

Getting Married and Exiting Welfare: The Role of Two-Parent TANF Eligibility Rules*

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September 2006

- This project acknowledges support by National Institute for Child Health and Human Development Grant No. 1 R01 HD041489, National Science Foundation Grant No. SES-0241848, and the Pennsylvania State University Population Research Institute Grant from the National Institute for Child Health and Human Development (No. 1 R24 HD1025). Direct correspondence to Deborah Roempke Graefe, Population Research Institute, The Pennsylvania State University, 601 Oswald Tower, University Park, PA, 16802. E-mail: graefe@pop.psu.edu.

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Abstract

This study uses the 1996 and 2001 Panels of the Survey of Income and Program Participation (SIPP) and multinomial event history models to evaluate the role of changes in union status (i.e., transitions to marriage, to cohabitation, and to singlehood) in competing-risk transitions from TANF: 1) to employment without TANF versus 2) to neither receiving TANF nor working at a job. Results show that becoming married was significantly related to TANF exits between 1996 and 2003, and compared with single women, women who were married were more likely to transition to work than to exit TANF without employment. While starting a cohabiting union had no effect on transitions from TANF, women in stable cohabiting relationships were more likely than continuously single women to leave TANF for a job. Stringency in state welfare eligibility policies for two-parent families also affected the likelihood of leaving TANF for employment, and the economic character of the state in which the respondent lived and her personal characteristics do not mediate these relationships; nor does union status mediate the influence of state TANF policies. However, the effect of becoming married on transitions from TANF without employment is conditional on state stringency of eligibility rules for two-parent families. These findings imply that relaxing two-parent rules – which provides financial support for marital relationships, in turn promoting employment – is an encouraging policy approach toward achieving self sufficiency of disadvantaged families.

Getting Married and Exiting Welfare: The Role of Two-Parent TANF Eligibility Rules

While most women exiting Temporary Assistance to Needy Families (TANF) in the late 1990s found employment within a year, two fifths had no job just after leaving the program (Moffitt 2003), raising the question: Did union formation play a role in these TANF exits? Early critics of the reform legislation argued that new restrictions on assistance eligibility could “push” poor single mothers into unhealthy relationships and marriages as a survival strategy if employment were unavailable or if work did not pay. Research to date shows little evidence in support of this fear. However, instead of welfare reform's promoting marriage, union formation may have promoted TANF exits. If so, marriage promotion policies may facilitate a decline in public dependency. If not, marriage within the prevailing economic and policy context may hold less promise for TANF-participant families.

Marriage as an alternative to public assistance is consistent with the goals of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. While welfare-to-work has been its primary focus, the formation and maintenance of two-parent families is a stated objective that has received even greater emphasis in PRWORA's reauthorization. Marriage not only offers potential emotional and physical benefits for children and parents, it also is expected to serve as a means for achieving family economic self-sufficiency (e.g., Ginther & Pollack 2004). Indeed, the availability of public assistance to two-parent families has been limited in the past under the assumption that at least one parent should be able to fulfill the family provider role.

In recognition that many dual-worker families remain impoverished, and to promote marriage among poor single women (Ooms, Bouchet & Parke 2004), most states

have relaxed restrictions on two-parent-family eligibility during the post-PRWORA era (De Jong, Graefe, Irving & St. Pierre 2006). Thus while stringent work-related requirements for single parents potentially promote union formation, stringent rules regarding two-parent families are expected to inhibit marriage – an aspect of welfare reform on which previous studies have not focused. If so, stringent two-parent rules may explain the influence of a marital transition on TANF exits; that is, women who marry may exit TANF simply because they lose eligibility when they marry. However, marriage may also have the potential to promote TANF exits by facilitating employment. This study builds on prior research showing that transitions from welfare were influenced by welfare reform policies (Author citation) by investigating the role of marriage and two-parent family TANF eligibility policy in these transitions, controlling for other TANF eligibility rules and job opportunities in the respondent's state of residence.

We ask four main research questions addressing the role of union status change in TANF exits:

1. Does a change in union status influence either the transition from TANF to work or the transition from TANF to neither work nor TANF and does the influence vary by type of TANF exit?
2. Is the influence of union status on exits from TANF explained by personal characteristics that jointly influence both union formation and TANF participation?
3. Is the influence of union status change on exits from TANF explained by state two-parent TANF eligibility stringency (e.g., does a marital transition influence TANF exits the most in states with stringent two-parent rules)?

4. Does the influence of a change in union status explain any effects found for state TANF eligibility rules on exits from TANF (i.e., does union status change or mediate the effect of TANF eligibility rules)?

Figure 1 shows these relationships to be tested, where paths of influence are numbered to correspond with the research questions. Our first question regards the potential direct effects of union status and change on transitions from TANF. The second and fourth questions address mediation effects, and the third question tests for moderation, or an interaction effect, between union status and change and two-parent eligibility policy. As shown here, we expect stringency of two-parent family eligibility policy should not affect TANF leaving for unmarried recipients, but should influence TANF exits only for two-parent families.

Figure 1 about here

Using the 1996 and 2001 Panels of the Survey of Income and Program Participation (SIPP) and multinomial event history models, we evaluate the role of changes in union status (i.e., transitions to marriage, to cohabitation, and to singlehood) on competing-risk transitions from TANF: 1) to employment without TANF versus 2) to neither receiving TANF nor working at a job. State welfare policies previously found to impact welfare and work behaviors are investigated for influences on marital and TANF transitions, controlling for annual state-level female unemployment rates and state fixed effects. Individual-level data for 4,999 women under age 65 who reported welfare participation from the 1996-99 and 2001-03 panels of the SIPP are merged with state-level data from the Bureau of Labor Statistics and measures of welfare policy based on the Urban Institute's Welfare Rules Database.

BACKGROUND

Marriage and Employment among TANF Participants

Most research on marriage and TANF examines policy effects on marital behavior to test the assumption that reduced welfare dependency will increase marriage among poor single mothers. The logic behind marriage promotion aspects of welfare reform, however, is that marriage will reduce welfare dependency. Marriage may promote transitions from TANF in several ways. First, and most straightforward, women who marry would no longer qualify for TANF if two-parent eligibility rules in their states make it difficult or impossible to qualify for the program. Second, even if two-parent eligibility rules are not stringent, gaining an employed spouse may raise family income above income cutoffs for program participation, possibly permitting a traditional homemaker-breadwinner family lifestyle or creating an environment in which TANF-participant mothers are better able to transition from TANF into the workplace. Marriage may provide a more supportive context for working mothers because two parents may better handle home-related responsibilities by sharing them, because marriage provides a less chaotic and more healthful context than single parenthood, or because the institution itself promotes feelings of efficacy regarding responsibility for self and family (Bandura 2001).¹

For instance, evaluation of couples-focused employment assistance indicates that partners motivate one another, potentially by providing one another with instrumental support (e.g., helping with child care), informational support (e.g., modeling and monitoring of work-related behaviors), and esteem support (e.g., encouragement, appreciation, listening to concerns) (Gordon & Heinrich 2005). Mothers with partners participating in couples-focused employment services are found more likely to gain

employment, to earn more, and to exit TANF than single mothers (Gordon & Heinrich 2005), indicating that couple relationships can have a stabilizing effect and facilitate employment. Furthermore, a high rate of earnings growth following welfare reform, interpreted as implying PRWORA's role in increasing employment among low-income families, was more pronounced among two-parent families than single-mother families (Murray & Primus 2005). A consideration for welfare policy is that continued public assistance for two parent families may promote stability that fosters marriage. For example, higher welfare benefits appeared to help unmarried parents in the Fragile Families study to stay together (Carlson, Garfinkel, McLanahan, Mincy & Primus 2004). If two-parent eligibility rules can facilitate the relationship stability needed to promote employment, marriage may indirectly foster TANF exits to self sufficiency.

Most studies to date find that, overall, marriage behavior is little affected by PRWORA (Fitzgerald & Ribar 2004; Gennetian & Knox 2003; Blank 2002), despite the promise of earlier research showing small but positive effects of welfare reform waivers on increases in two-parent families (Acs & Nelson 2004; Bitler, Gelbach & Hoynes 2003). In part, this naught effect may result because the human capital characteristics making employment difficult for TANF participants also decrease their marriageability (Graefe & Lichter 2006). Teitler et al. (2005), for example, find that TANF participation reduces the likelihood of marriage among unwed mothers, projecting that it delays marriage by as much as two and a half years. Fitzgerald and Ribar (2004) also find TANF participation reduces exits from female headship, but at the same time, economic opportunities reduce both marriage and TANF participation. Yet, findings from two waves of the Three Cities Survey that marital transitions are related to TANF and employment transitions, but that transitions to cohabitation are not, imply marriage may

be viewed by poor couples as an economic partnership (Cherlin & Fomby 2004). Small-sample qualitative study of TANF recipients indicates these women do seek interdependent relationships with others (Rodgers-Dillon & Haney 2005), and sanctioned mothers are at high risk of material hardship and relying on others (Reichman, Teitler & Curtis 2005). Indeed, marriage has been a stronger facilitator of TANF exits for chronic TANF participants than for shorter term participants (Hamil-Liker 2006). These findings together suggest that a welfare-reform push for marriage might be felt mostly among the least employable. That is, heterogeneity among TANF participants may mask welfare reform's effect on marriage if the effect is related to employability.

Results from the Women's Employment Study indicate lack of high school diploma, low work experience, substance dependence and other health problems, children's health and emotional conditions, domestic violence, and transportation barriers prevent women from exiting welfare and increase their likelihood of recidivism, and women who exit welfare without employment have more employment barriers than those continuously on welfare (Nam 2005). Furthermore, post-welfare employment rates are lowest for women who were sanctioned (Brauner & Loprest 1999; GAO 2000, Cherlin et al. 2001; Zedlewski & Loprest 2001; Pavetti & Bloom 2001), and these women tend to have poorer job skills, worse health, and lower education than employed TANF leavers (Moffitt & Roff 2000) – characteristics that may reduce marital opportunities as well. Yet, these may be the women more likely to view marriage as an economic survival strategy.

Some argue a different marriage-employment link. In the general population, women with higher earnings are known to be more likely to marry than lower income women (Sweeney 2002; Oppenheimer 1997), and the personal characteristics supporting

employment are likely to jointly determine marriage. Indeed, results from the Fragile Families study show that among African Americans, a single mother's employment increases the likelihood of marriage to her child's father (Mincey, Grossbard & Huang 2005). In addition, analysis of the New Hope anti-poverty project found higher income and earnings, compared with economic hardship, to promote marriage among never-married mothers, although the program's effects on multiple potential causes of marriage preclude assigning causality to employment per se (Gassman-Pines et al. 2006).

While there is general consensus that low-income mothers hold marriage in high esteem and desire to marry (Edin & Kefalas 2005; Gassman-Pines, Yoskiwawa & Nay, forthcoming; Carlson, McLanahan & England 2004; Lichter, Batson & Brown, 2004; McLanahan, Garfinkel & Mincy 2001), economic stability is commonly cited as an unmet requirement standing in the way of marriage. Unmarried low-income mothers typically view interdependent relationships with men as unpredictable and insecure (Rodgers-Dillon & Haney 2005; Edin & Kefalas 2005) and also state a desire for a less chaotic lifestyle before settling down in a marriage (Gassman-Pines et al. forthcoming). Thus TANF participants who marry, rather than being the least employable, may be those who feel less dependent on marriage because they have some financial independence through their own employment – i.e., marriage may follow employment. Clearly, the relationship among TANF policy, employment and marriage is complex, and is complicated by personal factors selecting individuals into both marriage and employment.

Personal Characteristics Influencing Marriage and Employment

Key groups for whom the transition from welfare to work is difficult overlap with those for whom marriage is less likely: Racial minority status is often associated with

long-term patterns of TANF receipt and poor employment opportunities (Harknett 2001, Sandefur & Cook 1998) and lower marriage rates (Tucker & Mitchell-Kernan 1995), although non-minorities, who are more likely to exit TANF, do not necessarily become employed upon leaving (Harknett 2001). Poorly educated recipients lack the necessary skills to secure employment and are likely to earn low wages and remain on welfare (Danziger et al. 2000; Isaacs 2001), and low-income recipients tend to remain on welfare because transitioning to work is so costly (Edin & Lein 1997). A larger number of children further reduces the likelihood of becoming employed (Sandefur & Cook 1998) and may also hinder the formation of marriages. Likewise age influences employability (Harris 1996; Rank & Hirschl 2002) as well as marriage (Goldman, Westoff & Hammerslough 1984; Jacobs & Furstenburg 1986). Unmarried recipients are often more disadvantaged on these factors than their married counterparts, and face more barriers in transitioning from welfare to work.

State Policy, Marriage, and Employment

Although numerous studies examine the influence of welfare reform on employment and marriage, the role of transition to marriage in the transition from TANF is relatively understudied. Welfare reform was designed to develop an ethic of self reliance among welfare recipients (Gais et al. 2001; Hays 2003), and TANF's new behavior-related rules found to "push" transitions from welfare include work-related activities requirements, time limits, and sanctions for rules noncompliance. Earned income disregards appear to "pull" TANF participants into working by rewarding employment (Author citation). Furthermore, whereas all states but North Dakota permitted TANF participation for some married couples by 2003 (Rowe and Giannarelli 2006), the varied stringency of two-parent family eligibility rules across states is

expected to influence TANF leaving. Where eligibility for two-parent families is more restricted, we expect transitions – to work or not – among those who marry. That is, where eligibility is more difficult for two-parent families, married participants will be “pushed” from welfare by eligibility cutoffs. Where eligibility is less restricted, we expect transitions from TANF to work will be more likely than transitions from TANF without work. When two-parent families more easily meet eligibility guidelines for TANF, they should be less likely to exit welfare unless they find a better employment alternative.

State unemployment rates are primary alternative explanations for welfare-to-work transitions and must be considered when testing policy effects. Researchers typically acknowledge the importance of a strong economy in caseload and employment changes (Blank 2001; Blank & Schmidt 2001; Haskins & Blank 2001; Hays 2003). Higher state unemployment rates are associated with reduced job availability and employment for welfare recipients (Holzer 1999; Hoynes 2000; Kim 2000), and increased welfare use (Grogger 2003). The effect of job opportunities on marriage among low-income women, however, appears to be negative (Fitzgerald & Ribar 2004).

In sum, employment appears to support economic independence of single mothers (Mincey, Grossbard & Huang 2005; Fitzgerald & Ribar 2004) as well as union stability (Carlson, Garfinkel, McLanahan, Mincey, and Primus 2004), but only minor influence of welfare rules on unions has been found. Higher benefits are found to increase the likelihood of cohabitation among new parents, but most studies agree on little to no influence of welfare reform work requirements, sanctions and time limits on marital behavior. These policies are found to influence TANF exits and employment, however. Because marriage per se no longer disqualifies poor families from receiving TANF,

lenient rules regarding eligibility of two-parent families are expected to promote marriage (Ooms, Bouchet & Parke 2004), and we expect more stringent two-parent rules will promote transitions from TANF when marriage occurs. Importantly, personal characteristics may jointly predict transitions to marriage and transitions to work and must be considered in determining the effects of union status and transitions on TANF exits.

METHODOLOGY

The two longitudinal panels of the Survey of Income and Program Participation completed in the years following PRWORA's implementation provide data for multinomial discrete-time event history analysis of the transition from TANF either 1) to employment without TANF or 2) to no public or employment support. The 1996 SIPP Panel covers four years and the 2001 SIPP Panel encompasses three years of observation. We examine monthly welfare and work statuses of welfare recipients using 8-month-lagged union status indicators, previous-year state-level characteristics, and previous-month personal characteristics as predictors.²

Since most TANF recipients are women, we focus our study sample on 4,999 females 15 to 64 years of age who reported family receipt of TANF income for at least two consecutive months. The data provide information for 7,062 spells of TANF receipt, or 79,610 person-months including all months in which a respondent's family was receiving TANF assistance plus the first subsequent month in which the respondent reported only working or neither working nor receiving TANF.³

The Variables

The dependent variable is a respondent's work and welfare status each month following a month of TANF receipt. Respondents may be 1) receiving TANF, 2) working and not receiving

TANF, 3) neither working nor receiving TANF, or 4) out of the sample due to attrition. We do not present results for the latter outcome, but controlling for attrition reduces bias in the reported coefficients. Cases receiving TANF benefits through the final month of the SIPP panel are censored in that month. About 36 percent of these TANF episodes ended in employment and 33 percent ended without employment.

Explanatory variables include state two-parent TANF eligibility stringency, other state welfare rules found previously to influence TANF exits and employment, state annual female unemployment rates, and personal characteristics known to influence employment, including race/ethnicity, age, educational attainment, previous-month income, disability, and migration, plus indicators of employability or propensity to work – months of prior employment and number of months of TANF receipt since the first survey month. Respondents with longer episodes of TANF receipt may find it difficult to move into employment because of their lack of work experience and skill development (Loeb & Corcoran 2001, Sandefur & Cook 1998). Respondents with substantial work histories may be less disadvantaged and better able to transition into employment (Sandefur & Cook 1998). Work and welfare histories may thus reflect the employability of recipients – those with the longest work histories may be the most advantaged recipients, while those with the longest TANF histories, the most disadvantaged. We expect these personal characteristics to influence the welfare-to-work trajectories of welfare-recipient women in addition to their union status transitions. By including prior employment while receiving TANF in our models, we control for characteristics leading to both employment and marriage. The resulting effects for union status and change are thus net the effects of those characteristics.

Our predictor of interest is union status, which captures transitions to marriage, cohabitation, or singlehood within the past 8 months, or marital status in the previous month for

those without a union transition. These categories are mutually exclusive and our reference group is “continuously single.” An eight-month lag provides time in which a union can settle into normal routines and provide the context that may nurture transitions to employment, as well as for transitional assistance to two-parent families to run out. In addition, eight months is a natural break point for SIPP data since each wave of data collection occurs in four-month intervals. SIPP's well known “seam problem” -- where respondents most often report transitions in the month of interview, or the “seam” between two waves – is of less concern by lagging the union status predictors over time periods covering complete waves of data. Just over 19 percent of these TANF participants were continuously married and approximately 2 percent were continuously cohabiting. Around 9 percent became married and 9 percent became single during the study observation period. Fewer than 1 percent began a cohabiting union ($n = 87$), making our results for this behavior relatively tentative.

All other personal characteristic variables except race/ethnicity are time varying and are lagged one month. Missing values are imputed based on responses in the months both immediately before and after the month in which data are missing for respondents who temporarily left the sample. Weighted frequencies and means and operational definitions for all variables are shown in Table 1.

Table 1 about here

All state two-parent policy variables are created based upon textual items from the Urban Institute's Welfare Rules Database. The state two-parent policy indicator is a factor-based score derived using factor analytic techniques to summarize stringency on three rules pertaining to couple participants in TANF: 1) the maximum hours of prior employment required (“Hundred-Hour Rule”), 2) whether proof of employment is required, and 3) the unemployment duration required before participation. Only one factor is represented by these three items, with an

eigenvalue of 2.5, and the resulting two-parent summary score dimension has an alpha reliability coefficient of 0.91. The distribution of this dimension across states in 2003 and its change between 1996 and 2003 are shown in Figure 2.

Figure 2 about here

Other state policy variables are based on individual rule items (see Table 1 for specific coding descriptions) and were shown in earlier research to influence transitions from TANF (Author citation). These are included in our models as controls. For the maximum benefits measure, standardized scores were created with means of 0 and standard deviations of 1; scores of less than -1 are low scores and scores greater than 1 are high scores; scores between -1 and 1 (medium scores) serve as the reference. For the activities requirements indicator, the variable sums scores measuring the number and types of allowable activities, so that higher values indicate greater leniency. The distribution of our earned income disregards indicator dictated use of a binomial response variable where scores at or above the mean are coded as “0” and scores below the mean are coded as “1.” Likewise, the sanctions policy indicator is coded “1” if the state applies sanctions of ineligibility for noncompliance with new welfare rules and “0” if sanctions result in only partial loss of benefits, and the time limits indicator is coded “1” for states that do not allow extensions of time limits and “0” for states without this restriction. Higher values on the latter three variables indicate greater rules stringency. State-level data are time varying and lagged one year.

To control for omitted variable bias, the analysis includes fixed effects for states with large welfare populations and high levels of welfare caseload decline since 1997. These include California, Connecticut, Florida, Illinois, Maryland, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas, and Wisconsin (Zeigler 2004). Small state subsample sizes

preclude use of fixed effects for other states. All models control for spell and time period (i.e., 1996-1999 or 2001-2003 SIPP Panel) of observation as well.

Modeling Strategy

SIPP's cluster sampling design requires adjustment of standard error estimates for sample design effects, achieved using SUDAAN, which adjust analysis according to SIPP-supplied stratification weights. The multinomial logistic regression model in a discrete-time event history modeling framework estimates monthly transitions in the TANF/employment status dependent variable at time $t + 1$, for respondents who received TANF in month t . This model estimates the log likelihood ratio of being in each of the outcome categories (no TANF and employed or no TANF and not employed) compared to the reference category (receiving TANF), conditional on not being in any other category. We present odds ratios derived from these estimated parameters for ease of interpretation. Also, although all outcomes are modeled simultaneously, we present the results for each outcome in separate tables for ease in discussion.

We begin with a model to assess only the role of union transitions, controlling for previous cohabitation and marital status. A second model shows direct effects of personal characteristics, and a third presents direct effects of state policy characteristics on transitions from TANF. Personal characteristics are then added to the union status model to control for personal factors likely to jointly select women to marriage and employment. This strategy adjusts union status effects for omitted variable bias to the extent that these personal characteristics and work and TANF histories jointly explain marriage and employment behaviors. A fifth model then adds state welfare rules, controlling for state unemployment rate, to determine the role of state characteristics in promoting marital transitions leading to transitions from TANF. In particular, we are interested in whether union status mediates state policy, which can be determined by comparing the third and fifth models. Any attenuation of the

two-parent policy indicator in this model would imply it may operate through its influence on union formation behavior. In this case, additional models would be required to confirm this mechanism.

A final model includes all three sets of variables plus an interaction term between union status and two-parent eligibility to test whether the effect of union transitions varies according to policy stringency. If union formation leads to TANF exits only where two-parent family eligibility policy is more stringent, then the structural eligibility limitation explains the effect of union formation and we can reject the notion that marriage per se facilitates employment of poor mothers. However, if union formation leads to TANF exits in both more stringent and more lenient states, we can be confident that unions provide settings that nurture family self sufficiency. We also present a version of the final model which shows the odds of a transition from TANF without work versus from TANF with employment to evaluate union status and policy effects on the type of transition made when women leave TANF.

RESULTS

Tables 2 and 3 present results from our multinomial logistic regression models as odds ratios, with effects on the transition from TANF to employment shown in Table 2 and effects on the transition from TANF without employment shown in Table 3. An odds ratio above 1 represents a positive effect; a value below 1 indicates a negative effect on the transitions.

Tables 2 and 3 about here

As shown in model 1, the effects of beginning a marriage or becoming single and of cohabiting are positive for the transition to employment (Table 2). Except for transitions to singlehood, these effects are large and remain significant with controls for personal and state characteristics. Personal characteristics do explain the positive influence of transitions to singlehood, shown in model 4, and these characteristics operate as we expect from earlier

research predicting TANF exits (see Author citation). Generally, low human capital decreases and having more experience in the workplace increases the likelihood of transitioning to work.

State policy indicators also operate as found in our earlier study, with the additional finding that in states with increasingly stringent two-parent eligibility rules, the transition from TANF to work is increasingly less likely (models 3, 5 and 6). Stringent time limits and low income disregards also increase transitions to work, and these effects are not attenuated by personal and union status characteristics in model 5.

The interaction model (model 6) shows a positive (as expected) but statistically nonsignificant effect of becoming married in states with more stringent two-parent family rules. Although the significant and positive effect of the being married by two-parent rules interaction term indicates that this policy stringency increases the effect of marriage on transitions to employment for poor women on TANF, the role of transitions to marriage is the same regardless of welfare policy. The remaining negative main effect of two-parent family eligibility stringency is the policy effect for single women. This unexpected effect indicates that single women in these states are more likely to remain on welfare.

Cohabiting women also are more likely than single women to make this transition, implying that there is something about the dyad relationship that encourages this transition. Importantly, these union status effects are net the effects of personal characteristics likely to influence both marriage and employment as well as other state welfare policies and female employment opportunities. Also, as seen in model 7 of Table 3, transitions to employment are more likely than transitions to “neither work nor TANF” for women who began a marriage.

A caveat is that our continuously married category includes both women who were married at their first observation and women who became married but left TANF more than 8 months later. If the latter were more likely to leave assistance without employment, those who

transition soon after a marriage may be qualitatively different from women who marry and remain on TANF – i.e., the transition to marriage as facilitator of employment may not be causal. However, both the transition to marriage and the state of marriage clearly facilitate leaving TANF, with the exit to employment equally likely across all policy contexts.

Turning to the transition from TANF without employment, models 5 and 6 of Table 3 show that becoming married pushes women from TANF without employment only in states with stringent two-parent eligibility rules. These models suggest that cohabitation operates similarly to the transition to marriage, although the differential effect in stringent states is negligible. Furthermore, stringent two-parent rules decrease the likelihood of leaving TANF, regardless of employment after leaving – that is, where two-parent rules are more stringent, poor families are more likely to remain on welfare.

The latter finding leads one to question whether stringent two-parent rules impedes transitions to marriage or cohabitation among women receiving TANF, but a comparison of models 1, 3, 4 and 5 provide no indication that union transitions and state two-parent family policy are related. We conducted additional tests to confirm this finding in which the influence of state policies were estimated for the competing risks of transition to marriage versus transition to cohabitation for all person months in which women were at risk of these transitions. Results, appended here, also provide no evidence of a relationship between two-parent policy and transitions to marriage or cohabitation among TANF recipients. Thus the unexpected finding that single women in these states are most likely to remain on welfare should be explained by some other state characteristic that is correlated with stringency in two-parent family eligibility policy since single women would not be restricted by two-parent rules.

As expected, low human capital and having more children, as well as stringent time limits and low benefits, increase the odds of leaving TANF without employment. Women with these

attributes who live in states with these policy characteristics may face tremendous disadvantage and raise policy concerns. As shown in model 7, in which our competing alternative transitions are contrasted, low human capital and disability make transitions from TANF without work more likely than exits to employment, although women with more children are more likely to exit TANF for a job. The importance of a work history is clear in this model, but it does not trump the role of marriage. Importantly, model 7 shows that recently married women are more likely to leave TANF with employment regardless of two-parent family eligibility policy. Women married for longer periods are more likely to leave TANF without employment, especially where two-parent family eligibility rules are more stringent. While this finding suggests that the type of transition made will depend on personal lifestyle preferences, the point remains that transitions from TANF in states with stringent two-parent policies are more likely to occur among married recipients.

DISCUSSION

Overall our findings show that both union status and welfare policies have important influences on transitions from TANF. Our first objective was to examine the relationship between union status and TANF receipt since PRWORA's expansion of eligibility to two-parent families. We find positive effects of marriage on transitions from TANF to employment which are robust to controls for the endogeneity of marriage and employment decisions – i.e., that unobserved personal characteristics may inhibit both behaviors and promote TANF participation (Fitzgerald & Ribar 2004).

Thus, we can answer “no” to our second research question regarding whether the personal characteristics selecting individuals to both union formation and TANF participation explain union status influences on TANF. While measured personal characteristics play important roles in the type of transition from TANF, controlling for human capital, minority

status, presence of children, disability, geographic mobility, and TANF and work histories has little effect on the relationship between becoming married and leaving TANF for work and reveals the positive effect of becoming married on the transition from TANF without employment. The latter transition is most likely to occur where TANF rules regarding two-parent eligibility are more stringent, partly affirming our third research question regarding whether the policy and union status interact in their influence on TANF exits. Where two-parent families have a harder time qualifying for TANF, recently married women are more likely to exit TANF without employment because, as married couples, they no longer are eligible for welfare. On the other hand, stringent (versus more lenient) two-parent family eligibility policy makes women who marry more likely to transition from TANF with than without employment, although the transition to employment is more likely to occur for these women in all policy contexts. While marriage makes participation in TANF impossible or quite difficult, leading to *de jure* TANF exits, our findings suggest that even where this policy dimension is most stringent, marriage promotes employment among TANF participants.

We find no evidence, however, to affirm our fourth research question regarding whether union status mediates the effects of welfare policy on two-parent family eligibility. State welfare policies did not influence union formation behaviors, as found generally in most prior studies of welfare reform and marriage; thus, we cannot answer “yes” to our fourth research question.

Marriage and cohabitation appear to provide a setting that is conducive to transitions from TANF to employment, net the characteristics influencing both employability and marriageability. This is true regardless of two-parent family eligibility stringency, and the transition from TANF to work is more likely than a transition from TANF without work when TANF participants marry. Where two-parent rules are more restrictive, continuously married women also are more likely to transition from TANF to work than to no TANF and no work.

Although the decision to marry may coincide with decisions to leave TANF for a job – indeed, women voice a preference to marry after they have job stability (Pines-Gassman et al. forthcoming; Edin & Kefalas 2005) – heading a family as a couple rather than alone appears to facilitate self sufficiency.

This population-based study is consistent with findings from couples-based employment assistance program evaluations that partners can support one another's employment efforts. Although not all welfare-to-work evaluations have found positive effects on employment, earnings, or TANF exit for two-parent families (e.g., Long, Nightingale, & Wissoker 1994; Miller et al. 2000; Scrivener et al. 2002), these studies focus on couples who have been married for some time. We find women in this group more likely to transition to employment than non-employment where two-parent rules are more stringent, suggesting a positive effect of marriage for employment when welfare assistance is unavailable. For the more recently married, the transition to marriage may signal an overall shift in lifestyle made possible by the couple's partnership. While more research is needed to better understand this process and its applicability to the general population of disadvantaged couples, the evidence presented here suggests that welfare assistance for two-parent families may be an important strategy providing structural support that helps poor families stand on their own.

In sum, stringent two-parent eligibility policy has a straightforward effect on welfare-leaving of married women, but marriage is linked to exits with a job more so than without for recently married women, regardless of state policy stringency. Marriage thus appears to provide a context supportive of employment. Although the finding that stringent two-parent eligibility policy is negatively related to welfare exits for unmarried women implies these women avoid marriage so they can continue to receive TANF, stringent policy is not directly linked with marriage decisions. The suggested conclusion is that while welfare policies do not influence

marital decisions, if they support healthy relationships among those who do marry, they will indirectly support transitions from TANF to self sufficiency through work.

Endnotes

¹The argument that marriage may increase employment by improving self efficacy is discussed in detail by Pines-Gassman et al. (2006).

²We also tested models using one-month lagged union status and change indicators, which gave similar but less significant results

³Months in which a respondent resides in Maine, Vermont, North Dakota, South Dakota, or Wyoming are excluded since the SIPP aggregates the few respondents living in these states to ensure confidentiality and state-level data cannot be merged to their data records.

REFERENCES

- Acs, Gregory and Sandi Nelson. 2004. Changes in Living Arrangements during the Late 1990s: Do Welfare Policies Matter? *Journal of Policy Analysis and Management*, 23: 273-290.
- Bandura, A. 2001. Social Cognitive Theory: An Agentic Perspective. *Annual Review of Psychology*, 51:1-26.
- Bitler, Marianne, Jonah Gelbach, Hilary Hoynes, and Madeline Zavodny. 2003. The Impact of Welfare Reform on Marriage and Divorce. *Demography*, 41: 213-236.
- Blank, Rebecca M. 2002. Evaluating Welfare Reform in the United States. *Journal of Economic Literature*, XL: 1105-1166.
- Blank, Rebecca M. 2001. Declining Caseloads/Increased Work: What Can We Conclude About the Effects of Welfare Reform? *Economic Policy Review* 7(2):25-36.
- Blank, Rebecca M., and Lucie Schmidt. 2001. Work, Wages, and Welfare. Pp. 70-102 in *The New World of Welfare*, edited by Rebecca M. Blank, and Ron Haskins. Brookings Institution Press.
- Brauner, Sarah and Pamela Loprest. 1999. Where Are They Now? What States' Studies of People Who Left Welfare Tell Us. ANF Paper Services A, No. A-32. Washington, DC: The Urban Institute.
- Carlson, Marcia, McLanahan, Sara, and Paula England. 2004. Union Formation in Fragile Families. *Demography*, 41: 237-261.
- Carlson, Marcia, Irwin Garfinkel, Sara McLanahan, Ronald Mincy, and Wendell Primus. 2003. The Effects of Welfare and Child Support Policies on Union Formation. *Population Research and Policy Review*, 23: 513-542.
- Cherlin, Andrew J., L. Burton, J. Francis, J. Henrici, and L. Lein. 2001. Sanctions and Case Closings for Noncompliance: Who Is Affected and Why. Three City Study Policy Brief 01-1. Baltimore, MD: Johns Hopkins University.
- Cherlin, Andrew J., and Paula Fomby. 2004. Welfare, Work, and Changes in Mothers' Living Arrangements in Low-Income Families. *Population Research and Policy Review*, 23: 543-565.
- Danziger, Sandra K., Ariel Kalil, and Nathaniel J. Anderson. 2000. Human Capital, Physical Health, and Mental Health of Welfare Recipients: Co-occurrence and Correlates. *Journal of Social Issues* 56(4):635-654.
- DeJong, Gordon F., Deborah Roempke Graefe, Shelley K. Irving, and Tanja St. Pierre. 2006. Measuring State Welfare Policy Variations and Change After Reform. *Social Science Quarterly*, 87: .
- DeJong, Gordon, Deborah Roempke Graefe, and Tanja St. Pierre. 2005. Welfare Reform and Interstate Migration of Poor Families. *Demography* 42:469-196.
- Edin, Kathryn, and Maria Kefalas. 2005. *Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage*. University of California Press.
- Edin, Kathryn, and Laura Lein. 1997. *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work*. Russell Sage Foundation.
- Fitzgerald, John M. and David C. Ribar. 2004. Transitions in Welfare Participation and Female Headship. *Population Research and Policy Review*, 23: 641-670.
- GAO. 2000. Welfare Reform: State Sanction Policies and Number of Families Affected. Washington, DC: GPO.
- Gais, Thomas L., Richard P. Nathan, Irene Lurie, and Thomas Kaplan. 2001. Implementation of the Personal Responsibility Act of 1996. Pp. 35-69 in *The New World of Welfare*, edited by Rebecca M. Blank, and Ron Haskins. Brookings Institution Press.

- Gassman-Pines, Anna and Hirokazu Yoshikawa. 2006. Five-Year Effects of an Anti-Poverty Program on Marriage among Never-Married Mothers. *Journal of Policy Analysis and Management*, 25:11-30.
- Gassman-Pines, Anna, Hirokazu Yoshikawa, and S. Nay (forthcoming). Can Money Buy You Love? The Relationship Between Dynamic Employment Characteristics, the New Hope Program, and Entry Into Marriage. In H. Yoshikawa, T. Weisner, and E. Lowe (eds.) *Making It Work: Low-Wage Employment, Family Life, and Child Development*. New York: Russell Sage Foundation.
- Gennetian, L.A. And V. Knox. 2003. Staying Single: The Effects of Welfare Reform Policies on Marriage and Cohabitation (Next Generation Working Paper Series No. 13). New York: MDRC.
- Ginther, D. K., & Pollack, R. (2004). Family structure and children's educational outcomes: Blended families, stylized facts, and descriptive regressions. *Demography*, 41, 671-696.
- Goldman, N., C. F. Westoff, and C. Hammerslough. 1984. Demography of the Marriage Market in the United States. *Population Index*, 50:5-25.
- Gordon, Rachel A. and Carolyn J. Heinrich. 2005. Taking a Couples Rather than an Individual Approach to Employment Assistance. Institute for Research on Poverty Discussion Paper No. 1294-05. (<http://www.irp.wisc.edu>).
- Graefe, Deborah Roempke and Daniel T. Lichter. 2006. When Unwed Mothers Marry: The Marital and Cohabiting Partners of Mid-Life Women. *Journal of Family Issues*, forthcoming.
- Grogger, Jeffrey. 2003. The Effects of Time Limits, the EITC, and Other Policy Changes on Welfare Use, Work, and Income Among Female-Headed Families. *Review of Economics and Statistics* 85(2):394-408.
- Hamil-Luker, Jenifer. 2006. Trajectories of Public Assistance Receipt among Female High School Dropouts. *Population Research and Policy Review*, 24: 673-694.
- Harknett, Kristen. 2001. Working and Leaving Welfare: Does Race or Ethnicity Matter? *Social Service Review* 75(3):359-385.
- Harris, Kathleen Mullan. 1996. Life After Welfare: Women, Work, and Repeat Dependency. *American Sociological Review* 61(3):407-426.
- Haskins, Ron, and Rebecca M. Blank. 2001. Welfare Reform: An Agenda for Reauthorization. Pp. 3-32 in *The New World of Welfare*, edited by Rebecca M. Blank, and Ron Haskins. Brookings Institution Press.
- Hays, Sharon. 2003. *Flat Broke With Children: Women in the Age of Welfare Reform*. Oxford University Press.
- Holzer, Harry. 1999. Will Employers Hire Welfare Recipients? Recent Survey Evidence from Michigan. *Journal of Policy Analysis and Management* 18(3):449-472.
- Hoynes, Hilary W. 2000. The Employment, Earnings, and Income of Less Skilled Workers over the Business Cycle. Pp. 21-71 in *Finding Jobs: Work and Welfare Reform*, edited by David E. Card, and Rebecca M. Blank. Russell Sage Foundation.
- Isaacs, Julia B. 2001. Cross-State Findings on Families Leaving Welfare. Pp. 21-31 in *Outcomes of Welfare Reform for Families Who Leave TANF*, edited by George Julnes, and E. Michael Foster. Jossey-Bass.
- Jacobs, J. A. and Frank. F. Furstenburg. 1986. Changing Places: Conjugal Careers and Women's Marital Mobility. *Social Forces*, 64: 714-732.
- Kim, Rebecca Y. 2000. Factors Associated with Employment Status of Parents Receiving Temporary Assistance for Needy Families. *Social Work Research* 24(4):211-222.

- Lichter, Daniel T., Christie D. Bateson, and J. Brian Brown. 2004. Welfare Reform and Marriage Promotion: The Marital Expectations and Desires of Single and Cohabiting Mothers. *Social Service Review*, 78: 2-25.
- Loeb, Susanna, and Mary Corcoran. 2001. Welfare, Work Experience, and Economic Self-Sufficiency. *Journal of Policy Analysis and Management* 20(1):1-20.
- Long, S. K., K. S. Nightingale, and D. A. Wissoker. 1994. *The Evaluation of the Washington State Family Independence Program*. (Urban Institute Report 94-1). Washington, DC: Urban Institute.
- McLanahan, Sara, Irwin Garfinkel, and Ronald Mincy. 2001. Fragile Families, Welfare Reform and Marriage. Brookings Institution Policy Brief No. 10. Washington, DC: Brookings Institution.
- Miller, C., V. Knox, L. A. Gennetian, M. Dodoo, J. Hunter, and C. Redcross. 2000. *Reforming Welfare and Rewarding Work: Final Report on the Minnesota Family Investment Program*. New York: Manpower Demonstration Research Corporation.
- Mincey, Ronald B., Shoshana Grossbard, and Chien-Chung Huang. 2005. An Economic Analysis of Co-Parenting Choices: Single Parent, Visiting Father, Cohabitation, Marriage. Unpublished manuscript dated April 11, 2005.
- Moffitt, Robert A. 2003. The Temporary Assistance for Needy Families Program. Pp. 291-363 in *Means-Tested Transfer Programs in the United States*, edited by Robert A. Moffitt. The University of Chicago Press.
- Moffitt, Robert A. and J. Roff. 2000. The Diversity of Welfare Leavers: The Three City Study. Baltimore, MD: Johns Hopkins University (and background working paper).
- Murray, Kasia O'Neill and Wendell E. Primus. 2005. Recent Data Trends Show Welfare Reform to Be a Mixed Success: Significant Policy Changes Should Accompany Reauthorization. *Review of Policy Research*, 22: 301-324.
- Nam, Yunju. 2005. The Roles of Employment Barriers in Welfare Exits and Reentries after Welfare Reform: Event History Analyses. *Social Service Review*, 79: 268-293.
- Ooms, Theodora, Stacey Bouchet, and Mary Parke. 2004. *Beyond marriage Licenses: Efforts in States to Strengthen marriage and Two-Parent Families*. Washington, DC: Center for Law and Social Policy.
- Oppenheimer, V. K. 1997. Women's Employment and the Gain to Marriage. *Annual Review of Sociology*, 23:431-453.
- Pavetti, LaDonna, and Dan Bloom. 2001. State Sanctions and Time Limits. Pp. 245-269 in *The New World of Welfare*, edited by Rebecca M. Blank, and Ron Haskins. Brookings Institution Press.
- Rank, Mark R., and Thomas A. Hirschl. 2002. Welfare Use as a Life Course Event: Toward a New Understanding of the U.S. Safety Net. *Social Work* 47(3):237-248.
- Reichman, Nancy E., Julien O. Teitler, and Marah A. Curtis. 2005. TANF Sanctioning and Hardship. *Social Science Review*, 79: 215-236.
- Rodgers-Dillon, Robin and Lynne Haney. 2005. Minimizing Vulnerability: Selective Interdependencies after Welfare Reform. *Qualitative Sociology*, 28: 235-254.
- Rowe, Gretchen and Linda Giannarelli. 2006. Getting On, Staying On, and Getting Off Welfare: The Complexity of State-by-State Policy Choices. New Federalism Issues and Options for States, Series A, No. A-70 (July). Washington, DC: The Urban Institute.
- Sandefur, Gary D., and Steven T. Cook. 1998. Permanent Exits from Public Assistance: The Impact of Duration, Family, and Work. *Social Forces* 77(2):763-787.

- Scrivener, S., R. Hendra, C. Redcross, D. Bloom, C. Michalopoulos, and J. Walter. 2002. *WRP: Final Report on Vermont's Welfare Restructuring Project*. New York: Manpower Demonstration Research Corporation.
- Sweeney, M. 2002. Two Decades of Family Change: The Shifting Economic Foundations of Marriage. *American Sociological Review*, 67: 132-147.
- Teitler, Julien O., Nancy E. Reichman, Lenna Nepomnyaschy, and Irwin Garfinkel 2005. Welfare Participation and Marriage. Presented at the 2005 Fall Research Conference of the Association for Public Policy and Management, Washington, DC, November.
- Tucker, Melinda B. and C. Mitchell-Kernan. 1995. *The decline in marriage among African Americans*. New York: Russell Sage Foundation.
- Zedlewski, Sheila R., and Pamela Loprest. 2001. Will TANF Work for the Most Disadvantaged Families? Pp. 311-334 in *The New World of Welfare*, edited by Rebecca M. Blank, and Ron Haskins. Brookings Institution Press.
- Zeigler, Jenifer. 2004. Implementing Welfare Reform, A State Report Card. in *Policy Analysis*, No. 529 (October 19). Cato Institute.

Table 1 – Means and Weighted Frequencies and Operational Definitions of Variables
(*n* = 79,610 person-months)

State Welfare Rules	% or mean	Operational Definition
Sanctions	28.95	Indicates the worst-case sanction that the state would employ. States that impose ineligibility for a specific period of time, until compliance, or for life are coded as a 1. States that are more lenient and impose only a partial loss of benefits are coded as a 0.
Work-related activities requirements	6.47	A summary score of each state's five activities requirements rules. Each rule coded as 0 if only work or only school activities are allowed, 1 if work and school activities are allowed, and 2 if a wide variety of activities including community service or child care are allowed or if the state has no activities requirement.
No time limit extensions	11.58	The measure of time limits captures how the extension policy is implemented in each state. States that do not allow any extensions are the most stringent and are coded as 1. States that do not have time limits or implement extensions based on specific rules or on a case-by-case basis are the most lenient and are coded as 0.
Low benefits Medium benefits High benefits	13.14 47.54 39.32	The maximum benefit level is calculated as the maximum dollar benefit that a family of four with no reported income is eligible to receive in each month. Values were put into standardized scores: Scores of less than -1 are considered low benefit states and greater than 1 are high benefit states. Scores between -1 and 1 (medium scores) are the reference category.
Two-parent family eligibility rules stringency	0.32	Eligibility of two-parent families is a factor-based score based on three indicators coded from the Welfare Rules Database, as described in the text. This index score ranges from -.73 to 1.55 and has an alpha reliability of .81.
Low earned income disregards	58.91	Earned income disregards measure the maximum amount of income that a family of 4 can disregard over a 2-year period of time assuming that welfare participation is continuous during the period, the unit head works at least 40 hours a week continuously during the period, and that earned income is equal to \$978 per month. Values were put into standardized scores: Scores less than 0 are considered low earned income disregard states and are coded as 1. Scores greater than 0 are high earned income disregard states and coded as 0.
State Economic Indicators		
Female unemployment rate	5.45	This value is the female unemployment rate in each state by year expressed as a percentage.
Individual and Family Characteristics		
White Black Latino Other	30.05 37.64 25.32 6.99	Race of the respondent. White is the reference category.
Less than high school High school Some college	49.28 42.26 8.46	Respondent's highest level of educational attainment. High school is the reference category.

Low income	36.18	Average incomes of respondent's family that are less than 50 percent of the poverty level are low income and greater than 200 percent are high income. Average incomes between 51 and 200 percent of the poverty level (medium income) are the reference category.
Medium income	51.18	
High income	12.64	
Married	19.48	Indicates marital status, lagged 8 months.
Cohabiting	4.64	
Single	76.47	
Began marriage	0.86	Indicates change in marital status in last 8 months.
Became single	1.92	
Began cohabitation	0.24	
Number of own children	1.62	Indicates the number of the respondent's own children under age 18 in the family
Under age 25	35.02	Age of respondent. Respondents age 25 and over serve as the reference group.
Disabled	21.95	Indicates whether respondent self-reported having a physical, mental, or other disability that limited the kind or amount of work she could perform.
Interstate move	0.13	Indicates whether respondent moved across state borders.
Intrastate move	1.11	Indicates whether respondent moved within state borders.
Months of employment	5.62	Number of months the respondent has worked since beginning of the survey panel.
Months of TANF receipt	13.03	Number of months respondent's family has received TANF since beginning of survey panel
Dependent Variable		
TANF	90.78	Respondents were categorized as TANF recipients if their total primary family income from public assistance payments in the form of TANF was a non-missing, nonzero dollar amount, whether or not she reported having a job. To be considered working, the respondent must have answered "yes" to the question, "Did you have at least one job (that is, a job for an employer, a business, or some other work arrangement) during the reference period or interview month?" If the family received no public assistance payments and the respondent did not report working during the month, the respondent was neither working nor receiving TANF that month.
Work only	3.27	
Neither work nor TANF	2.95	
Attrition	1.76	
Right censored	1.43	

Table 2 – Odds Ratios from Multinomial Logistic Regression Models of Transition from TANF to Work without TANF (*n*= 79,610 person-months)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Union Status (Reference=Single)						
Began marriage within last 8 months	1.89**			1.62**	1.66**	1.49**
Became single within last 8 months	1.42**			1.11	1.08	1.10
Began cohabitation within last 8 months	1.06			0.74	0.73	0.66
Married	1.11			0.89	0.89	0.87
Cohabiting	1.33*			1.37**	1.34**	1.38**
Personal Characteristics						
White		-		-	-	-
Black		0.77**		0.77**	0.75**	0.75**
Latino		0.86		0.86	0.87	0.87
Other		0.70*		0.71*	0.70*	0.70*
Less than high school		0.59**		0.60**	0.59**	0.59**
High school		-		-	-	-
Some college		1.08		1.07	1.07	1.07
Low income		0.51**		0.51**	0.50**	0.50**
Medium income		-		-	-	-
High income		1.19*		1.21	1.21*	1.22*
Number of own children		1.03		1.03	1.04	1.03
Individual TANF		1.23**		1.19**	1.20**	1.20**
Age Under 25		1.15		1.11	1.12	1.12
Disabled		0.37**		0.37**	0.37**	0.37**
Interstate mover		0.77**		0.76*	0.77	0.80*
Intrastate mover		0.65		0.65	0.67	0.67
Months of employment		1.04**		1.04**	1.04**	1.04**
Months of TANF		0.98**		0.98**	0.98**	0.98**
State Welfare Policy						
Two parent family eligibility rules			0.92*		0.95**	0.93**
Sanctions			0.99		0.90	0.90
Work activity requirements			0.96		0.96	0.96
No time limit extensions			1.14*		1.24**	1.25**
Low benefits			0.94		1.12	1.12
Medium benefits			-		-	-
High benefits			1.04		0.94	0.94
Low earned income disregards			1.01		1.13**	1.13*
State Economic Indicator						
Female unemployment rate			0.90**		0.94**	0.94**
Interaction Terms						
Became married*Two-parent rules						1.24
Became single*Two-parent rules						0.96
Began cohabitation*Two-parent rules						3.43
Married*Two-parent rules						1.11**
Cohabiting*Two-parent rules						0.96
Wald Chi-square - overall model						
Wald chi-square - minus intercept	511,084	1,939,232	2,330,495	485,790	8,628,873	
df	2	2	2	2	2	2

p*<.05, *p*<.01

Table 3 – Odds Ratios from Multinomial Logistic Regression Models of Transition from TANF to Neither Work nor TANF1 ($n=79,610$ person-months)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Neither Vs. Work
Union Status (Reference=Single)							
Began marriage within last 8 months	1.08			1.17*	1.22*	1.01	0.68**
Became single within last 8 months	1.48*			1.87*	1.88*	1.91	1.75
Began cohabitation within last 8 months	0.42			0.42	0.43	0.00**	0.00**
Married	1.24			1.24	1.24	1.25	1.45**
Cohabiting	1.11			1.22	1.21	1.16	0.85
Personal Characteristics							
White		-		-	-	-	-
Black		0.87		0.92	0.87	0.88	1.18
Latino		0.93		0.94	0.92	0.92	1.06
Other		0.90		0.89	0.88	0.90	1.28*
Less than high school		1.17*		1.17*	1.14*	1.15*	1.94**
High school		-		-	-	-	-
Some college		0.96		0.98	0.98	0.98	0.91
Low income		0.92		0.94	0.93	0.93	1.86**
Medium income		-		-	-	-	-
High income		1.20*		1.17	1.16	1.16	0.95
Number of own children		0.94		0.94	0.94	0.94	0.91**
Individual TANF		0.72*		0.71*	0.71*	0.72*	0.60*
Age Under 25		1.11**		1.16**	1.16**	1.16**	1.03
Disabled		1.29*		1.29*	1.28*	1.28*	3.42**
Interstate mover		0.57		0.54	0.55	0.54	0.68
Intrastate mover		0.53**		0.54**	0.55**	0.55**	0.82
Months of employment		0.95**		0.95**	0.95**	0.95**	0.91**
Months of TANF		1.00		1.00	1.00	1.00	1.02
State Welfare Policy							
Two parent family eligibility rules			0.89*		0.85*	0.86**	0.93**
Sanctions			1.03		1.07	1.06	1.18
Work activity requirements			0.99		0.99	0.99	1.03
No time limit extensions			1.10**		1.16**	1.15**	0.93**
Low benefits			1.33**		1.34**	1.33**	1.19
Medium benefits			-		-	-	-
High benefits			1.05		1.07	1.06	1.12
Low earned income disregards			1.24		1.20*	1.20*	1.07
State Economic Indicator							
Female unemployment rate			0.95*		0.94*	0.94*	0.99
Interaction Term							
Became married*Two-parent rules						1.53**	1.23
Became single*Two-parent rules						0.92	0.96
Began cohabitation*Two-parent rules						0.00**	0.00**
Married*Two-parent rules						0.91	0.82*
Cohabiting*Two-parent rules						1.17	1.22
Wald Chi-square - overall model							
		1,939,23	2,330,49		8,628,87		363,937
Wald chi-square - minus intercept							
	511,084	467,345	470,46	485,790			324,067
df							
	2	2	2	2	2	2	2

* $p<.05$, ** $p<.01$

1 All models control for state fixed effects (CA, CT, FL, IL, MD, MI, NC, NJ, NY, OH, PA, TX, and WI), the episode number, and panel.

**Appendix. Multinomial Logistic Regression Discrete-Time Event History Models
Estimating Policy Effects on Competing Risk Transitions to Marriage or to Cohabitation
among Single TANF Participants ($n = 104,082$ person-months).**

Table A.1. Odds Ratios for the Transition to Marriage

	Model 1	Model 2	Model 3
Personal Characteristics			
White (reference)	-		-
Black	0.30**		0.30**
Latino	0.57*		0.59**
Other	0.59		0.60
Less than high school	0.68		0.66*
High school (reference)	-		-
Some college	1.03		1.02
Low income	1.28**		1.27**
Medium income (reference)	-		-
High income	1.00		1.01
Number of own children	1.13		1.13
Individual TANF	1.02		1.00
Age under 25	1.07		1.08
Disabled	1.02		1.04
Interstate mover	0.00**		0.00**
Intrastate mover	4.40**		4.27**
Months of work	1.02*		1.03*
Months of TANF	0.98		0.98
State Welfare Policy			
Sanction		0.77	0.75
Work activity requirements		1.02	1.01
No time limit extensions		0.65**	0.73*
Low benefits		0.86**	1.08
Medium benefits (reference)		-	-
High benefits		0.84	0.74*
Stringency of two parent rules		1.10	1.06
Low earned income disregards		1.31**	1.41**
State Economic Indicator			
Female unemployment rate		1.04**	1.05

* $p < .05$, ** $p < .01$

Table A.2. Odds Ratios for Transition to Cohabitation.

	Model 1	Model 2	Model 3
Personal Characteristics			
White (reference)	-		-
Black	0.17*		0.18*
Latino	0.48*		0.48*
Other	0.53*		0.49
Less than high school	0.74*		0.74*
High school (reference)	-		-
Some college	0.94**		0.92*
Low income	0.94		0.94
Medium income (reference)	-		-
High income	0.56**		0.56**
Number of Own children	1.06		1.06
Individual TANF	1.32		1.26
Age Under 25	1.60*		1.60**
Disabled	1.18		1.18
Interstate mover	3.76*		3.76*
Intrastate mover	4.84**		4.79**
Months of work	1.02*		1.02**
Months of TANF	1.00		1.01
State Welfare Policy			
Sanction		0.65	0.68**
Work activity requirements		0.94*	0.93
No time limit extensions		0.77	0.85
Low benefits		0.67	0.95
Medium benefits (reference)		-	-
High benefits		1.30	1.10
Stringency of two parent rules		1.04	1.00
Low earned income disregards		1.16	1.25
State Economic Indicator			
Female unemployment rate		0.95	0.97

*p<.05, **p<.01

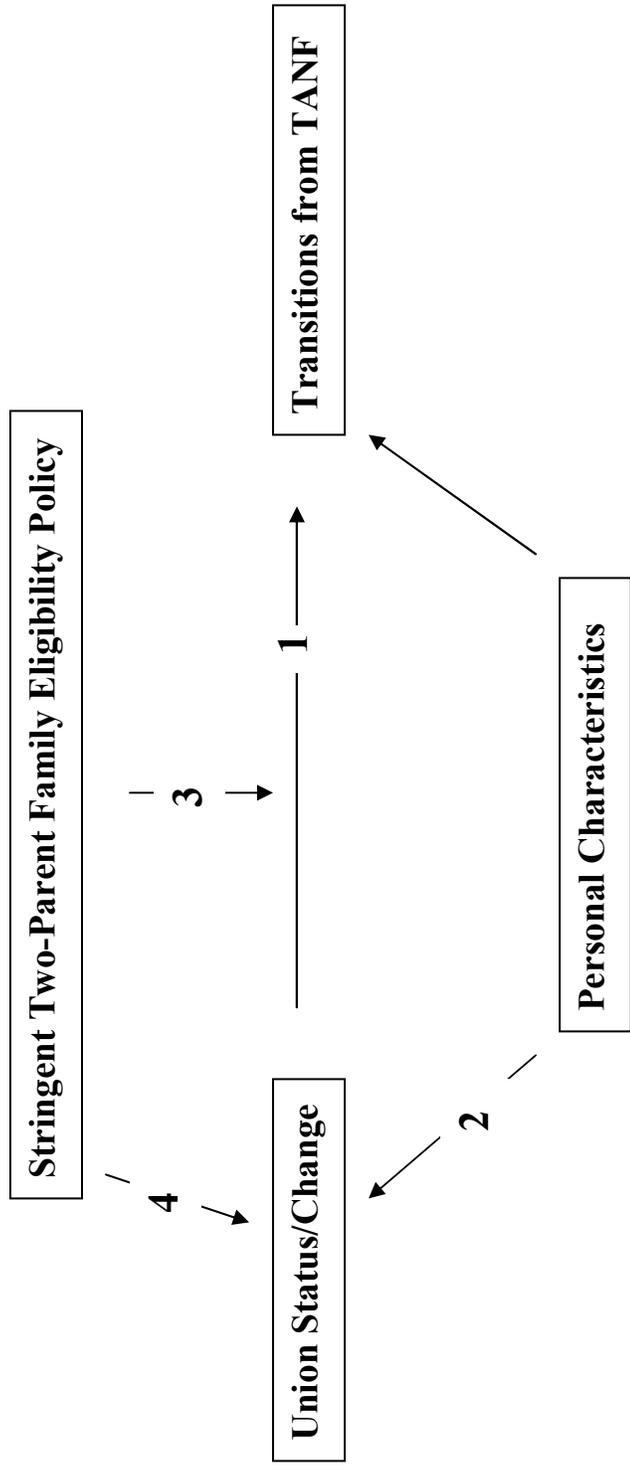


Figure 1. Hypothesized Paths of Influence on Transitions from TANF Corresponding to Numbered Research Questions.

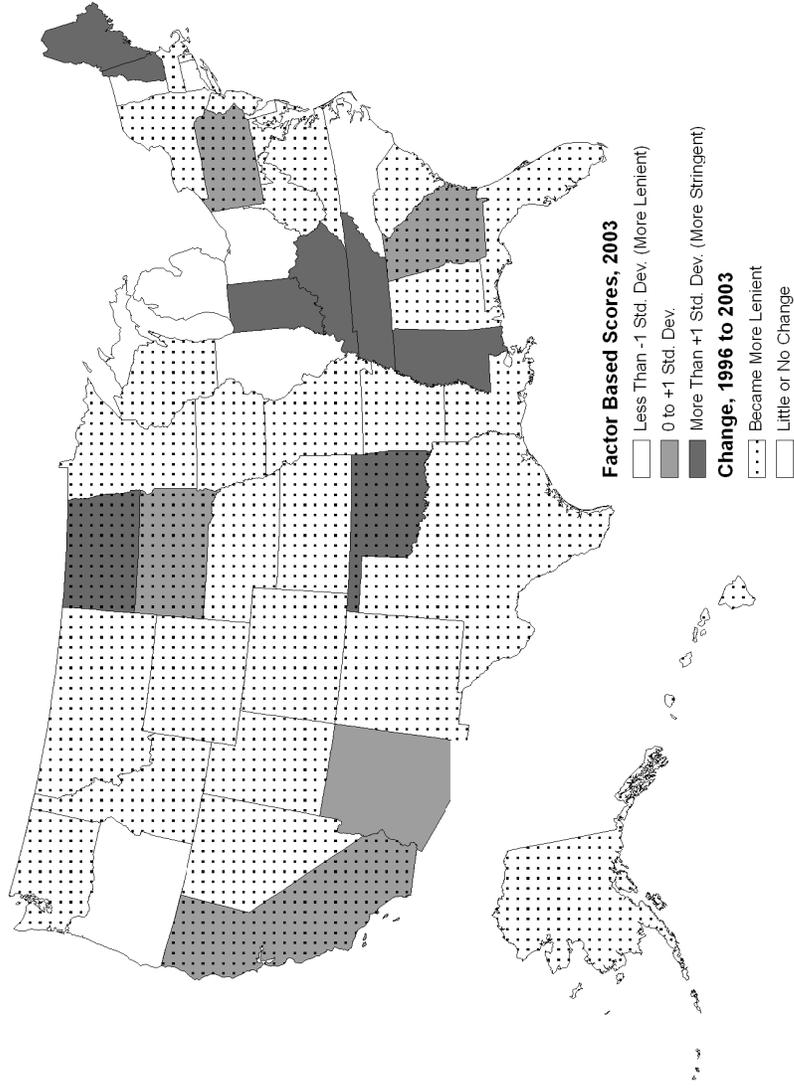


Figure 2. Stringency of Two-Parent Family Eligibility Rules Factor-Based Dimension across States in 2003 and 1996 to 2003 Change.