

**The Characteristics and Causes of Homelessness among At Risk Families with Children in
Twenty American Cities**

Running Head: Family Homelessness in Twenty American Cities

Angela R. Fertig*
College of Public Health
University of Georgia

David Reingold**
School of Public and Environmental Affairs
Indiana University

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*Corresponding author. Dr. Fertig is a labor and health economist. She can be reached at Angela R. Fertig, Assistant Professor, College of Public Health, University of Georgia, Coverdell Building, Athens, GA 30602, 706-542-9332 (office), 706-542-9301 (fax), afertig@uga.edu.

**Dr. Reingold is an urban sociologist. He can be reached at David Reingold, Associate Professor, School of Public and Environmental Affairs, Indiana University, 1315 E. 10th Street, Bloomington, IN 47405, 812-855-5971 (office), 812-855-7802 (fax), Reingold@indiana.edu.

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Abstract

This paper explores the characteristics and causes of homeless families with children using the Fragile Families and Child Wellbeing Study. These unique data measure a rich set of risk factors likely thought to influence homelessness at the individual, household, and city level. We find that homelessness is most strongly linked to informal and institutional social support, and is only modestly associated with local housing and labor market conditions. These results suggest that interventions designed to build and strengthen informal and institutional social support among low-income mothers, including low-income housing assistance, will have the greatest impact on reducing the likelihood of family homelessness, while policies designed to alter local housing and labor market conditions are unlikely to substantially reduce the risk of this pressing social problem.

Introduction

Scholarly research over the past twenty-five years has firmly established the emergence and persistence of family homelessness in the United States. The homeless household – usually a mother and her children – represents a departure from the stereotypical image of skid-row residents who are predominately single, working age males. Putting aside families that are doubled-up with friends and family, recent estimates from the U.S. Department of Housing and Urban Development suggest that there are approximately 754,147 sheltered and unsheltered homeless persons in the United States, and between one-third and one-half are families with children (HUD 2007). As a result, there are now an estimated 215,000 beds in homeless shelters dedicated to serving these families (HUD 2007).

Homeless families, where a minor child lives with their homeless parent, are frequently considered distinct from homeless parents. Many homeless adults have minor children (60 percent of homeless women and 41 percent of homeless men); however, only 28 percent live with their homeless parent. Among those children living with a homeless parent, 80 percent are under eleven years of age (HUD 1999; Burt 2001).

Homeless families can be found in virtually every American city, living in cars, abandoned buildings, and homeless shelters, among other places. While some families are able to avoid this type of severe material hardship by doubling-up with friends and family, the conditions responsible for these unstable housing arrangements are often intertwined with past exposure to the effects of domestic violence, a history of mental illness, and drug abuse. The growth in single-parent families and the decline of marriage are thought to have left women and children more vulnerable to numerous economic hardships, including homelessness. And, the general decline in the availability of close personal relationships upon which to draw informal

social support may make people more vulnerable during times of personal and economic crisis (McPherson, Smith-Lovin, and Brashears 2006). Moreover, there is substantial concern that rising housing prices and limited wage growth among less-skilled workers has worsened the problem. Taken together, these events are thought to have made families a permanent feature of the U.S. homeless population (See Jencks (1994) and Shlay and Rossi (1992) for additional historic trends and background information on homelessness in the U.S.).

Research in this area has sought to identify those factors most likely to place families at risk of becoming homeless or doubled-up with friends and family. Many of the risk factors considered in this research link back to the likely causes of family homelessness, such as exposure to domestic violence, history of mental illness and/or drug abuse, access to economic resources and non-economic social support, family structure and size, educational attainment, and local housing market conditions, among others. Unfortunately, scientific studies of family homelessness have been unable to simultaneously consider all of these likely risk factors. Much of the research can be divided into those studies that present family homelessness as the product of individual characteristics or of community (or structural) circumstances, without examining both factors together (Burt 2001b, Main 1998, and Shlay and Rossi 1992). This division occurs because of the types of data available to study homelessness. Individual level data comes from a single community (or city), limiting what can be said about the relative importance of community variation in local housing and labor market conditions, not to mention the potential influence of climate, the supply of shelter beds, and the presence of local anti-loitering laws designed to discourage homelessness. Likewise, community-level data does not allow an examination of individual risk factors. These limitations are frequently compounded by the tendency to collect data from individuals who are currently homeless or who have sought

assistance from homeless shelters without collecting comparable information from individuals who have not been homeless (Phelan and Link 1999). As a result, much of this literature is unable to provide reliable and systematic information on why some at risk families become homeless and others do not.

This study overcomes many of these limitations by examining data from a sample of households, some of which have been homeless or doubled-up, across twenty cities that vary by characteristics thought to be responsible for creating conditions that can lead to homelessness. Because these data are longitudinal, we are able to observe the presence of particular risk factors and measure their influence on homelessness or doubling-up over time. Our analysis is organized around three research questions: What are the characteristics of homeless families, as well as families that are doubled-up, compared to a similar sub-group that did not experience a homeless spell during the study period? What factors seem to inoculate at risk families from experiencing homelessness or doubling-up? And, what is the relative impact of individual versus community factors in explaining a family's exposure to a homeless spell or the need to double-up? Together, these data provide a unique opportunity to understand the relative importance of factors thought to cause family homelessness and unstable housing arrangements.

Explanations for Family Homelessness

In the homelessness literature, individual explanations of homelessness include those characteristics that reside within people and households, such as physical and mental health, substance abuse and addiction, domestic violence, single-motherhood, welfare receipt, and educational attainment, among others. In particular, family homeless is found to be closely associated with female-headed households, unwed childrearing, and the economic hardships of

single-mothers (Weitzman, 1989; Bassuk et al 1996). Several researchers have found that domestic violence, drug use and mental illness are important risk factors in becoming homeless (Wood et al 1990, Goodman 1991, Bassuk et al 1998, Bassuk and Rosenberg 1998, and Benda 1990). In contrast, other researchers have found that domestic violence and drug use do not differentiate those that become homeless from those who do not (Bassuk et al 1997). There is some debate about whether homeless families lack networks of social support, i.e. numbers of relatives and friends one can turn to for help. Some find that homeless families have few to turn to (Letiecq, Anderson and Koblinsky 1998), while others argue that these families actually have greater contact with their network, but have exhausted its resources before becoming homeless (Shinn, Knickman and Weitzman 1991 and Toohy, Shinn, and Weitzman 2004). Finally, low family income and low labor force participation have been found to be determinants of unstable housing situations that lead to homelessness (Wood et al 1990 and Shinn et al 1998).

Community (or structural) explanations include those characteristics beyond the individual, such as lack of affordable housing, slack labor markets, welfare reform, the availability of public housing and homeless shelters, among others. In particular, studies that examine aggregate levels of homelessness for metropolitan areas show that lack of housing affordability is associated with higher rates of homelessness (Quigley, Raphael and Smolensky 2001 and Lee, Price-Spratlen, and Kanan 2003). Consistent with this, public housing and other low income housing subsidies have been shown to protect families from experiencing multiple homelessness spells (Bassuk et al 1997 and Wong, Culhane, and Kuhn 1997) – even though these subsidies are not well-targeted to the homeless (Early 2004 and Early 1998). Low income programs, in general, such as welfare and other cash benefit programs have also been found to have a protective effect against family homelessness (Salomon, Bassuk, and Brooks 1996).

Low income programs have undergone substantial changes over the past ten years and have provided an opportunity for researchers to study the impact of these programs on homelessness. First, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, which introduced time limits and work requirements for receiving welfare, has been studied extensively. The evidence indicates that the implementation of welfare reform in some states resulted in higher rates of homelessness among welfare leavers; however, the numbers are extremely small, suggesting that the protective effect of welfare may be small (Loprest 1999, Institute for Family and Social Responsibility 2000, and Bloom, Farrell and Fink, 2002).

The second significant policy change is the HOPE VI effort, combined with the low-income housing reform Act of 1998. These policies have attempted to address substantial deterioration of the public housing stock, while promoting mixed-income replacement housing. Moreover, the 1998 Act gave local housing authorities increased flexibility in how they operate their programs, including giving preference to higher-income tenants even at the expense of the very poor. Over the past decade, hundreds of thousands of run-down public housing units have been demolished, but the number of replacement units is far less than the number of units that have been torn-down.

The only national-level effort to track families affected by these low-income housing policy changes is being conducted by The Urban Institute. This study is finding small, if any, effects on homelessness (Popkin 2004). However, this study is limited to the population of public housing residents who held formal lease agreements with the housing authority. Evidence from Chicago's public housing transformation efforts, which includes individuals who live in public housing illegally, indicates these structural policy changes may have a dramatic effect on

the family homeless problem. This study finds that 13 percent of the squatter population is homeless one year after building closure (Venkatesh et al 2004). Thus, public housing may have an important protective effect, particularly for illegal residents of public housing.

In addition to these individual and environmental causes of homelessness, existing studies vary in their focus on specific causal pathways that may precipitate severe economic hardship among families, including homelessness. Studies vary in their emphasis on the lack of material resources and human capital, frequently within the context of an unexpected crisis linked to domestic violence, mental illness or drug abuse; the absence of two-parent families in many low-income households, including the lack of family members and other forms of informal social support with whom an individual might turn in a crisis situation; and the lack of affordable housing in many large metropolitan areas. Each is discussed in turn.

Lack of Material Resources

Since the homeless, including families, are poor, it is frequently assumed that lack of material resources is a primary explanation for this social problem. The lack of material resources is often linked to limited human capital and the decline in wage returns among less-skilled workers. These characteristics alone, however, do not help explain why most poor families do not become homeless and why other poor families that do experience homelessness are able to remove themselves from this situation. This frequently leads to the assumption that perhaps it is the combination of poverty within the context of a sudden crisis brought on by domestic violence, health related problems or drug abuse that pushes families into shelters or life on the street. The present study controls for lack of material resources by restricting our comparison group to those households at 50 percent of the federal poverty threshold. The

analysis includes measures for employment status, educational attainment, self-reported health status, depression, domestic violence and drug abuse.

Family Structure and Social Support

Changes in family structure, such as the increase in single-parent families and the decline of marriage rates, are thought to have made families more vulnerable to changing economic conditions which can lead to homelessness. That is, more families are becoming dependent on a single-wage earner, making them increasingly susceptible to severe economic hardship as a result of a job loss due to economic conditions, poor health, or some other reason. As families become more dependent on single wage earners, the role of informal support from friends and family during a crisis, as well as the potential protective effects of low-income housing subsidies, welfare, and other social welfare benefits, is frequently believed to mediate episodes of homelessness among families. Measures of family structure, including household size, age of children, marital status and residential status of fathers, are included in the analysis. Measures of informal social support, such as the ability to get help from family, as well as receipt of housing subsidies, are also included as independent variables in the analysis.

Local Housing Market Conditions

The lack of affordable housing in many large metropolitan areas and the rising share of household income that is spent on housing costs are thought to put low-income families at risk of being unable to own or rent a housing unit. These local housing market conditions may price families out of stable housing conditions, while forcing others to double-up with friends and family to avoid a homeless spell. Moreover, the availability of shelter beds in a particular city, as well as other conditions that may make it more or less unpleasant to be homeless in a particular place, such as climate and the criminalization of being homeless by local ordinances,

may mediate the chances of a family becoming homeless. Measures to capture city-level variation in local housing market conditions used in this analysis include, the average cost of modest housing units, the share of housing units that are affordable, and the rental vacancy rate. In addition, the analysis takes account of other local economic and non-economic conditions that are frequently perceived as causal mechanisms responsible for homelessness, including unemployment and poverty rates, climate, the availability of shelter beds, and the number of local anti-homelessness laws.

In sum, the family homelessness literature has unfolded in a piece-meal fashion, and is frequently unable to fully account for the theoretical paradigm that simultaneously recognizes both individual and structural factors that generate risk. Because of this fragmentation in the homelessness literature, we know individual factors are associated with family homelessness, but we do not know whether these relationships hold when controlling for structural conditions. Similarly, we know that structural conditions matter, but we do not know whether these relationships remain robust when controlling for individual protective factors. As a result, the extant research literature on family homelessness has been unable to determine which risk factors matter most, limiting our ability to target interventions which can moderate the most important causal pathways which most frequently mediate the onset of a homelessness episode among at risk families.

A Comprehensive Empirical Inquiry

In this paper, we attempt to expand our understanding of the current characteristics of homeless families, while comparing the importance of individual and structural factors, by analyzing data from the Fragile Families and Child Wellbeing Study. This study follows a birth

cohort of nearly 5,000 children born in 20 U.S. cities with populations greater than 200,000 between 1998 and 2000, including an over-sample of births to unwed parents.¹ A stratified random sampling strategy was used to select among large cities in the U.S. grouped according to their policy environments and labor market conditions. Independent interviews are conducted with both the mother and the father of the cohort member. The first interviews, which we refer to as the baseline interviews, occur in the hospital after the birth of the cohort member. Data are also available from two follow-up interviews with mothers and fathers—one set that takes place approximately one year after the birth and another that occurs three years after birth.² All follow-up interviews were conducted over the telephone.

The Fragile Families data is well-suited to the goals of this analysis because it captures a population of at risk families and collects information on whether a respondent was homeless or in a shelter, or doubled-up. In addition, the survey contains a large amount of socio-demographic and life-history information on each respondent. The only limitation of the data for this analysis is that it is restricted to families with young children, which may not be the most prevalent form of family homelessness. To supplement these individual measures, we collect detailed city-level data on the local economic environment, climate, housing affordability and availability, access to shelter beds and anti-loitering laws.

¹ The twenty cities include Austin, TX; Oakland, CA; Baltimore, MD; Detroit, MI; Newark, NJ; Philadelphia, PA; Richmond, VA; Corpus Christi, TX; Indianapolis, IN; Milwaukee, WI; New York, NY; San Jose, CA; Boston, MA; Nashville, TN; Chicago, IL; Jacksonville, FL; Toledo, OH; San Antonio, TX; Pittsburgh, PA; and Norfolk, VA.

² The response rates vary slightly by marital status. For married mothers, 82% responded to the baseline interview, 91% of the baseline sample responded to the one-year follow-up, and 89% responded to the three-year follow-up. For unmarried mothers, 87% responded at baseline, 90% responded at one-year, and 88% responded at three-years. For married fathers, 89% responded to the baseline interview, 82% of the baseline sample responded to the one-year follow-up, and 82% responded to the three-year follow-up. For unmarried fathers, 75% responded at baseline, 70% responded at one-year, and 68% responded at three-years. Because attrition rates are low, particularly for the mother interviews, the differences in the sample across the waves are negligible (detailed attrition analysis available from the authors upon request.)

Overall, the number of homeless respondents in these data is small. We define homelessness using two different survey questions. First, a household is homeless if the mother responds that her current housing situation is either living in temporary housing or a group shelter, or on the street/homeless. Second, a household is homeless if the mother responds that in the last 12 months, she stayed in a shelter, in an abandoned building, an automobile or any other place not meant for regular housing even for one night. In addition, because we are interested in family homelessness, we restrict the homeless families to only those who also report that the child lives with them all or most of the time.

128 mothers living with children at the 1-year interview and 97 mothers living with children at the 3-year interview are coded as homeless. Very few fathers living with children but not living with the mother are homeless (12 at the 1-year interview and 16 at the 3-year interview) so we do not include them in this analysis. We do, however, include those homeless families that include both the mother and father and include an indicator variable for these types of families in the analysis.

As mentioned above, because an alternate form of homelessness involves temporarily doubling-up with friends or relatives, we allow doubling-up to be an alternative living situation to homelessness in this analysis. We define doubling-up as living with family or friends or in a house owned by family but, in either case, not paying rent. 343 mothers living with children at the 1-year interview and 223 mothers living with children at the 3-year interview are coded as doubled-up. As above, few fathers living with children but not living with the mother are doubled-up (46 at the 1-year interview and 41 at the 3-year interview) so we do not include them in this analysis. Consistent with our approach above, we do include those doubled-up families that include both the mother and the father.

In particular, our analysis focuses on six sub-samples: homeless mothers (n=128) and doubled-up mothers (n=343) at the 1-year interview and homeless mothers (n=97), doubled-up mothers (n=223) at the 3-year interview, and two comparison groups. It is important to note that there is very little overlap across the interview waves; only 16 mothers are homeless and 88 mothers are doubled-up at both the 12 and the 3-year follow-up interviews. The comparison subsamples of all mothers are those in households at or below 50% of the federal poverty threshold at the 1-year interview and at the 3-year interview, respectively. We argue that these groups of mothers, while not homeless or doubled-up during the relevant interview period, are at risk of homelessness.

Characteristics of the homeless. To assess the characteristics of homeless and doubled-up families compared to a similar sub-group that did not experience a homeless or doubled-up spell during the study period, we compare descriptive statistics on the sub-samples. Table 1 provides a large number of characteristics of mothers and their families for each of the four homeless/doubled-up sub-samples and the two comparison groups. We first provide some basic demographic characteristics and then show characteristics pertaining to a mother's housing, economic status, general and mental health³, drug use and violence, parental support, and community connectedness. As these latter characteristics can change over time, we show the mother's reports at the interview(s) before the homeless/doubled-up spell. Specifically, for the 1-year samples, we show these characteristics reported at the baseline interview and, for the 3-year samples, we show these characteristics reported at both the baseline and the 1-year interviews. For each characteristic, we report whether the difference in the mean for the homeless/doubled-up samples is significantly different from the mean for the non-homeless

³ An assessment of mental health status is not taken at the baseline interview and thus is only available at the 1-year interview.

comparison group (significant differences are indicated with stars). We also test whether the samples differ significantly across interview waves (indicated by a dagger). In general, the 1-year and 3-year sub-samples of homeless families appear to be very similar with respect to individual background characteristics, such as race, immigrant status, and educational attainment. A slightly smaller share of respondents in the 3-year sub-sample (23 percent) lives with the father compared to the 1-year subsample (30 percent). Similarly, the 3-year sub-sample reports slightly better health, lower drug use, less exposure to domestic violence, and greater access to informal social support. Despite these differences, the groups appear to be very similar across interview waves.

In contrast, mothers who have doubled-up are different in many ways from homeless mothers and from the comparison group of mothers. While there are some differences across interview waves, these differences are in size and significance, not in direction. Thus, in general, doubled-up mothers are slightly younger, are less likely to be Black, have fewer children, are less likely to live in public housing or to have a housing subsidy, are less likely to receive welfare, are more likely to have worked, are less likely to be in fair/poor health, are more likely to have parental support, and have lived in their neighborhood significantly longer than either of the other groups. Homeless mothers are significantly less likely to be immigrants, to be living with the father, and their families are less able to support them in times of trouble compared to either of the other groups. Although the differences are not significant at both interview waves, homeless mothers are also more likely to have drug, mental health, general health and violence problems and doubled-up mothers are more likely to be Hispanic or of another race and less likely to be a high school dropout. Doubling-up does not appear to be linked to drug problems,

depression or domestic violence and homelessness does not appear to be linked to race, marital status, age of the youngest child, housing subsidy or welfare receipt, or working status.

Predictors of homelessness. To empirically evaluate which factors, both individual and structural, seem to protect at risk families from experiencing homelessness, we estimate the impact of our individual background characteristics and city-level measures on the likelihood of experiencing a homeless or doubling-up spell. The individual characteristics are measured at the interview prior to the homeless spell to avoid reverse causality. That is, we estimate the impact of characteristics on future homelessness so that we do not confound the effect of homelessness on an individual's characteristics (like health or income). By incorporating both individual and community variables in the same analysis, we can determine whether individual factors have a significant effect when controlling for characteristics of the community, and whether community factors matter significantly when controlling for individual characteristics.

Table 2 displays characteristics of the cities which may influence the probability of family homelessness. There is a lot of variation across the twenty Fragile Families cities in these characteristics. The economic strength of the cities range from Newark, New Jersey, whose unemployment rate is the highest in both 2000 and 2002 (8 and 13 percent, respectively), to San Jose, California, whose poverty rate is the lowest in both years (7 and 8 percent, respectively). The climate may have a large influence on the homeless population and this data includes three cities in Texas with very high year-round temperatures and cities like Milwaukee, Wisconsin, whose average minimum temperature in January is 12 degrees Fahrenheit.

We measure housing affordability and availability of a city with three variables – fair market rent, the percent of apartments whose rent is less than 30 percent of the median family income, and the rental vacancy rate. As we can see in Table 2, there is substantial variation in

these three measures across cities. Finally, we measure city-level homelessness policy with three variables – the number of shelter beds per 1000 people in the city, the percent of shelter beds that are reserved for families, and the number of anti-homeless laws which a city has enacted.

Examples of anti-homeless laws include whether or not a city has established laws that prohibit vagrancy, loitering, sitting-lying, camping, sleeping, begging, and urinating or defecating in public places or bathing in particular public waters. Our measures of shelter beds are designed to capture the extent to which cities have adopted policies designed to affirmatively support the homeless (particularly families), whereas our measures of anti-homelessness laws are designed to capture the extent to which cities have adopted policies designed to curb or stigmatize the homeless (including families). While these anti-homelessness laws are most frequently associated with single adult homelessness, we hypothesize the criminalization of homeless adults likely spills over to the entire population. We include these measures in order to determine whether they change the behavior of those who are at risk of becoming homeless.

To evaluate the constellation of factors that best explain variation in family homelessness, we estimate the effect of all of these individual and city-level variables on the probability of being homeless or doubled-up over neither situation at a future interview in Tables 3 and 4 using multinomial logit estimation. We include doubling-up as an alternative choice to homelessness because we do not want the comparison group to be a mix of families, some of which are living in doubled-up circumstances and some of which are living independently. We report, in the first column, the effect of each independent variable on being doubled-up versus not being homeless in any form and, in the second column, the effect of the variables on having a homeless spell versus not being homeless in any form. The coefficients in both columns are from one regression. In Table 3, the dependent variables are doubled-up and homelessness at 1-

year and the independent variables are the characteristics of the mother at baseline or city variables from 2000 (if possible). This timing allows us to determine if any of these dimensions of her life or her community at the time of her child's birth can predict her future homeless/doubled-up spell. The R-squared for this specification indicates that we are explaining about 22 percent of the variation in homelessness and doubling up with these explanatory variables.

For the 1-year sample, we find that older mothers are more likely to be homeless. Black and Hispanic mothers are significantly less likely to be doubled-up. Immigrant status reduces a mother's risk for homelessness. Living with the father and having more children reduces a mother's risk of both being doubled-up and being homeless. Receiving public assistance (through public housing, housing subsidies, or cash welfare) also reduces the probability of being doubled-up. Poor health and domestic violence increase a mother's risk of homelessness, but not being doubled-up. Parental support and neighborhood tenure increases the probability of doubling-up but decreases the risk of homelessness. Even controlling for these individual characteristics, several city-level characteristics have significant effects. In particular, higher rents, fewer affordable housing units, and higher vacancy rates increase the probability of homelessness at the 1-year interview.

In Table 4, we report the results from the 3-year interview sample using characteristics of the mother from the 1-year interview and city characteristics from 2002 (if possible) and find similar results. The R-squared indicates that we are explaining 21 percent of the variation with these variables. As above, Black mothers are significantly less likely to be doubled-up; immigrant status reduces a mother's risk for homelessness; and living with the father reduces a mother's risk of both being doubled-up and being homeless. Receiving public assistance

(through public housing, housing subsidies, or cash welfare) reduces the probability of being doubled-up. Parental support and residential stability increase the probability of doubling-up but residential stability decreases the risk of homelessness. Finally, more affordable housing units decrease the probability of homelessness.

In addition, we find that mothers in the other race category are more likely to be homeless, that high school dropouts are less likely to be either doubled-up or homeless, and that being unmarried at the cohort member's birth decreases the probability of being doubled-up at the 3-year interview. Having older children and a fewer number of children increases the likelihood of doubling-up. Residing in public housing or receiving a housing subsidy at the 1-year interview significantly reduces the probability of being homeless at the 3-year interview. Poor health decreases a mother's probability of doubling-up. A high probability of having a depression diagnosis increases a mother's risk of homelessness. The city variables have a bigger impact on doubling-up at the 3-year interview than at the 1-year interview. In particular, higher unemployment rates decrease the probability of doubling-up; more affordable units increase the probability but a higher vacancy rate reduces the probability of doubling-up; and the proportion of shelter beds reserved for families increases the probability of doubling-up while a city with a larger number of anti-homeless laws decreases the probability of doubling-up.

The reason for the differences across interview waves is not clear. One of the main differences between the samples is that the 1-year interview is closer in time to the dramatic event of a birth. Thus, we control for the age of the youngest child in the family and find that having an older child at the 3-year interview increases the probability of doubling-up but has no effect on homelessness. We also test interactions between this variable and the other

independent variables that show up significant in Table 4, but not Table 3, and find that they are not significant (and thus not included in the specification shown).

Another difference across interview waves is the state of the economy. The U.S. economy went into recession in 2001, which is reflected in the higher unemployment and poverty rates in 2002 than in 2000 shown in Table 2. However, because we control for these variables, this difference between the samples should be accounted for. It is interesting to note that there was a smaller fraction of homeless and doubled-up families in the sample at the 3-year interview (9 and 21 percent respectively) than the 1-year interview (10 and 26 percent) despite the worse economic conditions.

There are two issues that concern us about this specification. First, some of the independent variables may not be significant because they are measured with more error than others. In particular, welfare participation and employment vary dramatically over time, especially for this low-income population, where race and immigrant status are stable over time. Thus, because the questions are asked at a point in time, the stable variables will be reliable proxies of the true value and the unstable ones will be measured with error, making them less likely to be significantly different from zero. To test whether this might be the case, we created more stable measures of welfare status and working status from two waves of data instead of one and find that using these two-period measures have no effect on the estimated effects on homelessness. In addition, welfare status measured in one-period only significantly reduces the probability of doubling-up for both the 1-year and 3-year samples, which indicates that these effects can be significantly different from zero. Still, it may be the case that these unstable traits suffer from attenuation bias and thus must be interpreted with care.

Second, we believe that the homeless policy variables may be acting as an indicator for cities with high levels of homelessness. That is, cities with a lot of homeless may be more likely to fund homeless shelters and pass anti-homeless laws. Thus, when we control for homeless policies, these variables could absorb all of the effects actually attributable to other factors. Because of this, we estimated the regressions shown in Tables 3 and 4 omitting these variables (not shown) and find that when the homeless policies are omitted, families living in high-rent cities are more likely to experience a homeless spell, but no other additional significant effect appear. Thus, we argue that the inclusion of the shelter and law variables is not distorting the estimated effects of the other explanatory factors for the most part.

Discussion & Conclusion

Our analytic approach is designed to measure some of the multiplicity of individual and structural factors that may be associated with the increased risk of becoming homeless or doubled-up, while also measuring those characteristics thought to protect families from this unfortunate hardship. The design of the Fragile Families Study allows us to estimate these effects on the actual experiences of at risk families. As a result, we are able to overcome the limitations of prior research that focuses on individual or structural factors, or focuses only on those families that have been homeless without an adequate comparison group.

Our approach is able to establish the relative importance of those dimensions thought to shape homeless and doubling-up spells among low-income families. In so doing, it provides the kind of information that can help untangle the complex matrix of risk factors. We believe this type of analysis can help policy makers prioritize strategies that can have the greatest effect on reducing the number of families living in shelters or on the street.

Our analysis highlights the primacy of individual factors over structural constraints. In particular, poor general and mental health, domestic violence, and residential mobility significantly increase the likelihood of homelessness even when controlling for city-level variation in housing affordability, local economic conditions, climate, shelter availability, and anti-loitering laws. Immigrant status, public housing and housing subsidy receipt, and family support lower the probability of homelessness holding structural factors constant. Moreover, local housing conditions seem to matter for increasing the risk of being homeless or doubled-up, independent of individual- and household-level socio-demographic characteristics, but the statistical significance of the effect is only marginal. In order to place these findings within the context of the homelessness literature, we discuss the results of our analysis with respect to the three dominant causal pathways thought to precipitate homelessness. These include the lack of material resources, family structure and social support, and local housing market conditions.

Our findings on the importance of material resources are mixed. The lack of material resources, proxied by employment status and low educational attainment, do not increase the risk of homelessness among low-income families. Similarly, there appear to be no protective effects of in-cash welfare benefits. Moreover, local economic conditions, such as the local poverty and unemployment rates, provide little leverage in explaining why some low-income families are at risk of becoming homeless. However, our selection of comparison groups -- families who are not homeless or doubled-up but who are at risk of homelessness -- is based on household income such that, on average, the comparison group is poorer and less educated than the homeless or doubled-up families. As a result, it is not entirely surprising that we find no effect of economic resources on the risk of homelessness in this analysis.

While our findings do not support a strong link between material resources, directly measured, and homelessness, general health, mental health and domestic violence – which likely signal material hardship -- do appear to play roles as causal pathways. Poor general or mental health may trigger homelessness through its affect on one's ability to work leading to material hardship. Interestingly, these effects are observed soon after the birth of the sampled child (except mental health which we do not observe at baseline), but disappear over time. Perhaps the event of a new child is a time when families are most vulnerable to crises. Alternately, it may be that a birth in the face of prior domestic violence prompts a reconsideration of the relationship resulting in an increased risk of becoming homeless. Consistent with this, the rate of self-reported domestic abuse among homeless respondents decreases over the sample periods (from 18 percent to 11 percent).

In addition to domestic violence and poor health, household structure appears to be a primary causal pathway for explaining family homelessness. While marriage does not seem to provide protective effects against family homelessness, a live-in father significantly reduces the odds of becoming homeless. It seems plausible that live-in fathers limit the potentially devastating consequences of severe economic hardship that may result from the loss of a job due to economic conditions, poor health or some other reason.

The protective effects of fathers against homelessness can be viewed as a form of informal social support. Our findings provide additional evidence that informal social support matters as a pathway for explaining why some poor families become homeless and others do not, particularly in the first year after a birth. Access to friends and family who can provide a small loan, provide childcare, or a place to live, significantly reduce the odds of becoming homeless at the 1-year interview. The role of informal social support as a central factor in understanding the

family homelessness problem also spills over into more formal (or institutional) types of help over time. In particular, housing subsidies do matter and provide protection against homelessness at the 3-year interview. It would appear that poor families are able to avoid homelessness, in part, because of low-income housing assistance when faced with a personal or economic crisis.

The final dominant causal pathway found in the literature and thought to influence homelessness is local housing market conditions. Our findings suggest housing costs and lack of affordable units do increase the risk of being homeless; however, the effect of high-rent in a given city is only marginally significant and the affordability effect is relatively small. To the extent that local housing market conditions matter for mediating risk of family homelessness, this causal pathway appears to be less important than either household composition or social support.

Before concluding, it is important to highlight several limitations in our analysis. First, our measure of homelessness is somewhat crude and does not capture variation in the severity of homelessness spells. Sleeping in a homeless shelter for a few nights is substantially different from sleeping on the street for months; however, the Fragile Families Study is unable to distinguish the severity of homelessness spells or the number of homelessness spells. We suspect the relatively low-threshold of homelessness used in this analysis likely creates a more heterogeneous sample of homeless families, and this variation makes it more difficult to isolate particular causes associated with chronic homelessness within this population. Second, the number of homeless families in the sub-samples limits the precision of our estimates. The robustness of our findings would likely improve with a larger sample of homeless families. Third, our study is restricted to the twenty cities in the Fragile Families Study and it is unclear

whether our findings can be generalized beyond these places. This external validity threat may be overstated given the mix of cities by region, size, and level of deprivation; however, it is important that these results not be interpreted beyond the study sample. Fourth, the assumed causal direction between our dependent and independent variables may be reversed. For example, while we attempted to limit reverse causality by measuring health prior to the reported homeless spell, there may have been homeless spells unknown to us that occurred prior to the health assessment. Thus, while we have interpreted the findings to suggest that poor health increases the risk of homelessness, it is also likely that chronic homelessness affects physical health. This problem can be addressed using future waves of data from the Fragile Families Study.

While future research will have to overcome these limitations, we believe our analytic approach is an innovative strategy for the study of family homelessness (and homelessness in general), and provides a framework for improving what we know about the problem of family homelessness. It provides a more coherent and comprehensive approach to the study of this complex social problem, while providing policy makers with the type of knowledge and understanding they need to craft effective interventions designed to keep at risk families from becoming homeless.

These results suggest policy makers need to account for the multiplicity of factors that lead to family homelessness, across individual- and community-levels. Specifically, these results indicate family homelessness services should consider prevention efforts that target native born mothers who do not live with the father of their children, who may have health or safety concerns, and who do not have meaningful family or institutional social support. In addition, municipal governments should not be overly concerned that the availability of shelter space will

increase the homelessness problem among families, and should be mindful that local labor and housing market conditions are not strongly linked to the family homelessness problem.

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Table 1: Demographic and Other Characteristics by Homeless/Doubled-up Status and Interview Wave

	50% of Poverty at 1- year interview	Doubled-up at 1-year interview	Homeless at 1-year interview	50% of Poverty at 3- year interview	Doubled-up at 3-year interview	Homeless at 3-year interview
Number of observations	868	343	128	760	223	97
Mother's age at birth ^a	23.7	21.7 **	24.8 +	23.7	22.9 + †	23.7
Mother is Black	61%	44% **	61%	64%	39% **	61%
Mother is Hispanic	30%	33%	25%	26% †	34% *	27%
Mother is another race	3%	4%	3%	2%	5% *	5%
Mother is immigrant	17%	13% +	7% **	13% †	13%	6% **
Mother is HS dropout	57%	40%	50%	58%	33% ** †	48% +
Mother is unmarried at birth ^a	91%	92%	92%	92%	86% ** †	92%
Age of youngest child at 1-year interview (months)	14.1	13.9	14.6			
Living with Father at 1-year interview	46%	31% **	30% **			
Age of youngest child at 3-year interview (months)				25.9 †	29.3 **	26.1
Living with Father at 3-year interview				36%	30%	23% **
<u>Baseline Interview</u>						
Number of children	2.5	1.5 **	2.5	2.6	1.7 ** †	2.3 +
Mother lives in public housing ^b	21%	3% **	19%	22%	4% **	17%
Mother receives housing subsidy ^b	13%	4% **	15%	13%	4% **	13%
Mother received welfare ^c	62%	31% **	56%	57% †	37% **	56%
Mother worked while pregnant ^d	64%	72% **	66%	63%	71% *	59%
Mother has a drug problem ^{c,e}	10%	9%	20% **	11%	11%	14%
Mother's health is fair/poor ^f	11%	6% **	19% *	12%	6% **	13%
Mother hurt by father ^g	6%	6%	18% **	6%	4%	11%
Mother's family would loan \$200 ^h	84%	94% **	73% **	84%	89% * †	82% †
Mother's family would house ^h	88%	96% **	81% +	87%	96% **	87%
Mother's family would babysit ^h	89%	95% **	87%	89%	95% **	87%
Months mother has lived in neighborhood	46.5	71.3 **	39.0	44.9	68.5 **	45.1

Table 1 continued

1-year Interview			
Number of children	2.6	1.7 **	2.3 *
Mother lives in public housing ^b	29%	7% **	17% **
Mother receives housing subsidy ^b	13%	4% **	9%
Mother received welfare ^c	50%	26% **	56%
Mother currently working ^b	31%	50% **	33%
Mother has a drug problem ^{c,e}	3%	3%	4%
Mother's health is fair/poor ^f	20%	17%	26%
Mother's probability of depression diagnosis ⁱ	16%	14%	26% *
Mother hurt by father ^j	5%	8%	11%
Mother's family would loan \$200 ^h	74%	80% +	65% +
Mother's family would house ^h	75%	91% **	71%
Mother's family would babysit ^h	82%	93% **	74%
# of moves made by mother ^k	0.8	0.6 *	1.1 **

Compared to 50% poverty group: + significant at 10%; * significant at 5%; ** significant at 1%

Compared to corresponding group in the 1-year sample (not tested for the 1-year interview variables): † significant at 10% or better

^aRefers to birth of Fragile Families birth cohort member.

^bAt the time of the interview.

^cIn the last 12 months prior to the interview.

^dAt any time in the 10 months prior to the birth.

^eDrinking or drugs interfered with mother's work on a job or with her personal relationships.

^fLowest two categories from a self-reported health rating where 1=excellent, 2=very good, 3=good, 4=fair, and 5=poor.

^gWas mother ever cut, bruised, or seriously hurt in a fight with the father of the baby before or during the pregnancy?

^hIf mother needed help during the next year, could she count on someone in her family to loan her \$200, provide a place to live, and help with babysitting or childcare?

ⁱComputed probability that mother would be positively diagnosed with depression, assessed using questions about the presence and frequency of certain feelings and other symptoms such as weight loss and trouble sleeping derived from Composite International Diagnostic Interview – Short Form (CIDI-SF).

^jWas mother ever cut, bruised, or seriously hurt in a fight with the father of the baby after the child was born?

^kHow many times has mother moved since child was born?

Table 2: City-level characteristics

	Mean	Min	Max
Unemployment rate in 2000 ^a	5%	3%	8%
Unemployment rate in 2002 ^a	7%	4%	13%
Poverty rate in 2000 ^b	14%	7%	19%
Poverty rate in 2002 ^b	15%	8%	21%
Average maximum temperature in July ^c	86	70	95
Average minimum temperature in January ^c	27	12	45
Average rainfall (inches) ^c	38	14	51
Fair market rent ^d	\$876	\$571	\$1,342
% apartment <30% median family income ^d	19%	6%	34%
Rental vacancy rate ^d	6%	2%	11%
Shelter beds/1000 ^e	2.0	0.9	6.9
% shelter beds for families ^e	41%	10%	64%
# of anti-homeless laws ^f	6	3	9

Note: The 20 Fragile Families cities are Austin, TX; Baltimore, MD; Boston, MA; Chicago, IL; Corpus Christi, TX; Detroit, MI; Indianapolis, IN; Jacksonville, FL; Milwaukee, WI; Nashville, TN; Newark, NJ; New York, NY; Norfolk, VA; Oakland, CA; Philadelphia, PA; Pittsburgh, PA; Richmond, VA; San Antonio, TX; San Jose, CA; and Toledo, OH.

^aSource is Bureau of Labor Statistics.

^bSource is the 2000 Census.

^cCompiled by U.S. National Oceanic and Atmospheric Administration. *Climatology of the U.S. #81*.

^dCompiled by U.S. Department of Housing and Urban Development, 2005.

^eTabulated by U.S. Department of Housing and Urban Development Continuum of Care initiative, 2004.

^fCompiled by National Coalition for the Homeless, a non-profit advocacy organization, 2003.

Table 3: The Importance of Factors on Homelessness and Doubling-Up at 1-year after birth
 Comparison Group: Households at 50% of the poverty line at the 1-year interview

	Doubled-up	Homeless
Mother's age at birth	0.010 (0.016)	0.077** (0.018)
Black	-0.733** (0.269)	-0.421 (0.366)
Hispanic	-0.554* (0.226)	-0.329 (0.592)
Other Race	0.167 (0.599)	0.307 (0.741)
Mother is immigrant	-0.557 (0.356)	-1.829** (0.567)
Mother is HS dropout	-0.267 (0.187)	-0.064 (0.224)
Mother was unmarried at birth	-0.093 (0.327)	-0.457 (0.401)
Age in months of youngest child at 1-year interview	-0.016 (0.024)	0.036 (0.039)
Living with Father at 1-year interview ^a	-0.622* (0.252)	-0.722** (0.256)
Number of children in household at baseline	-0.717** (0.102)	-0.419** (0.146)
Mother resides in public housing at baseline	-2.075** (0.320)	-0.041 (0.237)
Mother receives housing subsidy at baseline	-0.672+ (0.369)	0.052 (0.326)
Mother receives welfare at baseline	-0.907** (0.170)	-0.373 (0.267)
Mother worked during pregnancy	-0.154 (0.124)	0.005 (0.196)
Mother has drug problem at baseline	-0.089 (0.287)	0.245 (0.328)
Mother's self-reported health status at baseline (1=excellent, 5=poor)	-0.083 (0.081)	0.280** (0.087)
Mother has been hurt by father before birth	0.145 (0.487)	1.064** (0.319)
Mother's family can & would help at baseline (3=can loan \$200, offer room & babysit)	0.309** (0.090)	-0.282** (0.108)
Mother has lived in neighborhood 5+ years at baseline	0.586** (0.192)	-0.505* (0.249)

Table 3 continued

Average maximum temperature in July	0.021 (0.020)	-0.018 (0.018)
Average minimum temperature in January	0.030 (0.019)	-0.016 (0.016)
Average rainfall (inches)	0.005 (0.015)	0.013 (0.017)
City unemployment rate in 2000	-0.034 (0.112)	0.010 (0.081)
City poverty rate in 2000	0.017 (0.025)	-0.001 (0.031)
Log fair market rent in city	-0.013 (1.071)	1.812+ (1.035)
% apartment <30% median family income in city	0.007 (0.022)	-0.064* (0.027)
City rental vacancy rate	-0.016 (0.063)	0.123+ (0.075)
Shelter beds/1000	-0.020 (0.132)	0.114 (0.090)
% shelter beds for families	-0.009 (0.012)	-0.002 (0.010)
# of anti-homeless laws	-0.029 (0.063)	0.092 (0.070)
Observations		1262
R-squared		.2219

Multinomial logits. Coefficients indicate the estimated effect of the independent variable on being doubled-up or homeless over neither. Robust standard errors in parentheses. + significant at 10%; * significant at 5%; ** significant at 1%.

Table 4: The Importance of Factors on Homelessness and Doubling-Up at 3-years after birth
 Comparison Group: Households at 50% of the poverty line at the 3-year interview

	Doubled-up	Homeless
Mother's age at birth	0.003 (0.024)	-0.019 (0.030)
Black	-0.690* (0.299)	0.573 (0.407)
Hispanic	-0.223 (0.381)	0.744 (0.580)
Other Race	0.508 (0.589)	1.527** (0.487)
Mother is immigrant	-0.274 (0.337)	-1.382* (0.550)
Mother is HS dropout	-0.607* (0.304)	-0.545* (0.250)
Mother was unmarried at birth	-0.450+ (0.269)	-0.271 (0.364)
Age in months of youngest child at 3-year interview	0.017* (0.008)	-0.003 (0.012)
Living with Father at 3-year interview ^a	-0.401+ (0.226)	-0.576* (0.291)
Number of children in household at 1-year interview	-0.502** (0.125)	-0.112 (0.158)
Mother resides in public housing at 1-year interview	-1.504** (0.326)	-0.858* (0.373)
Mother receives housing subsidy at 1-year interview	-0.905+ (0.474)	-0.909+ (0.492)
Mother receives welfare at 1-year interview	-0.488** (0.174)	0.129 (0.186)
Mother is working at 1-year interview	0.283 (0.225)	0.010 (0.227)
Mother has drug problem at 1-year interview	0.370 (0.564)	-0.165 (0.641)
Mother's self-reported health status at 1-year interview (1=excellent, 5=poor)	-0.137* (0.064)	0.115 (0.086)
Mother's probability of a depression diagnosis	-0.044 (0.203)	0.475+ (0.282)
Mother has been hurt by father between birth and 1-year interview	0.432 (0.285)	0.511 (0.525)
Mother's family can & would help at 1-year interview (3=can loan \$200, offer room & babysit)	0.169* (0.076)	-0.202 (0.135)
Number of moves between birth and 1-year interview	-0.233+ (0.138)	0.259* (0.102)

Table 4 continued

Average maximum temperature in July	0.075** (0.014)	-0.023 (0.039)
Average minimum temperature in January	0.034** (0.013)	-0.009 (0.037)
Average rainfall (inches)	0.007 (0.023)	0.019 (0.031)
City unemployment rate in 2002	-0.125* (0.057)	0.007 (0.106)
City poverty rate in 2002	-0.041 (0.034)	-0.004 (0.049)
Log fair market rent in city	-1.049 (0.885)	2.517 (2.482)
% apartment <30% median family income in city	0.045* (0.021)	-0.076+ (0.039)
City rental vacancy rate	-0.172* (0.073)	0.183 (0.148)
Shelter beds/1000	0.079 (0.084)	0.274 (0.217)
% shelter beds for families	0.021** (0.005)	0.005 (0.024)
# of anti-homeless laws	-0.268** (0.052)	0.110 (0.155)
Observations		1001
R-squared		.2113

Multinomial logits. Coefficients indicate the estimated effect of the independent variable on being doubled-up or homeless over neither. Robust standard errors in parentheses. + significant at 10%; * significant at 5%; ** significant at 1%.