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## Single Mother Families and Employment, Race, and Poverty in Changing Economic Times\*

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### Abstract

Using American Community Survey data from 2001, 2005, and 2010, this paper assesses the relationships between employment, race, and poverty for households headed by single women across different economic periods. While poverty rates rose dramatically among single-mother families between 2001 and 2010, surprisingly many racial disparities in poverty narrowed by the end of the decade. This was due to a greater increase in poverty among whites, although gaps between whites and Blacks, whites and Hispanics, and whites and American Indians remained quite large in 2010. All employment statuses were at higher risk of poverty in 2010 than 2001 and the risk increased most sharply for those employed part-time, the unemployed, and those not in the labor force. Given the concurrent increase in part-time employment and unemployment between 2000 and 2010, findings paint a bleak picture of the toll the last decade has had on the well being of single-mother families.

### Keywords

Employment; Poverty; Race; Recession; Single Mothers

## 1.1 INTRODUCTION

At the start of the 21<sup>st</sup> century, researchers saw positive signs that poverty rates among single-parent households were on the decline (Lichter and Crowley 2004). Employment levels among single mothers also increased and the number of such families on welfare

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declined (Clampet-Lundquist et al. 2004; Lerman and Ratcliffe 2001). Notably, these benefits were apparent among the most vulnerable of families, those headed by women of color (Lichter & Crowley 2004). Ten years later, in the wake of the Great Recession of 2007–2009, much of this optimism has receded. Overall poverty rates were the highest of the decade at 15.1 percent in 2010 and single-mother households with children under 18 had poverty rates of 45 percent from 2006–2008 (DeNavas-Walt, Proctor, and Smith 2010; Author 2013). A decade into the 21<sup>st</sup> century, Black and Hispanic single-mothers and their children continue to bear a much higher poverty risk than their white counterparts (McLanahan and Percheski 2008; U.S. Census Bureau 2010; Van Hook, Brown, and Kwenda 2004). While greater poverty rates among single mother families are not surprising in the wake of an economic downturn, did families headed by women of color disproportionately bear a greater burden of poverty risk?

Despite the wealth of information about the relationship between race, family structure, and poverty, critical gaps remain in researchers' understanding of how the benefits of work vary across race for single-mothers. First, employment patterns differ by race (Reid 2002) and education (Hamil-Luker 2005) and the race wage-gap is persistent (Dozier 2010; McCall 2001). This suggests that the relationship between employment and poverty may differ according to race, with minority women more likely to be working in jobs that pay below-poverty wages than white women, yet these relationships have been for the most part only indirectly explored (see Lichter and Crowley 2004 for a notable exception). Second, there has been relatively little research on how these relationships might differ during different economic periods, even though research suggests that work-focused welfare programs are less effective during times of economic depression when the number of people seeking jobs increases and the number of jobs decreases (Kwon and Meyer 2011). The first decade of the 2000s mark the first full decade since the passage of the Welfare Reform Act of 1996 that moved the majority of poor families off of the welfare rolls (Clampet et al. 2004). The more hopeful research about the decline of poverty and the decline of women of color in poverty that emerged at the beginning of the 20<sup>th</sup> century likely reflected the fact that the economy had expanded steadily for close to ten years by 2000 (NBER 2001). In contrast, we examine the beginning of the decade (2001), a time at which the economy experienced a mild recession, the middle of the decade (2005), a time at which the economy was in the midst of an expansion, and the end of the decade (2010) a time that followed a significant recession (Autor 2010; National Bureau of Economic Research (NBER) 2001; Smeeding, Thompson, Levanon, and Burak 2011). Looking at the relationship between employment, race, and poverty across the decade at three distinct points (beginning, middle, and close) will allow us to see if changes in the broader economy have affected the tie between employment and poverty for the most vulnerable families, those headed by single women. Further, we also examine whether there is a racial dimension to this vulnerability by exploring whether Black and Hispanic women are placed at particular risk.

This paper asks: What are the relationships between employment, race, and poverty? Do these relationships change across the first decade of the 21<sup>st</sup> century? Using data from the 2001, 2005, and 2010 American Community Survey, we explore racial differences in poverty among single-mother households over the decade, as well as differences in how full-time employment, part-time employment, or unemployment may attenuate or exacerbate

poverty rates during three distinct economic periods in the 21<sup>st</sup> century: the economic recession of 2001 that followed a long period of expansion, a period of economic growth and labor market expansion in 2005, and a period of significant economic decline at the close of the decade (for detailed characterizations of these economic periods, see Autor 2010; National Bureau of Economic Research (NBER) 2001; Smeeding et al. 2011).

## 2.1. Race, Poverty, and Employment in Single-Mother Households

Families headed by unmarried women are the ones most vulnerable to poverty (McLanahan and Percheski 2008) and some of the most likely to be among the working poor (Brady, Fullerton, and Cross 2010) and race continues to stratify single mothers' likelihood of living at or below the poverty line. Relative to white and Asian single-mother households, Black and Hispanic women (and their children) living in single-parent households are at high risk of being in poverty (Elmelech and Lu 2004; Lichter and Crowley 2004; Lichter, Qian, and Crowley 2005; McLanahan and Percheski 2008;). There is some variation in child poverty risks among Asians and Hispanics, which reflects differences between new immigrants and second generations that have been attributed to the economic benefits of acculturation (Lichter et al. 2005; Van Hook et al. 2004). Recent research suggests that multiracial single-parent families may experience poverty at rates in between mono-racial whites and mono-racial single-parent families of color (Author 2013). These patterns are consistent with other indicators that demonstrate the power of racial stratification to exacerbate disadvantage even among already disadvantaged sub-groups, such as single mothers.

Although maternal employment can reduce poverty rates (Lichter and Crowley 2004), particularly when the economy is strong (Iceland 2003), the relationships between race, employment, single-parent births, low education levels, and a lack of work experience (Alon and Haberfeld 2007; Ciabattari 2007; Musick 2002; Pettit and Ewert 2009) may make employment less effective in pulling some groups of women out of poverty. Women who become single-mothers generally have less human capital to bring to the labor market due to having less education and fewer work experiences than their peers (Ciabattari 2007; Musick 2002). Furthermore, Black and Hispanic single mothers often begin motherhood at a younger age than whites and Asians, which often delays or completely eliminates educational progress beyond high school, decreasing cumulative earnings (Hoffman and Maynard 2008). On the other hand, Lichter and Crowley (2004) found that the greatest gains of increased maternal employment in the 1990s, in terms of decreases in poverty rates, were to African-American families (Lichter and Crowley 2004). Both lines of research suggest that the benefits of employment and its impact on poverty status differ across race. But what remains unclear is whether employment itself differently affects single mothers' risk of poverty across race.

Race and gender variation in poverty is strongly tied to labor force experiences, encompassing both the type of employment that women secure and the wages women receive. Women's employment rates differ by race (Browne and Misra 2003; England, Garcia-Beaulieu, and Ross 2004; Reid 2002), as do women's wages (Dozier 2010; Pettit and Ewert 2009). Although in the mid-20<sup>th</sup> century, women of color were more likely to work than their white counterparts, this trend has reversed in recent decades (England et al. 2004;

Higginbotham and Romero 1997; Reid 2002). Black women's wages have fallen behind white women's since the early 1980s: the wage gap between white and Black women has grown from under five percent at the start of the 1980s to between 12 and 15 percent today (Neal 2004; Pettit and Ewert 2009). Hispanic women also experience a wage gap compared to white women (Alon and Haberfeld 2007; England et al. 1999; McCall 2001), and, dependent on their local labor market, Asian women may experience this gap as well (McCall 2001). Ultimately, a lack of employment opportunities for women of color in urban environments may lead to an accumulation of disadvantages and an increased likelihood of living in poverty (Tienda and Stier 1996). When work is not available or poorly paid, social safety net programs, including welfare or SNAP (also known as food stamps), may provide a buffer from poverty (Moffit 2013).

## 2.2 THE LABOR MARKET, EMPLOYMENT, & POVERTY

While it seems clear that single-mothers who are Black and Hispanic may be at greater risk of experiencing poverty than their white or Asian peers, research has left unclear whether this risk of poverty changes depending on the broader economic context. The economy hit a peak of expansion in March 2001 after ten years of steady expansion and fell into a recession (NBER 2001). The recession was short lived, ending in November 2001 after which the economy rebounded, adding two percent to the total labor market by 2005 (Autor 2010). This expansion lasted until December 2007 (NBER 2008). 2005 stands both halfway through the decade, then, and also, approximately, half way through the period of expansion that lasted 73 months. Finally, the 2007 recession led to large increases in unemployment, significant decreases in wages, and the ensuing recovery has been halting with extremely slow job growth (Hoynes, Miller, and Schaller 2012; Smeeding et al. 2011). Moreover, the Great Recession did not evenly influence the life chances of all workers: risk of unemployment, of home loss, and of bankruptcy all varied across factors such as race, gender, and class (Grusky, Western, and Wimer 2011). While much attention has been paid to how the Great Recession impacted young men, there has been less focus on the ramifications of the recession for young women. In particular, it is unclear if the changes in the broader labor market have changed the relationship between race, poverty, and employment for single mothers.

How might race matter to employment and thus poverty in the midst of the recession? On one hand, the recent economic downturn has increased poverty rates among all families (Cancian and Danziger 2009) and economic downturns can reduce employment levels among those leaving welfare (Kwon and Meyer 2011), regardless of race. Since the risk of poverty is tied not only to employment, but also to the availability of government safety nets (Clampet-Lundquist et al. 2004; Misra, Moller, and Budig 2007), poverty rates may increase among all unemployed single mothers in periods of economic downturn. Moreover, there has been a decline in wages across groups in the wake of the recession (Hoynes et al. 2012), which suggests that employment during an economic downturn might not be as protective from poverty as employment during an economic upswing. Employment levels decreased most dramatically among high school dropouts and those with only a high school degree (Hout, Levanon, and Cumberworth 2011). However, African Americans faced greater economic costs from the Great Recession than whites, including home loss and bankruptcy,

because they had fewer resources to buoy them in the wake of the recession (Wolff, Owens, and Burak 2011). Moreover, African Americans had the highest rates of unemployment compared to other racial groups prior to the recession and also experienced the greatest increase in unemployment during and in the wake of the recession of 2007–2009 (Hout et al. 2011). Moreover, education appears to act as less of a buffer from job loss for African Americans than it does for whites (Hout et al. 2011).

Finally, employment status may play an important role in the relationship between employment, race, and poverty among single mothers. Black and Hispanic women report higher levels of part-time employment and higher levels of unemployment than do their white and Asian peers (Author 2012; England et al. 2004). Part-time employment is more tenuous than full-time employment and often lacks the health and other attendant benefits of full-time work (Mishel, Bernstein, and Boushey 2004), as well as a significant loss of pay, as part-time work rarely pays as well as full-time work and is for fewer hours (Webber and Williams 2008).

What remains unexplored is whether racial stratification leads to even greater disparities across race among single mother households during harsh economic times. The recession produced a broad based uptick in the unemployment and poverty rates (Grusky et al. 2011) however, some work has pointed to the ways racial minorities, particularly African Americans and to a lesser extent Latinos were particularly negatively impacted (Hout et al. 2011; Wolff et al. 2011). Poverty risks may have elevated for certain groups, as forces that underline enhanced poverty risks (Lin and Harris 2008) become more acute over this period. Alternatively, the realities of racially stratified opportunities may mean that racial differences in poverty are maintained, demonstrating the ways racial hierarchies persist. Rising racial inequalities in poverty across this period would suggest that race-based poverty represents the result of culmination of a variety of disadvantages plaguing groups of color.

In light of these issues, we provide one of the only (to our knowledge) time-series appraisals of race, employment and poverty for single mothers. Our ten-year view investigates to what degree declining economic times creates greater inequality by enhancing disparities, or unifies circumstances by doing “equal harm” across the race. Additionally, we provide a new way to test the “value added” by employment for single mothers. Full time employment is a crucial means to keeping single mothers, of all races, out of poverty, but it is unclear how or if this has changed as the economy declined.

### 2.2.1 Hypotheses

The existing literature on the intersections of race, gender, and employment lead us to form three primary hypotheses.

First, we anticipate that race will continue to shape poverty risk above and beyond SES or other background characteristics throughout the decade. Moreover, research suggests that people of color were hit harder by the economic recession than were whites, leading to our first hypothesis:

Hypothesis 1 (H<sub>1</sub>): Racial differences in poverty among single mothers will increase across years, regardless of employment status, and other aspects of socioeconomic resources.

Second, the continued racial differences in workforce participation and wages suggest that there will be unequal returns for full-time work for women attempting to leave poverty across the decade:

Hypothesis 2 (H<sub>2</sub>). Regardless of period, Black and Hispanic single mothers working full or part-time will be more likely to experience poverty than white women who are similarly employed.

Third, the current literature suggests that the broader macroeconomic climate influences a person's ability to exit poverty, but it is unclear whether change over time influences the relationship between race, employment, and poverty. This leads us to our third hypothesis:

Hypothesis 3 (H<sub>3</sub>). Regardless of race, those employed full or part-time in 2010, a time of economic downturn, will be more likely to experience poverty than those similarly employed in 2001.

## 3.1 Material & Method

### 3.1.1 Data and Sample

The data for this research comes from a pooled sample of the American Community Survey (ACS), examining the years 2001, 2005, and 2010 (one year estimates).<sup>1</sup> These files were made available through the Integrated Public Use Microdata Sample series (Ruggles et al. 2010a). The ACS is a repeated cross sectional survey modeled after the former United States Census long form, including many of the same questions as the Census long-form (National Research Council 2007). The full sample includes information on over three million respondents per year. We restrict our analytical samples to primary families that include mothers (as householders) with co-resident children and perhaps unmarried partners but no spouses. Although some households include multiple families, aggregate estimates of poverty among single-mother (and married-couple) families do not vary much if poverty is measured at the family level as opposed to the household level (Iceland 2003). Children may be listed as children of householders, children "in-law" (or step-children), grandchildren, and children who are listed as "other relatives."

We began by constructing a household level file of households designated as "female householder – no husband present," which included 318,860 households. We added further restrictions to households with at least one child, child-in-law or grandchild (related to the householder) that was under 18 years of age at the time of the survey (116,572 cases dropped) and where valid information on mother's employment was available (53 cases dropped). We included female householders with grandchildren both to ensure that we captured the broadest sample of the children living with a female householder and also as low-income families are more likely to rely on extended kin to care to act as primary

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<sup>1</sup>The ACS reports response rates of 96.7% for 2001, 97.3% for 2005, 97.5% for 2010. For additional information, please see: <http://www.census.gov/acs/www/methodology/sample-size-and-data-quality/response-rates/>

caregivers for children (Sarkisian and Gerstel 2012). This limited our sample to 202,241 families in total, (n=34,031 in 2001; n=81,490 in 2005; n= 86,720 in 2010).

### 3.1.2 Variables

**Poverty status**—Our dependent measure for this paper is presence of a family in poverty. We draw on the poverty status measure that captures the total family income of the previous year as a percentage of the poverty threshold, ranging from 0 to 500 percent or more. A family is considered in poverty if the value is between 0 and 100 percent, indicating an income at (100%) or below the poverty line. The poverty threshold, which was established in 1964 by the Social Security Administration, varies depending on the total persons in the family (see Fisher 1992). This measure is critiqued on many fronts (see National Research Council 1995). Although new measures, most notably the supplemental poverty measure, have been constructed to address these criticisms, this measure requires information not available for years of the ACS used in this analysis. Additionally, employing this standard measure allows for comparability to other analyses used in policy discussions of economic and material hardship.

**Race/Ethnicity**—We draw on questions on race and Hispanic ethnicity and the number of races selected to construct categories reflecting the standard Census administrative categories set forth by the Office of Management and Budget (OMB): Hispanic, White, Black/African American, American Indian/Alaskan Native, Asian, Native Hawaiian/Pacific Islander, Some Other Race, Two or more races. This adopts the convention of classifying respondents first into one pan-ethnic Hispanic category, regardless of other race(s) selected, and classifying those selecting one race into their self-reported category. Non-Hispanic respondents selecting multiple races are classified as “Multiracial.”

While the U.S. Census allows for a wide range of race/ethnic complexity, the sample sizes of many groups were too small to yield meaningful estimates. We therefore narrow our discussion of poverty distinctions to the four largest (monoracial) race/ethnic groups: Whites, Asians, African Americans, and American Indians. Pacific Islanders and Some Other Race are collapsed into one category and those designated multiple races are placed in a separate category.

**Demographic Characteristics**—In addition to race, we include covariates for year of data collection, and assign 2001 as the reference group, with covariates for 2005 and 2010. We adjust for child’s age, mother’s age, and mother’s marital status. We introduce age of the youngest child as series of dichotomous variables with the categories a) < than 6 years old (reference), b) 6 to 10 years old, and c) 11 to 17 years old. Mother’s marital status has the following categories a) Married (husband not present), b) separated, c) divorced (reference), d) widowed, and e) never-married.

**Acculturation**—We include several proxy measures of acculturation, including a measure combining nativity and citizenship of the mother, as a series of dichotomous variables (reference = U.S. Born mothers) that are contrasted with foreign-born citizen and foreign born, not a citizen. We also include measures of English proficiency. Those who speak only

English are the reference category and the remaining categories are: speaks English or speaks it well, speaks English not well, speaks no English.

**Family Composition**—We provide a series of measures tapping different aspects of family composition. We include covariates for presence of cohabiting partner (cohabiting=1). Additionally, we control for whether that partner was of the same sex (in this case female) as the respondent (same-sex=1). Using a variable constructed by IPUMS, we also include a control for whether the household has three or more co-resident generations in occupancy (1=multigenerational, 0=otherwise), and a continuous measure for the total number of children in the family.

**Maternal employment**—To measure mother’s employment, we introduce a categorical measure for workforce participation of working full time (35 hours per week or more) (reference), part time (between 1 and 34 hours per week), unemployed, and not in the labor force. We draw on the “usual hours worked” variable to distinguish between full time and part-time employment.

**Other Socioeconomic Status measures**—To adjust for other human capital influences, we include mother’s education and mother’s occupation. Mother’s education is entered as a categorical variable denoting less than high school education (reference), high school (i.e., high school graduate/GED), some college experience with no degree or an associate’s degree, and college degree or more. Finally, we adjust for occupational status, using standard occupational categories of (1) professional/managerial (reference), (2) service, (3) sales, (4) production, and (5) military and related services. Occupational information comes from a variable indicating current or most recent occupation, and, among those with more than one job, from the occupation to which the individual devotes the most time. In addition, we adjust for receipt of public assistance with two dichotomous measures indicating a) whether or not anyone in the household receives food stamps or a food stamp benefit card and b) indicating whether the householder receives income from a state or local welfare office.

### 3.2 Analysis

The analysis involves estimating univariate and bivariate statistics as well as multivariate analyses of the likelihood of a family’s presence in poverty. The ACS engages a multistage complex sampling strategy that must be adjusted for in statistical tests. The IPUMS extracts of this data provide person weights, cluster, and strata variables to estimate variances and standard errors using Taylor series linearization method to adjust for complex survey design (Ruggles et al. 2010b). This approach differs from the use of replicate weights that are also employed to adjust for the multistage sampling approach of the ACS. Replicate weights, while more precise, are only available for ACS samples taken from 2005 onward. To ensure year-to-year continuity in our pooled sample, we employ strata, household weights, and cluster variables that are available at every year of the ACS.

We employ household-level weights for descriptive and multivariate analyses, as recommended by IPUMS (Ruggles et al. 2010b). All of our descriptive analyses, statistical



tests, and multivariate models apply these weights to limit the impact of sampling error on our estimates of standard errors and significance tests. These weights and other design issues are adjusted through use of the “svy” commands in Stata (version 12). We also computed variance inflation factors to check for multicollinearity in our statistical models finding no evidence of collinearity.

Our multivariate analysis estimates the likelihood of a single-mother family living in poverty. We employ standard logistic regression models to analyze this dichotomous outcome and present relative risk ratios of poverty, which are the ratio of probabilities of poverty instead of odds. When predicting dichotomous outcomes, odds ratios and relative risk ratios are generally equivalent. However, when the outcome is common, say exceeding 30 percent, odds ratios may overestimate the likelihood. Poverty among single mother families is more than 35 percent in any given year under observation, qualifying as a common occurrence. Interpretation of a relative risk ratio is highly similar to that of an odds ratio, where we report the percent change in likelihood of being in one category compared to respective reference group.

## 4.1 Results

Table 1 shows descriptive information about our sample of single mothers at each year: 2001, 2005, and 2010. We note changes that are statistically significant ( $p < .01$ ) with superscripts <sup>a</sup> (2001 vs. 2005) and <sup>b</sup> (2005 vs. 2010). Poverty is increasingly prevalent among single mothers across the 2000s. More than one-third of households headed by single mothers lived in poverty in 2001 (35.7%) and this increased to 40.5 percent over approximately ten years. On average, single mothers are in their late thirties at the time of survey; most are either divorced or never married, and they commonly head a household with at least one child under six years old. Profiles have shifted some from 2001–2010 with an increasing share headed by never married women (33.7% vs. 40.0%) and raising young children under six (38.7% vs. 40.0%). The composition of families has also shifted since 2001, with an increasing share of families including a cohabiting partner (13.3% vs. 15.8%), or housing a multigenerational family (12.9% vs. 15.3%). Generally, single mothers are most often U.S. born and speak only English, though an increasing share, 9.2 percent in 2010 from 6.8 percent in 2001, are un-naturalized immigrants.

While many demographic characteristics remained fairly stable over the decade, we observe increased vulnerability in several labor market characteristics. While the majority of women are employed full-time in 2010, this is decreasingly the case across time, (57% in 2001 vs. 52% in 2010). Meanwhile a growing share of mothers are either part-time employed or unemployed compared to virtually no change among those not in the labor force (NILF). We observe a steady share of single mothers occupying professional/managerial sector (approximately 10%) and an increasing share employed in the service industry (35.6% vs. 39.4%). We observe increases in educational attainment with a growing percentage having some college (which includes associates degrees) or college degrees and beyond. As of 2010, nearly an equal percent of single mothers have a college degree or more as have less than a high school diploma (16.1% vs. 17.0%) in stark contrast to 2001, when those with less than high school were more common than were college graduates (22.4% vs. 13.3%).

Geographically, single mothers are concentrated in the poorest region of the country, the South, with close to 40 percent at each year; meanwhile the Midwest and West each have approximately 20 percent. Receipt of public assistance has also changed, specifically far more mothers receive food stamps in 2010 than in 2001 (42% vs. 26.7%). The percent receiving income from state or local welfare offices has declined slightly, from 10 percent in 2001 to 8.8 percent in 2010.

#### 4.1.2 Poverty Rates and Single Mothers: 2001–2010

In Table 2, we show the race/ethnic composition of single mothers across each year and the associated poverty rates by race-ethnicity. Over the decade, the movement in the race/ethnic composition of mothers trends closely to the nation as a whole. Whites represent a diminishing share of female-headed families (49% in 2001 vs. 45.5% in 2010), while Black women remain steady, heading 30 percent of single mother families in 2001 and 29 percent in 2010. Hispanics occupy increasing shares of single mother families, with Hispanic women heading 20 percent of these families in 2010, up from 15 percent at the beginning of the decade. Meanwhile, the share of families headed by Asians rose slightly, from 1.9 to 2.1 percent. American Indian mothers represent barely more than one percent of mothers at any year, and the share of Pacific Islander/Some Other Race mothers is less than one percent. The percent of single mothers declaring multiple races (i.e. “Multiracial”) represent just less than two percent of mothers at any given year.

While poverty has increased overall (see Table 1), race/ethnic background strongly shapes the level of poverty and degree of change over time. The highest poverty rates (in excess of 40%) occur among Black, American Indian, and Hispanic women. At the close of the decade, nearly half of women in these race/ethnic groups head a family in poverty. Poverty is least common among single-mother families headed by white and Asian women, with poverty rates increasing from 28 percent to one-third for families headed by white women and poverty rates *decreasing* for single-mother families headed by Asians from 30.7 to 27.7 percent. Poverty rates among Pacific Islanders/Some other race mothers are slightly lower than for single mothers in general, between 35 and 37 percent, meanwhile poverty has increased among Multiracial mothers, from 39 to 42 percent.

#### 4.1.3 Race and Employment over Time

Table 3 shows changes in employment profiles over time and across race. Full-time employment is associated with a lower likelihood to report living in poverty, but employment security -- as indicated by decreases in full-time employment and increases in part-time work and unemployment -- appears to have dropped over the 2000s. This decline is apparent for white and Black women, whose rate of full time employment has dropped from 60.7 percent to 54.5 percent for whites and from 55.8 percent to 50.4 percent for Black women. Meanwhile, Hispanic women’s full-time employment has only declined slightly, from 51.7 percent to 49.4 percent. Notably, Asian women have increased their presence among the full-time employed, from 54.9 percent to 58.3 percent. Part-time employment, which is markedly less resistant to poverty, was more common in 2010 than 2000 across nearly all race/ethnic groups. Between 15 and 16 percent of white, Asian, and Hispanic women are part-time employed as of 2010, up from between 11 and 13 percent, respectively,

in 2001. Unemployment has also risen across all race/ethnic groups, with the highest rates, 13 and 11 percent respectively, among Black and American Indian women and the lowest among Asian women, less than seven percent of whom are unemployed in 2010. The share of women NILF has varied considerably by race, with decreasing shares among non-White women, most markedly among Asian women, whose share declined from 29 percent to 19.9 percent over this ten-year period.

#### 4.2.1 Multivariate Models

We now turn to our multivariate models, which investigate the relationships between race, employment and poverty among single mothers, shown in Table 4. We begin with a baseline model that shows the relative risk of poverty across mother's race/ethnicity, independent of year (Model 1). Our first question is whether increases in poverty across year have impacted single mothers equally across race, with the prediction that poverty has increased even more so among non-white single mothers as compared to white mothers ( $H_1$ ), which we assess with a series of interaction effects between race and year (see Model II). We then adjust for demographic, family, and acculturative characteristics that may also be associated with poverty (see Model III). We then adjust for socioeconomic characteristics that may be associated with poverty, including the receipt of public assistance (see Model IV). In Models V through VII, we test the relationships between maternal employment and poverty and explore to what degree these associations vary across race and time. We anticipate a greater risk of poverty among those not employed full time, and for women of color and women interviewed in 2005 or 2010 to be more likely to face poverty than non-fulltime employed white women ( $H_2$ ) or women interviewed in 2001 ( $H_3$ ).

#### 4.2.2 Have Poverty Increases varied by Race?

According to Model I of Table 4, on average, African American, Hispanic, and Native American mothers have the highest risks of poverty, in excess of 40 percent higher relative to white women. Risks for Multiracial, Pacific Islander, and SOR women are still in excess of white women. Asian women stand out as having a lower risk of poverty by a small margin ( $RRR=0.92$ ). Relative to 2001, poverty risks for single mothers, across race, is six percent higher in 2005 and 12 percent higher in 2010 compared with 2001.

We test our first hypothesis in Model II by adding a series of interactions between race-ethnicity and year. The coefficients for 2005 and 2010 show that, for whites, poverty risk increased significantly over time. Yet countering our expectations, we do not find evidence of increasing racial disparities in poverty levels across year for most groups. The significant, negative (below 1.00) interactions between race-ethnicity and year show that the race gap for Blacks and Hispanics relative to whites declined over time, with Blacks and Hispanics showing a smaller increase in the odds of poverty compared with white peers between 2001 and 2010. This is particularly surprising given other research that has reported increased racial disparities after the Great Recession (Hout et al. 2011; Wolff et al. 2011). We also find that Asian single mothers in 2005 and 2010 were less likely than whites to report poverty.

Figure 1 graphically depicts these changes across the decade, highlighting the increased risk of poverty in *both* 2005 and 2010 for whites and the narrowing racial gap between 2001 and

2010 across whites versus Blacks and Hispanics. Asian Americans, in contrast, experienced a decreased risk of poverty in both 2005 and in 2010. This counters our original expectations (H1) and suggests that the recession may have decreased racial *inequalities* in poverty (but not decreased poverty levels itself) among white, Black, and Hispanic single mother households.

These results remain intact upon introducing a range of demographic, family, and acculturative characteristics in Model III. Poverty is negatively associated with maternal age, having children who are older than six years old, and living in a multigenerational household. Poverty risks tend to be higher among mothers who are single, separated, widowed, or married (spouse absent) when compared to divorced mothers. Mothers who are not English speakers are far more likely to be poor, however those who are foreign born citizens have nearly comparable poverty risks to the US born and those who are non-citizens are less likely to be poor.

In Model IV we introduce socioeconomic variables (education, income, and occupation) as well as receipt of public assistance (food stamps, income from welfare ). Not surprisingly, poverty is higher among those who are not employed full time, have less than a college education, or are not employed in a professional occupation, meanwhile those who receive public assistance are more likely to be in poverty. Net of these issues, we find little evidence race/ethnic variation in poverty among single mothers. Black women are still significantly more likely to be in poverty, but by a small margin (RRR=1.09), while all other groups have RRR that are close to 1.00. Ancillary analyses (not shown) reveals that net of their education, employment, and occupational characteristics, Black, Native Americans, and Hispanic women still have higher poverty rates than White women. However, receiving welfare, which is a function of being in poverty, reduces the remaining differences as these groups are most likely to receive public assistance. Finally, in supplemental analyses not shown, but available upon request, we examine models I–IV for single mother households in which the mother is not cohabitating and find relatively similar patterns across race and time.

#### **4.2.3 Employment and poverty: does the association vary by race or across time?**

In Table 5 in Models V through VII, we examine the role of employment in single mothers' poverty and how it potentially intersects with race and time. In this table, we add a series of interactions to our Table 4 covariates to test whether the relationships between poverty and employment status vary across race-ethnicity, and whether the relationships between employment status and poverty vary over time. Employment is strongly associated with poverty: a single mother who is not full-time employed (i.e. being part-time employed, unemployed, or not in the labor force) experiences nearly or above twice the risk of poverty compared with single mothers who were employed fulltime. Hypothesis 2 asks whether this relationship between poverty and employment varies by race. According to Model V of Table 5, the relationship between employment and poverty does not seem to vary by race for the majority of racial groups, and we table only significant interactions to note some exceptions (interactions for all races are included in the model and full output is available upon request). For Hispanic women, Asian women NILF, and Native American women

working part-time, poverty risks were lower than they were for whites working at similar levels of employment. Hispanics, however, are the only group for whom all categories of labor force participation varied significantly from whites in their associations with risk of poverty, suggesting a lower risk of poverty for Hispanics at each level of employment relative to whites. However, we are cautious to interpret this as indicating that Hispanic women experience benefits to being outside of the full-time employment, but rather that their high rates of poverty indicate that the employment makes less of a difference to Hispanics' poverty levels overall. Thus there is relatively little support for our second hypothesis.

Next we ask whether the disadvantages of being outside of full-time employment have varied across time. In support of our third hypothesis (H<sub>3</sub>), we find a stronger connection between being outside of full-time employment and poverty in 2010 (see Model VI). We find significant positive interactions revealing that poverty is more likely for mothers who are part-time employed, unemployed or not in the labor force in 2010 compared to 2001. To better highlight and interpret the change in relationship between employment status and poverty over time, we have graphed the relative risk of poverty by employment status across year, shown in Figure 2. We tested for year-to-year significant differences (with 2001 as the reference) in poverty rates, marked with an asterisk, to highlight how employment operates across the time periods. According to Figure 2, the probability of poverty has significantly increased from 2001 to 2010 for every labor force status, with the sharpest increases for those outside of full time employment. While this pattern of vulnerability is not entirely surprising, the shift in degree of vulnerability is notable. This provides additional support for our third hypothesis (H<sub>3</sub>) that employment would prove to be less protective during periods of economic downturn.

In Model VII, which adjusts for all controls (only socioeconomic characteristics are shown), the relationship between part-time employment and not in the labor force and poverty in 2010 versus 2001 compared to full-time employment remains little changed. Moreover, poverty risks for Blacks and Native Americans all remain significantly higher than whites even in the final model, though the Hispanic mothers, net of these issues, have nearly parallel poverty rates relative to white women (RRR=1.01).

## 5.1 Discussion, Limitations, and Conclusion

This paper seeks to evaluate at different economic periods the benefits of employment across race for lifting single mothers out of poverty. As the majority of research on single mothers and poverty has focused on the role of marriage (see Lichter, Graefe, and Browne 2003 for an insightful discussion), this paper makes a unique contribution by comparing the risk of poverty by race and *employment status* across the first decade of the 21<sup>st</sup> century. Overall, the findings paint a bleak picture of the toll the last decade has had on the well being of single-mother families. First, we find that poverty rates dramatically increased among most single-mother families between 2001 and 2010 with the exception of Asian-American families. Second, we find that racial disparities in poverty appear to lessen for some groups at the end of the decade, suggesting a reduction in inequality between whites and Blacks and Hispanics. Third, our multivariate analyses revealed a sharp increase in poverty risk for

those not in full-time employment at the end of the decade (see Figure 2), while the share of those in full-time employment declined during the decade across all groups except Asians (see Table 3).

At the beginning, middle and close of the decade, we find that Blacks, American Indians, Hispanics, and Multiracials all experience significantly higher risk of poverty than their white counterparts, although the poverty gap between whites and Blacks, Hispanics, and Asians was moderately lower at the end of the decade. We further test for differences in the benefits of employment to poverty across race with interaction effects finding mixed evidence that the impact of employment depended on racial background. For most groups, there was little change in the relationship between employment and poverty depending on racial background, but Hispanics were the outlier. Moreover, we find that the relationship between employment status and poverty risk changes across the decade—those outside of full-time employment have higher risks of poverty at the end of the decade than at the beginning. And more women were outside of full-time employment by the end of the decade than at the beginning. Ultimately, the full models presented in table 5 point to continued economic vulnerability of Black and American Indian single mothers and a lingering, yet diminished, racial gap in single mother poverty rates.

By comparing the links between race, employment, and poverty across time, our research lends some insight into how the recession impacted single-mother families—an already economically disadvantaged group. Concurrent with prior research, we find that in the wake of an economic downturn, single-mother families are at increased risk of experiencing poverty (see Clampet-Lundquist et al. 2004; Misra et al. 2007). We point to the changing relationship between employment status and poverty as a crucial component of the increased risk of poverty. Moreover, the changing distribution of women in employment categories, particularly the increased presence of women among the part-time and the unemployed, is of utmost importance for understanding why single mothers may face this increased level of vulnerability during an economic downturn. Our models suggest that some of the increased risk of poverty stems from the decreasing access to full-time work combined with the increasing vulnerability of those in part-time and unemployed work statuses. On its own, this would be striking, but we see this decline in access to full-time work despite the fact that the single mothers of 2010 are better educated than their counterparts were in 2001 (see Table 1).

There are several implications of our analysis for studies of employment, single-parent families, and poverty risks across race. First, our findings serve as a challenge to the notion that increased employment rates alone could solve the racial differences in child poverty. It is quite clear even when we hold employment constant, racial differences in poverty, particularly between whites and Blacks and whites and American Indians, still persist. The reduced race/ethnic variation of Model IV reflects the role of public assistance, pointing, perhaps, to the ways combining the labor market and the public safety net is necessary to make ends meet. Second, the particularly high risk of poverty among those outside of full-time employment (as seen in figure 2) suggests that access to full-time employment may be a crucial dimension of single mother poverty and may help explain some of the racial differences in poverty rates. Third, our observation that racial disparities in single poverty

risks declined marginally at the end of the decade is surprising. While we had anticipated finding evidence of increased (or maintained) racial disparities, particularly given other findings suggesting Blacks and Hispanics faced greater economic costs from the recession than whites (Hout et al. 2011; Wolff et al. 2011), our findings suggest a decrease in the poverty gap between whites and other groups. This decline appears to reflect a particularly sharp increase in poverty risk among white mothers *but not* declines in poverty among other disadvantaged groups. In fact, other groups, including Blacks, also experienced rate increases in overall poverty levels. And overall rates of poverty risk remain much higher for Blacks, Hispanics, and American Indians, approaching nearly 50 percent in 2010, when compared to whites, one third of whom are in poverty at the end of the decade. The decrease in disparity is surprising, however, and is not explained away by the factors included in our models. Both whites and Blacks experienced decreases in overall employment rates and increases in unemployment rates (which would lead us to expect the poverty gap to remain the same over time, rather than reduce). It may be that participation in full-time paid employment (for which white women have the highest levels compared to Blacks, Hispanics, and American Indians) may be less protective in 2010 compared to earlier in the decade. Yet, despite a decrease in the gap at the end of the decade, the remaining persistent racial disparities among single mothers suggests that a continued pattern of racial inequality that disproportionately harms children of color (for further discussion see Huston, McLoyd, and Coll 1994).

There are several limitations to this research. First, the data used is cross-sectional rather than longitudinal. Additionally, there may be unmeasured cohort differences between the single-mothers in 2001, 2005, and those in 2010 that affect their risk of poverty. This concern may be somewhat alleviated by the fact that education and occupation levels rose across the decade, which suggests that the younger cohorts should have more access to human capital, and, therefore, be at a lower risk of poverty, suggesting that our findings may actually downplay the effects of the recession. Moreover, some measures facilitate entry into poverty (e.g. chronic unemployment, less education), while others are a product of living in poverty (i.e. receiving food stamps). Future research should further tease apart these factors.

Looking forward, we contend that it can be quite useful, even necessary, to examine the intersections of race and employment status when assessing poverty risk for single-mother families, particularly when this is combined with an examination of the impact of different economic time periods. Our research contributes to the notion that race continues to matter among vulnerable population like single mothers. Moreover, prior research suggests that moving from welfare to work can reduce both poverty rates and expectations of future material hardship for women who find full-time paid work (Clampet-Lundquist et al. 2004; Danziger et al. 2000). While these are sound strategies, our research suggests that even full-time employment may not lift single-parent families out of poverty (see figure 2). This may be particularly true if women are unable to maintain full-time employment (see Author 2011 for discussion). Our research does, suggest, however, that those outside of full-time employment were most at risk of poverty at the end of the decade. This suggests that policies aimed at supporting women's full-time employment would likely prove most beneficial in reducing single mother family's poverty risk. Increasing all women's access to full-time employment may also be the best way to reduce racial inequalities in child poverty.

Our research finds that by the decade's close poverty was a norm for single mothers, affecting the majority of women who are not employed full-time, and, disproportionately impacting women of color and their children, despite the heightened risk for white women at the middle and end of the decade.

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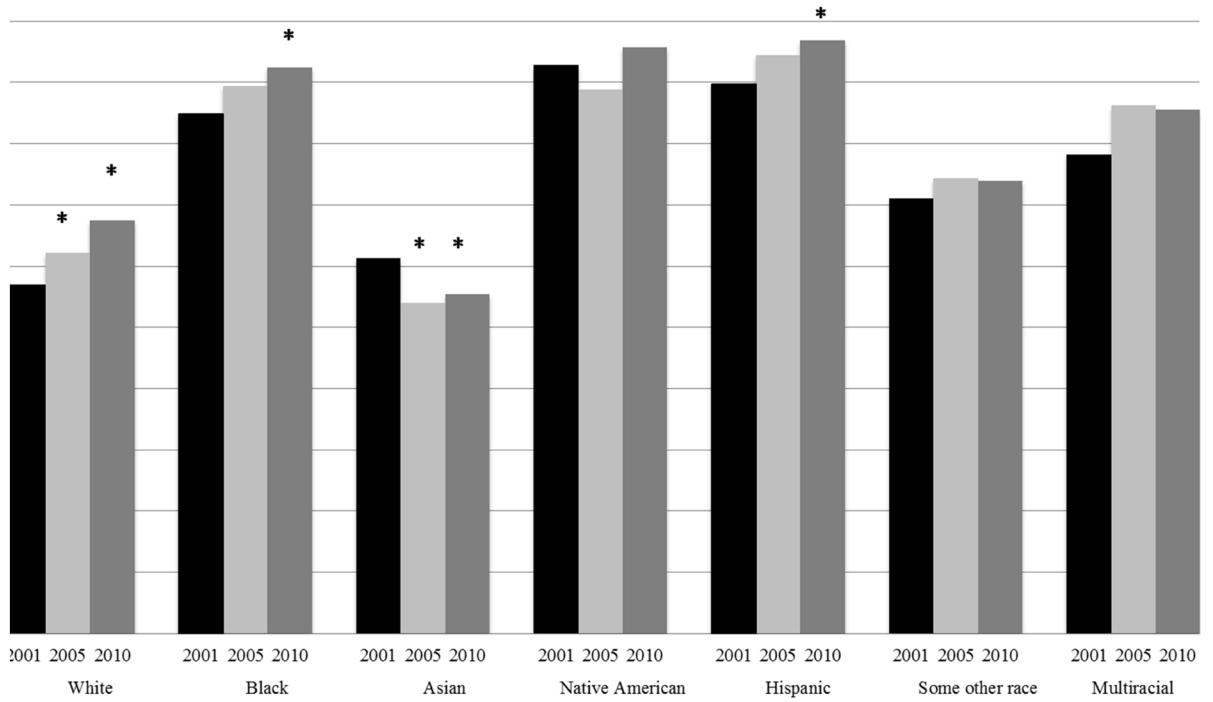
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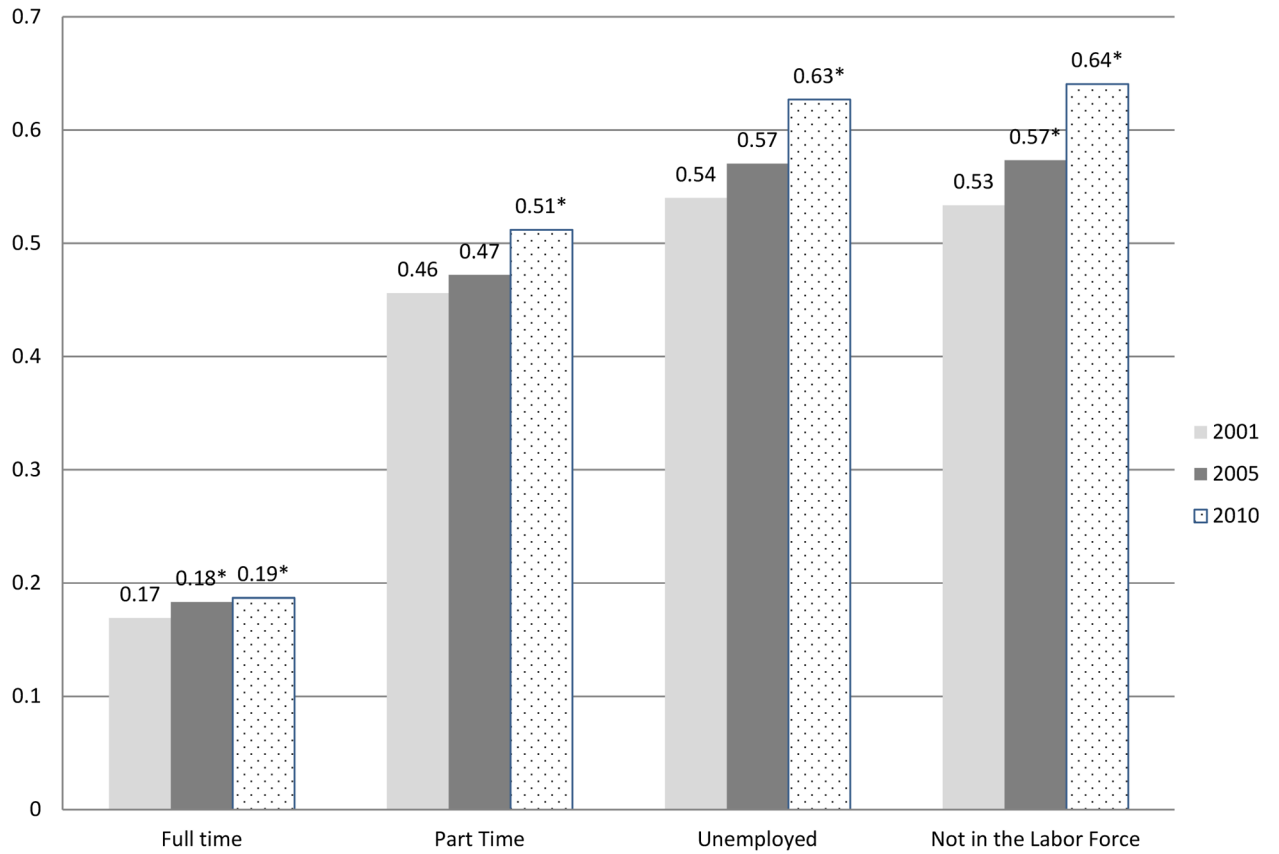
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**Figure 1. Risk of Poverty for Single Mothers by Race-ethnicity and Year (2001–2010)**

\* Asterisks indicate statistically significant difference (alpha =.05) relative to 2001 poverty estimate (generated from Model II. Table IV).



**Figure 2. Risk of Poverty for Single Mothers by Employment Status and Year (2001–2010)**

\*Asterisks indicate statistically significant difference (alpha =.05) relative to 2001 poverty estimate (generated from Model V, Table 5).

**Table 1**

Descriptive Statistics of Independent Variables (except Race/ethnicity) among female headed families, 2000, 2005, 2010

Variables	2001	2005	2010
<i>Poverty</i>	35.7 <sup>a</sup>	38.3 <sup>b</sup>	40.5
Mother's Age (M (SE))	38.3(.08) <sup>a</sup>	38.9(.05) <sup>b</sup>	39.6 (.05)
<i>Mother's Marital Status</i>			
Married, no spouse present	5.0	5.1	5.1
Separated	14.7 <sup>a</sup>	13.9 <sup>b</sup>	12.7
Divorced	38.1 <sup>a</sup>	36.5 <sup>b</sup>	34.9
Widowed	8.4	7.8 <sup>b</sup>	7.4
Never Married	33.7 <sup>a</sup>	36.7 <sup>b</sup>	40.0
<i>Age of Youngest Child</i>			
under 6	38.7 <sup>a</sup>	40.1 <sup>b</sup>	41.7
Between 7 and 10	27.6 <sup>a</sup>	25.5 <sup>b</sup>	24.8
Between 11 and 18	33.7	34.4 <sup>b</sup>	33.5
Number of minor children in household	1.79(.01)	1.79 (.01) <sup>b</sup>	1.81(.01)
Cohabiting	13.3 <sup>a</sup>	13.3 <sup>b</sup>	15.8
Same Sex Partner	0.4	0.5	0.5
Multigenerational Household (3+ generations)	12.9 <sup>a</sup>	13.1 <sup>b</sup>	15.3
<i>Nativity and Citizenship</i>			
U.S. Born	88.2 <sup>a</sup>	86.1 <sup>b</sup>	84.5
Foreign Born, Citizen	5.1 <sup>a</sup>	5.7 <sup>b</sup>	6.3
Foreign Born, Non-citizen	6.8 <sup>a</sup>	8.2 <sup>b</sup>	9.2
<i>Mother's English Proficiency</i>			
Speaks only English	82.2 <sup>a</sup>	79.9 <sup>b</sup>	77.8
Speaks English/Well	13.2 <sup>a</sup>	14.3 <sup>b</sup>	16.2
Speak English not well	3.2 <sup>a</sup>	3.8 <sup>b</sup>	4.3
Speaks No English	1.4 <sup>a</sup>	2.0	1.9
N (Sample Size)	34,031	81,490	86,720
<i>Mother's Employment</i>			
Full time	57.4 <sup>a</sup>	54.8 <sup>b</sup>	52.1
Part Time	12.1 <sup>a</sup>	13.4 <sup>b</sup>	15.7
Unemployed	7.1 <sup>a</sup>	8.0 <sup>b</sup>	10.4
Not in the Labor Force (NILF)	23.4	23.9 <sup>b</sup>	22.0
<i>Mother's Education</i>			
Less than High School	22.4 <sup>a</sup>	19.4 <sup>b</sup>	17.0

Variables	2001	2005	2010
High School	31.2 <sup>a</sup>	31.5 <sup>b</sup>	27.9
Some College	33.2 <sup>a</sup>	34.5 <sup>b</sup>	39.0
College Degree or More	13.3 <sup>a</sup>	14.7 <sup>b</sup>	16.1
<i>Mother's Occupation</i>			
Managerial or Professional	10.0	9.6 <sup>b</sup>	10.4
Service and Industry	35.6 <sup>a</sup>	38.9	39.4
Sales and Office	31.2 <sup>a</sup>	30.1 <sup>b</sup>	28.1
Production	11.2 <sup>a</sup>	10.0 <sup>b</sup>	8.4
Military	0.005	0.01 <sup>b</sup>	0.08
No occupation	11.9 <sup>a</sup>	11.4 <sup>b</sup>	13.7
<i>Region</i>			
Northeast	18.9 <sup>a</sup>	17.8	17.3
Midwest	21.8 <sup>a</sup>	21.4	20.9
South	38.9 <sup>a</sup>	40.4	41.0
West	20.5	20.4	20.8
<i>Public Assistance</i>			
Receives income from welfare	10.7 <sup>a</sup>	9.9 <sup>a</sup>	8.8
Receives Food Stamps	26.7 <sup>a</sup>	33.1 <sup>a</sup>	42.0
N (Sample Size)	34,031	81,490	86,720

Note: Statistics are weighted, sample sizes are unweighted

<sup>a</sup>Indicates a statistically significant difference between 2001 and 2005, according to a two-tailed tests ( $p < .01$ ).

<sup>b</sup>Indicates a statistically difference between 2005 and 2010 ( $p < .01$ ). Statistical significance is determined by chi-square tests in the case of comparing percentage and a t-test in the case of means.

**Table 2**  
 Distribution of Mother's Race/Ethnicity and associated Poverty Rates, 2001–2010

	Racial Composition				Percent in Poverty			
	2001	2005	2010	2001	2005	2010	2001	2010
White	49.0	47.0	45.4	28.5	31.1	33.7		
Black	30.4	30.5	28.8	42.4	44.7	46.2		
Asian	1.9	2.1	2.1	30.7	27.0	27.7		
American Indian	1.1	1.2	1.1	46.4	44.4	47.9		
Hispanic	15.7	17.4	20.6	44.89	47.3	48.4		
Pacific Islander/SOR	0.3	0.4	0.3	35.54	37.2	37.0		
Multiple Races	1.7	1.5	1.8	39.1	43.1	42.7		
Sample Size	34,031	81,490	86,720	34,031	81,490	86,720		

**Table 3**  
 Employment Status by Year for each Race/ethnic group, 2001–2010 (Source: American Community Survey)

	Full time			Part Time			Unemployed			Not in Labor Force		
	2001	2005	2010	2001	2005	2010	2001	2005	2010	2001	2005	2010
White	60.7	57.6	54.5	13.9	15.1	16.7	5.1	6.0	8.3	20.3	21.4	20.5
Black	55.8	52.8	50.4	9.5	11.5	13.8	9.7	10.9	13.2	25.0	24.8	22.7
Asian	54.9	58.0	58.3	12.3	11.9	15.0	3.7	3.6	6.8	29.1	26.5	19.9
American Indian	46.0	46.1	47.8	10.2	11.8	11.5	9.3	9.9	11.9	34.5	32.3	28.9
Hispanic	51.7	51.7	49.4	11.5	12.3	16.5	7.8	8.3	9.9	29.0	27.8	24.2
Pacific Islander/SOR	56.3	49.5	58.1	13.2	13.9	11.4	7.2	6.4	7.4	23.3	30.1	23.2
Multiple Races	55.3	48.4	47.4	13.9	15.7	15.8	10.3	10.4	13.0	20.5	25.6	23.8



**Table 4**

Multivariate Logistic Regression analyses: Relative Risk Ratios (RRR) and Odds Ratios (OR) of risk of poverty among Single Mothers, 2001–2010<sup>1</sup> (n=202,241)

	Model I	Model II	Model III	Model IV
<b>Constant</b>	<b>-0.89***</b>	<b>-0.92***</b>	<b>-0.20***</b>	<b>-0.47***</b>
	<b>RRR/OR</b>	<b>RRR/OR</b>	<b>RRR/OR</b>	<b>RRR/OR</b>
<i>Race of Mother (ref=NH White)<sup>2</sup></i>				
Black/African American	1.40***	1.39***	1.28***	1.09***
Asian	0.92**	0.92	0.93	0.96
Native American/American Indian	1.42***	2.17***	1.34***	1.11
Hispanic	1.46***	2.04***	1.19***	0.99
Pacific Islander/Some Other Race	1.16*	1.38	1.08	1.03
Multiracial	1.29***	1.61***	1.19*	1.01
<i>Year (ref=2001)</i>				
2005	1.06***	1.06***	1.06***	1.01
2010	1.12***	1.12***	1.13***	1.02
<i>Race * Year Interactions<sup>3</sup></i>				
Black *2005		0.97	0.97	0.99
Black *2010		0.91*	0.91*	0.97
Asian *2005		0.74*	0.78 <sup>+</sup>	1.00
Asian *2010		0.68**	0.79 <sup>+</sup>	1.10
Hispanic *2005		0.97	0.92	1.05
Hispanic *2010		0.90*	0.87**	0.98
<i>Demographic and Family Composition</i>				
Mother's Age			0.98***	0.97***
<i>Mother's Marital Status (ref=Divorced)</i>				
Married, spouse absent			1.34***	1.17***
Separated			1.38***	1.16***
Widowed			1.24***	0.91***
Never Married			1.37***	1.11***
<i>Age of Youngest Child (ref=age&lt;6)</i>				
Age 6–10			0.76***	0.91***
Age 11–17			0.64***	0.89***
<i>Mother Cohabiting (ref=no partner)</i>				
Mother has same sex partner			0.87*	0.79***
Multigenerational Household			0.70***	0.60***
<i>Acculturative Characteristics</i>				

	Model I	Model II	Model III	Model IV
<b>Constant</b>	<b>-0.89***</b>	<b>-0.92***</b>	<b>-0.20***</b>	<b>-0.47***</b>
	<b>RRR/OR</b>	<b>RRR/OR</b>	<b>RRR/OR</b>	<b>RRR/OR</b>
<b>Mother's Nativity &amp; Citiz. (ref=US Born)</b>				
Mother is Foreign born, US Citizen			1.05*	0.91***
Mother is Foreign born, Not citizen			0.78***	0.89***
<b>Language Ability (Ref=Speaks English Only)</b>				
Speaks no English			1.82***	1.22***
Speaks English not well			1.58***	1.15***
Speaks English/Well			1.05**	1.02
<b>Socioeconomic Characteristics</b>				
<b>Mothers Employment (ref=Full Time employment)</b>				
Part Time				1.83***
Unemployed				1.98***
Not in the Labor Force				2.47***
<b>Mother's Education (ref= College or Above)</b>				
Less than high school				1.72***
High School				1.51***
Some College				1.27***
<b>Mother's Occupational Status (ref= Professional)</b>				
Service				1.57***
Sales				1.35***
Production				1.19***
Military				0.79 <sup>+</sup>
No occupation				1.28***
<b>Public Assistance</b>				
Receives Income from welfare				1.05**
Receives Food Stamps				1.79***
F statistic	324.93***	143.78***	323.87***	600.54***

<sup>1</sup>Relative risk ratios (RRR) have been calculated for all categorical variables, with the exception of variables indicating interaction effects. Interaction effects are reported as Odds Ratios (OR) and the constant is reported as a coefficient.

<sup>2</sup>All race/ethnic groups, with the exception of "Multiracial", refer to respondents who select this group in isolation of other racial groups. Hispanic refers to all mothers, regardless of race(s) selected who reported being of Hispanic origin and "Multiracial" refers to non-Hispanic respondents selecting two or more races.

<sup>3</sup>Table only shows interaction effects yielding statistically significant effects. All other effects are suppressed but available from other by request.

\*\*\*  
p .001,

\*\*  
p .01,

\*  
p .05.

**Table 5**

Multivariate Logistic Regression analyses: Relative Risk Ratios (RRR) and Odds Ratios (OR) of risk of poverty among Single Mothers<sup>1</sup>, 2001–2010<sup>1</sup> (n=202,241)<sup>1</sup>

	Model V	Model VI	Model VII
<b>Constant</b>	<b>-0.54***</b>	<b>-0.41***</b>	<b>-2.09</b>
	<b>RRR/OR</b>	<b>RRR/OR</b>	<b>RRR/OR</b>
Race of Mother (ref=NH White) <sup>2</sup>			
Black/African American	1.24***	1.24***	1.11***
Asian	0.91	0.91	1.02
American Indian/Alaskan Native (AIAN)	1.21***	1.23**	1.16+
Hispanic	1.13***	1.14***	1.01**
Pacific Islander/Some Other Race	1.05	1.05	1.00
Multiracial	1.09+	1.10*	0.98
Year (ref=2001)			
2005	1.03**	1.04*	1.00
2010	1.08***	1.09	0.94***
Race * Year Interactions <sup>3</sup>			
Black *2005	0.97*	0.97	0.99
Black *2010	.90*	0.92+	0.98
Mothers Employment (ref=Full Time employment)			
Part Time	1.98***	1.98***	1.84***
Unemployed	2.15***	2.15***	1.94***
Not In the Labor Force	2.94***	2.94***	2.44***
Race * Employment			
Asian * NILF	0.56***		0.71*
AIAN * Part Time	0.64**		0.57*
Hispanic * Part Time	0.74***		0.77***
Hispanic * Unemployment	0.72***		0.78**
Hispanic * NILF	0.62***		0.62***
Employment * Year			
Part time *2005		0.96	0.97
Part-time *2010		1.16***	1.15*
Unemployed *2005		1.03	1.05
Unemployed *2010		1.23**	1.35***
NILF *2005		1.05	1.13*
NILF *2010		1.57***	1.53***
Mother's Education (ref=College and Above)			

	Model V	Model VI	Model VII
<b>Constant</b>	<b>-0.54***</b>	<b>-0.41***</b>	<b>-2.09</b>
	<b>RRR/OR</b>	<b>RRR/OR</b>	<b>RRR/OR</b>
Less than High School			1.71***
High School			1.51***
Some College			1.27***
Mother's Occupation (ref=Prof.)			
Service			1.56***
Sales			1.35***
Production			1.19***
Military			0.78 <sup>+</sup>
No Occupation			1.28***
F Statistic	466.06***	658.01***	438.88***

<sup>1</sup>Relative risk ratios (RRR) have been calculated for all categorical variables, with the exception of variables indicating interaction effects. Interaction effects are reported as Odds Ratios (OR) and the constant is reported as a coefficient.

<sup>2</sup>All race/ethnic groups, with the exception of "Multiracial", refer to respondents who select this group in isolation of other racial groups. Hispanic refers to all mothers, regardless of race(s) selected who reported being of Hispanic origin and "Multiracial" refers to non-Hispanic respondents selecting two or more races.

<sup>3</sup>Table only shows interaction effects yielding statistically significant effects and suppresses demographic, acculturative, and public assistance effects (available from author by request).

\*\*\*  
p .001,

\*\*  
p .01,

\*  
p .05.