# Race, Residence and Family Structure: Race/Ethnic Differences in Poverty Among Female-headed Families

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## **ABSTRACT**

We use data from the 5% Public Use Microdata Sample of the U.S. Census to examine race and residential variation in the prevalence of female-headed families with children and several key economic well-being outcomes. Special attention is paid to cohabiting female-headed families with children, and those that are headed by a single female caring for at least one grandchild because these have been identified as important living arrangements for single mothers and their children. We find that (1) in 2000 cohabiting and grandparental femal-headed households with children comprised one-third of all female-headed households with children, (2) cohabiting households are found disproportionately in nonmetropolitan areas, (3) household poverty is highest for single mother household heads that do not have other adult household members, (4) earned income from a cohabiting partner and retirement income account for much of the additional income sources that life cohabiting and grandparental female-headed households out of poverty.

#### Introduction

The rise in female-headed families is one of the most important family changes witnessed in recent decades. The combination of high but stable divorce rates with an increase in nonmarital childbearing has had important life course implications for recent cohorts of American women and children. Approximately half of all women will experience single motherhood at tome point in her lifetime (Moffitt and Rendall, 1995), and a majority of children will live in a female-headed family (Graefe and Lichter, 1999). Extensive research efforts have been directed toward studying poverty outcomes among female-headed families by race/ethnicity and residence separately, but few have examined how poverty varies among female-headed families by race/ethnicity and residence. Understanding how race, ethnicity and residence influence economic outcomes within female-headed families serves to inform the current policy debate over re-authorization of welfare legislation, the emphasis on gainful employment, and the focus on moving the unmarried into marriage. A critically important component of this debate is likely to be the prevalence and implications of different family structures and poverty among racial and ethnic minorities – Black, Hispanic, and others. Also well-documented, but receiving far less focused policy attention, is the considerable variation in family structure and poverty across residence areas, and the impact of welfare reform policies on these processes (see Weber, Duncan and Whitner, 2002). The fact that economic well-being is closely tied to local economic opportunities and the implementation of TANF requires that we examine racial/ethnic variation in family structure and economic well-being across residence areas.

In this study, we extend the prior research on female-headed households and economic well-being in nonmetropolitan and metropolitan areas by focusing on racial and ethnic variations

in female-headed families with children. We use the 5% Public Use Microdata Sample (PUMS) of the 2000 U.S. Census of Population and Housing to describe family structures by race and ethnicity (Whites, African Americans, Hispanics, Native Americans) across residence areas. We not only examine female-headed families with children under 18, we also focus attention on less common female-headed family types, such as those in cohabiting relationships or residing with grandparents. It is important to examine these family types when studying the "career" of single mothers (Bumpass and Raley, 1995) and of children living in female-headed families (Graefe and Lichter, 1999).

Prior studies find that female-headed families have the poorest economic outcomes, but there is significant variation in economic well-being depending on the mother's marital status and race/ethnicity (McLanahan and Casper 1995). Substantial variation in poverty rates also occurs between racial groups and across residence areas, with nonmetro residents vying with central city residents for the highest poverty rates (McLaughlin and Sachs 1988; Snyder and McLaughlin 2004). The type of female-headed family–single, cohabiting, headed by a grandmother–can also be an important factor determining household poverty.

The current study contributes to the literature that seeks to understand how residence influences economic outcomes and ultimately economic well-being, particularly among those most disadvantaged in the labor force (e.g., females, blacks and Hispanics) and those known to be the most in need (e.g., single mothers with children). We answer the following questions in this study. How common are cohabiting and grandparental female headed families with children across residence areas and racial/ethnic groups? How does poverty vary across different types of female-headed families with children depending on the race or ethnicity of the mother and the

place of residence? Does the extreme disadvantage for most minority groups and for nonmetro and central city residents observed in prior decades persist into 2000? What sources of income are most effective in raising these households above poverty? Finally, to what extent do differences in human capital, work effort, and reliance on public assistance across race-ethnic groups and residence affect the odds of being poor among different types of female-headed families with children?

# Household Structure, Race, Residence and Poverty

Each of the factors we examine in this study, when considered alone, is associated with the likelihood of being poor. Female-headed households with children are noted for their high poverty rates, as are most racial and ethnic minority groups (Jones and Kodras 1990; Lichter 1997). Nonmetro and central city residents have higher poverty rates than suburban metro residents. These high poverty rates among nonmetro and central city residents hold within race or ethnic group (Jensen, McLaughlin and Slack 2003). We briefly describe the importance of each of these factors for increased poverty risks, but then focus on how these factors combine to place female-headed families with children—those that are minorities in nonmetro areas—at the greatest risk of poverty.

Household Structure and Well-Being. Living in a female-headed family has become a normative experience for both women and children. Approximately half of recent birth cohorts of women will experience female-headship (Moffitt and Rendall, 1995), and a majority of children will experience this family type (Graefe and Lichter, 1999). The severe economic vulnerability of these families has been well-documented. One way female-headed families have improved their economic well-being is by living in a household with other adults. Over half of

single mother families spend some time living in a household with other adults, usually in response to a crisis (divorce, nonmarital birth), and they most often live in households with their parents or with a cohabiting male partner (Bumpass and Raley, 1995). These household types are important to consider because they are so common, but also because they have been found to improve economic well-being outcomes, at least in the short-run, for female-headed families (Manning and Lichter, 1996; Snyder and McLaughlin, 2002; Trent and Harlan, 1994).

Households that contain grandparents caring for a grandchild are becoming more common, and this is especially true among racial and ethnic minority groups (U.S. Census, 2003). Most studies find that grandchildren are often living in their grandparental home because their parents have financial needs and other problems (such as drug and alcohol abuse) that require additional parenting help from others (Goodman and Silverstein, 2002). Existing studies have focused on the emotional well-being of these grandparents, their relationships with their families (Goodman and Silverstein, 2003; Pearson, Hunter, Cook, Ialongo and Kellam, 1997), and less so on their economic well-being. The financial support provided by grandparents is often assumed as part of the motivation for the living arrangement. For the first time in 2000 the PUMS asks about grandparental coresidence with grandchildren, making it possible to examine their economic well-being, and obtain a detailed picture of their income sources.

The rise in nonmarital cohabitation is another significant and recent change in family behavior that has important implications for the economic well-being of women and children.

More than ever children are living in cohabiting households (Bumpass & Lu, 2000; Graefe & Lichter, 1999) and their improved economic circumstances, compared to female-headed households (Lichter and Crowley, 2003; Manning and Lichter, 1996; Snyder and McLaughlin).

should result in better child outcomes. Higher household income is linked with improved child and youth outcomes (Duncan & Brooks-Gunn, 1997). Despite these gains, we need to keep in mind that poverty is only one well-being outcome for families and children. Other evidence suggests that children in cohabiting unions often fare worse on developmental outcomes and this is especially true for White and Hispanic youth (Nelson et al., 2001). Outcomes among cohabiting children are more similar to those of children in single-mother families than to children in married-couple families (Brown 2002; Manning & Lamb, 2003; Nelson et al., 2001; Thomson, Hanson & McLanahan, 1994). In addition, the temporary nature of cohabiting unions, however, calls into the question the notion that they are a viable long-term strategy for promoting economic well-being of single mother families.

Nonetheless, we emphasize the economic well-being of these single mother family types to provide a more accurate portrait of these female-headed families, and a detailed description of one important well-being outcome. The interrelationships between household structure and total househol income, family earnings, welfare receipt and poverty status has received significant attention from economists and sociologists (Blank 2002; Ellwood 2000; Kniesner, McElroy and Wilcox 1988; Lichter 1997; Moffitt 1990; Rosenzweig 1999). These alternate household structures influence total household earnings by determining the number of possible wage earners in the household, and the characteristics of those wage earners. Total earnings are chronically low in many female-headed families due to presence of at most only one (female) wage earner and women's lower earnings in the labor market (Blank 2002; Ellwood 2000; Tickamyer and Bokemeier 1988). Barriers to employment among less educated single mothers also are well documented and include inability to find or afford quality child care, available jobs tend to be

shift-work or have variable hours with low pay and no health benefits and no provisions to take time off to care for sick children (Edin and Lein 1997; Lichter and Jensen 2002). Lack of transportation also is a problem especially in rural areas (Mills and Hazarika 2003).

Research has assessed the effects on poverty status of changes in earned and unearned income levels and levels of different forms of transfer payments - Social Security, SSI, Food Stamps and other in-kind transfers, as examples (see Gottschalk and Danziger 1985; Iceland, Short, Garner and Johnson 2001; McLaughlin and Sachs 1988). In female-headed families, barriers to employment often result in dependence on transfer payments and in-kind transfers, even in the face of welfare reform. Important differences in dependence on these supports by race and ethnicity have been documented (Rodgers and Rodgers 1991).

Race and Ethnicity. The higher poverty rates among most racial and ethnic minorities in the U.S. have been well-documented and have persisted across decades, with the highest rates generally found among African Americans and Hispanics (Jensen and Tienda 1989). American Indians located on reservations also have extraordinarily high poverty rates (Gonzales 2003; Snipp 1989). Higher poverty among minorities has been linked to both individual and structural explanations (Jensen, McLaughlin and Slack 2003; Lichter and Jensen 2002; RSS Task Force 1993). Individual explanations suggest that family structure, low educational attainment, poor work habits, and a culture that places little emphasis on mainstream goals hinder the ability of some minority groups to effectively participate in the labor market and thus to prosper economically.

Structural explanations would acknowledge the characteristics identified by the individual-level theories, but would argue that these are the result of forces in social and

economic institutions that place minorities at a disadvantage. They are not necessarily due to poor choices made by individuals. Poorer schools in minority communities leave minorities less prepared for successful labor market entry. Lower earnings returns to education for minorities compared to similarly educated whites, result in lower incentives to attain higher levels of education. The explanations for these lower earnings for minorities range from poorer work performance to discrimination (Duncan 1999; RSS Task Force 1993; Wilson 1987).

High mortality rates and incarceration rates of young African American men make them unavailable for marriage and poor employment prospects make them relatively unattractive 'marriage material' partially explaining the high proportion of female headed households among African Americans (Lichter, LeClere and McLaughlin 1991; Lichter, McLaughlin, Kephart and Landry 1992). African Americans in the South face special barriers to employment and economic success (Dill and Williams 1992; Lichter 1989). Low or no investment in areas with high concentrations of minorities has limited the economic, educational and social opportunities available to all residents, but especially to minorities, in those areas (Colclough 1988; Lyson and Falk 1993). In addition, studies of the effects of minority concentrations on economic disparities between whites and minority groups provide further evidence for differential treatment of minorities in areas with high minority concentrations (Cohen 1998; Beggs, Villemez and Arnold 1997).

All racial and ethnic groups are not the same. Some Hispanic and most Asian groups have more traditional family structures—they are more likely to be married or living with a partner, but Hispanic groups still have high poverty rates and limited opportunities (Saenz and Torres 2003). Because of more traditional gender role attitudes in some Hispanic communities,

female headed families may be particularly disadvantaged. Both individual and structural explanations help in identifying reasons for higher poverty among racial and ethnic minorities. Structural explanations provide an important rationale for understanding how the characteristics of minority groups might differ from those of the majority, and how those characteristics and their consequences for economic well-being are likely to vary across different places.

Residence or Place. Following Sawhill's well-known 1988 article questioning why the problem of poverty remains so persistent in America, economic research largely focused on the national level, without considering differentiation by place. The 1996 welfare reform legislation, i.e., the Personal Responsibility and Work Opportunity Reconciliation Act, further encouraged national-level analysis of the key interrelationships between work and welfare receipt, employment and poverty, and the influence of family structure (and, importantly, changes in family structure) on poverty status and reliance on welfare. The devolution of the implementation of this program down through states to the (usually) county level, led economists to consider the importance of local conditions when they examined poverty and the effects of welfare-to-work initiatives (Blank 2004; Crandall and Weber 2004; Swaminathan and Findeis 2004; Ulimwengu and Kraybill 2004; Weber, Edwards and Duncan 2004) and triggered additional research among sociologists and demographers on the importance of place for understanding poverty, welfare use and work (Duncan 1992; 1999; Lichter and Jensen 2002; Nord 2000; Weber, Duncan and Whitener 2002).

Sociologists and family demographers have long recognized place and its intersection with race/ethnicity and family structure as important determinants of economic and social well-being, even though the research was often segregated into rural or nonmetro and urban or central

city camps (Allen and Thompson 1990; Duncan 1992; Fitchen 1981; Jensen and Tienda 1989; Lichter 1989; Rural Sociological Society Task Force 1993; Wilson 1980; 1987). Despite the different lines of research, many of the factors placing racial and ethnic minorities at risk in both central city and nonmetro areas tended to coincide. Family structure plays an important role.

Historically, rural families have maintained more traditional family forms and behavior characterized by earlier marriage and childbearing, larger families, and a larger proportion of households headed by married couples (Heaton, Lichter and Amoateng 1989; McLaughlin, Lichter and Johnston 1993; Meyers and Hastings 1995). In recent years, however, family structure in nonmetro areas has become more similar to that in metro areas (MacTavish and Salamon 2003; McLaughlin, Gardner and Lichter 1999; Snyder and McLaughlin 2004), even though nonmetro women continue to display more traditional family behaviors when considering cohabitation and nonmarital births (Albrecht and Albrecht 2004; Snyder, Brown and Condo 2004). The share of female-headed families with children in nonmetro America increased from 8.1 percent of nonmetro families in 1980 to 10.9 percent by 2000 (Snyder and McLaughlin 2004). Far less is known about race-specific changes in family structure in nonmetro areas. Although female headed families with children are an increasing proportion of white families, the prevalence of these families among African Americans — especially in central cities and nonmetro areas—is much higher (Wilson 1987; Dill and Williams 1992).

Local economic and educational opportunities and local labor market institutions also determine the poverty of families. Residence, in particular nonmetro residence, places all families at greater risk of poverty (Fitchen 1995; Jensen and Eggebeen 1994; Lichter and McLaughlin 1995; Lichter and Jensen 2002), but especially female headed families (Snyder and

McLaughlin 2002; 2004). Prior research on rural economic opportunities has documented the lower incomes (despite greater labor force attachment) and higher underemployment of nonmetro than metro residents (Jensen, Findeis, Hsu and Schachter 1999; Lichter, Johnston and McLaughlin 1994; Lichter and McLaughlin 1995; McLaughlin and Perman 1991; RSS Task Force on Persistent Rural Poverty 1993; Slack and Jensen 2002). In nonmetro settings, more traditional attitudes regarding family structure and women's roles in the family and the paid labor market (Bokemeier and Garkovich 1991) and limited availability of quality, affordable child care and lack of reliable transportation (Mills and Hazarika 2003) tend to place female-headed families of all types at a distinct disadvantage for participating in the labor market.

Intersection of Family Structure, Race/Ethnicity and Place. The places in which minorities reside, particularly if minorities are concentrated, further shape the options available to them. Poor economic opportunities, poorer schools and resulting lower educational attainment affect minorities in both central city and nonmetro settings (Falk, Talley and Rankin 1993; Hyland and Timberlake 1993; Wilson 1987). The greater disadvantage of rural minority groups and women in rural labor markets also has been well-documented (Gonzales 2003; Harris and Worthen 2003; McLaughlin and Perman 1991; McLaughlin and Sachs 1988; Saenz and Torres 2003; Slack and Jensen 2002; Tickamyer and Bokemeier 1988). Dill and Williams (1992) make a particularly strong case regarding how the intersection of race, conservative religious beliefs and attitudes regarding women's roles places African American single mothers in the rural South at very high risk for poverty. Many rural minorities (African Americans, American Indians and Hispanics) reside in relatively concentrated populations near or in the places of their historical exploitation or subjugation suggesting persistence of structural forces placing these individuals at

a disadvantage that cannot be ignored (RSS Task Force 1993; Falk, Talley and Rankin 1993). In addition, the sharp rise in female-headed families among rural minority groups, especially rural African American families, has placed them at a distinct economic disadvantage compared to other rural families, and also African American families in other residential areas (horton and Allen 1998; horton, Thomas and Herring, 1995).

We expect these nonmetro disadvantages in economic opportunities to continue to be a force for poorer economic well-being in 2000, and to be exacerbated among rural race and ethnic minority groups. In addition to the restructuring of rural employment opportunities, changes in welfare policy in 1996 dramatically altered public assistance to needy families, particularly female-headed families, in the United States. In the recent re-authorization bill, the continued emphasis on promoting both employment and marriage that originated in the 1996 welfare reform legislation has the potential to affect both family structure and the economic well-being of women and children in female-headed families. The insensitivity of the national welfare policy and state-level implementation to special circumstances in nonmetropolitan areas has placed nonmetro families with children, and particularly minority women and children, at special risks for sanctions and inability to meet work or training requirements.

Poorer opportunities and barriers to employment in nonmetro areas are reflected in the poverty these women and their children experience. Female headed families with children are among the nonmetropolitan families most at risk for poverty. Poverty among nonmetro female-headed families with children stood at 40.9 percent in 2000. Despite a decade of economic expansion, poverty rates among this family type remained incredibly high–2/5 of these nonmetro women and children remain poor. By 2000, these poverty rates were equivalent to those of

female-headed families with children in the central cities of metropolitan areas. Equally important, Snyder and McLaughlin (2004), while unable to conduct race or ethnic specific analyses, show that Black and Hispanic female-headed households with children are 2.4 and 1.7 times more likely to be poor, respectively, than their white counterparts.

Numerous studies have documented post-1996 employment patterns and associated economic well-being outcomes, and residential variation in these processes (see Findeis and Jensen 1998; Lichter and Jensen 2002). Relatively few, however, have jointly examined post-1996 patterns of family structure by race and ethnicity, and residential variability in economic well-being outcomes and the factors influencing economic outcomes (for exceptions see Lichter and Crowley, 2002; Snyder and McLaughlin, 2004). As far as we know, no published studies have examine racial/ethnic and residential variation in these female-headed family structure patterns and economic outcomes. Our study will build upon the existing body of research in this area of rural family demography.

#### **Data and Methods**

We use recently available data from the 5% Public Use Microdata Sample (PUMS) of the 2000 U.S. Census of Population and Housing to closely examine female-headed families with children and economic well-being outcomes by race/ethnicity and residence. The sample size is large enough to highlight contemporary and emerging family types, including female-headed families with cohabiting male partners and those headed by a grandmother caring for one or more grandchildren, and associated economic well-being outcomes by residence for a variety of racial and ethnic groups groups. The 5% sample has approximately 14 million people (unweighted)

containing 258 person and household level variables related to demographic characteristics, family and household structure, income and poverty, housing, and employment. Weighted analysis makes the 5% PUMS sample representative of the US population in 2000. Our analyses are restricted to 230,415 female-headed households that contain children less than 18 years of age.

## Measures

Our analysis includes measures of female-headed family type (cohabiting, grandparent, single), individual characteristics (race, age, educational attainment), employment and job quality of the householder, measures of geographic location (nonmetro, central city and suburban residence, region), and economic well-being outcomes (percentage poor, poverty ratios).

Female-Headed Household Type. Our study emphasizes the prevalence and economic well-being of female-headed households with children, and includes an emphasis on cohabiting female-headed households and female-headed households that are headed by a grandmother caring for at least one grandchild. We identify the cohabiting and grandparent female-headed households using the expanded household relationship variable (relate) in the person-level file from the 2000 PUMS. Among these households we then identify those that contained children under age 18 and those that did not. *Cohabiting* female-headed households are those that are headed by an unmarried female with children, in which an unmarried partner of the opposite sex is reported in the household. *Grandparent* female-headed households are those that are headed by an unmarried female, and the presence of at least one grandchild is reported. Finally, *single* female-headed households include all other female-headed household types with children. The

result is three mutually exclusive female-headed household types with children: cohabiting female-headed households, grandparent female-headed households, and single female-headed households.

We are confident that our coding scheme captures most female-headed cohabiting and grandparent households, although we do not include these types of households when they exist as a subfamily within a larger family household. For example, cohabiting female-headed families living as a subfamily in a larger household are not included in our study. Female-headed grandparent families living as a subfamily in another household also are not included, although it is likely that few of these exist. Prior studies (Snyder & McLaughlin 2004) report that subfamilies represent less than 3% of all families and are not a large proportion of female-headed families with children.

Measures of Economic Well-Being. Several measures of economic well-being are used, all calculated at the household level. Prior studies find that regardless of family type, households tend to pool their economic resources (Oropesa, Landale & Kenkre, 2003). Moreover, qualification for TANF and other forms of public assistance is determined based on total household income resources, rather than just the resource reported by the household head. Thus, the household level is appropriate for examining indicators of economic well-being. The household income-to-needs ratio, hereafter called the poverty ratio, and whether or not a household has an income-to-needs ratio less than or equal to one, household poverty, are determined for each household. The *household income-to-needs poverty ratio* is calculated using the total household income and the income needs levels from the poverty threshold tables from the U.S. census in 1999. Income thresholds are provided for households containing up to nine or

more members and eight or more children. The poverty ratio can vary from zero to a very large positive value, indicating that household income far exceeds the poverty need level. *Household* poverty is equal to one if the household had an income-to-needs ratio of one or less. It is set equal to zero if the ratio is greater than one. This is equivalent to a standard poverty definition.

Rather than relying solely on total household income (hinc), we also are interested in how different types of income contribute to raising households above poverty, and how this varies by type of female-headed household, residence and race/ethnicity. To do this, we calculate additional measures of poverty to determine the degree to which poverty is alleviated for these female-headed family types as contributions of various income types are included. The following poverty ratios are calculated, and the percentage of households in poverty is reported for the earnings and income contributions shown in the five 'levels' below.

- Only the earnings of the household head are included (level 1)
- Earnings of any other related household members, including cohabiting male partners for cohabiting households, are added to the head's earnings (level 2)
- Income from all 'other' income sources for all related household members, including cohabiting partners, are added to the earnings income. "Other" income sources include mostly alimony and child support for female-headed families, but also can include income from veterans' payments, military income, and other periodic sources of non-earned income (level 3)
- Public assistance income is added to the incomes described above. Public assistance
  income includes only income received from the TANF program in 1999 and does not
  account for in-kind resources from public programs such as Medicaid and food programs.

- In-kind public income sources are not measured in the 2000 PUMS (level 4).
- The final level adds any income from social security, supplemental security income, and any retirement income to the other income sources (level 5).

Residence. The 5% PUMS further allows an accurate representation of place of residence. The "areatype" variable identifies nonmetropolitan residents, those in mixed nonmetropolitan and metropolitan areas, and three categories of metropolitan residents (central city, outside central city, and mixed central city and outside central city). Analyses of residence by household type and poverty revealed that the mixed metro category households more closely resembled metro-suburban households, and they are classified as such. It is not possible to determine residential location of households in the mixed metro and nonmetro category, and we classify these households as *not identified*. The *not identified* households comprise approximately 6% of all households in our sample and are not described in the descriptive tables, but are included as a residence category in the multivariate analyses. Thus, the residence variable has four categories: *nonmetro, metro-central city, metro-suburban, and not identified*.

We had initially considered using the 1% PUMS file, but found that the use of the SuperPUMAs (with a 400,000 minimum population size criterion) resulted in there being no identified nonmetropolitan residents in Pennsylvania. Clearly, this level of aggregation in the PUMS leaves the 1% file inappropriate for studying any type of residential variation. The percentages of nonmetropolitan and metropolitan residents reported in the 5% PUMS (where the PUMAs have a 100,000 minimum population criterion) are consistent with those in the county-level Summary Tape File data for the 2000 Census.

Region. Region indicates the region of the United States where the household is located.

Family and household economic well-being varies considerably by region of residence, and female-headed families with children in the Southern region of the country are worse off compared to others. Region includes the following categories: *Northeast, Midwest, South, and West.* 

Individual Characteristics of the Household Head. We include measures of the household head's demographic characteristics as explanatory variables in our models predicting poverty.

Age is split into five categories: less than 25 years (omitted category), 25-34 years, 35-44 years, 45-54 years and 55 years and older. Marital status indicates women's current marital status in three categories: divorce/separated (omitted category), widowed, and never married. Education captures the female head's highest educational attainment in 2000: less than a high school education (omitted category), high school education only, high school education plus some schooling other than college, four-year college education or more.

The work effort measures are a combination of hours and weeks worked, and the industry of employment. Persons are coded as working full-time, full-year if they report working 50 or more weeks in the prior year with an average of 35 or more hours of work per week. Part-time workers are those who worked less than 35 hours per week on average the prior year and/or less than 50 weeks per year. The third group includes those with no job. In the 2000 U.S. Census industry of employment is reported using the NAICS codes. Based on the categorization used in McLaughlin et al. (1999), we collapse the NAICS industry codes into a three category "job quality" variable based on reported earnings. We combine these two variables (work effort and job quality) into a series of dummy variables: *no job; part-time, poor job; part-time, mid job; part-time, good job; full-time, poor job; full-time, mid job; and full-time, good job (omitted*)

category).

Our study pays special attention to the race and ethnicity of the female household head, and how economic well-being outcomes vary by race/ethnicity and residential location. The 5% PUMS data set was chosen for this study in large part because it is the only data set with enough households to examine variations in female-headed household status by race/ethnicity and residence. *Race/Ethnicity* includes the following categories: *Non-Hispanic White, Non-Hispanic Black, Hispanic, Native American, and an 'Other'* category that includes all other racial groups. The characteristics of these five racial/ethnic groups are presented separately in the descriptive section of the analyses. However, there are too few Native American female-headed households in each residential location (especially in central city-metro areas, see Table 1) for meaningful multivariate analyses. Thus, for the multivariate logistic regression analyses the Native American households are included in the Other category.

#### Methods

Many of the variables described above are only available in the person-level file of the 2000 PUMS. Since our analyses are all at the household level, the person-level variables (including household head characteristics and household members' income sources) are appended to the household-level PUMS file. Thus, each household record in our constructed file contains all the original household-level variables, plus income variables for all related household members, and individual characteristics of the household head and all cohabiting partners.

We begin by presenting the distribution of female-headed family household types for the U.S., and across residence areas—nonmetro, metro suburban and central city—and racial/ethnic

groups—Non-Hispanic Whites, Non-Hispanic Blacks, Hispanics, Native Americans, and Others. Second, we report the percentage of the female-headed households that are poor and the median household poverty ratios for female-headed family types by residence and race/ethnicity. Next, we examine how various household income sources contribute to lifting these households above poverty for the female headed family types by race/ethnicity and residence. As described earlier, we construct combinations of these income sources and determine how much poverty is reduced by each source. Finally, we use logistic regression analyses to examine poverty among female-headed families with children, placing emphasis on the role of residence and race/ethnicity for influencing poverty risks. The multivariate models allow us to assess the extent to which demographic and work differences in household heads across race-ethnicity and residence contribute to the variations in poverty rates by race/ethnicity and residence. To further examine whether race/ethnicity and household type vary across residence in their influence on the odds of being poor, we estimate models predicting poverty status separately by residence and then by race and ethnicity.

#### Results

# **Descriptive Analyses**

Table 1 shows the distribution of the female-headed family types for the US, and by race/ethnicity and residential location. Two-thirds of female-headed households that contain children in the US are headed by a single female, twenty percent are headed by a woman with a cohabiting male partner, and thirteen percent contain a grandmother that is regularly responsible for caring for a grandchild (Table 1, first row). Among those living in nonmetro areas, female-

headed households headed by a single mother remain the largest female-headed household type, and the percentages are similar across race/ethnicity. Compared to other residence areas and the US overall, a larger percentage of these nonmetro families are headed by a cohabiting woman, nearly one-fourth. This is due to the greater share of white nonmetro female-household heads who are cohabiting, 26.3 percent. Notably, over one-third (34.2 percent) of Native American female-headed households with children are cohabiting. A somewhat larger share of nonmetro (than US) minority female-headed households contain a grandmother who cares for her grandchild. Nearly twenty percent of Non-Hispanic Black nonmetro female-headed households with children contain a grandmother, followed by 16.2 percent of Native American households. The larger shares of cohabiting and grandparent female-headed households among Native Americans in nonmetro areas result in only half (49.6 percent) of these female-headed households with children being headed by single mothers alone.

A similar pattern of female-headed household types by racial/ethnic groups exists among central city-metro and suburban-metro female-headed households with children. Non-Hispanic Whites and Native Americans are more likely than whites to be cohabiting, a larger percentage of Non-Hispanic Blacks and Native Americans are in grandparent female-headed households, and fewer Native American female-headed households with children can be categorized as single-mother headed. Despite the similar patterns, nonmetro female-headed families with children are distinguished by their propensity to have a cohabiting male partner, a pattern found across each race/ethnic category.

## [Insert Table 1 here]

Table 2 examines the economic well-being of female-headed households with children by

residential location and race/ethnicity. Median household poverty ratios and the percentage in poverty are reported for each household type. Overall, Non-Hispanic Whites experience better economic status than other race/ethnic groups as evidenced by the higher median poverty ratio and lower percentage in poverty across these female-headed household types, and also within each residence category. Comparing household types, cohabiting female-headed households with children have lower poverty rates and higher median poverty ratios than the other household types. This pattern holds across race/ethnic groups. Across household type and race/ethnic group, those in nonmetro areas fare worse compared to female-headed households with children in other areas.

Looking at female-headed households in nonmetro areas in more detail, we see that the same pattern holds. Whites fare better than other racial/ethnic groups for cohabiting, grandparent and single mother household types. For example, approximately 23 percent of these households headed Non-Hispanic White cohabiting women are poor, compared to 38.5 percent of those headed by Non-Hispanic Blacks, 36 percent of those headed by Hispanics, and 44 percent of those headed by Native Americans. Female-headed households with children that contain a grandparent fare worse. Nearly half of these households headed by Hispanic women are poor (47.5 percent), compared to 43.9 percent of those headed by Non-Hispanic Black women, 41.3 percent of those headed by Native American women, and 26.5 percent of those headed by Non-Hispanic White women. Female-headed households headed by a single mother, however, have the highest percentage in poverty in nonmetro areas, and this is true across racial/ethnic groups.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>The exception is households of this type headed by an "other" woman. Among these nonmetro households, those headed by a grandparent have the highest percent poverty (46.6%). .

Over one-third of these Non-Hispanic White households are poor (34.3 percent), and approximately half of these households in other racial/ethnic groups are poor. The patterns of poverty by race/ethnicity and type of female-headed family are similar in central city and suburban-metro areas, although the levels of poverty are lower in these areas, and differences are especially large between poverty levels in nonmetro and suburban-metro areas for these family types.

Thus, the extreme poverty experienced by minority female-headed families, and those in nonmetro and central city-metro areas persisted in 2000. Moreover, nonmetro female-headed families now fared worst of all in 2000, and this is true across all racial/ethnic groups and female-headed family types considered. Cohabiting female-headed households with children have the lowest poverty—and this is true across racial/ethnic groups—which may help to explain the sharp rise in this family type in recent years.

## [Insert Table 2 here]

Tables 3-5 examine how various income sources contribute to lifting households above poverty for cohabiting, grandparent, and single mother female-headed families. We consider the following income sources: earnings, public assistance, social security, supplemental security income, retirement income, and 'other' income. The 'other' income category includes mostly child support and alimony, but also income from various other sources.<sup>2</sup> Public assistance

<sup>&</sup>lt;sup>2</sup>'Other' income includes: alimony and child support for female-headed families, veterans' payments, military income, and other periodic sources of non-earned income.

income in 2000 includes only cash assistance from the TANF program. Although recognized as an important source of economic support, in-kind assistance from other public programs, such as medicaid and food programs (food stamps, WIC, free and reduced price student breakfast and lunch programs), is not included in the PUMS data, and thus is not in our analyses. To determine the importance of these income sources for alleviating poverty we construct five incremental measures: level 1= earnings of the household head only; level 2 = level 1 plus earnings from other related household members; level 3 = level 2 plus all income from 'other' sources for all related household members; level 4 = level 3 plus all public assistance income for all related household members; level 5 = level 4 plus all income from supplemental security income, social security income, and retirement income for all related household members. The construction of these 5 incremental measures was determined based on our understanding of the importance of various income sources for female-headed families with children.

Table 3 examines the degree to which adding these income sources lifts nonmetro female-headed households with children out of poverty. Level 1 includes only the earned income of the household head. Upwards of fifty percent of all nonmetro female-headed households with children would be in poor if earned income of the household head was their only income source.<sup>3</sup> Over seventy percent of grandparent households would be poor. Comparing across race/ethnic groups, cohabiting households in the 'other' race/ethnic group have the lowest percentage in poverty (35.9 percent), and grandparent households headed by Hispanic women have the highest percentage in poverty (90 percent).

<sup>&</sup>lt;sup>3</sup>The exception is cohabiting households headed by a female in the 'other' racial category (35.9%).

The earnings of other related household members (level 2) are an important resource that lifts many families with cohabiting partners out of poverty, where upwards of one-third of all families are raised above poverty. For example, an additional 35.8 percent of Non-Hispanic White cohabiting female-headed households are lifted out of poverty by the earnings of other related household members. This figure is even higher for other racial/ethnic groups is: 42.8 percent for Non-Hispanic Blacks, 38.7 percent for Hispanics, and 39.6 percent for Native Americans. Eamed income from other related household members, including a cohabiting male partner, is a critical resource for these families of all racial/ethnic groups, and explains their lower poverty.

Grandparent households are also lifted out of poverty by the earned income of other related household members, but the alleviation is much smaller, and Non-Hispanic Whites benefit more from this income source than do other race/ethnic groups. For example, 6.6 percent of grandparent households headed by a Non-Hispanic White female are raised above poverty by this income source (level 2). This compares to 2.4 percent of these grandparent households headed by a Non-Hispanic Black female, 4.5 percent headed by a Latino female, 2.6 percent headed by a Native American female, and 3.2 percent headed by a female from an 'other' racial group. Between 1.3 percent and 3.0 percent of single female-headed households are lifted out of poverty by the earned income of other related household members across racial/ethnic groups. Thus, earned income of other household members is an important source of income lifting cohabiting female-headed families out of poverty. The presence of other adult eamers in cohabiting female-headed families improves their economic well-being and helps explain this living arrangement.

Level 3 in Table 3 examines how the addition of 'other' income affects the percentage of households in poverty. Other income includes mostly child support and alimony, and lifts between one and three percent of female-headed families out of poverty. Non-Hispanic White single mother families benefit the most from 'other' income (5.4 percent leave poverty). When public assistance is added in level 4 of Table 3 the effect is minimal for most family types across racial/ethnic groups. With two exceptions, less than one percent of each female-headed family type in each racial group is lifted out of poverty by the addition of public assistance income.

Finally, the combination of income from social security, SSI and retirement income sources are added in the fifth level of Table 3. These income sources are important for raising all female-headed family types out of poverty, but especially so for those that contain a grandparent. For example, 11.7 percent of grandparent households headed by a Non-Hispanic White woman are lifted out of poverty with the addition of these three income sources. Comparable figures for other racial/ethnic groups of this household type are 5.4 percent for Non-Hispanic Blacks, 4.6 percent for Hispanics, 4.1 percent for Native Americans, and 10.8 percent for others. The income included in this category is the second most important source for raising cohabiting nonmetro female-headed families out of poverty.

We do not go into detail in describing how various income sources raise central citymetro and suburban-metro female-headed families out of poverty, although these statistics are shown Tables 4 and 5. However, we do observe that the general pattern is similar across household type and race/ethnicity, with a few notable exceptions. First, Non-Hispanic White and Non-Hispanic Black nonmetro cohabiting female households especially benefit from the earned income of others in their households, and more so than their central city or suburban

counterparts. A smaller share of cohabiting female-headed households from other racial/ethnic groups are lifted from poverty by a cohabiting partner's earned income. It is surprising that female-headed households in suburban-metro areas have the smallest percentage raised above poverty by the earned income of other household members. Second, compared to nonmetro single mother households, a notably smaller share of central city-metro single mother households are lifted from poverty by 'other' income sources, and the reverse is true for suburban-metro single mother households. This suggests that suburban single mother households may receive more child support and alimony payments, but we are unsure of this conclusion due to the other income sources included in this category.

## [Insert Tables 3-5 here]

# **Multivariate Analyses**

Next, we examine the extent to which differences in human capital, work effort and public assistance receipt across race-ethnic groups and residence affect the odds of being poor among different types of female-headed families with children. Table 6 reports multivariate logistic regression model results that address this question. These models are estimated using our entire sample of 230,415 female-headed households with children. A series of nested models examine the effects of residence, race, and then a full model including human capital, work effort and public assistance on the odds of poverty.

Model 1 in Table 6 includes residence only and in this model nonmetro and central city metro female-headed families are equally likely to be poor. Suburban female headed households

are about sixty percent as likely to be poor as households in either central city or nonmetro areas. When race is added in model 2, nonmetro female-headed households with children become 44% more likely than similar central city-metro households to be in poverty. Suburban-metro female-headed households with children are about 25% less likely to be impoverished, compared to those in central city-metro areas. Thus, controlling for race of the household head exacerbates differences in the odds of poverty for nonmetro and central city-metro households. As expected, female-headed households headed by a member of a minority racial/ethnic group are more likely to experience poverty compared to Non-Hispanic Whites. This association is especially true for Hispanic-headed households. These are nearly two and one-half times as likely as households headed by Non-Hispanic Whites to be poor.

Model 3 includes measures of human capital, work effort, family type, region of residence, and receipt of public assistance. Controlling for these factors slightly increases the association between nonmetro residence and poverty among female-headed households that contain children. These households in nonmetro areas are 1.5 times as likely to be poor as those in central cities. The association between race/ethnicity and poverty among these households is weakened slightly by these additional variables, indicating that these factors account for some of the association between race/ethnicity and poverty. Controlling for these factors, both cohabiting and grandparent female-headed households with children are significantly less likely to be poor when compared to single mother only families, which fits with the descriptive findings. The presence of other adult earners in these households likely accounts for much of this difference, as does the availability of other economic resources, such as retirement income. Female-headed households with children in the South are more likely than those in other regions to be poor. We

also find the familiar association between educational attainment of the householder and reduced household poverty risks, and age of householder and lower odds of poverty. Once other factors are controlled, never married household headship is not associated with higher odds of poverty. Finally, the strong association between work effort of the household head and household poverty is clear in model 3.

In the full models, race/ethnicity and residence influence the likelihood of poverty among female-headed households with children. As a further step in assessing the contributions of race/ethnicity and residence we ran models separately by race and ethnicity, and then by residence. The results for selected variables from these models are shown in Table 7. Panel A provides the odds ratios for the residence and household type variable in the race/ethnicity specific models. An asterisk (\*) indicates that the odds ratio for a specific racial group is different from that for Non-Hispanic Whites. The other variables in the full model reported in Table 6 also are included in these race/ethnicity and residence specific models, but the odds ratios are not shown. Notable in this table is the higher odds of poverty among nonmetro households, compared to central city households, in each race/ethnic group.

Panel B in Table 7 shows the odds ratios for race/ethnicity and household type for the residence-specific models. A double asterisk (\*\*) indicates that the odds ratio for a residence group is different from that for nonmetro areas. These comparisons show relatively little significant variation in estimated coefficients across these residence specific models. The only difference among the race/ethnic groups is the lower odds ratio for Other Race households in suburban compared to nonmetro areas. Grandparent households also were more like single mother households in suburban areas than in nonmetro areas, a significant difference. There

were no significant differences in the odds ratios for race/ethnicity or female-headed household type for the nonmetro and central city models. These relationships were essentially the same in these two residence areas.

#### **Conclusions**

The rise in female-headed families with children, combined with the lack of information about race/ethnic and residential variation in their prevalence and economic well-being prompted this study. Our focused attention on cohabiting and grandparental female-headed families highlights these alternative household living arrangements that characterize one-third of our female-headed families in 2000. Evidence from overall household poverty measures, and also from economic well-being measures that parcel out various income sources point to a similar conclusion: female-headed households that contain children have lower poverty when they include a cohabiting male partner or are headed by a grandparent.

A close examination of how various income sources alleviate poverty finds that the cohabiting households benefit most from earned income of others, whereas the grandparent households benefit most from social security and retirement income. The racial variation aspects of the tables reveal that Non-Hispanic Blacks and Hispanics are especially likely to benefit from a cohabiting partner's income whereas Non-Hispanic Whites are especially likely to benefit from social security and retirement income.

One critical assumption made in these analyses is that household income is pooled among all household members. Although this assumption rests on prior studies (Oropesa et al., 2003), few, if any, have closely examined income pooling among a variety of emerging household types

that contain children. In Tables 3-5 in this study we only consider income sources from related household members. One drawback to this approach is that it likely overestimates household poverty, and this explains the poverty differences reported in Table 2 and in the Level 5 income combinations in Tables 3-5. Poverty among some doubled-up households, for example, would be overestimated. In our analyses, if a single mother of two children lived in the household of another unrelated single mother with two children, the total number of persons would be considered, but not the income from the single mother subfamily, thus underestimating the poverty ratio. Future revisions can update these analyses to include income sources for all household members. The larger and related issues of subfamilies and household income pooling, differences between income pooling and cost sharing, and how these family and household living arrangements contribute to well-being outcomes of families with children remain for subsequent studies.

Table 1. Description of Female-Headed Household Types that Contain Children by Residence and Race

	<b>Cohabiting</b>		<u>Grandparent</u>		Single Mother		All	
	<u>Percent</u>	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>	<u>N</u>
Overall	20.0		13.0		67.0			
Non-Hispanic White	22.5	26,484	10.0	11,948	67.5	79,843	48.6	118,275
Non-Hispanic Black	16.3	10,350	17.2	11,484	66.5	42,721	30.4	64,555
Hispanic/Latino	19.2	6,784	14.3	5,214	66.5	23,821	16.0	35,819
Native American	28.8	857	15.0	455	56.2	1,516	1.0	2,828
Other	17.4	1,535	11.3	1,030	71.3	6,373	4.0	8,938
Nonmetro 13.2%	24.5	9,652	12.1	4,908	63.4	25,156	13.2	39,716
Non-Hispanic White	26.3	6,978	9.3	2,562	64.4	17,513	66.6	27,053
Non-Hispanic Black	19.2	1,564	19.8	1,695	61.0	4,961	21.8	8,220
Hispanic/Latino	20.3	552	14.2	387	65.5	1,702	7.1	2,641
Native American	34.2	391	16.2	195	49.6	539	2.6	1,125
Other	23.7	167	9.9	69	66.4	441	1.9	677
Central City Metro 25.8%	18.2	9,105	15.4	7,868	66.4	33,990	25.8	50,963

•	21.9	2,459	10.8	1,250	67.3	7,842	21.9	11,551
Non-Hispanic Black	15.9	3,873	18.0	4,559	66.0	16,558	51.0	24,990
Hispanic/Latino	19.9	2,288	14.6	1,692	65.5	7,685	21.9	11,665
Native American	26.3	75	16.1	44	57.5	163	.60	282
Other	17.3	410	12.9	323	69.8	1,742	4.0	2,475
Suburban Metro 55.4%	19.2	23,251	12.2	15,566	68.7	85,381	55.4	124,198
Non-Hispanic White	20.9	13,976	10.1	7,068	69.0	47,274	54.3	68,318
Non-Hispanic Black	15.7	4,439	15.8	4,761	68.5	19,748	24.3	28,948
Hispanic/Latino	18.6	3,712	14.2	2,986	67.3	13,763	16.2	20,461
Native American	24.2	238	14.7	152	61.0	570	.70	960
Other	16.4	886	10.6	599	73.0	4,026	4.50	5,511
Hispanic/Latino Native American	18.6 24.2	3,712 238	14.2 14.7	2,986 152	67.3 61.0	13,763 570	16.2 .70	20,461 960

Note: Female-headed families with children located in 'not identified' residential areas are included in the overall totals reported in Table 1, but their within residence statistics are not reported. A total of 15,538 households in 'not identified' areas are included in the analyses, representing 5.6% of the households in our sample. All percent values reported in Table 1 are weighted using a standardized household weight variable.

Table 2. Description of Female-Headed Household Types that Contain Children by Residence and Race: Percent of Households in Poverty and Household Poverty Ratios

	<b>Cohabiting</b>		<u>Grandparent</u>		Single Mother		All	
	<u>Poverty</u> <u>Ratio</u>	% Poverty						
Overall							1.66	30.3
Non-Hispanic White	2.29	16.5	1.48	17.0	1.87	24.3	2.00	21.8
Non-Hispanic Black	1.58	31.3	1.43	34.5	1.23	41.8	1.32	38.8
Hispanic/Latino	1.60	29.6	1.42	33.5	1.15	43.8	1.28	39.6
Native American	1.47	36.3	1.97	33.7	1.23	42.1	1.33	39.2
Other	2.17	21.5	1.87	25.4	1.71	31.7	1.81	29.2
Nonmetro							1.36	35.5
Non-Hispanic White	1.85	22.8	1.68	26.5	1.40	34.3	1.54	31.6
Non-Hispanic Black	1.24	38.5	1.13	43.9	.91	53.6	1.01	48.8
Hispanic/Latino	1.31	36.0	1.05	47.3	.89	55.2	1.00	50.2
Native American	1.25	44.0	1.28	41.3	1.09	48.2	1.17	45.6
Other	1.52	33.8	1.25	46.6	1.20	44.9	1.24	42.4

Central City Metro							1.44	37.0
Non-Hispanic White	2.37	16.5	2.26	19.0	2.01	24.5	2.12	22.2
Non-Hispanic Black	1.57	33.5	1.53	34.1	1.19	43.7	1.31	40.3
Hispanic/Latino	1.47	34.9	1.32	39.0	1.03	49.0	1.14	44.7
Native American	1.56	34.4	1.21	28.3	1.31	38.2	1.42	35.6
Other	2.09	24.5	1.75	29.0	1.54	37.2	1.67	33.9
Suburban Metro							1.91	25.4
Non-Hispanic White	2.64	12.7	2.47	13.3	2.16	20.6	2.27	18.2
Non-Hispanic Black	1.82	26.5	1.60	31.9	1.38	37.2	1.48	34.6
Hispanic/Latino	1.72	25.5	1.58	28.2	1.28	39.2	1.40	35.1
Native American	1.67	28.3	1.82	28.9	1.44	36.8	1.56	33.5
Other	2.42	17.4	2.18	21.3	1.86	27.8	2.00	25.4

Table 3. Percent of Nonmetro Female-Headed Households with Children Below the Poverty Line by Income Source of Household Head: Residential and Racial Variation

Income Source	Non-Hispanic Whites	Non-Hispanic Blacks	Hispanic/ Latino	Native American	Other
Level 1=Earned Income of					
Household Head Only					
Cohabiting	55.8	69.6	70.9	72.2	35.9
Grandparent	72.7	81.9	90.0	78.8	81.3
Single Mother	49.3	65.4	71.7	64.8	62.7
Level 2=1+Earned Income of All Related Household Members <sup>a</sup>					
Cohabiting	19.0 (-35.8)	26.8 (-42.8)	32.2 (-38.7)	32.6 (-39.6)	31.7 (-4.2)
Grandparent	66.1 (-6.6)	79.5 (-2.4)	85.5 (-4.5)	76.2 (-2.6)	78.2 (-3.1)
Single Mother	48.0 (-1.3)	64.1 (-1.3)	69.9 (-1.8)	62.0 (-2.8)	59.7 (-3.0)
Level 3=2+Other Income Sources of All Related Household Members					
Cohabiting	17.0 (-2.0)	24.2 (-2.6)	30.4 (-1.8)	30.7 (-1.9)	28.0 (-2.7)
Grandparent	64.7 (-1.4)	78.7 (8)	82.9 (-2.6)	75.2 (-1.0)	78.2 (0)
Single Mother	42.6 (-5.4)	61.2 (-2.9)	67.6 (-2.2)	59.1 (-1.9)	57.3 (-2.4)
Level 4=3+Public Assistance					
Income of All Related Household					
Members	16.4 (6)	23.8 (4)	29.7 (7)	30.7 (0)	27.8 (2)
Cohabiting	64.3 (4)	78.1 (6)	82.5 (7)	75.0 (2)	78.2 (0)
Grandparent Single Mother	42.1 (5)	60.8 (4)	66.2 (-1.4)	58.5 (6)	56.0 (-1.3)

Level 5=4+Social Security, SSI, and					
Retirement Income of All					
<b>Household Members</b>					
Cohabiting	13.8 (-2.6)	20.3 (-3.5)	27.6 (-2.1)	28.1(-2.6)	23.0 (-4.8)
Grandparent	52.6 (-11.7)	71.7 (-5.4)	77.9 (-4.6)	70.9 (-4.1)	67.9 (-10.8)
Single Mother	39.5 (-2.6)	59.1 (-1.7)	64.3 (-1.9)	57.0 (-1.5)	53.2 (-2.8)
Level 1-Level 5					
Cohabiting	-42.0	-49.3	-43.3	-44.1	-12.9
Grandparent	-20.1	-11.2	-22.1	-7.9	-13.4
Single Mother	-9.8	-6.3	-7.4	-7.8	-8.5

<sup>&</sup>lt;sup>a</sup>For cohabiting female-headed household income sources included for cohabiting male partner.

Table 4. Per cent of Central City Metro Female-Headed Households with Children Below the Poverty Line by Income Source of Household Head: Residential and Racial Variation

Income Source	Non-Hispanic Whites	Non-Hispanic Blacks	Hispanic/ Latino	Native American	Other
Level 1=Earned Income of					
Household Head Only	4.	0	<b>-</b>		<b>7.4</b> 0
Cohabiting	42.8	57.8	70.3	69.6	54.9
Grandparent	67.0	69.6	83.7	80.6	76.5
Single Mother	38.5	55.1	66.8	58.5	53.7
Level 2=1+Earned Income of All Related Household Members <sup>a</sup>					
Cohabiting	15.8 (-27.0)	25.1 (-32.7)	32.0 (-38.3)	33.5 (-36.1)	22.1 (-32.8)
Grandparent	60.9 (-6.1)	66.9 (-2.7)	78.0 (-5.7)	76.6 (-4.0)	69.9 (-6.6)
Single Mother	37.4 (-1.1)	53.6 (-1.5)	64.1 (2.7)	57.4 (-1.1)	51.2 (2.5)
Level 3=2+Other Income Sources of All Related Household Members					
Cohabiting	14.1 (-1.1)	23.6 (-1.5)	30.6 (-1.4)	29.8 (-3.7)	20.8 (-1.3)
Grandparent	57.8 (-3.1)	66.0 (9)	77.0 (-1.0)	76.6 (0)	68.5 (-1.4)
Single Mother	37.4 (-1.1)	51.7 (-1.7)	62.1 (-2.7)	56.0 (-1.4)	49.3 (-1.9)
Level 4=3+Public Assistance					
Income of All Related Household					
Members	13.7 (7)	22.3 (-1.3)	28.9 (-1.7)	29.0 (8)	19.6 (-1.2)
Cohabiting	57.3 (5)	65.7 (3)	76.4 (6)	76.6 (0)	68.1 (4)
Grandparent Single Mother	32.6 (7)	50.5 (-1.2)	60.7(-1.4)	56.0 (-1.4)	48.7 (6)

Level 5=4+Social Security, SSI, and					
Retirement Income of All					
<b>Household Members</b>					
Cohabiting	11.8 (-1.9)	19.8 (-2.5)	26.7 (-2.2)	23.9 (-5.1)	16.0 (-3.6)
Grandparent	44.8 (-12.5)	58.1 (-7.6)	72.4 (-4.0)	67.3 (-9.3)	58.5 (-9.6)
Single Mother	30.4 (-2.2)	49.0 (-1.5)	59.5 (-1.2)	51.8 (-3.4)	47.6 (-1.1)
Level 1-Level 5					
Cohabiting	-31.0	-38.0	-43.6	-45.7	-38.9
Grandparent	-22.8	-11.5	-11.3	-13.3	-16.0
Single Mother	-8.1	-6.1	-7.3	-6.7	-6.1

<sup>&</sup>lt;sup>a</sup>For cohabiting female-headed household income sources included for cohabiting male partner.

Table 5. Percent of Suburban Metro Female-Headed Households with Children Below the Poverty Line by Income Source of Household Head: Residential and Racial Variation

Income Source	Non-Hispanic Whites	Non-Hispanic Blacks	Hispanic/ Latino	Native American	Other
Level 1=Earned Income of					
Household Head Only		0			<b>5</b> 0.1
Cohabiting	41.3	52.0	66.2	61.4	50.1
Grandparent	61.0	66.4	79.0	71.0	71.4
Single Mother	34.0	48.3	59.4	53.7	44.7
Level 2=1+Earned Income of All Related Household Members <sup>a</sup>					
Cohabiting	12.6 (-28.7)	22.1 (-29.9)	29.2 (-37.0)	21.6 (-39.8)	16.7 (-33.4)
Grandparent	53.1 (-7.9)	63.5 (-2.1)	71.6 (-7.4)	68.8 (-2.2)	62.4 (-9.0)
Single Mother	33.1 (9)	47.0 (-1.3)	57.4 (-2.0)	52.4 (-1.3)	43.2 (-1.5)
Level 3=2+Other Income Sources of All Related Household Members					
Cohabiting	10.9 (-1.7)	20.5 (-1.6)	27.8 (-1.2)	20.6 (-1.0)	15.6 (-1.1)
Grandparent	50.6 (-2.5)	62.0 (-1.5)	70.0 (-1.6)	67.8 (-1.0)	60.2 (-2.2)
Single Mother	28.0 (-5.1)	44.8 (-2.2)	54.7 (-2.7)	48.6 (-3.8)	40.0 (-3.2)
Level 4=3+Public Assistance					
Income of All Related Household					
Members	10.4 (5)	19.9 (6)	26.5 (-1.3)	20.6 (0)	15.0 (6)
Cohabiting	50.2 (4)	61.6 (4)	69.5 (5)	67.8 (0)	60.2 (0)
Grandparent Single Mother	27.6 (4)	43.9 (9)	53.7 (-1.0)	47.6 (-1.0)	39.2 (8)

Level 5=4+Social Security, SSI, and					
Retirement Income of All					
Household Members					
Cohabiting	8.8 (-1.6)	17.4 (-2.5)	24.3 (-2.2)	19.5 (-1.1)	13.3 (-1.7)
Grandparent	37.0 (-13.2)	54.3 (-6.3)	65.5 (-4.0)	60.5 (-7.3)	52.5 (-7.7)
Single Mother	25.5 (-2.1)	42.3 (-1.6)	52.3 (-1.4)	45.6 (-2.0)	37.2 (-2.0)
Level 1-Level 5					
Cohabiting	-32.5	-34.6	-41.8	-41.9	-36.8
Grandparent	-24.0	-12.1	-13.5	-10.5	-19.9
Single Mother	-8.5	-6.0	-7.1	-8.1	-7.5

<sup>&</sup>lt;sup>a</sup>For cohabiting female-headed household income sources included for cohabiting male partner.

Table 6. Logistic Regression Analyses Predicting Poverty among Female-Headed Families with Children: Parameter estimates (odds ratios)

Independent Variables	Model 1		Model 2		M	Model 3	
Intercept	.063		-1.230		619		
Residence (cc metro omitted)							
Nonmetro	011*	.99	.363	1.44	.401	1.50	
Suburban	518	.60	301	.74	134	.88	
Not identified	167	.85	.282	1.33	.354	1.43	
Race (non-Hispanic white omitted)							
Non-Hispanic Black			.861	2.37	.631	1.88	
Hispanic			.893	2.44	.431	1.54	
Other racial/ethnic group			.480	1.62	.386	1.47	
Female-Headed Family Type (single							
female head omitted) Cohabiting					840	.43	
Grandparent					181	.83	
Region (South omitted)							
Northeast					203	.82	
Midwest					182	.83	
West					337	.71	
<b>Education (less than hs omitted)</b>							
High school graduate					421	.66	
More than high school					831	.44	
College or higher					-1.57	.21	

Age (less than 25 omitted)				
25-34			106	.90
35-44			494	.61
45-54			909	.40
55 and older			-1.653	.19
Marital Status (div/sep omitted)				
Widowed			500	.61
Never Married			.007*	1.00
Work Effort (full-time good job				
<b>omitted)</b> No work			2.954	19.20
Full-time medium job			260	.77
Full-Time poor job			.648	1.91
Part-time good job			1.574	4.83
Part-time medium job			1.485	4.42
Part-time poor job			1.997	7.37
Household Receives Public Assistance			.791	2.21
-2LL, (df)	312874.40 (3)	272125.72 (6)	194816.1	2 (26)
N=230,415 households				

<sup>\*</sup>not statistically significant at p>=.05 level

Table 7. Summary of Residence, Race and Household Type Effects Across Race- and Residence-specific Models Predicting Household Poverty among Female-headed Households with Children, 1999 poverty status. <sup>1</sup>

Panel A. Race-specific Models (odds ratios are reported).

Tuner 71. Ruce specific Prodess (Gdds runos dre reported).							
	Non-Hispanic Whites	Non-Hispanic Blacks	Hispanics	Other races			
Residence (referen	ace is central city)						
Nonmetro	1.569	1.423*	1.512	1.568			
Suburban	.907	.899	.838*	.767*			
Mixed	1.568	1.308*	1.199*	1.282			
Female-headed ho	ousehold type (refer	ence is single mother	·)				
Cohabiting household	.377	.535*	.413*	.469*			
Grandparent household	.783	.951*	.776	.794			

Panel B. Residence-specific Models (odds ratios are reported).

	Nonmetro	Central City	Suburban				
Race/Ethnicity (reference is Non-Hispanic Whites)							
Non-Hispanic Blacks	1.81	1.854	1.847				
Hispanics	1.57	1.642	1.464				
Other race	1.649	1.556	1.397**				
Female-headed household type (refe	rence is single moth	er)					
Cohabiting household	.415	.496	.397				
Grandparent household	.761	.852	.873**				

<sup>&</sup>lt;sup>1</sup> The race/ethnicity and residence-specific models also include the controls for region, education, age of the householder, marital status, work effort and public assistance receipt.

<sup>\*</sup> indicates the race-specific estimated odds ratios are different from those for Non-Hispanic Whites, based on comparisons of the confidence intervals.

<sup>\*\*</sup> indicates the residence-specific estimated odds ratios are different from those for Nonmetro areas based on the comparisons of the confidence intervals.

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