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Unwed Mothers' Private Safety Nets and Children's Socioemotional Wellbeing

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Abstract

Using longitudinal data from the Fragile Families and Child Wellbeing Study ($N = 1,162$) and the National Evaluation of Welfare-to-Work Strategies ($N = 1,308$), we estimate associations between material and instrumental support available to unwed, low-income mothers and young children's socioemotional wellbeing. In multivariate OLS models, we find mothers' available support is negatively associated with children's behavior problems and positively associated with prosocial behavior in both datasets; associations between available support and children's internalizing and prosocial behaviors attenuate but remain robust in residualized change models. Overall, results support the hypothesis that the availability of a private safety net is positively associated with children's socioemotional adjustment.

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Since the passage of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), which replaced federal entitlement to cash assistance with time-limited, work-based assistance under the Temporary Assistance for Needy Families (TANF) program, welfare recipients, as well as low-income parents generally, have had to support their families through employment and other nonwelfare sources in greater numbers. Public concern has been raised over the economic and socioemotional wellbeing of low-income parents and their children in the wake of these changes (Duncan & Chase-Lansdale, 2001), particularly because research suggests it is extremely difficult to support a family on TANF benefits or earnings from low-wage work (Edin & Lein, 1996; Edin & Lein, 1997), which is the nature of most jobs former recipients secure (Johnson & Corcoran, 2003; Pavetti & Acs, 2001). As low-income parents struggle to raise families in this policy context, they may turn increasingly to private sources of financial, in-kind, and instrumental support to ease their economic strain and the emotional stress that so often accompanies it.

Much qualitative sociological research has described the essential role material and instrumental support from family and friends can play in low income parents' economic survival (Edin & Lein, 1997; Massey & Denton, 1993; Stack, 1974; Wilson, 1996). Recently, researchers have begun to quantify these links using newly available, large-scale datasets of low-income families or longitudinal studies of former welfare recipients (Harknett, 2006; Henly, Danziger, & Offer, 2005; Turney & Harknett, 2007). Although these studies document the way material and instrumental support can improve low-income mothers' economic wellbeing, they do not examine the implications of that support for children's socioemotional wellbeing. Developmental psychological research explores this link by examining informal support as a mediator between economic hardship and child wellbeing, but many such studies rely on small, community based, and/or cross-sectional samples and do not directly estimate the link between social support and children's wellbeing with robust controls for endogenous maternal and child characteristics (Jackson, Brooks-Gunn, Huang, & Glassman, 2000; McLoyd, Jayaratne, Ceballo, & Borquez, 1994; Burchinal, Follmer, & Bryant, 1996). We aim to bridge these literatures by estimating the association

between material and instrumental support and children's socioemotional outcomes in two recent large-scale longitudinal studies of low-income, unwed mothers. In so doing, we hope to highlight an important protective factor for children growing up in low-income families.

Defining private safety nets

In the sociology and developmental psychology literatures "social support" is a broad construct that includes cash, in-kind, and instrumental assistance along with emotional support (Sarason, Sarason, & Pierce, 1990) and the quality and quantity of interpersonal relationships (Pattison, DeFrancisco, Wood, Frazier, & Crowder, 1975). We focus here on material and instrumental support specifically. By tangibly alleviating the economic strain low-income families experience this kind of assistance should have the most direct impact on the material and possibly emotional resources available to children. We borrow the term "private safety net" from Edin & Lein (1997) and subsequently Harknett (2006) to describe this construct because the term emphasizes not only the type of support we examine but also the protective role we believe it could play in low-income families' lives.

Our measures of private safety nets tap the *availability* of material and instrumental support to mothers, rather than its actual *receipt*. As in Harknett (2006), we conceive of the availability of support as a form of "insurance" against the risks posed by life at the economic margins. By defining private safety nets as the ability to draw upon support when needed, one better avoids confounding the availability of support – a positive attribute – with the immediate need for support – an indicator of risk (Cutrona, 1986; Harknett, 2006; Henly et al., 2005; Sarason et al., 1990). Moreover, some studies have found that it is only the availability of support, and not its actual receipt, that is associated with better economic outcomes such as material hardship and steady employment (Henly et al., 2005; Howard, 2006) and better socioemotional wellbeing and parenting among low-income mothers (Hashima & Amato, 1994; Thoits, 1995; Turner & Turner, 1999; Wetherington & Kessler, 1986).

By defining safety nets in terms of availability rather than use, our measures necessarily reflect mothers' perceptions of that availability. Because perceiving support is available could enhance mothers' emotional wellbeing, which in turn could benefit child development, these perceptions may partially, and

legitimately, drive positive associations between safety nets and child wellbeing. However, it also may be true that perceptions are driven by time invariant maternal characteristics, such as self esteem and internal locus of control, which are independently linked to children's socioemotional wellbeing (Downey & Coyne, 1990). If mothers with greater psychological and interpersonal resources perceive themselves to have stronger safety nets, regardless of their actual or potential receipt of support, our measures of availability could reflect a spurious association between private safety nets and child wellbeing. To establish that mothers who believe they have strong safety nets actually have greater access to resources than mothers with weak safety nets, we compare our measure of perceived safety net availability to mothers' actual receipt of financial assistance from informal sources. This point will be elaborated upon in the methods section.

Private safety nets and maternal wellbeing

Studies examining low-income mothers' actual as well as potential receipt of material and instrumental support have documented links between the strength of private safety nets and economic wellbeing. Cash assistance from friends and family can help mothers pay for essentials, such as food, rent, and utilities, and non-essentials, such as new clothes for children and meals at inexpensive restaurants (Edin & Lein, 1997), both of which relieve real and perceived economic strain (Edin & Lein, 1997; Henly et al., 2005; Howard, 2006). Material support that is delivered in kind, such as diapers, food, and toys, can serve a similar function (Edin & Lein, 1997). Research also documents the importance of instrumental support, such as emergency (or regular) help with child care and transportation as key factors in low income mothers' ability to find or keep a job (Henly, 2002; Knox, London, & Scott, 2003). Although debate exists over whether informal support helps low-income mothers improve their overall economic wellbeing (Harknett, 2006; Henly et al., 2005), qualitative and quantitative research indicates that this assistance is an essential part of their ability to survive economically.

Theories of stress and coping suggest that activating, or simply having the potential to activate, a private safety net in times of need can also relieve emotional stress associated with chronic economic strains and periodic financial crises (Thoits, 1995). Indeed, material and instrumental support from family

and friends has been associated with lower psychological distress among poor and low-income parents (Jackson et al., 2000; Simons et al., 1993), perhaps because receiving it reduces their actual experience of financial strain. Qualitative research also describes how merely believing relatives or friends would help if necessary can make mothers feel less hopeless, isolated, and anxious (Edin & Lein, 1997; Howard, 2006) and instill a sense of connection and belonging (Felton & Shin, 1992; Henly, 2002; House, Umberson, & Landis, 1988). Thus, whether informal support is real or perceived, it is clear that the availability of a strong private safety net can enhance not only mothers' economic wellbeing but also their sense of emotional wellbeing in the face of financial hardship.

Private safety nets and child wellbeing

A large body of research has linked early childhood poverty and financial hardship with unfavorable socioemotional outcomes for young (Duncan & Brooks-Gunn, 1997). Economic theory suggests that low income negatively impacts children's development because it prevents parents from purchasing essential and enriching materials, experiences, and services for children (Becker, 1991; Haveman & Wolfe, 1994). A complementary view exemplified by the family stress model (Conger et al., 1992) emphasizes how financial pressure or deprivation undermines parents' psychological and emotional resources, disrupting parenting styles, parent-child interactions, and child development as a result (Conger & Conger, 2000; Dodge, Pettit, & Bates, 1994). Private safety nets could facilitate low-income children's socioemotional development through both theorized pathways. By reducing their mothers' experience of financial hardship, private safety nets allow mothers to invest more and steadier resources in children, thereby enhancing their socioemotional development. As well, by bolstering mothers' emotional wellbeing, private safety nets protect against disrupted parent-child interactions and, thus, negative socioemotional outcomes.

Existing research provides theoretical and empirical support for these hypothesized pathways (see, e.g., Burchinal et al., 1996; Jackson et al., 2000; McLoyd et al., 1994). A related literature, which draws upon the ecological model of parenting (Belsky, 1984), shows that parents who have material and instrumental support interact in more supportive and less punitive ways with their children in the context

of economic strain (Leinonen, Solantaus, & Punamaki, 2003; Hashima & Amato, 1994; Simons et al., 1993). However, many of these studies use small, ethnically uniform, community-based samples, do not employ robust methods to account for maternal and child characteristics, and/or do not report direct associations between instrumental support and child outcomes. Nonetheless, they provide support for our hypothesis predicting a positive association between the availability of private safety nets and children's socioemotional wellbeing and illuminate the mechanisms through which the association may operate.

Accounting for endogenous and simultaneous associations

In addressing this research question, it is important to consider that observed and unobserved maternal characteristics may be endogenous to mothers' private safety nets and may also influence children's wellbeing. Some mothers may have interpersonal or economic strengths that make it easier for them to generate strong private safety nets. Literature on the importance of reciprocity in social networks supports this view, for it finds that in order to receive instrumental or material support, one often needs to be able to offer some kind of help in return (Antonucci & Jackson, 1990; Smith, 2005). The individual strengths mothers use to build strong networks may also be associated with more optimal child behavior through genetic endowment, parenting quality, or other aspects of the home environment.

We use two approaches to minimize the threat of endogenous maternal characteristics in our analyses. First, we include a robust battery of covariates in OLS regression models to control for observed maternal background, socioeconomic, and personal characteristics, including her parents' level of education, whether she lived with both parents at age 15, and her cognitive ability. Models also include indicators of mothers' use of public safety nets such as TANF, WIC, and food stamps, because these supports could reduce the need for informal support or serve as indicators of greater economic disadvantage. Second, we control for earlier measures of each dependent variable in OLS models to account for unobserved time-invariant maternal and child characteristics (this approach is sometimes called a 'residualized change model' [NICHD ECCRN & Duncan, 2003]). Although neither of these approaches can fully account for potential endogeneity in the association between private safety nets and child behavior, they offer more conservative estimations than previous research.

In addition to endogeneity, simultaneity could bias our estimation of the association between private safety nets and child outcomes, for just as private safety nets could influence children, child wellbeing could influence mothers' access to private safety nets. For instance, if a child behaves very aggressively, it may be difficult for her mother to recruit instrumental support, particularly in the form of emergency child care, because others will not want themselves or their children interacting with the child. A behaviorally disruptive child may also undermine a mother's ability to offer instrumental support to others, because the child is emotionally taxing or consumes too much of her time, making her less likely to receive help in return. Although it is impossible to rule out these dynamics, in additional analyses we strive to insure that child behavior does not wholly drive the hypothesized association by predicting child behavioral outcomes from mothers' safety net availability at the time of the child's birth, presumably before the focal child's behavior could have a biasing effect.

The present study

The present study tests the hypothesis that the availability of private safety nets to unwed, low-income mothers is positively associated with their children's socioemotional adjustment. We draw from two recent, longitudinal studies, the Fragile Families and Child Wellbeing Study (FFCWS) and the National Evaluation of Welfare-to-Work Strategies (NEWWS). Both samples are comprised of low-income unwed mothers, the former because we restricted the full FFCWS sample to mothers who were unwed and living at 200% of poverty or below at the child's birth and the latter because as an experimental evaluation of welfare programs, it included only welfare recipients at baseline. Thus, both datasets provide large samples of economically disadvantaged families who would theoretically need and benefit from having a private safety net, with the NEWWS sample relevant to mothers leaving the welfare rolls and the FFCWS relevant to the broader population of low-income unwed mothers and their children.

Method

Data

FFCWS

The Fragile Families and Child Wellbeing Study (FFCWS) is a longitudinal birth cohort that began in 1998 and followed 4,898 families up to age five. To choose participating cities, the designers used a stratified random sample of all U.S. cities of 200,000 people or more. Unwed families were oversampled by design, creating an ideal dataset for examining unwed mothers and children over time (see, Reichman, Teitler, Garfinkel, & McLanahan, 2001 for a detailed review of the study design). Mothers were initially interviewed in hospitals at the focal child's birth and again, mostly via telephone, when children were one-, three-, and five-years-old. Information on child behavioral outcomes was obtained from mothers during a separate in-home interview at three and five years for which response rates were lower than for the main telephone interview (at three years, 66% of those who also had one- and three-year main study interviews; 62% at five years). Among the 2,018 mothers who were unwed and living below 200% of the federal poverty line at the focal child's birth (and were in the 18 non-pilot cities), 1,180 (59%) were interviewed in-home about child behavior at *both* the three- and five-year follow ups, the main criterion for inclusion in our study. Our final sample was further restricted to those with complete data on private safety nets at one and three years and all covariates ($N = 1,162$).

NEWWS

The National Evaluation of Welfare-to-Work Strategies (NEWWS) was a random assignment intervention designed to assess various welfare-to-work strategies operating under the Job Opportunities and Basic Skills Training (JOBS) program. Between 1991 and 1994, the NEWWS enrolled single-parent cash welfare recipients in 11 programs at seven sites nationwide (see Hamilton et al., 2001 for a detailed review of the study design). In three sites, mothers with children between the ages of three and five were selected at random for inclusion in the Child Outcomes Study (COS), and one age-eligible child per household was randomly selected as the "focal child". Sample members in the COS completed in-person interviews two and five years after random assignment; approximately 3,000 families participated in the

two-year follow-up and slightly over 2,300 families participated in the five-year follow-up. Our sample draws from the COS five-year follow-up, at which point the focal children were between 8 and 10 years old. The response rate of the five-year follow-up differed across site, ranging from 63% to 85%. Our sample is restricted to cases with full data on child behavioral outcomes, mothers' private safety nets, and all covariates ($N = 1,308$). All analyses are conducted with an analytic weight to account for unequal probability of selection into the COS sample.

Measures

Private safety nets

FFCWS. The availability of a private safety net is assessed at the one-, three-, and five-year follow-ups via six dichotomous items asking mothers whether they could count on someone to: a) lend them \$200; b) lend them \$1,000; c) provide them with a place to live; d) help with emergency child care; e) co-sign a bank loan for \$1,000; and f) co-sign a bank loan for \$5,000. Because four of the six items ask about financial support, the scale taps the availability of material more than instrumental support. Responses to each question are summed (1 = *yes*; 0 = *no*) to create a scale ranging from 0 to 6 ($\alpha = .81$ at one and three years; $\alpha = .82$ at five years). Although scores are normally distributed in our analytic sample (*three-years*: $M = 3.51$; $SD = 1.81$; skew = -0.28; kurtosis = 2.11), we trichotomized the scale into *High* (scores of 5 or 6; $n = 392$; 34%), *Medium* (scores of 2 – 4; $n = 583$; 50%), and *Low* (scores of 0 – 1; $n = 187$; 16%) because we deemed categorization more appropriate for what is essentially an interval scale. In our main OLS models, dummy variables for Medium and Low at three years are entered with High as the reference category. One- and five-year safety net levels are used in additional analyses.

At birth, mothers are asked only three of the six items. We dichotomize this scale into *High* (score of 3; 82%) and *Low* (scores of 0 – 2; 18%). A dummy variable for Low is entered in models predicting age three outcomes, with High as the reference, to rule out the influence of simultaneity in main models. Note, far more mothers report having “High” safety nets on this abridged scale than on the full scale but the reliability is comparable ($\alpha = 0.77$).

To validate our measure of private safety net, we compare it to mothers' reports of financial support actually received from informal sources at the three-year follow-up (see Table 1). Although cash borrowed likely represents only a small portion of the help mothers receive, the data indicate that mothers' perceptions reflect real advantages. Indeed, we find that nearly 40% of mothers who report High safety net availability had borrowed money from friends or family in the past year compared to only 15% of mothers in the Low safety net group. Mothers in the High group also reported more sources of support and borrowed far more money than mothers in the Low group. Mothers in the High and Medium groups borrowed money in similar proportions from similar numbers of people, but mothers in the Medium group were lent far less money than those in the High group.

NEWWS. Our measure of private safety nets in the *NEWWS* is modeled after the measure used in Harknett (2006). In the two-year COS follow-up, mothers were asked to assess the following five statements on a ten-point scale, with 0 representing "not true" to 10 representing "completely true": "If I need to buy a pair of shoes for my child but I am short of cash, there is someone who would lend me the money"; "When I have troubles or need help, I have someone I can really talk to"; "If I need to do an errand, I can easily find a friend or relative living nearby to watch my child"; "If I needed a ride to get my child to the doctor, there are friends I could call to help me"; and "When my child is sick friends or family will call or come by to check on how things are going." Answers to each of the questions are summed to create the private safety net scale (range = 0 to 50; $\alpha = 0.77$). Because four of the five questions ask about non-financial kinds of support, unlike the measure used in the *FFCWS*, this measure more strongly taps the availability of instrumental rather than material support. No measure of actual instrumental support received is available in the *NEWWS* to validate this measure.

The linear measure is left-skewed; the average value in the analytic sample is 34 and the median value is 37. Fully 10% of observations take on the maximum value of 50. To assess the functional form of the dose-response relationship between the key independent predictor and the dependent variables of interest, we divide the sample into quartiles of private safety net availability and use the quartile dummies in our regression analyses, with the top quartile as the reference category.

Child behavioral outcomes

In both the FFCWS and the NEWWS we examine both *Internalizing* and *Externalizing* child behavior problems as well as different measures of positive child behaviors so that the association between private safety nets and children's socioemotional development can be assessed across behavioral domains. Each measure is based on maternal report, and complementary measures are available at two time points in both datasets.

FFCWS. The FFCWS used 26 items from the Age 2-3 Child Behavior Checklist (CBCL) (Achenbach, 1992) at age three and 34 items from the 4-18 CBCL (Achenbach, 1991) at age five that comprise the Anxious/Depressed (hereafter, *Internalizing* behaviors) and Aggressive behavior (hereafter, *Externalizing* behaviors) subscales. To compute scores on each subscale, responses to each item (0 = *not true of my child*; 1 = *sometimes/somewhat true*; 2 = *very/often true*) are summed and averaged (Internalizing: $\alpha = 0.69$ at three years, 0.66 at five years; Externalizing: $\alpha = .86$ at three years, 0.85 at five years). Scores on each subscale are significantly correlated between time points, although Externalizing behaviors were more strongly correlated over time than Internalizing (Internalizing: $r = .36, p < .001$; Externalizing: $r = .56, p < .001$).

Children's positive behaviors are assessed with nine items from the Express subscale of the Adaptive Social Behavior Inventory (ASBI) at both three and five years (Hogan, Scott, & Bauer, 1992), a subscale measuring children's social competence and prosocial skills with adults and peers (hereafter, *Social Competence*). The alpha coefficient was high at both times ($\alpha = 0.77$ at five years; $\alpha = 0.73$ at three years) and comparable to the full subscale reliability reported for other samples of socioeconomically disadvantaged preschoolers (Greenfield, Wasserstein, Gold, & Jorden, 1997). Scores were significantly positively correlated between time points ($r = .35; p < .001$).

NEWWS. In the NEWWS, *Internalizing* and *Externalizing* behavior problems are assessed at the five-year follow-up with items from the Social Skills Rating System (SSRS; Gresham & Elliot, 1990). The Internalizing subscale ranges between 0 and 24, with higher values of the scale representing a higher

level of internalizing behavior problems such as sadness and nervousness ($\alpha = 0.66$), and the Externalizing subscale ranges from 0 to 18 with a higher value reflecting more perceived problems such as fighting with and bullying others ($\alpha = 0.78$). At two-year follow-up, Internalizing behavior problems are assessed using the five items of the Depressed/Withdrawn Behavior Problems Index (BPI) scale (Zaslow, McGroder, & Moore, 2000). Our measure is the mean value of the item responses on a scale identical to the one used in the CBCL (range = 0 to 2). Externalizing behavior is measured in the two-year follow-up using the mean frequency of items in the Antisocial Subscale of the BPI (range = 0 to 2). Scores on both subscales are significantly correlated between time points, but as in the FFCWS, Externalizing behaviors are more strongly correlated over time than Internalizing behaviors (Internalizing: $r = .22, p < .001$; Externalizing: $r = .34 p < .001$).

Positive behaviors at the five-year follow-up are assessed with three measures drawn from the *Cooperation*, *Positive Assertion*, and *Responsibility* subscales of the SSRS; these scales each assess aspects of social competence similar to those assessed in the ABSI Express scale. The scales range from 1 to 39, 0 to 30, and 0 to 27, respectively, and have high internal consistencies ($\alpha = 0.85$; $\alpha = 0.83$; $\alpha = 0.80$). Although the scales are highly intercorrelated ($r_s = 0.64$ to 0.68), correlations are not so high as to obviate their separation. At the two-year follow-up, seven items from the Social Competence subscale of the Positive Child Behavior Scale (Polit, 1996) are used to assess children's prosocial skills. Although items differ from those in the SSRS, the scale is positively correlated with all five-year positive measures ($r_s = 0.33, 0.38, 0.32$) suggesting it taps similar constructs. As this is the only positive behavior measure gathered at the two-year, it is used as the earlier measure in models predicting all five-year positive behavioral outcomes.

Covariates

We include a wide range of controls in all models, conceptualized in three categories: *maternal characteristics*, *public safety net use*, and *child characteristics*. Within maternal characteristics, we include measures of mothers' family background, socioeconomic wellbeing, household structure at

baseline, and personal characteristics. In the FFCWS and NEWWS, we chose the most analogous measures within each category so that specifications would be maximally analogous across datasets.

FFCWS. The *maternal characteristics* we control for include two measures of mothers' family background: her parents' highest level of education (less than high school/GED with high school or higher as reference) and whether she lived with both parents at age 15. We include five measures of maternal socioeconomic characteristics: maternal race (coded as three indicators for Black, Hispanic, or other race/ethnicity with White as the reference), education level at baseline (coded identically to parents' education), age at focal child's birth, household income-poverty-ratio at one and three years (averaged), and employment status at three and five years (unemployed at both times, with employed at either or both times as the reference). We also control for maternal household structure (three indicators for lives with parent(s), cohabits with biological father and parent(s), or lives alone, with cohabits with father only as the reference), and number of children in the household (two indicator variables two children or three or more children, with focal child only as the reference) both measured at birth.

Key indicators of mothers' personal characteristics, measured at baseline, are also controlled. These are: maternal health (mother is in fair/poor health with excellent/very good/good as the reference), whether mother smoked during pregnancy, whether she used alcohol/drugs during pregnancy, and whether she received prenatal care in her first trimester. We also enter her score on the Peabody Picture Vocabulary Test-III (Dunn & Dunn, 1997), a receptive language assessment administered during the age three home visit, as an indicator of cognitive ability. In robustness checks, we add an indicator variable for whether mother had experienced a major depressive episode in the year after the focal child's birth (using criteria from the Composite International Diagnostic Interview – Short Form; Kessler, Andrews, Mroczek, Ustun, & Wittchen, 1998).

We control for several indicators of mothers' *public safety net use* measured at age three: whether the mother ever received welfare/TANF, assistance from the WIC program, food stamps, a housing subsidy, or lived in public housing between the one- and three-year follow-ups. We also control for whether the child has public or private health insurance at three years (separate indicators), with no

insurance as the reference. *Child characteristics* included are child is male, child age in months at the three- and five-year follow-ups, and low birthweight status, as a proxy for high child health risk.

NEWWS. The *maternal characteristics* we control for include two baseline indicators of family background: whether the mother lived in a household that received welfare at some point during her childhood and whether the mother first gave birth as a teenager. We control for maternal race using two indicators for White and Non-White/Non-Black, with Black serving as the reference category, and for maternal education with an indicator for mother has no high school degree or GED at baseline. Household income as a percentage of poverty at two-year follow-up is also included, as is the number of quarters the respondent worked between random assignment and the two-year follow-up. To control for maternal household structure, we enter three indicators of living arrangement (living with children and a spouse/partner, living with children and an adult relative, and not living with children at two-year follow-up, with living alone with children as the reference) and two indicators for mother has two children or three or more children at baseline, with one child as the reference category.

To control for mothers' personal characteristics, we use baseline measures of mothers' self-efficacy entered as four indicators of different dimensions of the construct: feeling pushed around in life; feeling angry that people like themselves never get a fair chance to succeed; feeling like they have no control over the things that happen; and feeling that there is little that can be done to change many of the important things in life. The *NEWWS* administered a baseline literacy test and we include a dummy variable that represents scoring below sufficiency on this test. Although we are not interested in assessing treatment impacts, we include indicators for treatment group status, with control group membership as the reference category. In robustness checks, we add a measure of mothers' level of depressive symptoms at the two-year follow-up using responses to 12 items from the Center for Epidemiologic Studies Depression Scale – Short Form (CESD-SF; Radloff, 1977) ($\alpha = 0.89$).

As measures of *public safety net use*, we include the number of months between random assignment and the two-year follow-up respondents received food stamps and, separately, cash welfare. A vector of indicators reflects receipt of the following public assistance programs at the two-year follow-up:

WIC (anyone in the household); Medicaid (focal child); and living in public housing or receiving public housing assistance (household). We also include controls for whether the focal child was privately insured and if she was uninsured. Insurance status at the two-year follow-up had relatively high item non-response, therefore “missing insurance status” serves as the reference group for focal child insurance status. To control for *child characteristics*, we include a dummy for child is male. The most precise information on child age reported in the public use data files is whether the focal child was younger than the median age of all focal children at baseline, so we include an indicator for whether the child was younger than this median.

Analytic Strategy

Univariate analyses

We first examine which maternal (and child) characteristics are associated with the availability of private safety nets by comparing mothers at the different safety net levels across all covariates using one-way analyses of variance (ANOVA) for continuous variables and chi-square tests for dichotomous variables. We also compare children’s behavioral scores at both time points across private safety net levels and conduct pairwise contrasts using bonferroni post-hoc adjustments to identify significant between-group differences. In the NEWWS, these and subsequent analyses are conducted with an analytic weight to account for unequal probability of selection into the COS sample.

Multivariate analyses

If we find significant mean differences in children’s behavioral outcomes by safety net level, we then conduct three types of multivariate models. In multivariate models, we standardize scores on all child behavioral outcomes to have mean zero and standard deviation of one so that coefficients for safety net level (FFCWS) and quartile (NEWWS) are comparable across models with different dependent variables. Specifically, in OLS and residualized change models safety net indicators represent the difference between children’s behavioral scores in that group versus those in the highest safety net group (the reference category) in standard deviation units of the dependent variable.

OLS models. First, we run OLS regression models predicting behavioral outcomes from private safety net levels, holding constant the outlined set of covariates. This technique reduces bias induced by *observed* characteristics of mother and child, but does not account for unobserved characteristics of mother and child that may bias the association between private safety net and behavioral outcomes, such as unmeasured maternal interpersonal skills (Duncan & NICHD ECCRN, 2003). It takes the following form:

$$Y_{it} = \alpha_1 + \beta_1 \text{PrSN}_{i(t-1)} + \beta_2 \text{Mat}_i + \beta_3 \text{PbSN}_{i(t-1)} + \beta_4 \text{Child}_i + \varepsilon_{it} \quad (1)$$

where Y_{it} represents a child's score on a particular behavioral outcome at the age-five follow up in the FFCWS and the five-year follow-up in the NEWWS. PrSN represents a vector of indicator variables reflecting mothers' level of private safety net (with the highest level as the reference) at the age-three follow up in the FFCWS and the two-year follow up in the NEWWS. Mat represents a vector of variables for all maternal characteristics; PbSN represents a vector of indicators for mothers' public safety net use at the same time private safety net level is measured, and Child represents a vector of covariates for child characteristics. β_2 through β_4 represent vectors of coefficients for all measures of maternal, public safety net, and child characteristics.

Residualized change models. Next, we enter children's scores on earlier measures of the outcome on the right hand side of equation (1), running what is sometimes called a residualized change model (NICHD ECCRN & Duncan, 2003). It is considered a change model because entering the earlier outcome as an independent variable reduces all other coefficients to estimating their impact on change in the outcome between measurements. Whereas in OLS models safety net coefficients reflect mean differences in child behavior scores by safety net group at one time point, residualized change coefficients reflect mean differences in the change in scores between time points. This approach attenuates bias induced by both observed and unobserved time invariant characteristics of mother and child. It can provide considerably more power than other types of change models to detect associations when outcomes are highly correlated and are not measured identically over time (Cronbach & Furby, 1970). However,

because including initial level as a predictor likely introduces a biasing correlation between it and the error term, the change model may underestimate coefficients' confidence intervals. We use robust standard errors to correct for this potential underestimation. This model takes the following form:

$$Y_{it} = \alpha_1 + \beta_1 \text{PrSN}_{i(t-1)} + \beta_2 \text{Mat}_i + \beta_3 \text{PbSN}_{i(t-1)} + \beta_4 \text{Child}_i + \delta Y_{i(t-1)} + \varepsilon_i \quad (2)$$

where $Y_{i(t-1)}$ represents the analogous behavior score at the age-three follow-up in the FFCWS and the two-year follow-up in the NEWWS, and δ reflects the coefficient for the earlier outcome.

Results

Univariate results

FFCWS. Table 2 displays child behavior scores at both time points and means and percentages for all independent variables by level of private safety net at age three. As hypothesized, children whose mothers report High levels of private safety nets have significantly lower Internalizing and Externalizing scores at both time points than those in the Medium and Low safety net groups. Although children in the Medium safety net group have lower scores than those in the Low group, differences are small and non-significant. Children in both the High and Medium groups have significantly higher Social Competence scores than those in the Low group at both time points.

Mothers differ in terms of their family background, socioeconomic wellbeing, and use of public programs by level of private safety net. Those who report High levels have more educated parents, are more educated themselves, have higher PPVT scores, and, interestingly, are younger than those in the Medium or Low groups. Their household incomes are also higher, and they are less likely to have been consistently unemployed. Across characteristics, mothers in the Medium group fall in between those in the High and Low groups, but are closer to those in the Low group. No racial differences emerged by safety net level, nor did mothers significantly differ in their health or prenatal behaviors.

Mothers in the High safety net group are less likely to rely on public programs such as TANF or food stamps and are less likely to live in public housing. In terms of household structure, mothers are equally likely to live with the child's biological father, at least at the time of birth, but mothers with High levels of safety nets are more likely to live with their parents and less likely to live alone or with non-

relative adults than those with Low levels. Taken together, these patterns suggest mothers with higher levels of private safety nets come from more advantaged families, are better off socioeconomically, and may have more sources of support from relatives in the home than those who report lower levels.

NEWWS. In the NEWWS, differences in child behavior across levels of mothers' private safety nets closely resemble those in the FFCWS (see Table 3), with children in the top quartile scoring significantly lower on Internalizing and Externalizing behaviors and significantly higher on all positive behaviors than children in the bottom two quartiles at both time points. Scores on all outcomes follow a linear trend with those in the second and third quartiles scoring in between those in the top and bottom quartiles.

Far fewer differences emerge among mothers in the NEWWS in their characteristics and use of public programs, perhaps because mothers are less socioeconomically diverse, and more disadvantaged, than those the FFCWS. Mothers in the top safety net quartile are more likely to be Black and are less likely to feel pushed around in life than those in lower quartile, the latter suggesting higher self efficacy in this group. They were less likely to receive public health insurance and slightly more likely to lack health insurance for their children than those in the bottom quartile. No differences emerge in mothers' household income, employment, or use of public programs. Similar differences emerge, however, in mothers' household structure, with mothers who report the highest levels of safety net availability more likely to live with relatives and less likely to live alone than mothers reporting the lowest levels.

OLS and residualized change models

FFCWS. Table 4 presents results for both the OLS and residualized change models for age five behavioral outcomes. In model 1, with all covariates held constant, children's scores are significantly higher on both Internalizing and Externalizing behavior problems and significantly lower on Social Competence in the Medium and Low safety net groups than in the High safety net group. Because coefficients reflect group differences in standard deviation units, the difference between the Low and High groups represents about a third of a standard deviation on behavior problems and a quarter of a standard deviation on Social Competence. The differences between Medium and High groups are smaller

but still represent between 0.11 and 0.22 of a standard deviation. Estimates for covariates are available upon request.

In model 2, the analogous age three outcomes (also standardized) are entered as covariates in residualized change models. For Internalizing behaviors, coefficients for both Low and Medium are reduced in size but remain significant, reflecting group differences of 0.23 and 0.16 standard deviations. For Social Competence, only the coefficient for Low is reduced, and both the Low and Medium coefficients are still significant, representing group differences of 0.18 and 0.11 standard deviations. For Externalizing behaviors, both coefficients are reduced in size by 50% and become nonsignificant, however, the Low coefficient still represents 0.14 of a standard deviation.

NEWS. Results from OLS and residualized change models in analyses using the *NEWS* data are strikingly similar to those using the *FFCWS* (see Table 5). In model 1, children in the bottom two quartiles of safety net score significantly higher than children in the top quartile on both Internalizing and Externalizing behavior problems. Differences on Internalizing behaviors are larger, representing approximately a third of a standard deviation between the top and bottom quartiles. Children in the lowest two quartiles also score significantly lower on Cooperation, Assertiveness, and Responsibility than those in the top, and both bottom and second quartile coefficients represent a third of a standard deviation. Only results for Cooperation are shown because results for other positive behaviors are similar (available upon request).

Once analogous earlier outcomes are entered in model 2, children in the bottom quartile still score significantly higher than those in the top quartile on Internalizing by 0.18 of a standard deviation. In models predicting Externalizing behaviors, safety net coefficients reduce substantially and become nonsignificant, just as they do in the *FFCWS*. Finally, children in the bottom two quartiles still score significantly lower than those in the top quartile on all positive behaviors and safety net coefficients are largely unchanged in these models.

Threats to Validity

Our study design presents several potential threats to validity. Primarily, we are concerned that the key independent variable and the outcome measures may be simultaneously determined, thus biasing our estimates. To test for bi-directional causation, we ran additional models predicting age three child outcomes from mothers' safety net level at birth—before the child's behavior could plausibly influence safety net levels—using FFCWS data (not shown). Because only three of the six safety net items were asked at baseline, the measure is not entirely comparable that of our main specification, however it captures a similar construct. In OLS models with all covariates entered, Low safety net level at birth was associated with greater Internalizing ($b = .04$; $se = .02$; $p < .10$) and Externalizing ($b = .06$, $se = .03$; $p < .05$) behaviors three years later, suggesting simultaneity did not strongly bias the main results.

Omitted variables bias is also a concern. By including a particularly rich set of covariates and employing change models, we substantially reduce the potential influence of confounding maternal characteristics, however, neither analytic approach yields estimates completely free of bias. As an additional robustness exercise, we estimated a child-level fixed effects model with the two waves of FFCWS data that contain measures of safety net availability and child behavior (results not shown). The (continuously measured) safety net variable was not significant in models predicting Internalizing or Externalizing behaviors, but was significant at the trend level for the outcome measure of Social Competence ($b = .04$; $se = .02$; $t = 1.82$; $p = .07$). Large confidence intervals in the fixed effects models suggest that imprecision precludes our knowing if these null results are true. Furthermore, it may be that the association between private safety nets and child wellbeing is relatively stable and cumulative such that short-term changes would not have large effects on outcomes, whereas consistent safety net levels over time would.

Finally, shared method variance between mothers' report of safety net availability and children's behavior is an additional threat to construct validity. It is possible, for example, that a depressed mother would perceive more limited support from her social network and perceive higher levels of behavior problems in her child than a non-depressed mother, rendering the association between private safety nets

and child behavior merely an artifact of her perceptions. Encouragingly, our results held when maternal depression was controlled (in both data sets); in the NEWWS controls also included baseline measures of self efficacy. Recall too that both datasets allowed us to control for mothers' cognitive ability. Importantly, additional analyses (not presented here) showed that mother-reported behavior problems predict objective assessments of children's academic abilities in both datasets in the expected directions. These associations give us more confidence that our measures of children's behaviors are "real" and not simply reflections of mothers' cognitive or non-cognitive characteristics.

Discussion

The goal of the present paper was to estimate associations between low-income mothers' perceptions of private safety nets (i.e., that belief that they could draw upon financial and instrumental support from their social network in times of need) and their children's behavioral adjustment. Using two large-scale, high-quality longitudinal data sets, we found remarkably similar, robust associations between the presence of a strong safety net and better scores on a range of social and emotional outcomes. The similarity in the nature and strength of these associations across the two datasets is especially striking given the different (yet complementary) operationalizations of private safety nets in *Fragile Families* (which emphasizes financial support) and *NEWWS* (which emphasizes instrumental support).

The results support our hypothesis that the availability of a private safety net would be positively associated with children's emotional and behavioral adjustment. These findings add to a long tradition of research illustrating the merits of "social support," broadly defined, in the lives of low-income families. Unlike previous studies exploring connections between social support and children's behavioral outcomes, many of which fail to demonstrate a significant main association between safety nets and children's adjustment and instead present only indirect associations in a structural equation framework (e.g., Jackson et al., 2000; McLoyd et al., 1994), we were especially concerned with accounting for the potential endogeneity and simultaneity biases in the estimation of these relationships. Our descriptive evidence indeed suggests positive selection into having a private safety net. For example, *Fragile Families'* mothers who came from more educated families and were better off socioeconomically were

more likely to report a strong safety net than other mothers. This difference casts doubt on any argument for a causal impact of safety nets on child behavioral adjustment, for the positive qualities that allow mothers to create or maintain a social network may be the same qualities that positively affect her child's socioemotional development. Our ability to control for an unusually wide range of observable characteristics among mothers, in addition to our use of residualized change models helps temper this concern. Moreover, in NEWWS, which had a more uniformly economically disadvantaged sample, we found few socioeconomic differences among mothers across safety net levels, and the associations with child wellbeing remained sizeable, significant, and remarkably similar to those in *Fragile Families*.

Thus, to the extent that one can believe that private safety nets have a demonstrable causal impact on children's emotional and behavioral wellbeing, this study draws attention to the importance of unwed mothers' private safety nets in the context of economic hardship. Voluminous sociological research has stressed the importance of instrumental and material support to the functioning of poor and low-income families (e.g., Edin & Lein, 1997; Harknett, 2006; Henly, 2002; Henly et al., 2006). This study extended that research by linking this support to children's socioemotional wellbeing in an analytic framework that addressed issues of unobserved heterogeneity to a greater extent than previous research. In doing so, we have highlighted an important protective factor for children growing up in economically disadvantaged families. This protective factor may be especially important in the wake of welfare reform because mothers are necessarily less able to rely on public safety nets, such as cash welfare assistance. Indeed, as more single mothers enter the labor market (and are subject to its vagaries, such as job instability or unpredictable and non-standard hours), it may be critical to have a private safety net to provide cash assistance during an unemployment spell, child care assistance during an evening shift of work, or the emotional comfort of knowing this help is available to relieve the dual burdens of work and family.

The obvious next step in this line of research is to understand the mechanisms linking private safety nets to children's socioemotional wellbeing. As we described earlier, several possible routes exist. Low-income mothers who have access to such networks may be better able to weather economic difficulties following illness, job loss, or the dissolution of relationships. As such, private safety nets

might help smooth consumption or sustain housing or child care arrangements for children. It is easy to imagine that minimizing turbulence in the face of economic shocks helps to sustain children's emotional wellbeing. Private safety nets might also help mothers maintain employment, especially when schedules are erratic and vary from week to week, as is characteristic of the low-wage labor market (Presser, 2003). Indeed, Harknett (2006), also using NEWWS, found that private safety nets encouraged employment and minimized welfare use; for instance, mothers with the highest levels of private safety nets worked on average about 1.3 months more in a three-year period compared to mothers with the least amount and, moreover, that a dose-response relationship existed between the strength of the private safety net and mothers' employment probabilities. Finally, private safety nets might benefit mothers' parenting behavior by minimizing parenting stress and maternal depression, both of which can interfere with healthy parent-child interactions. Our ongoing work in this area will aim to identify these mediating linkages.

It is noteworthy that most research and discussion about children's wellbeing in the wake of welfare reform focuses on the role *public* programs, such as TANF or other cash assistance or public insurance programs, play in shaping children's environments. Despite the largely accepted notion that social support, variously defined, plays a central role in alleviating the economic and emotional hardship low-income mothers experience, surprisingly little work has examined the social insurance role private safety nets might play in children's development. In the present study, we find statistically significant and substantively important associations between the availability of private safety nets and children's socioemotional wellbeing, suggesting more research should be devoted to understanding this potentially important protective factor for children in low income families.

References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T. M. (1992). *Manual for the Child Behavior Checklist/2-3 and 1992 Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Antonucci, T.C. & Jackson, J. S. (1990). The role of reciprocity in social support. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp.173-198). New York: Wiley.
- Axinn, W., Duncan, G., & Thornton, A. (1997). The effects of parents' income, wealth and attitudes on children's completed schooling and self-esteem. In G. Duncan & J. Brooks-Gunn (Eds.), *Consequences of growing up poor* (pp. 518-540). New York: Russell Sage Foundation.
- Becker, G. S. (1991). *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55, 83-96.
- Burchinal, M. R., Follmer, A., & Bryant, D. M. (1996). The relations of maternal social support and family structure with maternal responsiveness and child outcomes among African American families. *Developmental Psychology*, 32, 1073-1083.
- Conger, R. D., Conger, K. J., Elder, G. H., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development*, 63, 526-541.
- Conger, R. D., & Conger, K. J. (2000). Resilience in midwestern families: Selected findings from the first decade of a prospective longitudinal study. *Journal of Marriage & Family*, 64, 361-373.
- Cronbach, L. J., & Furby, L. (1970). How should we measure "change"? – or should we? *Psychological Bulletin*, 74, 68-80.
- Cutrona, C. E. (1986). Behavioral manifestations of social support: A microanalytic investigation. *Journal of Personality and Social Psychology*, 51, 201-208.

- Dearing, E., McCartney, K., & Taylor, B. A. (2001). Change in family income-to-needs matters more for children with less. *Child Development, 72*, 1779-1793.
- Dodge, K. H., Pettit, G. S., & Bates, J. E. (1994). Socialization mediators of the relation between socioeconomic status and child conduct problems. *Child Development, 65*, 649-665.
- Downey, B. & Coyne, J. C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin, 108*, 50-76.
- Duncan, G. J., & Brooks-Gunn, J. (Eds.). (1997). *Consequences of growing up poor*. New York: Russell Sage Foundation Press.
- Duncan, G. & Chase-Lansdale, L. (2001). *For better and for worse: Welfare reform and the Well-being of Children and Families*. New York: Russell Sage Foundation.
- Dunn, L. M. & Dunn, L. M. (1997). Peabody Picture Vocabulary Test – Third Edition. Circle Pines, MN: American Guidance Service, Inc.
- Edin, K. & Lein, L. (1996). Work, welfare, and single mothers' economic survival strategies. *American Sociological Review, 61*, 253-266.
- Edin, K. & Lein, L. (1997). *Making ends meet: How single mothers survive welfare and low-wage work*. New York: Russell Sage Foundation.
- Felton, B. J. & Shinn, M. (1992). Social integration and social support: Moving 'social support' beyond the individual level. *Journal of Community Psychology, 20*, 103-115.
- Gershoff, E. T., Aber, J. L., Raver, C. C., & Lennon, M. C. (2007). Income is not enough: Incorporating material hardship into models of income associations with parenting and child development. *Child Development, 78*, 70-95.
- Greenfield, D. B., Wasserstein, S. B., Gold, S., & Jorden, B. (1997). The Adaptive Social Behavior Inventory (ASBI): Evaluation with high-risk preschoolers. *Journal of Psychoeducational Assessment, 15*, 322-333.
- Gresham, F. M., & Elliot, S. N. (1990). *The Social Skills Rating System*. Circle Pines, MN: American Guidance Systems.

- Hamilton, G., Freedman, S., Gennetian, L., Michalopoulos, C., Walter, J., Adams-Ciardullo, D., Gassman-Pines, A., McGroder, S., Zaslow, M., Ahluwalia, S., & Brooks, J. (2001). *How effective are different welfare-to-work approaches? Five-year adult and child impacts of eleven programs*. Washington, DC: U.S. Department of Health and Human Services.
- Harknett, K. (2006). The relationship between private safety nets and economic outcomes among single mothers. *Journal of Marriage and Family*, 68, 172-191.
- Hashima, P. Y., & Amato, P. R. (1994). Poverty, social support, and parental behavior. *Child Development*, 65, 394-403.
- Haveman, R., & Wolfe, B. (1994). *Succeeding generations: On the effects of investments in children*. New York: Russell Sage Foundation.
- Henly, J. (2002). Informal support networks and the maintenance of low-wage jobs. In F. Munger (Ed.), *Laboring below the line: The new ethnography of poverty, low-wage work, and survival in the global economy* (pp.179-203). New York: Russell Sage Foundation.
- Henly, J. R., Danziger, S. K., & Offer, S. (2005). The contribution of social support to the material well-being of low-income families. *Journal of Marriage and Family*, 67, 122-140.
- Hogan, A. E., Scott, K. G., & Bauer, C. R. (1992). The Adaptive Social Behavior Inventory (ASBI): A new assessment of social competence in high risk three-year-olds. *Journal of Psychoeducational Assessment*, 10, 230-239.
- House, J. S., Umberson, D. & Landis, K. R. (1988). Structures and processes of social support. *Annual Review of Sociology*, 14, 293-318.
- Howard, E. (2006). The informal social support, well-being, and employment pathways of low-income mothers. In H. Yoshikawa, T. S. Weisner, & E. Lowe (Eds.), *Making it work: Low-wage employment, family life, and child development* (pp.256-272). New York: Russell Sage Foundation.

- Jackson, A. P., Brooks-Gunn, J., Huang, C., & Glassman, M. (2000). Single mothers in low-wage jobs: Financial strain, parenting, and preschoolers' outcomes. *Child Development, 71*, 1409-1423.
- Johnson, R. & Corcoran, M. (2003). Welfare recipients' road to economic self sufficiency: Job quality and job transition patterns post-PREWORA. *Journal of Policy Analysis and Management, 21*, 615-641.
- Kessler R.C., Andrews G., Mroczek D., Ustun B., & Wittchen H.U. (1998). The World Health Organization Composite International Diagnostic Interview Short-Form (CIDI-SF). *International Journal of Methods in Psychiatric Research, 7*, 171-85.
- Knox, V. W., London, A., S., & Scott, E. K. (2003). *Welfare reform, work, and child care: The role of informal care in the lives of low-income women and children*. New York: MDRC.
- Leinonen, J. A., Solantaus, T. S., & Punamaki, R. (2003). Social support and quality of parenting under economic pressure and workload in Finland: The role of family structure and parent gender. *Journal of Family Psychology, 17*, 409-418.
- Massey, D. & Denton, N. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.
- McLoyd, V. C., Jayaratne, T. E., Ceballo, R. & Borquez, J. (1994). Unemployment and work interruption among African American single mothers: Effects on parenting and adolescent socioemotional functioning. *Child Development, 65*, 562-589.
- National Institute of Child Health and Human Development Early Child Care Research Network & Duncan, G. (2003). Modeling the impacts of child care quality on children's preschool cognitive development. *Child Development, 74*, 1454-1475.
- Pattison, E. M., DeFrancisco, D., Wood, P., Frazier, H., & Crowder, J. (1975). A psychosocial kinship model for family therapy. *American Journal of Psychiatry, 132*, 1246-1251.
- Pavetti, L. & Acs, G. (2001). Moving up, moving out, or going nowhere? A study of the employment patterns of young women and the implications for welfare mothers. *Journal of Policy Analysis and Management, 20*, 721-736.

- Polit, D. F. (1996). *Self administered teacher questionnaire in the New Chance 42-month survey*. New York: Manpower Demonstration Research Corporation.
- Presser, H. B. (2003). *Working in a 24/7 economy: Challenges for American families*. New York: Russell Sage Foundation.
- Radloff, (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.
- Reichman, N., Teitler, J., Garfinkel, I., & McLanahan, S. (2001). Fragile families: Sample and design. *Children and Youth Services Review, 23* (4-5), 303-326.
- Sampson, R. J. & Laub, J. H. (1994). Urban poverty and the family context of delinquency: A new look at structure and process in a classic study. *Child Development, 65*, 523-540.
- Sarason, B.R., Sarason, I. G. & Pierce, G. R. (1990). *Social support: An interactional view*. New York: Wiley.
- Simons, R. L., Lorenz, F. O., Wu, C., & Conger, R. D., (1993). Social network and marital support as mediators and moderators of the impact of stress and depression on parental behavior. *Developmental Psychology, 29*, 368-381.
- Smith, S. S. (2005). 'Don't put my name on it': Social capital activation and job-finding assistance among the black urban poor. *American Journal of Sociology, 111*, 1-57.
- Smith, J. R., Brooks-Gunn, J., & Klebanov, P. (1997). Consequences of living in poverty for young children's cognitive and verbal ability and early school achievement. In G. J. Duncan & J. Brooks-Gunn (Eds.), *Consequences of growing up poor* (pp. 132-189). New York: Russell Sage Foundation.
- Stack, C. (1974). *All our kin*. New York: Harper Row.
- Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health and Social Behavior, 35*, 53-79.

- Turner, R. J. & Turner, J. B. (1999). Social integration and support. In C. S. Aneshensel & J. C. Phelan (Eds.), *Handbook of the sociology of mental health* (pp.301-319). New York: Kluwer.
- Turney, K. & Harknett, K. (2007). Neighborhood socioeconomic disadvantage, residential stability, and perceptions of social support among new mothers. Center for Research on Child Wellbeing, Working Paper #2007-08-FF.
- Wetherington, E. & Kessler, R. (1986). Perceived social support, received social support, and adjustment to stressful life events. *Journal of Health and Social Behavior*, 27, 78-89.
- Wilson, W. J. (1996). *When work disappears: The world of the new urban poor*. New York: Vintage Books.
- Zaslow, M.J., McGroder, S.M., & Moore, K.A. (2000). *The National evaluation of welfare-to-work strategies: Impacts on young children and their families two years after enrollment*. Washington, D.C.: Child Trends.

Table 1

Indicators of Mothers' Actual Use of Private Safety Nets between One and Three Years: FFCWS

	<i>Level of Perceived Safety Net at Three Years</i>			<i>F/χ^2</i>
	High	Medium	Low	
Received financial help (FH) from anyone (%)	37.8	35.9	14.3	***
# Sources FH (range 0-3)	0.48 (0.69)	0.43 (0.65)	0.17 (0.50)	***
FH from mother's family (%)	31.4	27.4	10.4	***
FH from father's family (%)	8.2	8.2	2.8	*
FH from friends/partner (%)	8.7	7.8	3.9	ns
Amount (\$) borrowed btw 12 and 36 mths	\$511.22 (1668.50)	\$253.32 (785.23)	\$148.52 (722.14)	***

N = 1162; **p* < .05; ***p* < .01; ****p* < .001.

Table 2

*Child Behavioral Outcomes at Five Years and all Independent Variables by Private Safety Net Level:
FFCWS Data*

	<i>Private Safety Net Level</i>				<i>F/χ^2</i>
	Total	High	Medium	Low	
<i>Child Behavior at 5 Years</i>					
CBCL Anxious/Depressed (0-2 scale)	0.27 (.23)	0.23 _a	0.28 _b	0.30 _b	***
CBCL Aggressive (0-2 scale)	0.59 (.34)	0.54 _a	0.61 _b	0.64 _b	**
ASBI Social Competance (0-2 scale)	1.71 (.30)	1.75 _a	1.71 _a	1.63 _b	***
<i>Child Behavior at 3 Years</i>					
CBCL Anxious/Depressed (0-2 scale)	0.54 (.31)	0.49 _a	0.55 _b	0.61 _b	***
CBCL Aggressive (0-2 scale)	0.70 (.42)	0.64 _a	0.72 _b	0.74 _b	**
ASBI Social Competance (0-2 scale)	1.66 (.32)	1.69 _a	1.67 _a	1.58 _b	***
<i>Maternal Characteristics</i>					
Mother lived with both parents at 15 (%)	30.0	26.9	29.0	32.9	ns
Mothers' parents had < HS degree (%)	27.5	22.20	27.4	39.0	***
Mother is Black (%)	62.2	57.7	64.2	65.4	ns
Mother is Hispanic (%)	23.9	26.3	22.3	23.6	ns
Mother is Other race (%)	1.7	2.1	1.5	1.8	ns
Mother and father same race (%)	88.6	88.0	88.8	89.6	ns
Mother has < HS (%)	44.3	37.0	46.1	54.4	***
Mother's age at child's birth	23.4 (5.3)	22.9	23.5	24.5	**
Mother's PPVT Score	86.8 (10.0)	87.8	87.0	84.2	***
Mother has fair/poor health	9.6	13.4	8.6	9.4	ns
Mother smoked during pregnancy	25.5	23.0	25.6	30.8	ns
Mother used alcohol/drugs during pregnancy	13.7	10.5	15.4	15.4	ns
Mother had early prenatal care	58.1	60.0	59.1	51.0	ns
Maternal HH Income-to-Poverty	0.93 (.71)	1.17	0.87	0.64	***
Mother Unemployed 36 and 60 months	28.7	20.4	29.7	43.4	***
<i>Household Structure at Child's Birth</i>					
Cohabits with father	34.2	35.5	34.1	32.1	ns

	<i>Private Safety Net Level</i>				<i>F/χ²</i>
	Total	High	Medium	Low	
Cohabits with father and parents	8.1	7.6	8.5	7.5	ns
Lives with parents	24.5	26.0	26.2	16.0	**
Lives alone/with non-relative adults	33.1	30.9	31.1	44.4	**
Has Two Children in HH	32.8	33.4	32.4	32.4	ns
Has Three (or more) Children in HH	43.7	37.8	44.4	54.4	**
<i>Use of Public Programs at 3-Years</i>					
Welfare/TANF	35.9	26.5	39.5	45.1	***
WIC	68.8	66.5	71.2	65.9	ns
Food Stamps	73.5	65.3	77.1	80.2	***
Housing Subsidy	30.9	25.0	32.6	37.9	**
Public Housing	29.4	23.0	31.8	35.7	**
Public Health Insurance for child	76.2	71.9	77.4	81.9	*
Private Health Insurance for child	13.3	18.4	11.6	7.7	**
<i>Child Characteristics</i>					
Child is male	52.9	53.7	52.1	53.9	ns
Child was low birthweight (<2500 g)	10.8	9.0	12.1	10.8	ns
Child age in months (at 5-year follow-up)	60.9 (2.3)	61.0	60.9	60.9	ns

N = 1162; **p* < .05; ***p* < .01; ****p* < .001.

Child behavior means with different subscripted letters differ in pairwise contrasts at *p* < .05.

Table 3

Child Behavioral Outcomes at Five-Year Follow-Up and all Independent Variables by Private Safety Net Quartile: NEWWS Data

	<i>Private Safety Net Quartile</i>					<i>F/χ²</i>
	Total	Top	Third	Second	Bottom	
<i>Child Behavior at 5-Year Follow-Up</i>						
Internalizing behavior (0-22 scale)	8.3 (3.6)	7.8 _a	7.9 _{ab}	8.6 _{bc}	9.0 _c	****
Externalizing behavior (0-18 scale)	4.8 (3.1)	4.3 _a	4.6 _{ab}	5.1 _{bc}	5.2 _c	****
Cooperation (1-39 scale)	22.0 (6.5)	23.6 _a	22.2 _b	21.2 _b	21.0 _b	****
Positive Assertion (0-30 scale)	21.6 (5.1)	22.6 _a	22.0 _{ab}	21.1 _{bc}	20.6 _c	****
Responsibility (0-27 scale)	18.0 (4.6)	19.1 _a	18.4 _{ab}	17.4 _c	17.3 _c	****
<i>Child Behavior at 2-Year Follow-Up</i>						
Internalizing behavior (0-2 scale)	0.21 (.29)	0.14 _a	0.19 _{ab}	0.24 _{bc}	0.26 _c	***
Externalizing behavior (0-2 scale)	0.47 (.34)	0.38 _a	0.40 _{ab}	0.46 _{bc}	0.52 _c	****
Social Competance (0-2 scale)	1.59 (.37)	1.66 _a	1.60 _{ab}	1.55 _b	1.54 _b	****
<i>Maternal Characteristics</i>						
Mother was on welfare as a child (%)	31.4	30.2	30.4	32.5	32.5	ns
Mother had first baby as a teenager (%)	49.8	52.0	51.7	47.9	47.6	ns
Mother is white (%)	32.4	27.6	35.0	32.1	34.3	ns
Mother is black (%)	55.0	61.5	53.8	55.2	49.9	*
Mother is non-white, non-black (%)	12.6	10.9	11.1	12.7	15.8	ns
Mother has < HS (%)	35.7	34.4	34.3	37.4	36.9	ns
Mother has low literacy (%)	29.7	30.0	26.3	31.9	30.8	ns
Maternal HH Income-to-Pov (at 2 year FU)	0.78 (.43)	0.79	0.80	0.75	0.76	ns
Quarters employed between RA and 2-year FU	3.1 (2.8)	3.4	3.0	3.2	2.9	ns
Mother feels pushed around (%)	35.0	26.0	32.6	40.5	40.6	****
Mother has no control over life (%)	27.2	22.5	26.3	28.2	31.7	ns
Mother unable to change life (%)	26.7	24.6	24.8	29.3	28.2	ns
Mother angry at life chances (%)	52.8	51.4	48.3	52.7	58.9	ns
Control group (%)	36.1	32.1	37.3	38.0	36.6	ns
Human capital development treatment arm (%)	28.8	32.7	31.5	23.8	27.2	*
Labor force attachment treatment arm (%)	35.2	35.3	31.3	38.3	36.2	ns
<i>Household Structure at 2-Year Follow-Up</i>						
Lives with a spouse or partner (%)	18.9	19.9	20.6	19.0	16.0	ns
Lives with a relative (%)	19.0	21.4	22.7	16.8	15.1	^
Lives with a non-relative (%)	3.4	2.4	2.8	4.2	4.3	ns
Lives alone with children (%)	56.0	52.8	50.8	58.5	62.1	^
Does not live with children (%)	2.7	3.6	3.1	1.6	2.6	ns
<i>Number of Children at RA</i>						
Has one child in HH (%)	28.9	31.4	30.0	30.5	23.9	ns
Has two children in HH (%)	42.0	39.3	43.4	42.0	43.3	ns
Has three or more children in HH (%)	29.0	29.3	26.6	27.6	32.8	ns

	<i>Private Safety Net Quartile</i>					<i>F/χ²</i>
	Total	Top	Third	Second	Bottom	
<i>Use of Public Programs at 2-Year Follow-Up</i>						
Months receiving cash welfare since RA	17.9 (7.7)	17.7	17.6	17.7	18.2	ns
Receiving WIC (%)	15.9	11.4	16.2	19.1	16.8	ns
Months receiving food stamps since RA	18.7 (7.5)	18.4	18.6	18.8	19.1	ns
Living in public or publicly subsidized housing (%)	36.4	33.9	34.7	39.4	37.7	ns
Public Health Insurance for Child	76.3	71.5	73.3	80.1	80.1	*
Private Health Insurance for Child	7.7	10.4	6.4	8.8	5.5	ns
Uninsured Child	10.6	11.8	14.7	6.7	9.0	*
<i>Child Characteristics</i>						
Child is male	48.9	48.1	51.4	45.3	50.7	ns
Child was younger than 51 mths. at RA (%)	51.3	51.5	43.8	55.4	55.0	*

N=1308; **p* < .05; ***p* < .01; ****p* < .001

Child behavior means with different subscripted letters differ in pairwise contrasts at *p* < .05.

Table 4

OLS Regression Models Predicting Age Five Child Outcomes from Age Three Private Safety Net: FFCWS

	Internalizing		Internalizing		Externalizing		Externalizing		Social Comp.		Social Comp.	
	1		2		1		2		1		2	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
<i>Safety Net Level</i>												
High (5-6) (reference)	--	--	--	--	--	--	--	--				
Low (0-1)	0.36	0.10 ***	0.23	0.10 **	0.31	0.10 **	0.14	0.08	-0.25	0.09 **	-0.18	0.09 *
Medium (2-4)	0.22	0.07 **	0.16	0.07 **	0.17	0.07 *	0.06	0.06	-0.11	0.07 +	-0.11	0.07 +
<i>Mothers' Characteristics</i>	YES		YES		YES		YES		YES		YES	
<i>Public Safety Net</i>	YES		YES		YES		YES		YES		YES	
<i>Child Characteristics</i>	YES		YES		YES		YES		YES		YES	
<i>Age 3 Outcome</i>			0.36	0.03 ***			0.55	0.03 ***			0.32	0.03 ***
<i>N</i>	1162		1162		1148		1148		1159		1159	
Adjusted R-squared	0.05		0.17		0.04		0.32		0.05		0.16	
<i>F</i> -value	2.88 ***		8.29 ***		2.62 ***		17.91 ***		2.97 ***		7.97 ***	

Note. + $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 5

OLS Regression Models Predicting Five-Year Follow-Up Child Outcomes from Two-Year Private Safety Net: NEWWS

	Internalizing		Internalizing		Externalizing		Externalizing		Cooperation		Cooperation	
	1		2		1		2		1		2	
	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>	<i>b</i>	<i>se</i>
<i>Safety Net Quartile</i>												
Top quartile (reference group)	--	--	--	--	--	--	--	--				
Third quartile	-0.01	0.07	-0.06	0.08	-0.01	0.07	-0.01	0.07	-0.19	0.08 *	-0.18	0.08 *
Second quartile	0.17	0.08 *	0.08	0.08	0.18	0.08 *	0.13	0.08 +	-0.33	0.08 ***	-0.33	0.08 ***
Bottom quartile	0.30	0.09 ***	0.18	0.09 *	0.18	0.08 *	0.07	0.08	-0.35	0.08 ***	0.33	0.09 ***
<i>Mothers' Characteristics</i>	YES		YES		YES		YES		YES		YES	
<i>Public Safety Net Variables</i>	YES		YES		YES		YES		YES		YES	
<i>Child Characteristics</i>	YES		YES		YES		YES		YES		YES	
<i>Outcome at 2-Year Follow-Up</i>			0.25	0.03 ***			0.34	0.03 ***			0.12	0.02 ***
<i>N</i>	1308		1233		1308		1237		1308		1234	
<i>R-squared</i>	0.08		0.13		0.14		0.25		0.08		0.12	
<i>F-value</i>	3.21 ***		4.95 ***		5.06 ***		9.02 ***		3.09 ***		5.02 ***	

Note. + $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.