Published in final edited form as:

Fam Relat. 2009 December 1; 58(5): 647–661. doi:10.1111/j.1741-3729.2009.00581.x.

Contemporary Work and Family Issues Affecting Marriage and Cohabitation Among Low-Income Single Mothers

Pamela Joshi, PhD,
RTI International

James M. Quane, PhD, and
Harvard Kennedy School

Andrew J. Cherlin, PhD
Johns Hopkins University

Pamela Joshi: pjoshi@rti.org; James M. Quane: James_quane@harvard.edu; Andrew J. Cherlin: cherlin@jhu.edu

Abstract

In this paper, we advance and test an integrative model of the effects of employment status, nonstandard work schedules, male employment, and women's perceptions of economic instability on union formation among low-income single mothers. Based on longitudinal data from 1,299 low-income mothers from the 3-city Welfare Study, results indicate that employment status alone is not significantly associated with whether women marry or cohabit. We find that nonemployed mothers and mothers working nonstandard schedules were less likely to marry compared to those working standard schedules. Mothers' perceptions of economic well-being were associated with marriage at Wave 2. In contrast, cohabitation outcomes were not explained by economic factors, but were related to the perception of child care support. The policy implications of these results are discussed, in particular, as they relate to welfare reform's work and family goals.

Keywords

Marriage; Co-habitation; Welfare/welfare reform; Work and families; Nonstandard work schedules; Economic stability

Enacted in 1996, welfare reform policy focused on changing *both* work and family formation patterns among low-income single mothers. With the employment focus mandated by welfare-to-work reforms and strong job growth during policy implementation, in the past decade alone, single mothers increased their labor market participation and many transitioned off of welfare and into low-wage jobs (Acs & Loprest, 2007). In 2006, when welfare policy was reauthorized, family formation goals were emphasized and funding was made available to encourage states and localities to develop voluntary healthy marriage education programs targeted primarily toward low-income families. Since the dramatic employment shifts among low-income single mothers occurred prior to the implementation of most healthy marriage programs, an important empirical question arises regarding the

An earlier version of this paper was presented at the 2004 Population Association of America annual meeting in Boston.

extent to which single mothers' increased participation in the low-wage labor market impacted family formation decisions. From a policy perspective, understanding whether increasing employment among single mothers helped to achieve or undermine family formation goals is central to informing the design of future welfare reform policies. Unfortunately, our understanding of this association is limited.

In this study, we explored the link between low-income mothers' employment characteristics and union formation by advancing a theoretically informed conceptual model that encompasses contemporary work characteristics and caregiving responsibilities of low-income women. Using a representative longitudinal sample of caregivers and their children ages 0–4 and 10–14 living in poor and near-poor neighborhoods in three urban cities in the U.S. (Winston, et al., 1999), we extended existing studies on union formation of single mothers by moving beyond a consideration of employment status alone. Specifically, we concentrated on two areas of research interest. The first is whether employment status is related to marriage and cohabitation for low-income single mothers. Second, given the findings of several studies documenting single mothers' concerns about making financial ends meet each month, the challenges of raising a family and maintaining stable employment in low wage jobs, and the limited availability of employed men, (Henly & Lambert, 2005; Roy, Tubbs, & Burton, 2004; Wilson, 1996), we also investigated whether job characteristics such as nonstandard work schedules, mothers' perceptions of financial security, and the pool of employed potential partners influenced marriage and cohabitation over an 18-month period.

Conceptual Framework

Examining whether mothers' employment as well as a broader array of employment characteristics influence marriage and cohabitation, our study conceptualization was informed by the basic economic model of marriage markets proposed by Becker (1981) and updated by Oppenheimer (1988). Using a utility maximization framework, Becker proposed that single men and women make their marriage decisions based on whether or not they experienced a net economic gain from marriage compared to remaining single. Based on assumptions about the allocation of paid employment and unpaid domestic labor between men and women, this model hypothesized that women's labor market participation and higher wages provide them with greater economic independence, thereby decreasing their probability of marriage. This basic model recognizes the importance of women's and men's employment status influencing their marriage decisions but does not consider cohabitation.

Oppenheimer's theory of marital timing (1988) extended Becker's framework by proposing that the economic criteria underlying women and men's marriage decisions also included other factors such as assessments of current job characteristics and future economic stability. Recognizing that women's employment participation had increased over time, Oppenheimer asserted that the socioeconomic criteria that men and women used to evaluate their marriage readiness were becoming increasingly similar, such that women took into account their own labor market prospects when considering marriage as well as the employment characteristics of the potential pool of male partners. She further argued that partners each had a preferred threshold level of stable economic achievement they were willing to accept before entering

into marriage. In turn, marriage is delayed until a minimum level of economic stability is reached.

Oppenheimer (1988) also suggested that individuals evaluated "work structure" characteristics such as night shift work schedules or high pressure jobs when making marriage decisions. If such arrangements are considered unstable or disruptive, this framework predicts that marriage would be delayed until a more acceptable arrangement is obtained. The decision to cohabit could be an alternative to marriage according to Oppenheimer (2003), at least in the short term, as couples facing economic uncertainty or working in low paying jobs sought to continue their relationship without making the long-term commitment to marriage.

In sum, these theories of union formation suggest that empirical research studies need to control for additional factors beyond mothers' employment status to better explain how work influences rates of cohabitation and marriage. Next, we consider how these factors relate to contemporary work and family life situations of low-income single mothers in urban areas.

Low-Income Women's Employment and Union Formation

Empirical studies on the effect of employment status and earnings on marriage found positive, null, and negative effects for women and more consistent positive effects for men across all social classes (Ellwood & Jencks, 2004). The few studies that considered low-income mothers' employment status and marriage and cohabitation outcomes also produced mixed results. Non-experimental studies found that lower-income single employed mothers were not significantly more likely to form a cohabiting union or marriage compared to mothers who were not employed (Carlson, McLanahan, & England, 2004). When samples are broken down by whether parents live together or maintain distinct residences, researchers found that mothers' higher earnings increased the likelihood of marriage (Osborne, 2005). Relatedly, experimental studies that examined whether employment-focused welfare reform policies in the 1990s impacted marriage rates found null effects on marriage rates (Gennetian & Knox, 2003). The lack of consensus in the empirical literature suggests that a broader set of employment characteristics needs to be considered in exploring the effects of employment status on union formation among low-income single mothers.

Nonstandard work schedules

For single mothers, the lack of discretionary time to cultivate a romantic relationship can diminish the likelihood of marrying (Bennett, Bloom, & Miller, 1995). Research on married couples underscores the consequences that nonstandard employment schedules pose for nurturing family relationships. These arrangements have been typically associated with increased probability of divorce and higher conflicts among couples, especially in families with children (Perry-Jenkins, Goldberg, Pierce, & Sayer, 2007; Presser, 2003). Qualitative interviews with married couples in which husbands worked the overnight shift point to high levels of marital stress because spouses did not have enough time to spend together (Hertz & Charlton, 1989). In general, nonstandard work schedules appeared to increase work and

family conflicts (Staines & Pleck, 1983), create higher parental stress (Joshi & Bogen, 2007), and reduce family activities (Staines & Pleck). Additionally, stress may be intensified as the prevailing evidence suggests that nonstandard schedules are often nonnegotiable conditions of employment for mothers working in low-wage jobs (Scott, London, & Edin, 2000). Presser and Cox (1997) examined Current Population Survey (CPS) data and found that almost 50% of mothers with a high school diploma or less viewed their nonstandard work schedules as a job requirement rather than a personal preference.

Perceived economic stability

For unmarried couples, lower perceptions of financial stability, can lead to delayed marriage (Oppenheimer, 1988; 2003). Edin and Kefalas (2005), using data from qualitative interviews, found that low-income parents placed a high premium on marriage and preferred to be more financially secure before marriage. Furthermore, they found that this preference to delay marriage due to economic considerations was consistent across different low-income racial and ethnic groups. Findings from other qualitative interviews with low-income single mothers, as well as working class single parents, have confirmed the salience of mothers' and their potential partners' economic conditions (such as high quality jobs with fringe benefits, financial stability, and adequate wages) as a prerequisite for marriage (Gibson-Davis, Edin, & McLanahan, 2005).

There is emerging evidence that cohabitation may not be so heavily influenced by such perceptions. Though qualitative research suggested that some unmarried parents entered cohabitation after a baby is born, at least initially, for economic reasons (Reed, 2006), these considerations may be predicated on a lower economic bar compared to marriage (Edin & Kefalas, 2005).

Male employment

According to Wilson (1996), men's unstable employment was directly related to increases in single mother households in urban areas. This relationship between lower marriage rates and male joblessness has been documented in empirical studies (Massey & Shibuya, 1995). Indeed, an examination of the effects of low-income women's employment on union formation, which did not consider the male employment rates, was likely to produce biased coefficients since female employment on its own is highly correlated with the employment status of the men they were likely to marry (Moffitt, 2000).

Demographic and contextual characteristics

While our model focuses on the role of mothers' employment characteristics and perceptions of economic stability there are a number of additional covariates that relate to single mothers' likelihood of forming a union. These include caregiving responsibilities as well as human capital and demographic characteristics.

Studies using the Fragile Families data suggest that child care and other parenting responsibilities may affect single mothers' odds of marriage or cohabitation. For example, adequate social supports could give working mothers time to pursue a romantic relationship (Sigle-Rushton & McLanahan, 2002). However, other caregiving related time constraints

such as the number and age of children in the household and the health of family members may impede it (Sigle-Rushton & McLanahan; Burton, Lein, & Kolak, 2005).

We also included controls for mothers' education and achievement test scores (Ellwood & Jencks, 2004) in order to measure both current and future levels of human capital attainment. Mothers' health status also affects union formation (Burton, et al., 2005). A measure for welfare status was included in our model since the receipt of cash benefits may serve as a disincentive to marriage for single mothers (Moffitt, 2000). Finally, we included controls for previous marital and cohabitation experience (Graefe & Lichter, 1999) as well as caregivers' age, race, ethnicity (Carlson et al., 2004), and geographic location (Graefe & Lichter)

Hypotheses

Using the framework proposed by Becker (1981) and Oppenheimer (1988; 2003), and the findings from the existing empirical literature, this study examined the effects of work and other economic factors on low-income women's odds of marriage and cohabitation. Given the inconsistent empirical results for low-income parents' employment, we did not advance a definitive hypothesis as to whether employment improves or diminishes the chances of marital or cohabitating unions. However, based on the preponderance of established literature, we expected that single mothers with a nonstandard work schedule would be less likely to marry. We further hypothesized that low-income caregivers who indicated that their economic situation is strained would be significantly less likely to marry in the short term and more likely to cohabit, in part because of the temporary economic security that these arrangements can provide. We also expected that a higher local male employment rate would be positively related to single mothers' chances of forming a union.

METHOD

Data

The data for this study are drawn from Welfare, Children and Families: A Three-City Study, a longitudinal study of low-income Hispanic, African-American and non-Hispanic White children ages 0 to 4 years and 10 to 14 years and their caregivers in low and moderate income neighborhoods in Boston, Chicago, and San Antonio (Winston, et al., 1999). In-person interviews were conducted with a randomly selected focal child and his or her caregiver (the mother in over 90% of the cases). The first wave of data collection was conducted in 1999 with 2,402 families, including an oversampling of families on welfare. The second wave was fielded approximately 16 months later with almost 90 percent of the original sample. When sampling weights were applied, the stratified random-sample survey constituted a representative sample of low-income African-American, non-Hispanic White, and Hispanic families with young and adolescent children in poor and near poor neighborhoods in each of the three cities (Winston, et al.). In this paper, we examined data from a subsample of 1,299 biological mothers who were not married or cohabitating at wave 1 and who were interviewed in both survey periods. All the data used for the descriptive and multivariate analyses have been weighted using sampling weights that were adjusted so that

cases from the three cities, which had slightly different sample sizes, were given equal weight.

Measures

The dependent variable is union status at wave 2 of mothers who were single at baseline. We classified respondents as *married* who answered ”yes” to a survey question in wave 2, which asked “are you married now?” Mothers were classified as *cohabiting* if they answered no to this question but indicated in a follow-up question that they had a partner who resided in the household. The remaining respondents were coded as *remained single*. In our subsample, 9.7 percent of single mothers were cohabitating by wave 2, and 10.8 percent formed marriages. Forty-seven percent of these unions were with the biological father of the focal child. Quantitative studies of nonstandard work schedules typically classify persons as working a nonstandard schedule if they spent at least half of their week working during the evening hours or at night, work any hours on the weekends, on a rotating shift, or had variable hours (Presser, 2003). We categorized respondents in the Three-City Study as having nonstandard schedules based on their responses to interview questions pertaining to whether they were separated from their children due to employment and the timing of the separation on the day before the interview. Mothers who were separated from their children for employment reasons between the hours of 7 p.m. and 6 a.m. the previous day (or anytime, if the previous day occurred on a weekend) were coded as working a nonstandard schedule. Mothers were coded as working a standard schedule if this separation occurred between the hours of 6 a.m. and 7 p.m. on a weekday. For the multivariate analysis, we also created a dichotomous indicator of *employment* such that 1 = not employed on the day before the interview and 0 = employed. We also included a series of dummy variables measuring respondents’ work status and schedule the day before the interview, including *nonstandard schedule* (1 = yes, 0 = no) and *not employed* (1 = yes 0 = no), with the omitted category as the group that worked a standard schedule. The limitation of this approach to the measurement of employment and work schedules was that it may not capture the typical work pattern if mothers switched schedules or did not work the day before the interview but worked during other days of the week. To address this limitation, we included a control variable for the *day of the week interviewed* in order to reduce measurement error for weekend work. We also controlled for *work hours* to capture mothers’ usual weekly labor force participation. In the multivariate analysis, neither variable was significant, and they were omitted from the final models.

Perceived economic instability was measured using a single item, which asks, “Does your household have enough money to afford the kind of housing, food, and clothing you feel you should have.” Original response categories included, “definitely no,” “not quite,” “mostly,” or “definitely yes,” which were recoded as 1 = definitely cannot afford housing, food, and clothing that I feel I should have and 0 = not quite, mostly, or definitely have enough money to afford the items I feel I should have.

We controlled for the *male community employment rate* in the same communities as mothers in our sample using data from the 2000 U.S. Census. Since male employment rates vary dramatically by race (Holzer & Danziger, 2000), and racial homogeny is the modal marriage

pattern (Rose, 2004), employment of Black, White, and Non-Hispanic White men was matched to females in the sample using the mothers' self-identified race/ethnicity.

We defined mothers' communities of residence using local administrative agency definitions that were based on clusters of census tracts to delineate specific boundaries. Our sample of almost 1,300 single mothers resided in 58 community areas within each city (11 community areas in Boston, 40 in Chicago, and 7 in San Antonio). We measured male employment for the three racial and ethnic groups at the community level using the male employment-to-population ratio, which is the percentage of all males ages 16 and over who worked in the week before the Census interview in 2000.

To minimize bias in our estimated coefficients due to unobserved heterogeneity, we controlled for demographic and contextual characteristics specified in the literature as influencing union formation. These included *mothers' care giving responsibilities for disabled children or adult* (1 = yes and 0 = no) as well as *number of children* present in the household at baseline. Because younger children tend to require more attention and pose a specific challenge to forming a union, we included a dichotomous variable for *children under age 6 in the household* (1 = yes and 0 = no). We also included a dichotomous measure of mothers' *access to enough child care support* (1 = enough, 0 = too few or no one to count on).

Mothers' education at baseline is measured by two dummy variables: *high school diploma or GED* (1 = yes and 0 = no) and *some or all college or technical school* (1 = yes and 0 = no). Less than high school was the omitted category. We also controlled for achievement test scores as measured by the word and letter subscale of the *Woodcock Johnson* Psycho-Educational Battery Revised Edition administered at the second interview (Woodcock and Johnson, 1989; 1990). This is a widely used achievement test that measures reading skills. Although this variable was measured at wave 2, cognitive ability would not be expected to change significantly over the study period and interfere with the causal ordering of variables.

Additional controls included, mother's o*ngoing health problems* that limit work participation (1 = yes and 0 = no), a continuous measure of the *number of months on welfare in 2-year period up to Wave 1* (0 to 25 months), and dichotomous measures of whether the focal child's *mother and biological father were previously married* or *previously cohabitating* at wave 1 (1 = yes, 0 = no). Finally, we included two continuous measures for *mother's age* and *age squared* to capture the declining propensity of marriage over time as well as a set of dummy variables that indicated whether a respondent was *Black, Hispanic*, or *Non-Hispanic White* (with *Black* as the omitted category) as well as city of residence (San Antonio is the omitted reference category).

Analytical Strategy

For the multivariate analysis, we estimated two multinomial logit models to test whether mothers' employment and work schedules were associated with lower odds of moving into a cohabitating relationship or marriage by wave 2 compared to remaining single. In the first model, we tested whether mothers' employment status, without controlling for other

economic determinants of union formation, was associated with cohabitation and marriage, net of human capital and demographic controls. In the second, we added controls for mothers' work schedules as well as their perceived current economic instability and the extent of male employment in their communities. We adjusted the standard errors in the second model for clustering in order to reflect the measurement of male employment at the community level. Lastly, we used the results of the multinomial logit model to predict the probabilities of marriage and cohabitation for mothers according to their employment status and work schedules, holding other variables constant at their mean levels.

Results

Table 1 presents descriptive statistics for our sample of low-income unmarried mothers at baseline. Examining mothers' employment characteristics by union status at wave 2, we found distinct differences in the work patterns and nonstandard schedules of mothers who formed marriages compared to those who entered cohabitation or remained single. A much greater percentage of mothers who married by wave 2 were employed at the baseline interview (48%) compared to mothers who remained single (25%) and those who began cohabitating (29%). Only 4% of mothers who married worked a nonstandard schedule requiring night or weekend shifts at baseline in comparison to 10% of cohabitating mothers and 11% of mothers who remained single. A lower percentage of mothers who perceived themselves as economically unstable entered marriage over the course of the study (6%, 25%, and 25% married, remained single, or cohabited, respectively) by 2000/1. Moreover, mothers who married lived in neighborhoods with slightly higher percentages of employed men (52%) at baseline, compared to single mothers (47%) and cohabitating mothers (48%).

In terms of mothers' caregiving responsibilities over three quarters (78%) of cohabiting mothers cared for children under 6 in their household compared to 68% of single mothers and 50% of married caregivers. Less than one quarter of mothers who formed marriages believed they had enough people to help take care of their children, compared to over one third of mothers who entered cohabitating relationships and over half of mothers who remained single. Mothers' human capital and demographic characteristics also indicated that 25% of the entire sample graduated from high school and 43% had at least some college or technical education beyond high school (these percentages break down to 39%, 47% and 68% for single, cohabiting, and married mothers, respectively). The average age of mothers in our sample was 31 in 1999. Fourteen percent of mothers were previously married to the biological father, and over half previously cohabitated with the focal child's father.

Turning to our multivariate analysis, (see Table 2), Model 1 presents the results for cohabitation and marriage regressed on employment status net of other demographic, household, and individual characteristics. We found that mothers' nonemployment was not significantly related to union formation. However, the results indicated that having sufficient child care supports lessened the odds of cohabitation, while mothers' higher cognitive ability as measured by the Woodcock-Johnson aptitude test had the opposite effect. Living in Boston versus San Antonio increased the odds of cohabitation.

With regard to the probability of getting married versus remaining single, Model 1 also indicated that caring for young children was associated with lower chances of marriage. Mothers' educational attainment beyond high school and higher cognitive test scores significantly increased the odds of marriage, whereas mother's ongoing health problems decreased the odds. Residing in Boston also decreased the odds of marriage compared to living in San Antonio.

In Model 2, representing our full conceptual model of mothers' employment characteristics, we added the nonstandard work schedule dummy variable as well as the measures for mothers' perceptions of economic instability and male employment in the community. The results helped to better explicate the important role of employment once we differentiated among the various work schedules, holding other factors constant. Mothers' nonemployment significantly decreased the likelihood of marriage compared to employment in a standard work schedule. Specifically, mothers who were not employed at wave 1 decreased their odds of marriage by 64% compared to mothers who worked a standard schedule. Similarly, we found that working a nonstandard schedule in the evening, night or weekend significantly decreased mothers' odds of marriage as did mothers' perception of economic instability, net of other control variables

In terms of other household and individual characteristics included in Model 2, notable findings pertaining to cohabitation, compared to remaining single, included the effect of child care supports (having enough child care supports decreased the odds) and mothers' verbal test scores (higher Woodcock Johnson scores increased the odds). In addition, we see that Hispanic mothers were more likely to enter cohabitating unions (being Hispanic increased the odds relative to being African American) than remain single compared to African-American mothers. Living in Boston increased the odds of marriage compared to residing in San Antonio.

The additional household and individual characteristics that significantly related to the probability of marriage in Model 2 included children's age (younger children decreased the odds), and standardized scores on a reading aptitude test (higher scores were positively associated with the chances of marriage). Ongoing health problems diminished the odds of marriage as did residing in Boston compared to San Antonio. Cohabitation history or previous welfare experience was not associated with marriage in this sample of low-income mothers.

In order to highlight the magnitude of the relationships between mothers' work schedules and union formation over a 16-month period, Figure 1 presents predicted union status for three employment scenarios: working a nonstandard shift, working a standard daytime shift, and no employment. We calculated these predicted probabilities based on the employment-related results presented in Model 2 (see Table 2), holding constant all other human capital and demographic variables at their mean. These results predicted that the majority of low-income mothers in the sample will remain single in the short term. However, among mothers who did make a transition, the group that worked a standard shift on the day before they were interviewed had the lowest predicted odds of being single after an average of 16 months (85%). Mothers in a nonstandard schedule had the highest chance of remaining

single (93%), even more than mothers who were not employed (88%). Comparing the odds of marriage or cohabitation among mothers who experienced a change in family formation, mothers in a standard schedule were less likely to marry (6%) than to cohabit (9%). Among mothers who worked a nonstandard schedule, the predicted probability for cohabitation was close to 7% as opposed to 0.5% for marriage. Unemployed mothers were likewise more likely to cohabit rather than marry, but their chances of forming any union were greater compared to mothers working nonstandard shifts.

Discussion

The Becker marriage model (1981) suggests that employment status is an important economic consideration that influences the likelihood of marriage. Like Becker, Oppenheimer (1988) argued that the likelihood of marriage is also affected by women's and men's employment status but extends the Becker model by considering economic characteristics such as work schedules and perceptions of financial stability. This study draws on these two overarching theories to propose an integrated conceptual model linking low-income mothers' contemporary work and family characteristics with their likelihood of forming a union. We consider union formation outcomes in terms of the likelihood of marriage or cohabitation, given the prominence of cohabitation among low-income couples. The results highlight that this integrated approach can provide a clearer conceptualization of the factors that predict union formation among low-income mothers than is achieved by a less differentiated application of the Becker model.

Differentiating between Employment Status and Nonstandard Work Schedules

Using longitudinal data and without controlling for the theoretically derived covariates, we find no statistical relationship between mothers' employment status and cohabitation or marriage among low-income mothers, which is consistent with results from other studies of lower income parents (Carlson et al., 2004). Once we control for other economic considerations, we find that working a standard schedule increases the probability of mothers' marriage over the 16-month period in comparison to mothers who did not working at all over this period. There are several possible reasons for this relationship. It could be that the workplace provides exposure to a wider social network which increases opportunities to meet potential partners who are also employed and may lead to marriage for some (Newman, 1999). Employed women may also be more desirable partners for working low-income men, as their combined income increases the couples' chances of making it out of poverty (McLaughlin & Lichter, 1997).

In comparison to mothers who work a standard shift, mothers who work a nonstandard schedule are significantly less likely to marry over the period under consideration. This finding is consistent with much of the qualitative research, which chronicles the time pressures and work and family scheduling complexities faced by low-income single mothers, especially while working a nonstandard shift in the low-wage labor market (Henly & Lambert, 2005). The negative association between working nonstandard schedules and marriage points to a potential scheduling mismatch for single mothers who work such

schedules - in terms of having time to nurture relationships with potential partners who work a standard shift.

The implications of nonstandard schedules do not extend to the likelihood of cohabiting however. This finding contributes to scholarship, which suggests that cohabitation may be motivated by different considerations than those that predict marriage (Cherlin, 2000). The results indicate that single mothers working a nonstandard schedule were no less likely to cohabit than mothers who were not employed or working a standard shift. One possible interpretation of this result is in keeping with Stanley and his colleagues (Stanley, Rhodes, & Markham, 2006), who argued that couples may "slide" into cohabitation with their romantic partners when the conditions are less than ideal for the more permanent marriage commitment. This conclusion fits with Oppenheimer's (2003) contention about cohabitation serving as a substitute for marriage among romantic partners in the short term and is supported by suggestive evidence from ethnographic studies, which show that low-income mothers may be less strict about the conditions they place on cohabitation as compared to marriage (Edin & Kefalas, 2005). Cohabitation, therefore, may constitute a short-term response to crises, rather than more long-term commitment to a permanent arrangement with a romantic partner (Stanley, et al.).

Preferences for Economic Stability before Marriage

In addition to nonstandard work schedules, the results show that low-income mothers' perceptions of economic stability also factor into their likelihood of marriage but not of cohabitation. This finding provides further evidence that low-income parents may emphasize different criteria when deciding whether to marry or cohabit with a romantic partner. Based on qualitative interviews with unmarried mothers, Gibson-Davis et al. (2005) reported that financial instability is the most frequently cited reason that these mothers offer for deciding to delay marriage, and the mothers in our study may share this sentiment. Since we do not directly address the decision making process, it is possible that their financial instability affects the likelihood of marriage in other ways. From an economic stand point, mothers' tentative labor market prospects may, for example, make them a less economically viable marriage partner for men who themselves may be struggling in the labor market and prioritize greater financial security from such a union (McLaughlin & Lichter, 1997).

The Lack of a Direct Effect of Employed Partners on Union Formation

Both the Becker (1981) and Oppenheimer (1988) models imply that the likelihood of marriage is higher among women who reside in areas with large numbers of opposite sex partners who possess desirable economic traits compared to their counterparts who reside in less promising marriage markets. We did not detect a significant direct effect of community male employment on mothers' marriage or cohabitation decisions. However, we caution that better assessments of the relationship between employment status among low-income unmarried men and women and their union formation patterns await more detailed controls at the community level, which include employment rates broken down by race, martial status, gender, age and presence of children.

Contextual Factors Linked to Low-Income Mothers' Likelihood of Union Formation

Though not a central focus of this study, a number of other factors controlled for in our models provided additional insights into union formation among low-income mothers. One notable finding relates to the important role of instrumental social support mothers receive around child care. Our results show that mothers who indicated that they did not have enough support were more likely to form cohabiting relationships compared to remaining single, suggesting that such arrangements may be partly motivated by necessity. Since such support is an important part of single mothers' personal safety nets that help facilitate their employment (Harknett, 2006), it could be that concerns about child care may increases the chances that low-income mothers cohabit in order to gain assistance from an another adult. Relatedly, even though our analysis demonstrates a significant independent effect of nonstandard work schedules and child care considerations, we speculate that the combined effects of these constraints may be even more problematic for single mothers. If mothers are working at night or on the weekend and taking care of children during the day or after school, there may not be enough time available to spend with potential partners. Future research about cohabitation should consider this association and attempt to better understand how social supports and the availability of informal and formal child care supports relate to low-income mothers' union formation decisions.

The positive, though moderate, effect of post secondary education on the likelihood of marriage is a further indication that higher levels of human capital increase the probability of marriage among low-income women. Furthermore, the positive association between achievement test scores and either forms of union formation further demonstrates the potential benefits of continuing education for low-income mothers' future economic and family well-being.

The strong association detected between mothers' ongoing health problems and the decreased odds of cohabitation and marriage among low-income mothers reinforces concerns about health issues as an important barrier to self-sufficiency among low-income parents (Burton et al., 2005). Studies indicate that poor single mothers are disproportionately more likely to suffer from health problems, which can act as a barrier to work or make it difficult to raise a family (Jayakody & Stauffer, 2001). Their reduced odds of cohabiting or marriage compared to their healthier counterparts are further evidence that this group is particularly disadvantaged and in need of more targeted assistance to help them attain their employment and family formation goals.

Finally, we also observe significant regional effects in our results. In particular, single mothers in Boston are significantly less likely to marry and more likely to cohabit than the comparison group in San Antonio. These findings were robust across all the models we tested and are similar to those from other multi-site analyses of union formation that identify important city differences in their analyses (Sigle-Rushton & McLanahan, 2002). Though city comparisons are not a central focus of this study, we reason that there are likely to be important regional differences in terms of policies, culture, attitudes, or demographics, which account for variations in union formation patterns.

Limitations

There are some limitations to this study that need to be considered. Recent reviews of the empirical literature on women's marriage decisions highlight the potential endogeneity of employment characteristics and union formation (Ellwood & Jencks, 2004). Though the evidence is strong that low-income women's work schedules are dictated by the nature of their jobs and not a reflection of personal preferences (Roy et al., 2004; Scott et al., 2000), we cannot rule out the possibility that the relationship works the other way, which is that mothers may decide to work a nonstandard schedule because they believe that there is not enough time to spend with partners, or they would like to avoid forming a romantic union altogether.

There also remains the possibility that unobserved characteristics correlated both with employment and work schedules and union formation are not accounted for in our multivariate analyses and could bias our estimates. Our models control for an extensive set of individual and family measures as well as male employment, which minimizes this form of selection bias but cannot rule it out completely.

Another limitation relates to the measurement of nonstandard work. While most published reports of nonstandard time consider work schedules over an entire week (Presser, 2003), we used reports for the day prior to the interview. While this narrow approach excluded workers who were not working that day but work during the week, it still represents a more conservative estimate of employment and work schedules and may even underestimate the negative effects of a nonstandard work schedule. Finally, the study is also limited by the small sample size of White mothers, which restricts a test of whether predictors of union formation differ by race and ethnicity.

Implications for Policy and Practice

Overall, the findings from this study underscore the important role that employment factors and contextual variables play in low-income mothers' union formation. The significant effects of nonstandard schedules and social support around child care pose direct implications for the kinds of healthy marriage and relationship programs that the recent round of federal welfare reauthorization funding hopes to energize. Our findings suggest that by emphasizing work participation without considering the schedules associated with many low-wage jobs, welfare-to-work and family formation policies could work at cross purposes. Given this cautionary note, we proffer three core considerations, which stem from the results of this study.

Employment and training—Since employment plays a key role in building the economic security that many low-income couples desire before marriage (Edin & Kefalas, 2005), several marriage education programs also provide comprehensive services including referrals to job training and placement assistance. While the results of national impact evaluations of healthy marriage programs that include access to multiple services such as employment are not yet available, initial findings from a non-experimental study of a Chicago-based program providing employment services to young couples show positive employment and earnings outcomes over time as well as improvements in couples'

relationship quality (Gordon & Heinrich, 2007). The findings from our study suggest that healthy marriage initiatives, which directly connect clients with gainful employment, could facilitate a couple's ability to stay together.

Work schedules—Program developers, however, also need to be cognizant of the implications of nonstandard schedules for single parents when making these connections to employment. Our findings suggest that nonstandard work schedules at night or on the weekends in comparison to standard schedules may act as a barrier to marriage. For them, nonstandard schedules may actually do more harm than good. It is also important for policymakers and employers to consider different options to address some of the negative consequences of these schedules such as allowing employees more input into work schedule decisions, setting time limits on shift work, or creating incentives to offer child care options for workers during nontraditional hours.

Indeed, the practice of addressing participants' work schedule preferences could be integrated into career development and job placement services for both welfare-to-work and healthy marriage providers working with low-income mothers. Some innovative healthy marriage and relationship programs have contracted with employment providers that consider clients' work schedule preferences when matching them to jobs (Joshi, Pilkauskas, Bir, & Lerman, 2008). Similarly, assessing work schedule preferences when administering needs assessments during the application process for these programs would help case workers understand whether these arrangements could cause stress or be otherwise harmful to established relationships among couples. In terms of healthy marriage education curricula development, it may be useful to integrate a discussion of couples' work schedule preferences into training modules so that partners can practice their communication and negotiation skills when preferences differ between couples or among applicants and employers.

Financial and child care stability—Finally, the results also reinforce comprehensive approaches that seek to help low-income parents overcome financial and child care stressors when charting a course for themselves and their family. Providing affordable and convenient child care to low-income working mothers, which corresponds to their work schedules, could help ease tensions about child care. Furthermore, incorporating financial education topics about budgeting, credit scores, predatory lending practices, and other topics that allow parents to establish and work toward short and long term financial goals as well as avoid financial pitfalls could help poor families establish an economic framework and a plan to attain them. Another approach includes referring individuals and couples who are employed to subsidized child care and asset building programs that help submit tax refunds or create matched savings accounts to save for home ownership, small business development, or educational investments. Linking marriage education participants to these kinds of asset building, financial education, child care, and job training programs can help to enhance economic security, which may result in more couples being able to realize their marriage aspirations and fulfill the work and family goals of welfare reform.

Acknowledgments

Funding for “Welfare, Children, and Families: A Three City Study” was provided by the National Institute of Child Health and Human Development through grant HD36093 and the Office of the Assistant Secretary of Planning and Evaluation, Administration on Developmental Disabilities, Administration for Children and Families, Social Security Administration, and National Institute of Mental Health, as well as a number of national and local foundations. The first author gratefully acknowledges a professional development award from RTI. We also acknowledge the research assistance of Elisabeth Jacobs and Christopher Wimer who worked on earlier drafts of this paper as well as the suggestions and comments of the Editor and three anonymous reviewers.

References

Acs, G.; Loprest, P. TANF caseload compositions and leavers synthesis report. Washington, DC: Urban Institute; 2007.

Becker, GS. A treatise on the family. Cambridge, MA: Harvard University Press; 1981.

Bennett NG, Bloom DE, Miller CK. The influence of nonmarital childbearing on the formation of first marriages. Demography. 1995; 32(1):47–62. [PubMed: 7774730]

Burton, L.; Lein, L.; Kolak, A. Work, family, health, and well-being. Bianchi, SM.; Casper, LM.; King, RB., editors. Washington, DC: National Institute of Child Health and Human Development; 2005. p. 493-510.

Carlson M, McLanahan S, England P. Union formation in fragile families. Demography. 2004; 41(2): 237–261. [PubMed: 15209039]

Cherlin, AJ. Toward a new home socioeconomics of union formation. In: Waite, LJ.; Bachrach, C.; Hindin, M.; Thomson, E.; Thornton, A., editors. The ties that bind: Perspectives on marriage and cohabitation. New York: Aldine de Gruyter; 2000. p. 126-44.

Edin, K.; Kefalas, M. Promises I can keep: Why poor women put motherhood before marriage. Berkeley: University of California Press; 2005.

Ellwood, D.; Jencks, C. The uneven spread of single-parent families: What do we know? Where do we look for answers?. In: Neckerman, K., editor. Social inequality. New York: Russell Sage; 2004. p. 3-78.

Gennetian, LA.; Knox, V. The Next Generation Working Paper Series. Manpower Demonstration Research Corporation; 2003. Staying single: The effects of welfare reform policies on marriage and cohabitation; p. 19

Gibson-Davis C, Edin K, McLanahan S. High hopes but even higher expectations: The retreat from marriage among low-income couples. Journal of Marriage and Family. 2005; 67:1301–1312.

Graefe DR, Lichter DT. Life course transitions of American children: Parental cohabitation, marriage, and single motherhood. Demography. 1999; 36(2):205–217. [PubMed: 10332612]

Gordon, RA.; Heinrich, CJ. Taking a couples rather than an individual approach to employment assistance. Presented at the Association of Public Policy Analysis and Management annual meeting; Washington, DC. 2007.

Harknett K. The relationship between private safety nets and economic outcomes among single mothers. Journal of Marriage and Family. 2006; 68(1):172–191.

Harknett K, McLanahan S. Racial and ethnic differences in marriage after the birth of a child. American Sociological Review. 2004; 69(6):790–811.

Henly, JR.; Lambert, SE. Linking workplace practices to child care requirements: Lower-level workers in lower-skilled jobs. In: Bianchi, SM.; Casper, LM.; Christensen, KE.; King, RB., editors. Workforce/workplace mismatch? Work, family, health & well-being. Mahwah, NJ: Erlbaum; 2005. p. 473-492.

Hertz R, Charlton J. Making family under a shiftwork schedule: Air Force security guards and their wives. Social Problems. 1989; 36:491–507.

Holzer, H.; Danziger, S. Are jobs available for disadvantaged groups in urban areas?. In: Bobo, L.; O’Connor, A.; Tilly, C., editors. The changing face of urban inequality in America. New York: Russell Sage Foundation; 2000.

Jayakody R, Stauffer D. Mental health problems among single mothers: Implications for work and welfare reform. Journal of Social Issues. 2001; 56:617–634.

Joshi P, Bogen K. Nonstandard schedules and young children's behavioral outcomes among working low-income families. Journal of Marriage and Family. 2007; 69:139–156.

Joshi, P.; Pilkauskas, N.; Bir, A.; Lerman, R. Piloting a community approach to healthy marriage initiatives in three sites: Boston, Massachusetts; Jacksonville, Florida, and Chicago, Illinois. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families; 2008.

McLaughlin DK, Lichter DT. Poverty and the marital behavior of women. Journal of Marriage and Family. 1997; 59(4):582–594.

Massey D, Shibuya K. Unravelling the tangle of pathology: The effect of spatially concentrated joblessness on the well-being of African Americans. Social Science Research. 1995; 24:352–366.

Moffitt, RA. Female wages, male wages, and the economic model of marriage: The basic evidence. In: Waite, LJ.; Bachrach, C.; Hindin, M.; Thomson, E.; Thorton, A., editors. The ties that bind: Perspectives on marriage and cohabitation. New York: Aldine de Gruyter; 2000. p. 320-342.

Newman, KS. No shame in my game: The working poor in the inner city. New York: Russell Sage Foundation and Knopf; 1999.

Oppenheimer V. A theory of marriage timing. American Journal of Sociology. 1988; 94(3):563–591.

Oppenheimer V. Cohabitation and marriage during young men's career development process. Demography. 2003; 40:127–149. [PubMed: 12647517]

Osborne C. Marriage following the birth of a child among cohabiting and visiting parents. Journal of Marriage and Family. 2005; 67:14–26.

Perry-Jenkins M, Goldberg AE, Pierce CP, Sayer AG. Shift work, role overload, and the transition to parenthood. Journal of Marriage and Family. 2007; 69(1):123–138. [PubMed: 20216932]

Presser, HB. Working in a 24/7 economy. New York: Russell Sage Foundation; 2003.

Presser HB, Cox AG. The work schedules of low-educated American women and welfare reform. Monthly Labor Review. 1997; 4:25–34.

Reed J. Not crossing the "extra line": How cohabitors with children view their unions. Journal of Marriage and Family. 2006; 68:1117–1131.

Rose, E. Education and hypergamy in marriage markets. Seattle WA: University of Washington; 2004. Center for Statistics and Social Welfare Working Paper Series No. 53

Roy KM, Tubbs CY, Burton LM. Don't have no time: Daily rhythms and the organization of time for low-income families. Family Relations. 2004; 53(2):168–178.

Scott EK, London AS, Edin K. Looking to the future: Welfare-reliant women talk about their job aspirations in the context of welfare reform. Journal of Social Issues. 2000; 56(4):727–746.

Sigle-Rushton W, McLanahan S. For richer or poorer? Marriage as an anti-poverty strategy in the United States (in low fertility, family and public policies). Population. 2002; 57(3):509–526.

Staines, GL.; Pleck, JH. The impact of work schedules on the family. Ann Arbor: University of Michigan Press; 1983.

Stanley SM, Rhoades GK, Markman HJ. Sliding vs. deciding: Inertia and the premarital cohabitation effect. Family Relations. 2006; 55:499–509.

Wilson, WJ. When work disappears: The world of the new urban poor. New York: Alfred A. Knopf; 1996.

Winston, P.; Angel, R.; Burton, L.; Chase-Lansdale, PL.; Cherlin, A.; Moffitt, R., et al. Welfare, children, and families: A three city study, overview and design report. Baltimore, MD: Johns Hopkins University; 1999.

Woodcock, RW.; Johnson, MB. Woodcock-Johnson psycho-educational battery—Revised. Itasca, IL: Riverside Publishing; 1989, 1990.

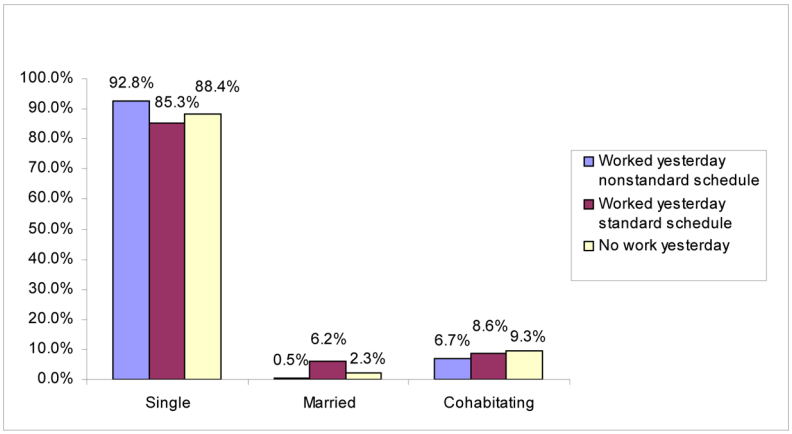

Figure 1.
Predicted Union Status by Work Status and Nonstandard Schedules

Table 1

Characteristics of Mothers at Wave 1 Interview by Union Status at Wave 2 Interview

	Total Sample	Remained Single	Cohabiting	Married
Employment Characteristics				
Not employed the day before the interview	72%	75%	71%	52%
Employed the day before the interview	28%	25%	29%	48%
Nonstandard schedule*	10%	11%	10%	4%
Standard schedule	18%	15%	18%	44%
Perceived economic instability	23%	25%	25%	6%
Male community employment rate	47%	47%	48%	52%
Caregiving Responsibilities				
Mother's caregiving responsibilities for disabled children or adults	13%	14%	8%	9%
Average number of children in the household	3.1	3.1	2.6	3.8
Children under 6 years in the household	67%	68%	78%	50%
Access to enough child care support	47%	52%	36%	23%
Human Capital and Demographic Characteristics				
High school diploma or GED	25%	25%	28%	21%
Some or all of college/tech school	43%	39%	47%	68%
Average Woodcock-Johnson score at Wave 2	90	87	99	97
Ongoing health problems	15%	16%	13%	2%
Average months of welfare receipt in 2-year period up to Wave 1 interview	11	12	10	5
Average age of mother	31	31	30	32
Black	50%	54%	39%	32%
Hispanic	45%	41%	53%	65%
Non-Hispanic White	5%	5%	8%	3%
Boston	33%	33%	54%	16%
Chicago	33%	36%	21%	23%
San Antonio	33%	31%	25%	62%
Mother and biological father previously married	14%	14%	11%	20%
Mother and biological father previously cohabited	51%	49%	62%	64%

Note. All numbers are weighted. (The unweighted sample size is 1,299).

*Ten percent of the total sample of mothers is employed in nonstandard shifts, which represents 35% of all employed mothers at Wave 1.

Table 2

Multinomial Logit Models Predicting Mothers' Likelihood of Entering Cohabitation and Marriage between 1999 and 2000/01

	MODEL 1				MODEL 2			
	Cohabiting vs. Remain Single		Married vs. Remain Single		Cohabiting vs. Remain Single		Married vs. Remain Single	
	RRR	*Z Statistic*	*RRR*	*Z Statistic*	*RRR*	*Z Statistic*	*RRR*	*Z Statistic*
Employment and Economic Characteristics								
Not employed	1.20	0.55	0.72	−0.69	1.05	0.10	0.36*	−2.06
Nonstandard schedule					0.72	−0.55	0.08*	−2.23
Perceived economic instability					0.72	−0.97	0.27*	−2.01
Male community employment rate					0.48	−0.35	0.48	−0.36
Caregiving Responsibilities								
Mother's caregiving responsibility for disabled children or adult	0.71	−0.60	1.69	0.76	0.69	−0.65	1.85	0.75
Number of children in the household	0.87	−1.15	1.43†	1.82	0.87	−1.45	1.31	1.59
Children under age 6 years in the household	1.59	1.14	0.29*	−2.12	1.55	1.00	0.31*	−2.40
Access to enough child care support	0.50*	−2.15	0.45	−1.60	0.49*	−2.59	0.38	−1.60
Human Capital and Demographic Characteristics								
HS Diploma or GED	1.39	0.75	1.58	0.55	1.38	0.68	1.54	0.60
Some or all of college/tech school	1.84	1.59	5.55*	2.18	1.83	1.45	5.32†	1.87
Woodcock-Johnson score at Wave 2	1.03***	3.71	1.03**	2.77	1.03***	4.24	1.03*	2.04
Ongoing health problems	0.74	−0.73	0.06***	−4.40	0.78	−0.54	0.05***	−4.61
Months on welfare in 2-year period up to wave 1 interview	0.99	−0.65	0.96	−1.59	0.99	−0.58	0.96	−1.63
Mother and biological father previously married	1.00	−0.01	1.74	0.80	1.06	0.14	2.96†	1.84
Mother and biological father previously cohabit	1.88†	1.79	1.71	0.89	1.86†	1.74	1.63	0.83
Age	0.90	−0.73	1.21	0.89	0.91	−1.04	1.29	1.28
Age Squared	1.00	0.65	1.00	−1.21	1.00	0.9	0.99	−1.54
Hispanic	2.05†	1.88	1.44	0.90	2.19*	2.18	1.52	0.94
Non-Hispanic White	1.98	1.26	1.75	0.85	2.34	1.16	2.23	1.46
Lives in Boston	2.89**	2.68	0.35*	−2.03	3.02***	3.73	0.42*	−2.00

	MODEL 1				MODEL 2			
	Cohabiting vs. Remain Single		Married vs. Remain Single		Cohabiting vs. Remain Single		Married vs. Remain Single	
	RRR	*Z Statistic*	*RRR*	*Z Statistic*	*RRR*	*Z Statistic*	*RRR*	*Z Statistic*
Lives in Chicago	1.89	1.20	1.52	0.93	1.93	1.47	1.94	1.45
N	1125				1123			
Log Pseudolikelihood	−581.35				−559.08			

Note. In Model 2, standard errors are adjusted for clustering.

† p < .10

* p < .05

** p < .01

*** p < .001 (two-tailed tests)