# Do Private Safety Nets Increase Employment and Reduce Welfare Receipt among

Single Mothers?\*

Kristen Harknett

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# Abstract:

In this paper, I examine the relationship between social network support and employment and welfare receipt among low-income single mothers in three U.S. counties. Departing from prior research in this area, I measure private safety nets as the *potential* to draw upon family and friends for child care, transportation, or financial assistance in the event that these supports are needed. I find that private safety nets facilitate employment and reduce reliance on welfare. My findings suggest that social network disadvantages compound individual-level disadvantages and that social networks should be taken into account when designing and targeting welfare policies.

## I. Introduction

Sociologists have long recognized that social networks play an important role in providing financial and in-kind support to poor families and have documented the accumulation of disadvantages associated with social isolation (Edin and Lein 1997; Massey and Denton 1993; Jargowsky 1997; Wilson 1987, 1996). However, debates about the causes of poverty and welfare dependence often polarize into two competing camps: those who emphasize individual causes such as intellectual or motivational deficits (Murray 1984) and those who emphasize structural causes such as a lack of well-paid job opportunities, affordable childcare, or health care (Wilson 1996). Scholars and policymakers have often overlooked or underemphasized the role that social networks of family and friends can play in supporting employment and in reducing reliance on welfare. Yet, common sense and research suggest that people who have social networks of family and friends to help out in a pinch will be better able to weather economic crises following divorce, job loss, or illness and consequently may be more able to sustain employment and less dependent on welfare programs.

In this paper, I examine the extent to which lacking the ability to draw on support from social networks impedes employment and increases reliance on welfare among single mothers with young children. I find that lacking the ability to draw on social networks for assistance is associated with depressed employment rates and earnings and increased reliance on welfare even after taking into account a wide range of individual characteristics.

Borrowing from Edin and Lein (1996), I use the term "private safety net" throughout this manuscript to represent potential support from social networks that a family can fall back on in times of need. Prior research has measured private safety net support as actual financial or in-kind support provided by social networks. In contrast, my research defines private safety net support as the *potential* to draw on support from social networks in times of need. This is an important distinction. The prior research approach of measuring private safety net support as actual support received over a given period of time cannot distinguish between mothers who do not need support and mothers who need support but do not have social networks that can provide it. My analysis avoids the problem of conflating the availability of social network support with the need for this support by examining the *potential* to draw on social networks when in need.

This paper characterizes those who have or lack support from social networks and examines the consequences of lacking private safety net support in terms of employment and welfare outcomes. I use longitudinal data on 2,818 single mothers who were involved in the National Evaluation of Welfare-to-Work strategies (NEWWS) in the 1990s in three U.S. counties to address the following research questions: First, who has the potential advantage of private safety net support and who does not? Second, to what extent is social network support associated with employment and earnings? Third, is social network support associated with being able to leave and stay off of welfare?

## **II. Prior Research**

Sociologists have theorized that social network support is associated with individual wellbeing (Lin 2001; Erickson 2001). Social capital theorists and researchers have argued that those who have diverse and resourceful social networks tend to do better in arenas such as the labor market (Burt 2001; Lin 2001). Research has suggested that social isolation, or having social networks that are limited in their range and resources, is a cause of poverty and welfare dependence (Granovetter 1982; Wilson 1987). Research has also shown that people tend to have social networks comprised of people with similar socioeconomic status (McPherson, Smith-Lovin, and Cook 2001). Because of the tendency toward socioeconomic homophily in social networks, we can expect the most disadvantaged single mothers, who likely have the greatest need for social support, to have the most disadvantaged social networks.

Studying the effects of social networks on an individual's economic circumstances is a complex endeavor. Social capital researchers have pointed out that social capital consists of two dimensions: one's network of personal relationships ("who you know") and the resources that those relations have to offer (Portes 1998; Hurlbert, Beggs, and Haines 2001). Further, the ability to access support depends not only on the members and characteristics of one's social network, but also on the nature and history of the relationships and on the norms within the social network itself (Wellman and Frank 2001).

Prior research has taken varied approaches to surmounting these research challenges: asking employed individuals whether they found their job through their social

networks; measuring the actual support received from social networks over a given period of time; and using living arrangements as a proxy for social network support. Each of these approaches has advanced our understanding of the relationship between social networks and individual economic circumstances, but each has limitations.

One large area of research related to social networks and individual economic circumstances has focused on the role that social networks play in the process of finding a job (Granovetter 1995; Lin, Cook, and Burt 2001; Stoloff, Glanville, and Bienenstock 1999). This job search literature has made an important contribution by demonstrating the value of information exchanged through social networks in facilitating the job search process. The job search literature has typically not analyzed the usefulness of social networks in getting better pay or better jobs (Erickson 2001). The job search literature has also lacked a comparative perspective; we know little about the characteristics of the social networks of those not engaged in a job search or of those who found their jobs through a source other than their networks (Erickson 2001).

Prior research has suggested that social networks are an important source of informal support for employment. Child care costs have been found to be a barrier to employment among low-income single mothers, and child care subsidies that reduce these costs have been found to increase employment (Baum II 2002; Meyers, Heintze, and Wolf 2002). By the same logic, social networks that provide free child care can be expected to increase employment among low-income single mothers by lowering their child care costs.

Former welfare recipients' jobs often involve irregular work schedules or evening and weekend shifts and often lack benefits such as a sick leave, which make it difficult to

combine work and single-parenting (Heymann and Earle 1998). Henly (1999) finds that informal networks play a major role in sustaining low-wage employment. She finds that mothers who work in low-paying jobs are often required to work irregular hours and have little flexibility in their schedules; and, therefore, these mothers rely heavily upon their own mothers and other female relatives to provide child care. Similarly, Knox et al. (2003) find that a large proportion of mothers on welfare or leaving welfare face irregular job schedules including night and weekend shifts and rely on a patchwork of formal childcare and informal childcare provided by friends or kin. While these studies have established the prevalence of social network supports for employment, this research has not attempted to connect the extent and quality of social network support to employment, job retention, or job quality. Therefore, we know little about how the social networks of those who are unemployed or underemployed compare with the social networks of those who are working; and we know little about the strength of the relationship between social network supports and employment.

Further evidence that social networks influence single mothers' employment comes from research on household structure. Mothers who live with extended family members, especially when those family members are employed, are more likely to be employed themselves compared with mothers who do not share their household with other adults (Cohen 2002; Parish, Hao, and Hogan 1991; Tienda and Glass 1985). Unlike the job search literature and the research documenting social network supports for work, research on household structure and employment is comparative. Mothers living with extended family members are more likely to work compared with mothers who live alone with their children. Although the research on household extension and employment has

established an association between extended households and employment, the mechanisms and direction of causality remain uncertain.

A separate research literature has documented that financial support from social networks is an important component of the income packages of single-mother families on welfare or in low-wage jobs (Edin and Lein 1997; Moffitt and Cherlin 2002; Spalter-Roth et al. 1995). Edin and Lein (1997) found that mothers frequently supplement low-wage employment and welfare with money from social networks. The availability of financial support from social networks may accelerate welfare exits and may help to prevent returns to welfare. Prior research has found that families with more income from other household members, social networks, or child support are more likely to leave welfare and less likely to return (Brandon 1995; Blank and Ruggles 1994). Presumably, the relationship between income from social networks and leaving and remaining off of welfare is partly a direct effect of these income transfers. Having support from social networks may also reduce welfare reliance by promoting and sustaining mothers' employment.

Measuring the actual financial or in-kind support that mothers receive is one good strategy for synthesizing the complexities of who you know, what they have to offer, and whether you can access their assistance. But, measuring actual support received from social networks conflates two separate concepts: the *need* for social support and the *availability* of social support. When looking at actual support received (such as financial assistance or child care), it is impossible to distinguish families who need support but are unable to get it from families who simply do not need the support. This paper takes a different approach by analyzing mothers' potential to access various types of social

network support if needed. Measuring the availability of potential support allows all mothers to be compared on the extent to which they could harness social networks if needed and avoids conflating the availability of social support with the need for social support.

## III. Data

The data for this paper come from the National Evaluation of Welfare-to-Work Strategies (NEWWS), which took place in seven U.S. counties throughout the 1990s. NEWWS randomly assigned welfare recipients to a welfare-to-work program or to a control group, then collected survey and administrative records on these groups over a five-year follow-up period. NEWWS provides several rich data sources. Administrative records data provide a complete time series of employment, earnings, and welfare receipt from the year prior to baseline through the five-year follow-up point. A baseline survey provides demographic and other background characteristics. Follow-up surveys administered around the two-year point provide information on the availability of support from social networks. Further details on the NEWWS evaluation data sources, research design, and experimental program impacts on economic and behavioral outcomes can be found in Hamilton et al. (2001).

The NEWWS sample consists primarily of mothers with children who were receiving welfare at the time of the baseline survey. This paper focuses on the subsample that was included in the child outcomes portion of the evaluation, because the richest data are available for this subsample. The child outcomes study took place in three research

sites: Atlanta, Georgia; Grand Rapids, Michigan; and Riverside, California and was targeted to mothers with children who were between the ages of 3 and 5 at baseline. The analysis sample consists of 2,818 mothers who were included in the child outcomes study and responded to questions about the availability of social network support. All of the results presented below are weighted to account for the probability of being fielded and having responded to the two-year survey.<sup>1</sup>

Appendix Table A provides a guide to the data sources and timing of independent, dependent, and control variables. Most noteworthy are that the independent variable of interest, availability of social support, was measured at the two-year point and the dependent variables, employment and welfare receipt, cover the subsequent three year period, labeled years 3 through 5.

Single mothers who were receiving welfare entered the NEWWS study over a rolling 29-month intake period and were followed longitudinally for a period of 5 years. The earliest time of entry into the sample was September 1991. The first mothers to enter the study were given a baseline survey in September 1991 and a two-year follow-up survey around September 1993. For these early entrants, employment and welfare receipt outcomes span the years 1993-1996. The last mothers entered the study in January 1994 (baseline) and were given a two-year follow-up survey around January 1996. For the late entrants, welfare and employment outcomes span the years 1999.

<sup>&</sup>lt;sup>1</sup> The survey sample is a stratified random sample of mothers in the larger research sample. The survey sample is weighted by the inverse probability of having been randomly selected for inclusion in the survey sample and of having responded to the survey.

Dramatic changes in welfare policy took place during the 1990s, but separate analyses suggested that these changes did not affect the pattern of results presented in this paper. In 1996, legislation was passed which replaced the former welfare entitlement, Aid to Families with Dependent Children, with the block grant program, Temporary Assistance for Needy Families. After the legislation, many states implemented stricter work requirements for welfare recipients and began to impose time limits on welfare receipt. Perhaps in response to these policy changes, mothers in the late cohort worked more, earned more, and received less welfare than mothers in the early cohort. However, in spite of the dramatic changes to welfare policies in the 1990s, the relationship between private safety nets and employment and welfare were similar for early entrants to the study (who were observed before most of the welfare policy changes were implemented) and late entrants to the study (who were observed after most of the welfare policy changes were implemented). The results presented below are based on the pooled sample of early and late entrants to the study.

*Independent variables*. The key independent variables, on the availability of support from private safety nets, come from a series of questions on the two-year survey in which mothers were asked: How true is this statement for you as a parent?

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 my child is sick, friends or family will call or come by to check on how things are going.

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.

Mothers answered these questions on a scale of 0 to 10 with 0 indicating "completely untrue" and 10 indicating "completely true." Between 30 and 49 percent of mothers felt confident that they could get a given type of support from family and friends if they needed it (not shown in tables). Only a small proportion (between 5 and 17 percent) had no support in a given area, but those reporting no availability of social support may be particularly vulnerable to poverty and hardship.

Table 1 shows that the responses to the five social support questions (covering monetary or emotional support, childcare, and transportation assistance) were highly correlated. I combined the responses to these questions into a 50-point scale that measures the availability of social network support with a value of 0 indicating no support available in any area and a value of 50 indicating complete support available in

all five areas.<sup>2</sup> I also divide mothers into quartiles based on their score on the 50-point social network support scale and compare welfare and employment outcomes across these quartiles in the multivariate analysis. Analyzing social network support quartiles allows for the detection of non-linearities in the relationship between social support and welfare or employment outcomes. However, a separate analysis of the relationship between the 50-point social support scale and welfare or employment outcomes yielded results consistent with those presented based on support quartiles.

# [TABLE 1 HERE]

Table 2 shows the means for all of the variables included in the analysis. As shown, the average score on the social network support scale is 33 out of 50. The mothers in the sample were heterogeneous in terms of their available social network support: mothers in the top quartile averaged 48 out of 50 on the social support scale and mother in the bottom quartile averaged only 16 out of 50 on the scale.

<sup>&</sup>lt;sup>2</sup> In addition to the results presented, I also analyzed the relationship between the five measures of social network support and employment and welfare outcomes. These disaggregated results (available upon request) were consistent with those presented based on the social network support scale. Among the five social support areas, being able to access cash assistance and having someone available to watch your child were the most robust predictors of employment and reduced reliance on welfare, but having someone to talk to and transportation support were also significantly related to these economic outcomes.

# [TABLE 2 HERE]

*Dependent variables*. Dependent variables for the analysis come from administrative records and include welfare receipt, employment, and earnings over the three-year follow-up period. On average, mothers worked about half of the quarters during that three-year period and earned about \$15,000. On average, mothers received welfare in just fewer than half of the months over that three-year period, which amounted to an average of \$7852 in welfare payments.

*Control variables.* The characteristics of mothers and their families are likely to be related both to the availability of social support and to mothers' employment and welfare receipt. The first part of the analysis estimates the relationship between individual and household characteristics and social network support. Subsequent analyses of the relationship between social network support and employment or welfare control for demographic, economic, and other individual and household characteristics.

A mother's need for support from her social network may increase as her number of children increases, but a mother with a greater number of children may have less time for maintaining social network ties. On the other hand, a mother with a greater number of children may be more likely to receive childcare and other types of assistance from her older children, and her children may act as a bridge to kin and community, fostering stronger social ties. Table 2 shows that about one-third of mothers had three or more children, 36 percent had two children, and 30 percent had one child.

Race, age, city of residence, and residential moves may be related to social support, employment, and welfare receipt. Prior research has suggested that African-American and Hispanic families rely more heavily on extended families than White families. Younger mothers or mothers who had children as teenagers may have stronger ties to their parents. Social support may also vary by city of residence and may be disrupted by residential moves.

A mother's education and skills may be correlated with social support network and are likely to affect her employment and welfare receipt. About 60 percent of mothers had at least a high school diploma. About 25 percent of mothers had low reading test scores, indicating low literacy skills. Over 40 percent of mothers had low math skills.

Prior research has found high rates of depression among welfare recipients. Mothers who are depressed may have difficulty developing and maintaining ties with social networks and may also have difficulty finding and keeping jobs. The relationship between depression and social support may also work in the opposite direction: lacking support from social networks may be a cause of depression. I include a scale that measures a the extent of a mothers' depression with 4 being the least depressed and 16 being the most depressed. The scale is based on the following four questions. Mothers were asked how often during the past week they felt sad, depressed, lonely, or that they could not shake off the blues even with the help of family and friends. For mothers' responses of "rarely," "some/a little," "a moderate amount," or "most/all day" to each of the questions, the depression scale was incremented by 1, 2, 3, or 4 units, respectively.

NEWWS was designed to evaluate the effects of welfare-to-work programs, and the published analyses of the study have focused on quantifying program and control

group differences across a range of economic and behavioral outcomes. My paper departs from this prior work by focusing on the longitudinal information that the study provides rather than on the experimental comparisons. Therefore, I include assignment to one of the welfare-to-work program groups ("human capital development" or "labor force attachment" programs) as a control variable in the analysis.

Prior employment, earnings, and welfare receipt are predictive of future employment, earnings and welfare receipt and may also be related to social support. Therefore, the analysis controls for the number of quarters employed in year 2 (the year prior to the measurement of social network support), earnings in year 2, and number of months of welfare receipt in year 2. On average, mothers worked 1.5 of 4 quarters, earned \$3,167, and received welfare for 8 months during year 2.

Including prior employment and welfare receipt in the multivariate analysis controls for unobserved characteristics of individuals such as motivation that may be correlated with both social network support and future employment and welfare. However and importantly, prior employment, earnings, and welfare receipt are likely to be endogenous with respect to the independent variable of interest, social network support. Therefore, estimates of the relationship between social network support and subsequent employment and welfare are likely to be conservative in models that control for prior employment and welfare. In other words, the independent variable in this analysis – social network support at the end of year 2 – is likely to be indicative that support was available *during* year 2; and, controlling for employment and welfare during year 2 is likely to conceal some true effects of social network support on employment and welfare in subsequent years.

## **IV. Results**

#### Who has support from social networks?

Individual barriers to work (such as lack of education or job skills) have received relatively more attention from policymakers and researchers than disadvantages related to social networks. While both types of barriers may represent important obstacles to work, the two types of barriers may be correlated and may tend to work in tandem. Mothers with individual barriers to work may also have difficulty maintaining social network ties, which often involve expectations of reciprocity. Mothers who have the fewest individual barriers may also have stronger and more resource-rich social networks.

Table 3 presents evidence on which individual characteristics are associated with the availability of support from social networks by regressing the 50-point social network support scale on a range of background characteristics. Availability of social network support varied by number of children, number of recent residential moves, and place of residence. Parents with more than one child, who would arguably have the greatest need for social network support, had less social network support available to them than parents with only one child. Residential moves may disrupt social networks, and families who had moved three or more times in the two years prior to baseline reported less available social support. Mothers in Riverside reported less available social network support than mothers in Atlanta or Grand Rapids. Welfare recipients in Riverside County are geographically dispersed and a relatively high proportion of welfare recipients were

exempted from participation requirements because they lived in a remote area (Hamilton et al. 1997: 99). The geographic dispersion in Riverside may have been associated with social isolation and the lower availability of social support in this site.

Prior research has debated whether extended families substitute for nuclear families in African-American communities, and whether African-American extended families provide as much support as ethnographic evidence had previously suggested (McDonald and Armstrong 2001; Stack 1974). In this analysis, race was not related to the availability of social network support after controlling for other baseline characteristics.

Some individual barriers to work, in particular low education and depression, were associated with lacking social network support. Mothers with less than a high school education were significantly lower on the availability of support scale compared with mothers who had at least a high school degree. On the other hand, low math or reading skills were not related to social network support. Depression may affect one's ability to form social network ties or lacking social network ties may be a cause of depression. In fact, depression and social support were related: the availability of social support decreased as mothers' score on the depression scale increased.

Table 3 also examines the relationship between prior employment and welfare receipt and the availability of social support. As previously mentioned, social support at the end of year 2 is likely to be indicative that support was available during year 2; and, therefore, employment and welfare during year 2 are likely to be endogenous with respect to social support availability at the end of year 2. After taking into account other background characteristics, the number of quarters a mother worked and her earnings

during year 2 were not associated with the availability of social support at the end of year 2. However, the number of months of welfare receipt in year 2 was negatively related to social support at the end of year 2.

#### Does Social Network Support Increase Employment?

Theoretically, we expect that private safety nets may help mothers to find and maintain employment, and the evidence presented below is consistent with this hypothesis. Tables 4 and 5 analyze the relationship between the availability of support from private safety nets and number of quarters employed and earnings during the threeyear follow-up period. Each outcome is regressed on dummy variables representing the top three quartiles on the scale of social network support. Mothers in the bottom quartile, i.e., mothers with the least social support, are the reference category. In the first specification, the relationship between social support and employment is estimated in a reduced form model. The second model specification controls for a series of background characteristics that may be related to employment and social support. Controlling for these background characteristics reduces the chance that the estimated relationship between social support and employment is spurious. On the other hand, if social support is the mechanism through which background characteristics (e.g., living in Riverside) affect employment then this second specification may underestimate the relationship between social support and employment. The third specification includes measures of prior employment, earnings, and welfare receipt and is the most conservative estimate of the relationship between social support and employment. Part of the effect of social

support on employment may be captured by controlling for prior employment, earnings, and welfare. The net relationship between social support and subsequent employment may represent only a part of the true effect of social support. If a relationship between social support and employment persists in the third specification, then that represents fairly strong evidence that the private safety nets influence employment.

Table 4 examines the relationship between social support and the duration of employment during the follow-up period. If the support that social networks provide facilitates employment, then mothers with more of this support available should work more quarters, on average, compared with mothers who lack social network support. Mothers with the most social support worked on average 1.5 more quarters than mothers with the least social support (Model 1), or an average of 0.94 more quarters after controlling for background characteristics (Model 2). The significant relationship between social support and quarters of employment persisted even after controlling for prior quarters employed, earnings, and welfare receipt in Model 3. The most conservative estimate of the relationship between social network support and quarters employed suggests that mothers with the most social support worked on average 0.43 quarters more (or about 1.3 months more) than mothers with the least social support.

#### [TABLE 4 HERE]

Table 5 compares the earnings of mothers with different levels of support available through social networks. In Model 1 (reduced form) and Model 2 (including background characteristics), mothers in the top, third, and second quartiles of the social network support scale earned significantly more than mothers with the least social support. The earnings difference between mothers in the top and bottom quartiles was substantial: mothers with the most social support averaged almost \$8900 more in earnings compared with mothers with the least social support (Model 1), almost \$7000 more after taking into account background characteristics (Model 2), and more than \$3500 more even after controlling for prior employment, earnings, and welfare receipt (Model 3). Even the most conservative specification suggests that mothers with a lot of social network support earned substantially more than mothers who lacked this support.

## [TABLE 5 HERE]

#### Does Social Network Support Reduce Dependence on Welfare?

Social networks may facilitate and sustain exits from welfare by helping mothers find alternative sources of income through employment, by providing support for employment, or by directly providing an alternative source of income. Theoretically, we expect those with more social network support to be less reliant on welfare. Table 6 tests the hypothesis that social network support reduces reliance on welfare by analyzing the total welfare amount received over the three-year follow-up period. Reduced welfare amounts provide a good summary measure, reflecting reductions in months of welfare receipt as well as reductions in grant amounts for mothers who combine welfare with income from employment or social networks. The findings support the hypothesis that social network support reduces reliance on welfare.

Model 1 estimates the relationship between social network support and the amount of welfare received in the subsequent three years. The relationship between social support and the amount of welfare received appears to be linear: the more social support a mother had, the lower the average amount of welfare she received. Mothers with the most social support averaged almost \$3500 less in welfare over a three-year period compared with mothers with the least social support. Compared with the bottom quartile, those in the third quartile averaged \$2400 less in welfare and those in the second quartile averaged \$1200 less. The linear relationship between social network support and the amount of welfare received persisted after controlling for background characteristics. After controlling for demographic, human capital, and other characteristics, those in the top, third, and second quartiles averaged around \$2200, \$1300, and \$600 less in welfare, respectively, relative to the bottom quartile. After controlling additionally for prior employment, earnings, and welfare receipt in Model 3, mothers with the most social support received \$927 less in welfare payments in the subsequent 3 years compared with mothers with the least social support.

## [TABLE 6 HERE]

#### V. Discussion

As theorized and expected, individual barriers to work are associated with a lack of social network support. These results suggest that individual disadvantages are compounded by social network disadvantages: those who need social network support the most are the least likely to have it available to them. This paper finds that human capital and social capital deficits are correlated, but that lacking support from one's social networks is associated with depressed employment and increased reliance on welfare even after taking human capital and other background characteristics into account. These findings suggest that single mothers who lack social support face a series of disadvantages: they lack various types of financial, in-kind, and emotional support from their personal networks; they are likely to also have individual barriers to work; and they work less, earn less, and are more welfare-reliant.

This paper provides evidence that social networks are instrumental in supporting employment and reducing reliance on welfare. Social network support has a substantial influence on single mothers' employment and their dependence on welfare. Mothers with the most social network support work more, earn more, and receive fewer welfare dollars than mothers with the least social network support even after controlling for prior employment, earnings, and welfare receipt and a range of other background characteristics.

Importantly given the era of time-limited welfare, mothers with the most social network support will spend a greater share of their time working and not on welfare compared with mothers with less social support. These mothers have the advantage of both a private and a public safety net to fall back on: Mothers with more social network support are in a position to conserve more of their time-limited welfare benefits compared with mothers who lack social network support. Mothers who lack social network support to fall back on and also will tend to more quickly use up the time-limited public safety net provided by welfare.

Conceptually, this paper has demonstrates a new way of operationalizing the concept of social network support. I find that measures of *potential* support from social networks are strongly related to individual economic circumstances and that measures of potential support avoid conflating the need for support with the availability of support. I argue that the measures of potential social network used in this paper do a good job of capturing the multidimensional concept of social network support, encapsulating who you know, what they have, and the accessibility of these social network resources.

From a policy perspective, this research has several implications. Policymakers have long recognized that single mothers differ in their employability and in the extent of their barriers to work. Policy interventions have sometimes attempted to take into account heterogeneity in welfare recipients' human capital but have paid considerably less attention to differences in welfare recipients' social capital.

The importance of social networks in affecting employment and welfare suggests that social isolation should be taken into account when designing and targeting welfare policies. An initial step is simply to identify welfare recipients who lack support from social networks. Socially-isolated welfare recipients could be identified using welfare intake questionnaires or by welfare caseworkers. Once identified, several approaches could be taken to offer extra support to the socially-isolated target group:

(1) Recognizing that some welfare recipients do not have informal childcare, financial, emotional, or transportation assistance from family and friends, extra efforts could be made to inform mothers who need it most about opportunities for childcare subsidies, transportation assistance, and other supportive services. Also, outreach efforts

could be made to welfare recipients who have changed residences to assist them in becoming established in their new neighborhoods.

(2) Cross-site variation in social network support suggests that it may be important to take into account contextual differences between counties when designing welfare program requirements and services and when setting national performance standards for state welfare programs. Among the sites included in this paper, mothers in Riverside may need considerably more help with childcare and transportation than mothers in Atlanta.

(3) Existing welfare-to-work program activities could be modified to maximize opportunities for building social ties and new program activities could be designed that explicitly incorporate the goal of social-network building. After-school and community-recreational programs commonly serve the purpose of fostering social ties for children. Adult versions of these programs, such as support groups, adult recreational activities, or other types of group activities, could be offered as a way to foster community and social support. Recently welfare policy has begun to focus on the largely uncharted territory of marriage promotion and relationship skills building and a proposed \$1.5 billion may be earmarked for these purposes. Dedicating resources to designing and implementing activities to build community and social networks arguably represents a broader and more inclusive approach compared with marriage-promotion activities. At the same time, social-network building activities may also increase marriage rates if they succeed in facilitating friendships, improving neighborhoods and communities, and reducing social isolation.

(4) A separate policy approach is to consider ways to remove existing disincentives for developing social-network ties. Historically, welfare policies have discouraged families from sharing household expenses or pooling resources with others by reducing welfare grants in response to financial contributions from kin, absent fathers, or friends; and welfare policies have typically been less accessible for two-parent families. Recently, some states or programs have made attempts to change the incentives for marriage, coresidence, and child support payments from absent fathers. In particular, many states have changed their welfare eligibility rules in recent years to make benefits more accessible for two-parent families. Wisconsin has experimented with disregarding child-support payments when determining eligibility for welfare (Meyer and Cancian 2001). In Canada, the Self-Sufficiency Project experimented with disregarding spouse and partners' income when calculating eligibility for benefits (Michalopoulos et al. 2002). Interventions such as these may make it easier for single mothers to draw on support from their social networks and to develop marital and coresidential relationships. In designing and evaluating policies such as these, researchers should attempt to measure their effects not only on marriage rates but also on the availability of social network support and, ultimately, on economic wellbeing.

This paper focuses on single mothers with young children who were receiving or had recently received welfare in one of three U.S. counties. Several questions remain for future research: determining whether the relationship between social network support and individual economic circumstances is similar, weaker, or stronger for mothers in other geographic locations; examining whether the relationship between social network support and mothers' employment and welfare receipt is weaker for mothers with older children

compared with mothers with young children; and analyzing racial differences in potential social network support and in the relationship between social network support and economic circumstances. Future research could also revisit the question of whether the numerous welfare policy changes of the 1990s altered the relationship between social network support and mothers' economic circumstances.

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Table 1. Correlation Coefficients for Availability of Five Types of Social Network Support

	CASH	SICK	TALK	WATCH	RIDE
Can borrow CASH for shoes	1.000	0.386	0.376	0.426	0.479
Someone to check on SICK child	0.386	1.000	0.391	0.325	0.403
Someone to TALK to about troubles	0.376	0.391	1.000	0.331	0.431
Someone to WATCH child	0.426	0.325	0.331	1.000	0.452
Someone to provide RIDE to doctor	0.479	0.403	0.431	0.452	1.000

Source: National Evaluation of Welfare-to-Work Strategies, Two-Year Child Outcomes Study Notes: Each variable is measured on a 0 to 10 point scale. All correlation coefficients were significant at the p<.0001 level.

Table 2. Means of Dependent, Independent, and Control Variables

	Mean	Std. Dev.
Dependent variables		
Quarters employed years 3 to 5	5.6	5.7
Earnings years 3 to 5 (\$)	15071	25799
Welfare amount years 3 to 5 (\$)	7852	10200
Independent variable		
Availability of social network support		
at end of year 2 (0 to 50 scale)	33.3	15.6
Control variables		
Has one child (%)	30.5	57.6
Has two children (%)	36.1	60.1
Has three or more children (%)	33.4	59.0
White (%)	31.1	57.9
Black (%)	49.3	62.5
Not black or white (%)	19.6	49.7
Age (years)	29.5	7.4
Atlanta site (%)	34.9	59.6
Grand Rapids site (%)	15.8	45.6
Riverside site (%)	49.3	62.5
Has high school diploma (%)	60.2	61.2
Low reading score (%)	25.0	54.1
Low math score (%)	42.4	61.8
Depression scale (4 to 16)	5.9	5.7
Mother had a baby as a teenager (%)	43.5	62.0
No moves in the 2 years prior to blin (%)	33.3	58.9
Moved once or twice in 2 years prior to blin (%)	51.0	62.5
Moved 3 or more times in 2 years prior to blin (%)	15.7	45.6
Assigned to the control group (%)	36.8	60.3
Assigned to human capital development program (%)	26.6	55.3
Assigned to labor force attachment program (%)	36.6	60.2
Quarters employed in year 2	1.5	2.1
Earnings in year 2	3167	6821
Months of welfare receipt year 2	8.2	6.1
Ν	2818	

Source: Adminstrative records and survey data collected for the National Evaluation of Welfare-to-Work Strategies.

	0	
Intercept	43.18	
Has one child (reference cell)	(1.89)	
Has two children	-3.10	**
	(0.58)	
Has three or more children	-2.65	**
White (reference cell)	(0.02)	
Plack		
DIACK	(0.22	
Not black or white	-0.54	
	(0.72)	
Age	-0.06	
Mather had a baby on a tanganar	(0.05)	
Mother had a baby as a teenager	0.49 (0.54)	
Atlanta site (reference cell)	(0.04)	
Grand Rapids site	0.03	
	(0.81)	4-4-
Riverside site	-2.28	
Has high school diploma	1.31	*
	(0.52)	
Low reading score	-0.86	
	(0.67)	
Low math score	1.05	
Depression scale	-0.47	**
	(0.08)	
No moves in two years prior to baseline (reference cell)	)	
Moved once or twice in two years prior to baseline	-0.65	
Moved three or more times in two years prior to baselin	(0.52) e -2.32	**
	(0.73)	
Assigned to control group (reference cell)		
Assigned to human capital development program	0.11	
	(0.60)	
Assigned to labor force attachment program	-0.35	
Quarters employed in year 2	-0.07	
	(0.21)	
Earnings in year 2 (\$1000s)	0.11	
Number of months resolved welfare in year 9	(0.06)	**
Number of months received weitare in year 2	-0.23 (0.05)	
Ν	2818	

Table 3. 50-Point Availability of Social Network Support Scale Regressed on Individual Characteristics

Source: Adminstrative records and NEWWS survey data.

Notes: OLS regression coefficients appear in tables. Standard errors are in parentheses. Statistically significant coefficients are indicated by: \*\* p<.01, \* p<.05

	Dependent Varia	able: Quarters em	ployed in Years 3 to 5
	Model 1	Model 2	Model 3
Intercept	4.942	6.128	3.778
	(0.167)	(0.662)	(0.571)
Top quartile on social support scale	1.523 **	0.937 **	0.429 *
	(0.245)	(0.235)	(0.196)
Third guartile on social support scale	0.606 *	0.277	0.105
	(0.239)	(0.227)	(0.188)
Second quartile on social support scale	0.461	0.295	0.066
	(0.236)	(0.222)	(0.184)
Bottom quartile (reference cell)			
Has one child (reference cell)			
Has two children		-0.016	0 150
		(0.202)	(0.167)
Has three shildren		(0.202)	0.107
Has thee children		-0.033	0.097
M/hite (reference cell)		(0.217)	(0.160)
white (reference cell)			
Віаск		0.983 ^^	0.653 **
		(0.248)	(0.206)
Not black or white		1.185 **	0.626 **
		(0.251)	(0.208)
Age		-0.047 **	-0.030 *
		(0.016)	(0.013)
Had a baby as a teenager		0.301	0.144
		(0.189)	(0.157)
Atlanta (reference cell)			
Grand Rapids site		0.742 **	0.541 *
		(0.282)	(0.233)
Riverside site		-1.859 **	-0.908 **
		(0.272)	(0.226)
Has high school diploma		1.522 **	0.692 **
		(0.180)	(0.151)
Low reading test score		-0.437	-0.029
5		(0.234)	(0.194)
Low math test score		-0.919 **	-0.361 *
		(0.194)	(0.161)
Depression scale		-0.029	-0.037
		(0.027)	(0.022)
No moves in two years prior to baseline (reference	e cell)	(0.021)	(0:022)
Moved once or twice in two years prior to baseling	<b>`</b>	 _0 182	 _0 118
moved once of twice in two years phot to baseline	,	(0.102 (0.182)	-0.110 (0.151)
Moved three or more times in two years prior to be	asalina	_0 457	_0 313
woved thee of more times in two years phor to be		-0.407	-0.313
		(0.255)	(0.211)

Table 4. Availability of Social Network Support Regressed on Quarters Employed over Three Follow-up Years

	Dependent Variable: Quarters employed in Years 3 to 5		
	Model 1	Model 2	Model 3
Assigned to control group (reference cell)			
Assigned to human capital development program		0.685 **	0.391 *
		(0.209)	(0.173)
Assigned to labor force attachment program		0.659 **	0.171
		(0.188)	(0.156)
Quarters employed in year 2			1.298 **
			(0.061)
Earnings in year 2 (\$1000s)			0.092
			(0.019)
Months of welfare receipt in year 2			0.005
			(0.016)
<u>N</u>	2818	2818	2818

Table 4. Availability of Social Network Support Regressed on Quarters Employed over Three Follow-up Years

Source: Adminstrative records and NEWWS survey data.

Notes: OLS regression coefficients appear in tables. Standard errors are in parentheses. Statistically significant coefficients are indicated by: \*\* p<.01, \* p<.05

	Dependent Va	ariable: Earnings (\$	) in Years 3 to 5
	Model 1	Model 2	Model 3
Intercept	11460.0	13973.0	7764.2
	(747.4)	(3050.4)	(2376.0)
Top quartile on social support scale	8876.4 **	6974.1 **	3551.6 **
	(1101.9)	(1083.2)	(815.3)
Third quartile on social support scale	3478.5 **	2116.3 *	638.2
	(1073.2)	(1045.1)	(783.7)
Second quartile on social support scale	2848.1 **	2164.7 *	645.7
	(1060.1)	(1024.1)	(766.7)
Bottom guartile (reference cell)	·		
Has one child (reference cell)			
Has two children		-244.4	1135.9
		(931.9)	(697.3)
Has three children		873.2	1033.3
		(1001.4)	(749.9)
White (reference cell)			(1 10:0)
Black		1945 8	1763 1 *
Black		(1142 7)	(859.4)
Not black or white		2777.3 *	1409 5
		(1154 3)	(866.8)
Δαρ		-14 1	-66 5
Age		(73.6)	(55.2)
Had a baby as a teenager		-338.3	-634.9
had a baby as a techager		(871 4)	(653 3)
Atlanta (reference cell)		(071.4)	(000.0)
Grand Ranids site		1251 1	088 /
Grand Napids Site		(1208.2)	(071 1)
Diverside site		6402.0 **	2075.6 **
		(1251 5)	(042.1)
Has high school diploma		6575.5 **	(342.1)
has high school diploma		(830.3)	(628.2)
Low reading test seers		(030.3)	(020.2)
Low reading lest score		-3300.0	-1105.1
Low moth toot coord		(1070.3) 5076 9 **	(007.7)
Low main lest score		-5070.0	-2210.0
Depression scale		(094.4)	(072.1)
Depression scale		-00.7	-115.2
No moves in two years prior to beseline (reference		(124.7)	(93.2)
no moves in two years phor to baseline (reference	cell)		
Mound anon or twice in two warrs prior to beselves			
woved once of twice in two years phor to baseline		-009.1	04.0
Moved three or more times in two years price to be	aalina	(037.0) 2000 4 *	(020.7)
woved three or more times in two years prior to bas	seime		-900.4
		(11/3.8)	(879.3)

Table 5. Availability of Social Network Support Regressed on Earnings over Three Follow-up Years

	Dependent Variable: Earnings (\$) in Years 3 to 5		
_	Model 1	Model 2	Model 3
Assigned to control group (reference cell)			
Assigned to human capital development program		 1556.8 (963.8)	 528.5 (721.2)
Assigned to labor force attachment program		1647.6	-372.7
Quarters employed in year 2		(867.0)	(650.9) -191.7 (254.6)
Earnings in year 2 (\$1000s)			2532.6 **
Months of welfare receipt in year 2			(77.8) 59.2 (65.4)
N	2818	2818	2818

Table 5. Availability of Social Network Support Regressed on Earnings over Three Follow-up Years

Source: Adminstrative records and NEWWS survey data.

Notes: OLS regression coefficients appear in tables. Standard errors are in parentheses. Statistically significant coefficients are indicated by: \*\* p<.01, \* p<.05

	Dependent	Variable: Welfare A	Amou	nt (\$) in Years 3-5
	Model 1	Model 2		Model 3
Intercept	9535.5	3975.7		-494.9
	(295.294)	(1121.767)		(998.049)
Top quartile on social support scale	-3458.8	** -2172.9	**	-927.0 **
	(435.3)	(398.3)		(342.5)
Third quartile on social support scale	-2360.8	** -1345.4	**	-531.7
	(424 0)	(384.3)		(329.2)
Second quartile on social support scale	-1209.8	** -588.5		-8.7
	(418.8)	(376.6)		(322.0)
Bottom quartile (reference cell)	(+10.0)	(070.0)		(022.0)
Has one child (reference cell)				
Has two shildran		1207.0	**	
has two children		1307.0		901.2
		(342.7)	**	(292.9)
Has three children		3457.0		2895.1 ***
		(368.3)		(315.0)
White (reference cell)				
Black		1340.8	**	740.6 *
		(420.2)		(361.0)
Not black or white		1326.4	**	1330.3 **
		(424.5)		(364.1)
Age		-23.9		-36.0
		(27.1)		(23.2)
Had a baby as a teenager		217.8		-161.8
		(320.5)		(274.4)
Atlanta (reference cell)				
Grand Rapids site		2049.1	**	2486.7 **
·		(477.4)		(407.9)
Riverside site		6750.1	**	5875.2 **
		(460.3)		(395.7)
Has high school diploma		-1608.8	**	-660.3 *
		(305.3)		(263.9)
Low reading test score		-252.6		-604.0
		(396.6)		(339.3)
Low math test score		1876.4	**	1089.2 **
		(328.0)		(282.3)
Depression scale		(020.0)		70 /
Depression scale		(45.0)		(20.2)
No moves in two years prior to baseling (refer		(45.9)		(39.2)
no moves in two years prior to baseline (refer				
Mound anon or twice in two warrs prior to har	olino			 262 E
woved once of twice in two years prior to base	enne	-312.0		-203.5
Mayod three or more times in two was and	to bookline	(308.1)	*	(203.3)
woved three or more times in two years prior	to baseline	-1048.8		-888.2
		(431.7)		(369.3)

Table 6. Availability of Social Network Support Regressed on Total Welfare Amount over Three Follow-up Years

	Dependent Variable: Welfare Amount (\$) in Years 3-5			
	Model 1	Model 2		Model 3
Assigned to control group (reference cell)				
Assigned to human capital development progr	am	-717.3	*	-539.0
		(354.4)		(302.9)
Assigned to labor force attachment program		-1528.9	**	-804.2 **
		(318.8)		(273.4)
Quarters employed in year 2				-495.0 **
				(106.9)
Earnings in year 2 (\$1000s)				-44.1
				(32.7)
Months of welfare receipt in year 2				691.8 **
				(27.5)
N	2040	0040		2010
IN	2818	2818		2818

Table 6. Availability of Social Network Support Regressed on Total Welfare Amount over Three Follow-up Years

Source: Adminstrative records and NEWWS survey data.

Notes: OLS regression coefficients appear in tables. Standard errors are in parentheses. Statistically significant coefficients are indicated by: \*\* p<.01, \* p<.05

# Appendix A. Variable Descriptions, Timing, and Data Sources

Variable type	Variable description	Timing	Data source
dependent variable	number of quarters employed, earnings	years 3-5	Unemployment insurance adminstrative records
dependent variable	total welfare amount received	years 3-5	Welfare administrative records
indpendent variable of interest	availability of social network support	end of year 2	Two-year child outcomes survey
control	number of children, race, age, high school diploma, teen mother, residential moves	baseline	Baseline survey
control	depression	baseline	Private opinion survey
control	low reading and low math scores	baseline	Literacy and math tests
control	number of quarters employed, earnings	year 2	Unemployment insurance adminstrative records
control	number of months of welfare receipt	year 2	Welfare administrative records

Notes: All data were collected for the National Evaluation of Welfare-to-Work Strategies. "Timing" refers to the time period covered by the particular data item(s) relative to baseline, which marked the beginning of the evaluation.