation.

- (3) To what extent does having a child with a disability have a similar or different effect on work participation for single and married mothers, controlling for the mother's

own disability? How does this effect vary by the ages of disabled children as well as by levels and types of disability?

We generally expect having a child with a disability—especially a young child—to have some negative influence on maternal employment. Given somewhat inconsistent results in previous research, however, it is difficult to predict the differing effects of child disability between single and married mothers. Because single mothers may draw other sources of income (e.g., welfare or SSI benefits) and generally have fewer child care options than do married mothers, greater caregiving burdens for children with disabilities may impede single mothers' work participation more than married mothers'. On the other hand, higher costs involved in raising children with disabilities may produce greater needs for earnings from work participation among single mothers than married mothers, thereby generating a weaker effect of child disability among the former than the latter.

(4) How does having older children or having additional adult members in the family influence the likelihood of maternal employment?

Very few studies have looked into the potential social support coming from older children or other family members in the relationship between disability and mothers' work participation. Studies that have looked at the effects of older children have shown mixed results (Porterfield 2002; Powers 1999). We expect that having older healthy children or other healthy adult members in the family would, to some extent, facilitate maternal employment, while having other family members who are elderly or have a disability is likely to further impede maternal employment.

Data and Methods

Data for this study come from wave 5 of the 1996 panel of the Survey of Income and Program Participation (SIPP), collected from July 1997 to October 1997. The sample households in the SIPP are interviewed every four months on a rotation basis for several years, providing data

for the four months preceding the interview month. Wave 5 of the 1996 SIPP includes a topical module that provides detailed information on disabilities of adults and children, along with core data on general demographic, employment, income, and household composition information. The core data file includes monthly information for most variables during the four-month reference period.

Our study focuses on families rather than households as the unit of analysis. Some households in the SIPP data include more than one family unit: the primary family and an additional unit that is called a related subfamily or an unrelated subfamily depending on the relationship of the subfamily head to the household head. We treat both related and unrelated subfamilies as independent family units, and focus on all units that include a mother and a child under age 18.² Treating subfamilies separately from primary family units is important for our analysis comparing married and single mothers, because a sizable proportion of single mothers live with their parents or other adults, mostly as related subfamily units (Hartmann and Spalter-Roth 2003; London 2000).³ Including only those single mothers who are the head of the household (and hence belong to the primary family unit), as many studies do, would result in excluding many single mothers who tend to be younger, have fewer children, and report a work disability (London 2000).

Although our analysis focuses on each sub-level family unit of mothers and children, we incorporate both household-level and primary family-level information, for example, by including the number of adults in the whole family or in the household. We restrict our sample of mothers to those who are between the ages of 18 and 64, since labor force behaviors and the effect of

² Mothers include biological mothers, stepmothers, adopted mothers, or other related or unrelated adults who are the guardians of children under age 18.

³ London (2000), using 1990 SIPP data, shows that 62 percent of single mothers live independently, 16 percent live with their parents, 12 percent cohabit with unrelated men, and 11 percent live with other adults. Hartmann and Spalter-Roth (2003), using several panels of the SIPP (1986-1990), show similar patterns among low-income single mothers as London: 16 percent live with parents and 21 percent live with other adults.

government support programs can be quite different for mothers over age 65. The resulting sample comprises 11,359 mothers in total, with 7,879 married mothers and 3,480 single mothers.

The SIPP topical module on disability contains a series of questions measuring adults' ability to perform major life activities or social roles including employment, and questions about children's ability to perform age-appropriate functions. Our study follows the definitions of disability and severe disability used by the Census Bureau in analysis of the same SIPP data (McNeil 2001). Respondents who report having difficulty in performing one or more activities covered by the survey are defined as having a disability. The severity is determined with a follow-up question asking the level of difficulty or the need for help in performing a specified task. The kinds of activities or functional limitations measured for adults' disability status (age 15 and older) are as follows: physical/mobility limitations (e.g., difficulty in lifting, walking, use of a wheelchair, a cane, crutches, or a walker, etc.); limitations in communication ability (e.g., difficulty in seeing, hearing, or speaking); difficulty with activities of daily living (ADLs such as eating, dressing, bathing, etc.); difficulty with instrumental activities of daily living (IADLs such as going outside the home, getting around inside the home, preparing meals, etc.); and mental, emotional, and social problems that interfere with everyday activities (e.g., mental retardation, learning disability, autism, cerebral palsy, etc.). For adults, the survey also asks about difficulty in finding and remaining in a job due to long-lasting mental or physical conditions. For children under age 6, developmental questions are asked (e.g., difficulty in moving arms or legs, difficulty in walking, running, or playing), while children aged 6 and older (up to 19) are asked about difficulty in school-related activities and a set of questions about mobility and communication limitations, ADLs, and mental and emotional problems similar to those asked of adults.

From the rates of overall disability and severe disability, we define two levels of disability among mothers and children: moderate and severe disability. Mothers and children who have a

disability but whose disability is not categorized as severe are defined as having a moderate disability. As for the types of disabilities, we focus on disabilities in three broad domains: limitations in communication ability (hereafter “communication disability”), limitations in physical mobility (“physical disability”), and mental/social/emotional problems (“mental disability”).

Using these definitions of disability, our paper first discusses the prevalence of disabilities among mothers and children. In order to compare the impact of disability between single and married mothers, our descriptive analyses present various demographic, family, and economic characteristics of single and married mothers. These analyses provide an overall picture of differences not only between single and married mothers, but also between mothers who have a disability and those who do not within each family type.

In our multivariate analyses examining the impact of disabilities on mothers’ work participation, we consider two related but distinct logit models. Since wave 5 of the SIPP provides mothers’ employment status for each month during the four-month reference period, the first model estimates the likelihood of the mother working in any of the four months preceding the survey (E). In the second model, we examine three possible employment outcomes: the mother has worked all four months and all weeks in each month (E_1), the mother has worked some weeks in the four months but not continuously (E_2), and the mother has not worked at all (E_0). The first model is intended to examine the extent to which disabilities among mothers and children are related to participating at all in the workforce, while the second model explores potential differences in mothers’ labor force attachment or their abilities to maintain employment in relation to disabilities as well as other individual and family characteristics. It is important to distinguish continuous employment (whether it be part-time or full-time) from sporadic or

interrupted patterns of employment among mothers,⁴ because different levels or types of disabilities and the ages of children with disabilities may impose varying degrees of impediments to mothers' employment. These two models can be described by the following functional forms:

$$(1) \text{Ln} \left(\frac{P_E}{1 - P_E} \right) = \hat{a}_0 + \hat{a}_1 \text{MODIS} + \hat{a}_2 \text{CHDIS} + \hat{a}_3 \text{IND} + \hat{a}_4 \text{FAM} + \hat{a}_5 \text{LOCAL} + \hat{a}$$

$$(2) \text{Ln} \left(\frac{P_{E_i}}{P_{E_0}} \right) = \hat{a}_{0i} + \hat{a}_{1i} \text{MODIS} + \hat{a}_{2i} \text{CHDIS} + \hat{a}_{3i} \text{IND} + \hat{a}_{4i} \text{FAM} + \hat{a}_{5i} \text{LOCAL} + \hat{a}_i$$

where $\sum_{i=0}^2 P_{E_i} = 1$.

Models (1) and (2), which represent binary and multinomial logistic regression models, respectively, are estimated using maximum likelihood methods. Along with measures for disabilities among mothers (*MODIS*) and children (*CHDIS*), we analyze the effects of the following covariates: individual characteristics (*IND*) such as age, education, race/ethnicity; family characteristics (*FAM*) such as ages of healthy children, presence of other adult members, husband's earnings and disability status (for married mothers); and local economic and policy variables (*LOCAL*) that include state-level unemployment rates and maximum welfare benefits available for a family of three.

Results

Descriptive Analyses

Prevalence of Disability among Mothers and Children

Among all mothers in our SIPP sample ($n = 11,359$), about 14 percent have a disability of some kind and 8 percent have a severe disability. Compared with married mothers, single

⁴ Although the four-month period in wave 5 may not provide a sufficient timeframe to fully analyze these two differing qualities of employment, we believe the two measures of work participation—working all weeks in four months versus working only some time during the four-month period—can indicate potentially distinct types of employment among the mothers under study.

mothers are almost twice as likely to have a disability—21 percent of single mothers versus 11 percent of married mothers. The overall rate of severe disability is also more than twice as high for single mothers (13 percent) as for married mothers (6 percent). Importantly, the rates of disability are closely associated with family income level. As Figure 1 shows, the disability rate is high among mothers with lower family income⁵ and is especially high among those mothers who received welfare benefits during the reference period of the survey. For example, more than one-third of both married and single mothers who received welfare benefits have a disability of some kind, and the disability rate among welfare recipients is nearly (or more than) three times greater than the rate among higher-income mothers. Likewise, one-quarter of both married and single mothers who received welfare benefits have a severe disability, a rate of severe disability that is about five times that of higher-income mothers.⁶

Similar patterns are found for children's disabilities by family type and by family income level. Overall, about 13 percent of all mothers have at least one child with a disability, and about 7 percent have a child with a severe disability. Compared with married mothers, single mothers are more likely to have at least one child with a disability (16 percent of single mothers versus 11 percent of married mothers), and are more likely to have a child with a severe disability (10 percent of single mothers versus 6 percent of married mothers). As Figure 2 shows, the rates of child disability and severe child disability are also higher for low-income mothers and highest for mothers receiving welfare benefits.

⁵ Family income here refers to the total family income including both primary family and related subfamily incomes, and is averaged over the four-month reference period for wave 5 of the 1996 SIPP. Higher-income families are those whose total family incomes are twice or above twice the official poverty line; low-income families are those whose family incomes are below twice the official poverty line, excluding those who received welfare benefits during the reference period.

⁶ There is no statistically significant difference by family type in the rates of both overall disability and severe disability among mothers receiving welfare benefits.

Among mothers who have any type of disability, physical disabilities are most commonly reported, at an overall rate of 56 percent. About 32 percent of mothers have mental, social, or emotional problems that interfere with daily activities (“mental” disabilities), and 21 percent report having communication disabilities. The rates for physical and communication disabilities are quite similar between single and married mothers, while single mothers are significantly more likely to have mental disabilities than married mothers (38 percent versus 28 percent). Many mothers reporting disability have more than one type of disability. Panel A of Table 1 shows that single mothers are more likely than married mothers to have disabilities in two or three domains (25 percent of single mothers and 18 percent of married mothers). Mothers in low-income families (not receiving welfare benefits) and mothers receiving welfare benefits are also more likely to have multiple types of disabilities (22 percent and 31 percent respectively) than mothers in higher-income families (16 percent; data not shown).

With respect to the types of children’s disabilities, of all single and married mothers who have children with disabilities, more than half (57 percent) have at least one child with a mental disability, and about half of these families include children with a learning disability. About 26 percent of mothers have children with physical disabilities, and about 23 percent have children with communication disabilities. Panel B of Table 1 shows that approximately 16 percent of children with disabilities have multiple disabilities. An additional 15 to 18 percent of children are reported as having other physical, mental, or learning conditions that limit school work, which are not identified by the three disability domains used in this study. There is no significant difference between single and married mothers in the type or the number of children’s disabilities.

Demographic and Economic Characteristics of Single and Married Mothers

Before examining the impact of disability on work participation between single and married mothers, we consider various demographic, family, and economic characteristics between single and married mothers, and by their disability status within each family type (Table 2). The overall rate of work participation is very similar between single and married mothers, with nearly three-quarters of them having participated in the labor force during the reference period and over half of them having worked all weeks during that period. Yet, single and married mothers differ to a great extent in their demographic and economic characteristics. Single mothers comprise a higher proportion of African Americans than married mothers (33 percent versus 7 percent). Single mothers are also less likely than married mothers to have completed high school and to have a college degree. Family incomes indicate that nearly 70 percent of single mothers belong to the low-income category, compared with only about 30 percent of married mothers. Almost 20 percent of single-mother families receive welfare benefits, whereas very few married-mother families do so (less than 2 percent).

As for other family characteristics, the average number of children is similar between single and married mothers, but as discussed earlier, single mothers are more likely than married mothers to have a child with a disability or a severe disability. Consistent with other studies, single mothers are more likely than married mothers to be part of related or unrelated subfamilies: 15 percent of single mothers live as related subfamily units, compared with only 2 percent of married mothers.⁷ Partly due to higher rates of subfamily units among single mothers and partly due to those women living with unmarried partners, nearly one-third of single mothers (32 percent) have other adults in the family.

⁷ A closer look at the SIPP data indicates that mothers in related subfamilies tend to be young mothers who are living with their parent(s) or other relatives. For example, the average age for single mothers living in primary family units is 36.1; for those living in unrelated subfamily units, 32.8; and for those living in related subfamily units, 27.7.

In addition to these differences between single and married mothers overall, there are several notable differences by the mother's disability status within each family type. The rate of work participation is substantially lower for women with a disability than for those without a disability, for both single and married mothers. But the difference by disability status is greater among single mothers than married mothers (see Table 2). Among mothers who do not have a disability, single mothers are more likely to work than married mothers (79 percent versus 74 percent); among mothers who have a disability, however, single mothers are significantly less likely to work than married mothers (50 percent versus 58 percent). These statistics suggest that mothers' own disability status has a considerable dampening effect on work effort among both single and married mothers, but this effect of disability is likely to be greater among single mothers than married mothers.

Other statistics presented in Table 2 suggest that both single and married mothers who have a disability also have personal and family characteristics that are likely to be obstacles to work participation and potentially to continuous employment. For instance, although single mothers overall have lower levels of education than married mothers, both single and married mothers who have a disability are less likely to have a high school diploma or a college degree than their counterparts without a disability. The overall educational level for married mothers with a disability, however, is still higher than that for single mothers with a disability.

The average number of total children is similar between single and married mothers overall, and also between those who have a disability and who do not within each family type. Yet, for both single and married mothers, mothers with a disability are significantly more likely than their healthy counterparts to have at least one child who also has a disability. Among single mothers, 30 percent of those with a disability have at least one child with a disability, compared with only 12 percent of other single mothers without a disability. Likewise, 25 percent of married

mothers with a disability have a child with a disability, compared with only 10 percent of married mothers who do not have a disability. That is, mothers who have disabilities themselves are approximately two and a half times as likely to have a child with a disability as mothers who do not have a disability, similarly for single and married mothers.⁸ In addition, mothers who have a disability of their own are much more likely to have a child with a severe disability, and also to have more than one child with a disability. In terms of the ages of children with disabilities, both single and married mothers are most likely to have children with disabilities at ages of 6 to 14.

In addition to children's disability, mothers with a disability, especially married mothers, are more likely than those without a disability to live with adult family members who also have a disability: among married mothers with a disability, more than one-third (36 percent) have another adult family member with a disability, compared with only 11 percent among married mothers without a disability. For married mothers, many of these adult family members with a disability are their husbands, but some are family members other than husbands. This is related to the fact that married mothers with a disability are more likely to live with other family members besides their husbands, compared with married mothers without a disability. For single mothers, although they are in general more likely than married mothers to live with other family members, single

⁸ Among researchers examining the relationship between disability and labor force participation, there is a concern with bias caused by endogeneity: for example, individuals may incorrectly report or overestimate disability of their own or of family members because they may rationalize their non-working status by exaggerating their health conditions or caring burdens for other family members, or because they have economic incentives to do so if they receive government benefits contingent upon disability (e.g., Parsons 1982; Powers 2001; Stern 1989). Some researchers argue that self-reported disability status in particular tends to be associated with financial incentives (Kubik 1999; Parsons 1982). But others show that the problem of endogeneity is rather small and that the standard health questions asked in many data sets provide good proxies in assessing the impact of disability on labor force participation (Stern 1989; see also Powers 2001). With self-reported disability questions, there can also be a problem of reliability. The SIPP is no exception to this problem. According to McNeil (2000), while the problem of reliability can be serious in SIPP data if individual measures of disability status are used, using a summary measure of disability status reduces the reliability problem and provides the most accurate measure of the aggregate number of individuals with a disability. In our research, therefore, we focus on summary measures of disability and severe disability that are based on a series of questions asking about limitations in various individual activities.

mothers with a disability are no more likely to have other adults in the family than single mothers without a disability.

The high incidence of disability within the family for mothers who have a disability of their own is likely to be associated with their poor economic circumstances.⁹ Even though married-mother families are in general better off than single-mother families, the mothers who have a disability in each family type are much more likely to be low income and to receive government income support. Among married mothers, 40 percent of those with a disability are low income compared with only 28 percent of those without a disability. A similar pattern is indicated among single mothers as well, but the percentage of single mothers with a disability who are low income is more than twice as large as the percentage of their married counterparts (82 percent versus 40 percent). Accordingly, single mothers with a disability are most likely to receive welfare benefits or SSI compared with their married counterparts or other single mothers: about one-third of these single mothers receive welfare benefits. But the rate of SSI receipt is quite low even for these single mothers with a disability—15 percent for themselves and 7 percent for their children—given that nearly 30 percent of these mothers also have at least one child with a disability and 18 percent have a child with a severe disability.

In view of these varied family and economic situations facing single- and married-mother families, we examine next how the disability status of mothers and children influences mothers' work participation using multivariate methods. We particularly focus on whether there are differential effects of disability and other factors between single and married mothers.

⁹ There is a large body of literature illustrating a close relationship between health and socioeconomic status (SES) such as education, income, and occupation, although it is often difficult to untangle the causal direction between the two (Smith 1999). Studies emphasizing the importance of SES for health status argue that poor health among low-income people is not merely due to limited access to health care but is also closely associated with their social, psychological, and physical environments including working conditions, social support networks, housing quality, environmental safety, etc. (Adler and Ostrove 1999; Arno and Figueroa 2000).

Multivariate Analyses

Work Experience

Tables 3 and 4 present the results from logistic regression models of having any work experience during the survey's reference period for single and married mothers, respectively. Each table shows three models that include different combinations of child disability and child age, along with the mother's disability status. Model 1 includes only mothers' disability status variables and Model 2 adds children's disability status variables. While both Models 1 and 2 control for the presence of children by age regardless of their disability status, Model 3 incorporates both children's disability status and their ages. All three models in the tables also include other individual, family, and local context variables.

All three models indicate that a mother's disability status is an important determinant of work participation among both single and married mothers. Having a severe disability significantly reduces the likelihood of paid work, and this effect is greater for single than married mothers. A moderate level of disability also has a significant negative impact on work participation among single mothers, but not among married mothers. In other words, single mothers' work participation is influenced even by a moderate level of disability to a greater extent than is married mothers' participation. This finding is in line with descriptive statistics showing that single mothers without a disability have a greater rate of work participation than their married counterparts, whereas single mothers who have a disability are less likely to work than their married counterparts. It could be the case that single mothers with a moderate disability—the vast majority of whom belong to the low-income population—are eligible for income support through TANF or SSI, making it feasible for them not to work. Single mothers may also have more chronic types of disabilities—even if they are moderate—that prevent them from working. Our earlier descriptive statistics indicate that single mothers more often have multiple disabilities than

married mothers, especially those including mental and physical disabilities (see Table 1). A relative lack of adult social support among single mothers compared to married mothers may also impede their ability to work when they have a disability. When we include the types of disabilities to our regression Model 1 (model not shown), single mothers with physical disabilities are significantly less likely to work than single mothers who have other types of disabilities or who do not have a disability, controlling for the severity of disability. Among married mothers, on the other hand, those with communications disability are significantly less likely to work than others (model not shown).

Once we control for mothers' disability status, the variables for child disability included in Model 2—moderate disability and severe disability—do not show any significant impact on work participation among both single and married mothers, nor do they reduce the size of the effect of mothers' own disabilities. When we exclude the variables measuring mothers' disability status, child disability variables are significant for both single and married mothers (models not shown), but these effects disappear once we include mothers' disability variables. This suggests that there is a close association between mothers' and children's disabilities, with the mother's own disability status having a more direct impact on her work status. (Note that mothers are more likely to have a disability than are children.) But the presence of children, regardless of their disability status, has an important bearing upon mothers' work participation. Consistent with other literature on the impact of children on mothers' labor supply, having pre-school (age 0-5) or younger school-age (age 6-14) children has significant negative effects on work participation by both single and married mothers (Models 1 and 2 in Tables 3 and 4). Having older children (age 15-17) facilitates work participation among married mothers, while it has no significant effect among single mothers.

We look at the impacts of children separately by age and disability status in Model 3. For single mothers, having any healthy pre-school or younger school-age children significantly lowers their likelihood of participating in the workforce. Older healthy children, on the other hand, do not have a significant influence on single mothers' work participation. Once we control for the presence of healthy children, having younger school-age children (age 6-14) with a disability has an additional, significant negative effect on single mothers' work participation. Given an already large negative effect of pre-school healthy children, pre-school children with disabilities do not have any additional impact on single mothers' work participation.

For married mothers, having healthy young—both pre-school and younger school-age—children similarly reduces their work participation. In contrast to single mothers, however, having older healthy children significantly increases married mothers' work participation, as we predicted. The difference in the effect of older healthy children between single and married mothers seems to suggest that older children ease mothers' caregiving burdens and increase their work participation only when there is another primary adult in the family, like a spouse. Teenagers may not need the kinds of caregiving as younger children, but they may still require parental attention and emotional support from mothers; as a result, unless there are other primary adults in the family, the presence of teenagers may not facilitate the work participation of single mothers. As for the effects of disabled children among married mothers, again unlike single mothers, having pre-school children with a disability (not younger school-age children with a disability) has an additional strong negative effect on work participation. This suggests a greater option among married mothers to stay home when they have pre-school children with a disability.

In addition to disability-related variables, there are other factors that are important determinants of mothers' work participation. In particular, education is a highly significant factor for both single and married mothers' work: the higher the mother's education level, the more

likely she is to work even when all other characteristics are equal. That is, even when the mother has a disability, highly-educated mothers—whether single or married—are more likely to work than the mother who has only a high school diploma, and high school graduates with a disability are still significantly more likely to be working than mothers who have not completed high school and who have a disability. Importantly, the effect of education is greater for single mothers than for married mothers. The odds of work participation by single mothers with a college degree is 3.5 times ($= e^{1.26}$) greater than the odds for single mothers only with a high school diploma (our reference category), holding all other characteristics equal. The comparable effect of a college degree among married mothers is a factor of 2 ($= e^{0.70}$).

Race and ethnicity show diverging effects between single and married mothers. Among single mothers, African Americans (non-Hispanic) are less likely than whites to work, and Hispanics are also less likely to work than whites, controlling for all other characteristics. In contrast, African-American married mothers are significantly more likely than white married mothers to work, all other characteristics being equal, whereas Hispanic married mothers are less likely to work than their white counterparts.

As for the influence of other family configurations, we expected that having other adults in the family would facilitate mothers' work participation by providing potential child care and other support, especially for single mothers. Our results do not provide support for this hypothesis for either single or married mothers. Unlike our expectation, the coefficient is negative rather than positive, and it does not reach the level of significance. Even when we include a variable for only healthy adults in the family, the results are the same. Having other adults in the family may provide two offsetting effects for mothers' work participation: while these adults can provide social support for mothers' work with child care, they can also provide income that lessens the need for paid work among single mothers. In fact, our data show that single

mothers who live as related subfamilies are less likely to work than others, suggesting that they are usually supported by their primary family members, mostly their parents. In a similar vein, for married mothers, husbands' earnings have a significant negative impact on their work participation: married mothers whose husbands have high earnings are significantly less likely to work than those whose husbands have low earnings, controlling for other factors.

With respect to the importance of local factors, as expected, local unemployment rates have a highly significant influence on the likelihood of both single and married mothers' work participation: the higher the unemployment rate, the less likely the mother is working. States' maximum TANF benefits (the amount available for a family of three) have diverging effects between single and married mothers. There is no significant effect of state-level TANF benefits on single mothers' work participation, whereas these benefit levels are positively associated with married mothers' work participation. The positive effect seems to reflect the fact that states with more generous income support programs tend to be more committed to other state policies or programs (e.g., Head Start or Pre-K programs) that can foster mothers' employment (Meyers, Gornick, and Peck 2001). And two-parent families may have more flexibility to take advantage of these benefits than one-parent families. Married mothers who live in metropolitan areas are significantly less likely to be in the workforce than those who do not live in a metro area. For single mothers, however, metro residence does not have a significant impact on their work participation.

Work Patterns: Continuous Work, Partial Work, or No Work

While the analyses above illustrate how mothers' general work experience is related to their own disability status and the disability status of their children, as well as to many other factors, questions remain regarding the impact of disabilities on mothers' ability to maintain

steady employment. As shown earlier, 73 percent of single mothers overall have work experience, but only 58 percent worked continuously over the four-month survey period (see Table 2). In order to understand the factors associated with different patterns of work participation, this section examines two types of work experience among mothers: continuous work participation during the four-month survey period versus some but not continuous work participation (hereafter “partial work”). Although a four-month period is by no means sufficient to predict long-term versus short-term work participation, these two different patterns will provide important insight as to how the disability status of mothers and children influences mothers’ employment stability.

Tables 5 and 6 present the results of multinomial logit models for single and married mothers, respectively, that estimate the likelihood of continuous work and the likelihood of partial work, both in reference to not working at all during the survey period. Table 5 shows that African-American and Hispanic single mothers, compared with white single mothers, are significantly less likely to work continuously and are also less likely to have partial work, controlling for other characteristics. The level of education, again, has a highly significant impact on single mothers’ work patterns: those with higher levels of education are more likely to have at least partial work as well as continuous work, rather than not working at all. Holding these demographic and other characteristics constant, single mothers with a disability—either moderate or severe levels—are significantly less likely than healthy single mothers to have continuous work experience. Mothers with a severe disability are also less likely to have any partial work experience. There is no significant effect of moderate disability on single mothers’ partial work, however, indicating that single mothers with a moderate disability are likely to do at least some partial work to the same degree as healthy single mothers, controlling for other characteristics.

As for the effects of healthy children, single mothers with pre-school children (ages 0-5) are significantly less likely to do any type of work—both continuous and partial work. Having younger school-age children (ages 6-14) also has a significant negative effect on mothers' continuous work, but no significant effect on their partial work. Older healthy children, although their coefficients are positive, do not seem to be a significant source of facilitating single mothers' work activities—either continuous or partial work. As for the effects of children with disabilities, only younger school-age children with disabilities have an additional, significant negative effect on single mothers' continuous work, but not on partial work. Importantly, older children with a disability (age 15-17) have a positive influence on single mothers' partial work activity. This seems to indicate the combined effects of single mothers' greater economic needs for employment due to having children with a disability, while the older ages of these children impose fewer constraints for engaging in partial work activities.

As for other family and local contexts, having additional adults in the family does not affect single mothers' continuous work participation, but lowers the chances of partial work. Having other adults in the family for single mothers appears to operate more as an income effect, although this assessment will require detailed analyses of income sources for single mothers. With individual and family characteristics being equal, local economic opportunities have a highly important impact in promoting work activities among single mothers, especially their continuous work. Neither the maximum level of states' TANF benefits nor metropolitan residence has any significant influence on single mothers' work participation.

As for married mothers' work patterns (Table 6), there are some similar and diverging effects from single mothers. In contrast to single mothers, African American married mothers are significantly more likely than white married mothers to work continuously, but their likelihood of doing partial work is not different from that of white married mothers. Education, similar to

single mothers, is a highly important factor for married mothers' work participation as well, both continuous and partial work. Disability status among married mothers also has similar effects to those among single mothers. Both moderate and severe levels of disability significantly decrease the likelihood of continuous work among married mothers, with severe disability having a stronger effect; a moderate level of disability has a significant effect only on continuous work.

Similar to single mothers, having healthy pre-school children significantly decreases the likelihood of both continuous and partial work among married mothers, while younger healthy school-age children have a significant negative impact only on continuous work, not on partial work. Having older healthy children, on the other hand, significantly increases the likelihood of married mothers' continuous as well as partial work, whereas we saw that children this age (15-17) have no significant effect on single mothers' continuous work activities. These diverging effects of older healthy children between single and married mothers suggest differential demands on mothers' time of these children depending on the availability of the other parent. The effects of disabled children diverge between married and single mothers as well: for married mothers, pre-school children with disabilities have a strong significant effect that decreases mothers' continuous work activities, whereas for single mothers, younger school-age children with disabilities have a significant negative effect. In contrast to single mothers, having older children with a disability has no association with married mothers' work activities.

As in the case of general work experience, state-level TANF benefits have a significant positive effect, while unemployment rates have a significant negative influence on continuous work as well as partial work among married mothers. And married women living in a metro area are significantly less likely to work either continuously or partially compared with those living in rural areas.

Summary and Conclusion

This paper examined the prevalence of disabilities among mothers and children, and analyzed how these disabilities influence mothers' work participation. Our study paid special attention to whether disabilities of mothers and children have similar or differential effects on work participation between single and married mothers. Our descriptive analyses illustrate that disabilities of mothers and children are more prevalent in the low-income population than in the higher-income population, and among single-mother families than married-mother families. While single mothers are overall more likely to face challenges in their economic circumstances than married mothers, mothers with a disability—regardless of their family type—are more likely than mothers without a disability face poor economic situations and multiple barriers to work participation. Both single and married mothers who have a disability tend to have lower levels of education and lower family income than their counterparts without a disability. Importantly, single and married mothers with a disability are also more likely to have children with disabilities.

The results of multivariate analyses demonstrate that mothers' own disability status has a profound impact on whether they are likely to work—either continuously or partially—during the four-month period examined in our study. In particular, severe disability has a large direct impact on work participation for both single and married mothers. This close association between mothers' disability and work participation has important implications for current welfare legislation. Since a relatively large proportion of low-income mothers, especially those receiving welfare benefits, have a severe disability that makes it difficult for them to maintain steady employment, federal work requirements and time limits have a tremendous impact on the economic well-being among this segment of the population. States are allowed to exempt 20 percent of their caseloads from these requirements, including people with severe disabilities, but

these exemption criteria appear to be insufficient given that many welfare-recipient mothers also have children with severe disabilities.

Our analyses incorporating disabilities of children as well as those of mothers demonstrate that child disability also has a significant impact on mothers' work participation, but the extent is not as great as a mother's own disability. This somewhat lesser impact of child disability is in large part because mothers' work participation is already constrained greatly by the presence of young children. Nevertheless, having a child with a disability imposes an additional burden on mothers in ways that hinder their continuous work participation, but this impact varies between single and married mothers. For married mothers, pre-school children (age 0-5) with disabilities create a serious additional barrier to their work participation, whereas for single mothers, younger school-age children (age 6-14) with disabilities exert an additional constraint. While younger school-age children, compared with pre-school children, usually require less care from mothers, it may not necessarily be the case for single mothers with disabled children of school age, because they are usually the only caregiver who can meet the special needs of these children, for instance, by taking the children to special schools, helping them with extra school work, etc. Having older children with a disability, on the other hand, increases the likelihood of at least partial work activities among single mothers, suggesting a greater economic necessity for work among single mothers combined with perhaps less intensive caregiving required for older children with a disability.

Many previous studies examining the impact of child disability on mothers' labor supply have shown somewhat inconsistent results between single and married mothers. Our study incorporating the ages of children both with and without a disability indicates similar but somewhat diverging effects of child disability between single and married mothers. Disability among young children (pre-school or younger school-age children) has a significant negative

impact on both married and single mothers' work participation, but the magnitude of this effect is greater for married mothers than single mothers once we account for the negative effect of other young healthy children. The negative impact of younger children overall—both children who are healthy and those who have a disability—demonstrates the general caregiving burden faced by mothers when making the decision to work. This caregiving burden tends to be greater for mothers who have children with disabilities, although the additional burden associated with the particular age group of children differs between single and married mothers. Without appropriate provisions for child care that can accommodate not only healthy children but also children with special care needs, it may not be possible for many mothers to seek and maintain employment. Given the high percentage of welfare recipients who have children with disabilities, it will be extremely important to identify the individual support needs of these families when imposing work requirement policies.

While we expected certain family configurations or living arrangements would provide some social support for mothers' work participation, particularly among single mothers, our study lends only weak support to this hypothesis. Having older healthy children does not have a significant impact on single mothers' work participation, while having older children with a disability shows some significant effect but only for partial work among single mothers. For married mothers, the presence of older healthy children is significantly associated with mothers' work participation. In contrast, having other adults in the household does not have an effect that facilitates the work participation of either single or married mothers.

Lastly, our analyses illustrate strong, consistent effects of education and local economic environments. Most of all, education is a highly significant factor that increases mothers' work activities, regardless of their disability status. Having education and advanced skills is important for the low-income population in getting high-wage jobs that can provide stable employment

(Deprez, Butler, and Smith 2002; Gittell et al. 1996; Strawn and Martinson 2000). It may be even more important for mothers with a disability because high-wage jobs, rather than low-wage jobs, are likely to provide health coverage and other benefits such as flexible schedules or sick leave that are crucial for women with health problems or women who have children with disabilities (Heymann and Earle 1999).

The research presented here explored several key aspects of disabilities among mothers and children to examine their impacts on mothers' work participation. While our study demonstrates that mothers' severe disability is a serious barrier to employment, some mothers with a moderate disability work and may need to work out of economic necessity. It will be important to further investigate whether different types of disabilities, in addition to the level of severity, have varying impacts on mothers' steady employment and, if so, how and why. This will be especially important for welfare recipients who have a moderate level of disability, so that potential support and training services can be developed to help their steady employment.

While our study was confined to data from wave 5 of the 1996 SIPP in examining different kinds of work activities among single and married mothers, we need to examine a longer period of time to gain a better understanding of how disabilities among mothers and children influence mothers' long-term participation in the labor force. Future research utilizing data from the full 1996 panel of the SIPP will provide a clearer picture of how mothers' continuous work participation is associated with disabilities as well as other factors. In future research, it will also be important to look at the kinds of jobs held by mothers with disabilities, to examine how certain job characteristics foster mothers' steady employment, and to identify the kinds of workplace policies that can accommodate the needs of workers who have disabilities.

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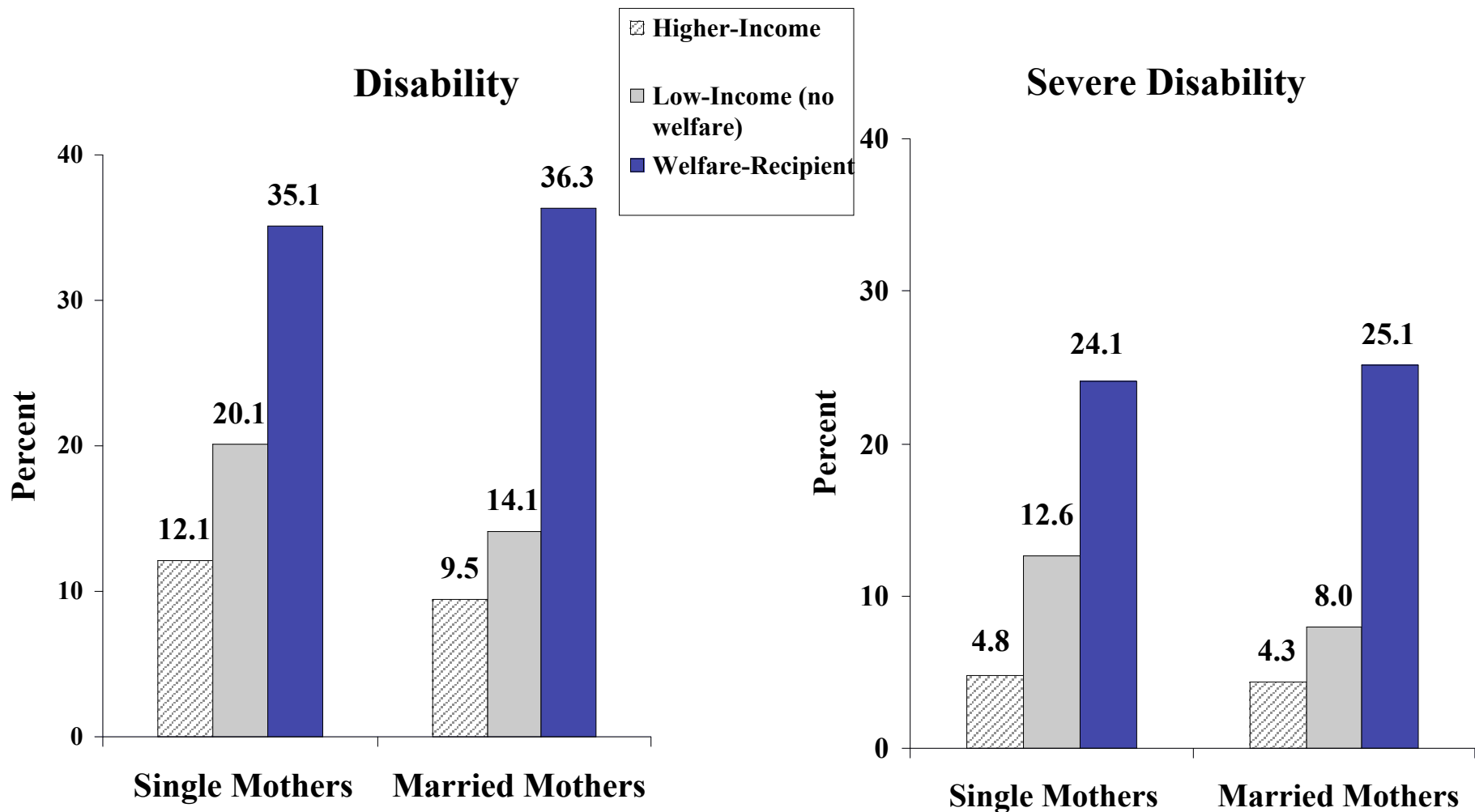
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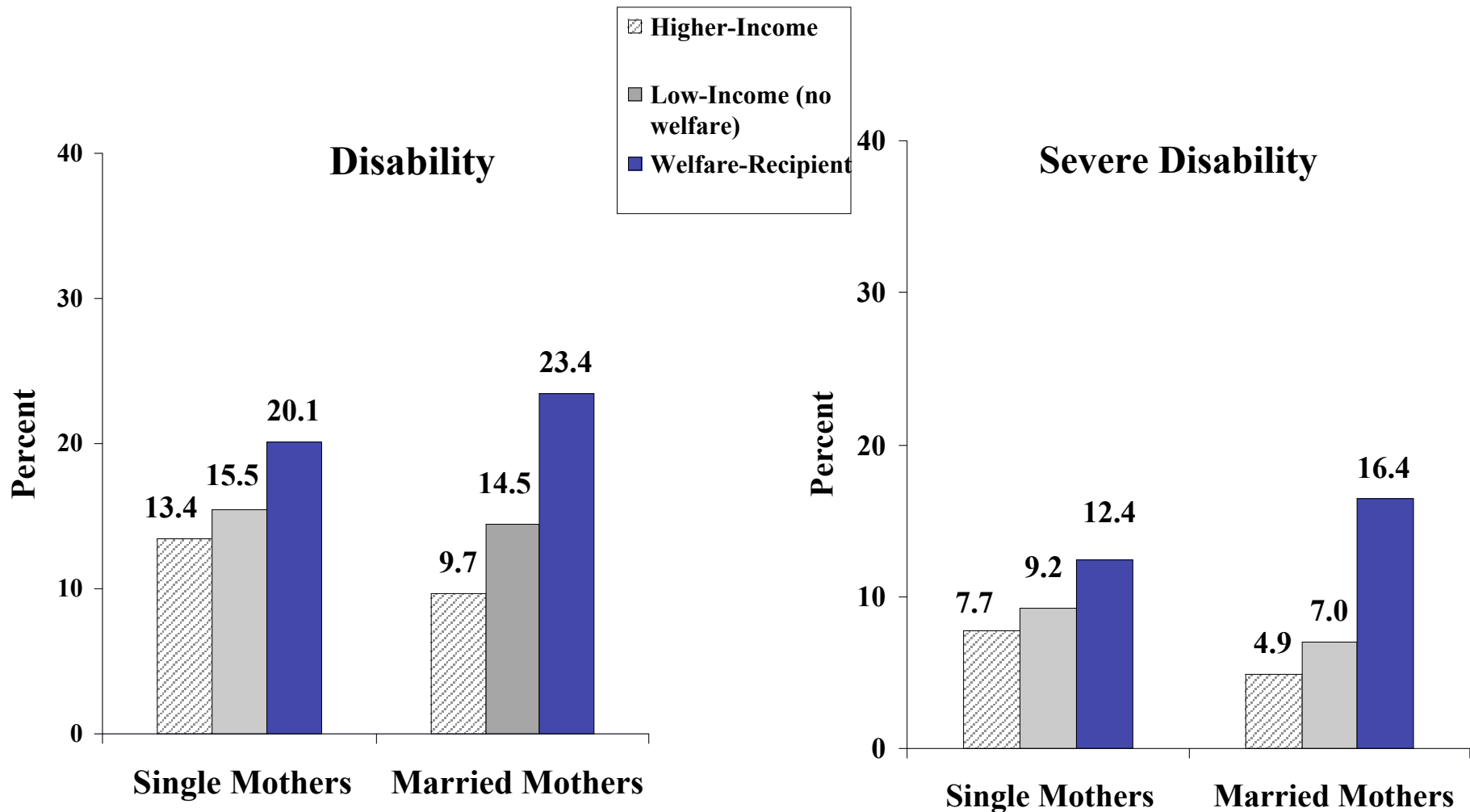
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Figure 1. Disability and Severe Disability Rates Among Single and Married Mothers by Income Level



Source: Authors' calculations based on data from the 1996 panel of the Survey of Income and Program Participation, wave 5, collected in July-October 1997.

Figure 2. Children's Disability and Severe Disability Rates Among Single and Married Mothers by Income Level



Source: Authors' calculations based on data from the 1996 panel of the Survey of Income and Program Participation, wave 5, collected in July-October 1997.

Table 1. Types of Disabilities among Mothers and Children

	Single Mothers	Married Mothers
A. Mothers' Disabilities (%)	(N = 761)	(N = 945)
In one domain	60.9	63.3
Communication	10.2	9.6
Physical	32.6	38.3
Mental	18.1	15.4
In two domains	19.7	15.2
Communication & physical	5.8	5.8
Communication & mental	1.4	1.3
Physical & mental	12.5	8.1
In three domains	5.6	3.2
Others not identified	13.9	18.2
Total	100.0	100.0
B. Children's Disabilities (%)	(N = 680)	(N = 1,079)
In one domain	65.5	64.0
Communication	7.5	8.6
Physical	17.9	15.4
Mental	40.1	40.0
In two domains	12.5	12.3
Communication & physical	1.2	0.9
Communication & mental	8.9	7.8
Physical & mental	2.4	3.6
In three domains	3.1	3.5
School-related (unrelated to three domains)	15.2	17.6
Others not identified	3.7	2.7
Total	100.0	100.0

Note: Percentages are based on weighted data; sample sizes are unweighted totals.

Source: Authors' calculations based on data from the 1996 panel of the Survey of Income and Program Participation, wave 5, collected in July-October 1997.

Table 2. Characteristics of Single and Married Mothers by Disability Status

	Single Mothers			Married Mothers		
	With Disability (N=749)	Without Disability (N=2,731)	Total (N=3,480)	With Disability (N=919)	Without Disability (N=6,960)	Total (N=7,879)
Work Status (%)						
Worked in reference period	50.4	79.2	73.2	58.1	73.8	72.1
Worked all weeks	34.9	63.5	57.5	40.0	60.2	57.9
Worked some weeks	15.5	15.7	15.7	18.1	13.6	14.2
Did not work	49.6	20.8	26.8	41.9	26.2	27.9
Age (mean)	37.6	33.8	34.6	38.9	36.1	36.4
Race (%)						
White (non-Hispanic)	51.8	48.6	49.3	73.4	75.1	74.9
African American (non-Hispanic)	30.2	34.3	33.4	10.7	6.8	7.3
Hispanic	14.0	13.9	13.9	10.3	13.0	12.7
Asian/other	4.0	3.2	3.3	5.6	5.1	5.1
Education (%)						
Less than high school	32.0	18.2	21.1	19.1	9.5	10.5
High school	34.7	36.3	36.0	34.2	31.2	31.6
Some college	26.8	34.9	33.2	31.4	32.4	32.3
College or more	6.4	10.6	9.8	15.3	26.9	25.6
Children's Characteristics						
Number of children (mean)	1.8	1.7	1.7	1.9	1.9	1.9
% with disabled children	29.5	12.2	15.8	25.4	9.5	11.3
% with severely disabled children	18.4	7.1	9.5	14.1	4.7	5.7
% with one disabled child	22.1	10.5	13.0	20.3	8.2	9.5
% with two or more disabled children	7.4	1.7	2.9	5.2	1.3	1.7
% with disabled children						
age 0-5	3.8	1.9	2.3	1.6	1.0	1.0
age 6-14	21.2	8.4	11.1	18.0	7.0	8.2
age 15-17	7.5	2.8	3.8	7.5	1.9	2.5
% with healthy children						
age 0-5	33.1	42.5	40.5	32.9	47.1	45.5
age 6-14	50.0	54.7	53.7	56.3	59.1	58.8
age 15-17	26.8	21.8	22.9	28.2	22.9	23.5

(Table 2 continued)

	Single Mothers			Married Mothers		
	With Disability (N=749)	Without Disability (N=2,731)	Total (N=3,480)	With Disability (N=919)	Without Disability (N=6,960)	Total (N=7,879)
Family Characteristics						
% Primary family	85.0	78.9	80.2	97.6	98.2	98.1
% Related subfamily	11.5	16.5	15.4	2.4	1.7	1.8
% Unrelated subfamily	3.5	4.6	4.4	0.0	0.1	0.1
% with other adults in family (except husband)	31.5	31.8	31.7	25.1	18.9	17.9
% with 1 additional adult in family (except husband)	19.3	17.9	18.2	18.2	12.4	13.1
% with 2 or more adults in family (except husband)	12.3	13.9	13.5	6.9	4.6	4.8
% with other disabled adults	13.1	10.8	11.3	36.3	11.0	13.3
Family Income Characteristics						
Total family income (mean) ^a	\$1,366	\$1,779	\$1,693	\$4,084	\$5,177	\$5,054
Total family income (median) ^a	\$1,000	\$1,400	\$1,314	\$3,300	\$4,137	\$4,032
% in higher-income population ^b	18.1	34.9	31.4	59.8	72.5	71.1
% in low-income population ^b	81.9	65.1	68.6	40.2	27.5	28.9
% receiving welfare benefits	33.6	15.1	18.9	5.5	1.1	1.6
% receiving SSI for self	15.1	1.2	4.1	4.3	0.2	0.6
% receiving SSI for children	7.1	2.5	3.5	1.9	0.5	0.7

Note: Percentages are based on weighted data; sample sizes are unweighted totals.

^a This family income is calculated using total family income separately for primary family and related subfamily units.

^b Higher income refers to combined total family income for primary family and related subfamily units that is twice or above twice the official poverty line. Low income refers to combined total family income that is below twice the official poverty line and includes welfare recipients.

Source: Authors' calculations based on data from the 1996 panel of the Survey of Income and Program Participation, wave 5, collected in July-October 1997.

Table 3. Logistic Regression Models for Work Participation among Single Mothers

	Model 1		Model 2		Model 3	
	Coefficient	(SE)	Coefficient	(SE)	Coefficient	(SE)
Constant	0.66	(0.91)	0.66	(0.91)	0.64	(0.91)
Age	0.15 **	(0.05)	0.15 **	(0.05)	0.15 **	(0.05)
Age ² /100	-0.18 **	(0.06)	-0.18 **	(0.06)	-0.19 **	(0.06)
Race and Ethnicity						
White	----	----	----	----	----	----
African American	-0.65 ***	(0.14)	-0.66 ***	(0.14)	-0.64 ***	(0.14)
Hispanic	-0.55 **	(0.18)	-0.57 **	(0.18)	-0.55 **	(0.18)
Asian/other	-0.16	(0.34)	-0.17	(0.34)	-0.16	(0.34)
Education						
Less than high school	-0.91 ***	(0.15)	-0.91 ***	(0.15)	-0.91 ***	(0.15)
High school	----	----	----	----	----	----
Some college	0.55 ***	(0.15)	0.54 ***	(0.15)	0.54 ***	(0.15)
College or more	1.29 ***	(0.33)	1.27 ***	(0.33)	1.26 ***	(0.33)
Mother's Disability Status						
No disability	----	----	----	----	----	----
Moderate disability	-0.47 *	(0.21)	-0.45 *	(0.21)	-0.44 *	(0.21)
Severe disability	-2.05 ***	(0.17)	-2.03 ***	(0.17)	-2.03 ***	(0.17)
Presence of Any Children						
Age 0 – 5	-0.60 ***	(0.16)	-0.60 ***	(0.16)		
Age 6 – 14	-0.26 ⁺	(0.15)	-0.23	(0.16)		
Age 15 – 17	0.26	(0.18)	0.26	(0.18)		
Children's Disability Status						
No disability			----	----		
Moderate disability			-0.35	(0.24)		
Severe disability			0.26	(0.29)		
Presence of Healthy Children						
Age 0 – 5					-0.67 ***	(0.16)
Age 6 – 14					-0.29 *	(0.14)
Age 15 – 17					0.22	(0.18)
Presence of Disabled Children						
Age 0 – 5					-0.28	(0.37)
Age 6 – 14					-0.43 *	(0.19)
Age 15 – 17					0.11	(0.34)
Number of Adults in Family	-0.08	(0.06)	-0.08	(0.06)	-0.09	(0.06)
Metro Residence	0.13	(0.16)	0.12	(0.16)	0.12	(0.16)
Local Unemployment Rates	-0.21 **	(0.07)	-0.22 **	(0.07)	-0.21 **	(0.07)
Maximum TANF benefits/100	-0.05	(0.04)	-0.05	(0.04)	-0.05	(0.04)
Maximum Likelihood	3144.41		3140.45		3133.20	
(N = 3,448)						

Note: Standard errors are in parentheses. Results are based on weighted data; standard errors are adjusted for survey design effects. ⁺ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed tests).

Table 4. Logistic Regression Models for Work Participation among Married Mothers

	Model 1		Model 2		Model 3	
	Coefficient	(SE)	Coefficient	(SE)	Coefficient	(SE)
Constant	1.25 ⁺	(0.71)	1.27 ⁺	(0.71)	1.22 ⁺	(0.71)
Age	0.09 [*]	(0.04)	0.09 [*]	(0.04)	0.09 [*]	(0.04)
Age ² /100	-0.15 ^{**}	(0.05)	-0.15 ^{**}	(0.05)	-0.15 ^{**}	(0.05)
Race and Ethnicity						
White	----	----	----	----	----	----
African American	0.49 ^{***}	(0.14)	0.48 ^{***}	(0.14)	0.49 ^{***}	(0.14)
Hispanic	-0.22 [*]	(0.11)	-0.23 [*]	(0.11)	-0.22 [*]	(0.11)
Asian/other	0.06	(0.16)	0.06	(0.16)	0.06	(0.16)
Education						
Less than high school	-0.72 ^{***}	(0.12)	-0.72 ^{***}	(0.12)	-0.72 ^{***}	(0.12)
High school	----	----	----	----	----	----
Some college	0.34 ^{***}	(0.09)	0.35 ^{***}	(0.09)	0.35 ^{***}	(0.09)
College or more	0.67 ^{***}	(0.10)	0.70 ^{***}	(0.10)	0.70 ^{***}	(0.10)
Mother's Disability Status						
No disability	----	----	----	----	----	----
Moderate disability	-0.20	(0.15)	-0.19	(0.15)	-0.19	(0.15)
Severe disability	-1.22 ^{***}	(0.14)	-1.20 ^{***}	(0.14)	-1.21 ^{***}	(0.14)
Presence of Any Children						
Age 0 – 5	-0.78 ^{***}	(0.09)	-0.78 ^{***}	(0.09)		
Age 6 – 14	-0.16 ⁺	(0.09)	-0.15 ⁺	(0.09)		
Age 15 – 17	0.23 [*]	(0.10)	0.24 [*]	(0.10)		
Children's Disability Status						
No disability			----	----		
Moderate disability			-0.12	(0.16)		
Severe disability			-0.06	(0.21)		
Presence of Healthy Children						
Age 0 – 5					-0.76 ^{***}	(0.09)
Age 6 – 14					-0.18 [*]	(0.08)
Age 15 – 17					0.25 [*]	(0.10)
Presence of Disabled Children						
Age 0 – 5					-1.19 ^{***}	(0.32)
Age 6 – 14					-0.09	(0.13)
Age 15 – 17					-0.03	(0.23)
Husband's Disability Status						
Without disability	----	----	----	----	----	----
With disability	0.06	(0.12)	0.08	(0.12)	0.08	(0.13)
Husband's Earnings (logged)	-0.04 [*]	(0.02)	-0.04 [*]	(0.02)	-0.04 [*]	(0.02)
Number of Adults in Family	-0.02	(0.06)	-0.02	(0.06)	-0.02	(0.06)
Metro Residence	-0.26 ^{**}	(0.09)	-0.26 ^{**}	(0.09)	-0.27 ^{**}	(0.10)
Local Unemployment Rates	-0.17 ^{***}	(0.04)	-0.17 ^{***}	(0.04)	-0.17 ^{***}	(0.04)
Maximum TANF Benefits/100	0.07 ^{**}	(0.03)	0.07 ^{**}	(0.03)	0.07 ^{**}	(0.03)
Maximum Likelihood		8607.21		8604.17		8595.27
(N = 7,875)						

Note: Standard errors are in parentheses. Results are based on weighted data; standard errors are adjusted for survey design effects. ⁺ $p < .10$, ^{*} $p < .05$, ^{**} $p < .01$, ^{***} $p < .001$ (two-tailed tests).

Table 5. Multinomial Logit Model for Work Patterns among Single Mothers

	Continuous Work vs. No Work		Partial Work vs. No Work	
	Coefficient	(SE)	Coefficient	(SE)
Constant	-0.87	(0.99)	1.52	(1.19)
Age	0.22 ***	(0.05)	0.02	(0.06)
Age ² /100	-0.27 ***	(0.07)	-0.05	(0.08)
Race and Ethnicity				
White	----	----	----	----
African American	-0.68 ***	(0.14)	-0.65 ***	(0.18)
Hispanic	-0.64 ***	(0.19)	-0.44 ⁺	(0.23)
Asian/other	-0.17	(0.37)	-0.09	(0.44)
Education				
Less than high school	-0.96 ***	(0.16)	-0.80 ***	(0.20)
High school	----	----	----	----
Some college	0.61 ***	(0.16)	0.31	(0.19)
College or more	1.28 ***	(0.34)	1.09 **	(0.38)
Mother's Disability Status				
No disability	----	----	----	----
Moderate disability	-0.52 *	(0.22)	-0.30	(0.28)
Severe disability	-2.42 ***	(0.20)	-1.24 ***	(0.22)
Presence of Healthy Children				
Age 0 – 5	-0.70 ***	(0.17)	-0.49 *	(0.21)
Age 6 – 14	-0.28 *	(0.15)	-0.31	(0.19)
Age 15 – 17	0.19	(0.19)	0.31	(0.24)
Presence of Disabled Children				
Age 0 – 5	-0.53	(0.42)	0.06	(0.43)
Age 6 – 14	-0.49 *	(0.21)	-0.30	(0.25)
Age 15 – 17	-0.17	(0.36)	0.71 ⁺	(0.39)
Number of Adults in Family	-0.07	(0.07)	-0.15 ⁺	(0.09)
Metro Residence	0.09	(0.17)	0.16	(0.21)
Local Unemployment Rates	-0.22 **	(0.07)	-0.15 ⁺	(0.09)
Maximum TANF Benefits/100	-0.06	(0.05)	-0.05	(0.06)
Maximum Likelihood	5462.67			
(N = 3,390)				

Note: Standard errors are in parentheses. Results are based on weighted data; standard errors are adjusted for survey design effects. ⁺ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed tests).

Table 6. Multinomial Logit Model for Work Patterns among Married Mothers

	Continuous Work vs. No Work		Partial Work vs. No Work	
	Coefficient	(SE)	Coefficient	(SE)
Constant	0.35	(0.75)	1.16	(1.01)
Age	0.13 ***	(0.04)	-0.01	(0.05)
Age ² /100	-0.19 ***	(0.05)	-0.06	(0.07)
Race and Ethnicity				
White	----	----	----	----
Black	0.59 ***	(0.15)	0.07	(0.22)
Hispanic	-0.18	(0.12)	-0.35 *	(0.17)
Asian/other	0.12	(0.17)	-0.17	(0.24)
Education				
Less than high school	-0.84 ***	(0.13)	-0.39 *	(0.18)
High school	----	----	----	----
Some college	0.37 ***	(0.09)	0.28 *	(0.13)
College or more	0.70 ***	(0.11)	0.65 ***	(0.14)
Mother's Disability Status				
No disability	----	----	----	----
Moderate disability	-0.30 ⁺	(0.16)	0.16	(0.20)
Severe disability	-1.55 ***	(0.16)	-0.39 *	(0.19)
Presence of Healthy Children				
Age 0 – 5	-0.78 ***	(0.10)	-0.68 ***	(0.14)
Age 6 – 14	-0.22 *	(0.09)	-0.07	(0.12)
Age 15 – 17	0.25 *	(0.11)	0.25 ⁺	(0.15)
Presence of Disabled Children				
Age 0 – 5	-1.42 ***	(0.36)	-0.66	(0.42)
Age 6 – 14	-0.14	(0.14)	0.06	(0.18)
Age 15 – 17	-0.01	(0.24)	-0.03	(0.33)
Husband's Disability Status				
Without disability	----	----	----	----
With disability	0.09	(0.13)	0.13	(0.17)
Husband's Earnings (logged)	-0.05 *	(0.02)	-0.02	(0.03)
Number of Adults in Family	-0.06	(0.07)	0.06	(0.09)
Metro Residence	-0.23 *	(0.10)	-0.39 **	(0.13)
Local Unemployment Rates	-0.17 ***	(0.04)	-0.13 *	(0.05)
Maximum TANF Benefits/100	0.06 *	(0.03)	0.11 **	(0.04)
Maximum Likelihood	13,940.41			
(N = 7,832)				

Note: Standard errors are in parentheses. Results are based on weighted data; standard errors are adjusted for survey design effects. ⁺ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed tests).