

Evaluating the Role of Marriage for Tennessee Welfare Recipients



A Report to the Tennessee Department of Human Services

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Executive Summary

The healthy marriage initiative proposed by the Bush Administration brought marriage to the forefront of the welfare debate. The initiative is built around the idea of providing the tools essential for healthy marriages to individuals who choose marriage for themselves. Marriage promotion was selected as a policy tool due to the large amount of evidence indicating that marriage reduces poverty and improves child well-being. However, by directly comparing poverty and child well-being statistics for children in married and unmarried households, this literature makes the critical assumption that the basic characteristics of the married and unmarried are the same. This assertion has been discounted by previous research and is not supported by our data.

This study briefly outlines the healthy marriage initiative and the empirical evidence on the effects of marriage. We then use four waves of longitudinal survey data to examine the effects of marriage on a variety of outcome measures. Specifically, we consider the effects of marriage on such things as employment, earnings, poverty, health status, and child well-being. Our rich survey data source allows us to account for different characteristics among married and unmarried respondents and to control for the simultaneity of marriage and observable outcomes. Our analysis considers active welfare participants as well as recent leavers.

Our key findings include the following:

- Those married in Waves 1 and 3 of the survey were significantly *less* likely to be employed in Wave 4 than those who were unmarried in both of these earlier waves.
- Switching marital status in either direction between Waves 1 and 3 led to a decrease in the number of hours worked per week in Wave 4 by 4 to 6 hours compared to unmarried respondents.
- Results for health status of the respondent are mixed. Ending a marriage between Waves 1 and 3 improved the health of some and diminished the health of others as of Wave 4.
- Respondents transitioning from married to unmarried between Waves 1 and 3 were more likely to be unable to pay the electric bill or to move in with others as of Wave 4 than their continuously unmarried counterparts.
- No evidence was found to suggest that marriage leads to improved poverty or child well-being outcomes for *Families First* participants and recent leavers.

1. Introduction

Marriage came to the forefront of the welfare policy debate when the Bush Administration proposed a new initiative to promote healthy marriage among welfare recipients. Linking what is traditionally a private decision with public assistance programs has spurred an ongoing debate among policy makers, researchers, and practitioners. Despite research efforts by those on all sides of the debate, many serious questions regarding the appropriateness and effectiveness of government involvement in marriage decisions remain in contention.

Supporters of the Administration's plan have suggested that marriage alleviates poverty, promotes health and longevity among adults, and improves child well-being. Given the array of benefits, the most crucial question for policy makers in considering marriage programs is why do many low-income individuals choose to remain single? Given that marriage is a choice made at the individual level, the effects of marriage must be considered in a framework that allows for those who voluntarily choose marriage to be fundamentally different from those who choose not to marry. For instance, an educated, healthy, working individual is likely to be a more attractive mate and, therefore, to be married. However, these same characteristics might also increase employment and earnings and reduce the probability of poverty. Simply comparing poverty rates and other outcomes of interest across married and unmarried populations provides misleading conclusions. To isolate the effects of marriage, other factors correlated with positive outcomes such as age and education must be taken into account.

The purpose of this document is to provide an objective discussion of the current debate surrounding marriage and welfare. Section 2 begins with a description of the Administration's healthy marriage plan. Questions regarding what legitimate role, if any, government has in marriage are also addressed. Section 3 briefly reviews the available empirical evidence on the effects of marriage, distinguishing between the establishment of a statistical *correlation* between marriage and a chosen measure of well-being and the much stronger conclusion of *causality*. In Section 4, data from the first four waves of the *Family Assistance Longitudinal Study (FALS)* are used to explore the possible effects of marriage on a variety of outcomes for Tennessee welfare recipients. The final section provides concluding remarks.

2. Strengthening Marriage: The Administration's Plan

The idea of government promotion of marriage has spurred a debate among those interested in welfare and its implementation. However, before proceeding to the evidence surrounding welfare and marriage, it is important to identify, to the extent possible, the specific nature of the Bush Administration proposal. In order to be consistent with the stated goals of the plan, marriage promotion must be qualified in two respects. First, the Administration is not advocating the general promotion of marriage but rather the establishment and maintenance of stable, healthy marriages.¹

Second, the plan is intended to promote marriage only for those who voluntarily choose to be united. The key policy instrument is education allowing for the improvement of existing marriages and the development of knowledge and skills necessary to decide whether marriage is appropriate. In the context of welfare programs, marriage education might be included as an allowable "work activity."² Programs currently offered through community and faith-based organizations focus on issues such as communication, parenthood, conflict management, pre-marital counseling, and divorce education.³

The U.S. Department of Health and Human Services Administration for Children and Families (ACF) lists healthy marriage, "helping couples who choose marriage for themselves to develop the skills and knowledge to form and sustain healthy marriages," as a key priority.⁴ The recent bill to reauthorize welfare reform, which has since stalled in Congress, outlines the legislative details of the healthy marriage initiative.⁵ Recently submitted legislation calls for competitive grants to be awarded for up to 50 percent of the cost of "implementing innovative programs to promote and support healthy, married, 2-parent families." Qualified expenses include advertising campaigns, high school education programs, marital and pre-marital education, divorce reduction, and efforts to reduce marriage disincentives in the welfare program. The legislation includes an appropriation of \$100 million per year for fiscal years 2003-2008.

Government involvement in the promotion of marriage raises several key questions. First, does the empirical evidence support a causal relationship between marriage and positive outcomes such as poverty reduction and child well-being? This issue is addressed in the following two sections by briefly reviewing the current literature and analyzing data for Tennessee welfare recipients and recent leavers.

¹ The Department of Health and Human Services website lists eight essential characteristics of a healthy marriage (Lewis and Gossett, 1999):

- Both partners participate in the definition of the relationship;
- There is a strong marital bond characterized by levels of both closeness and autonomy;
- The spouses are interested in each other's thoughts and feelings;
- The expression of feelings is encouraged;
- The inevitable conflicts that do occur do not escalate or lead to despair;
- Problem-solving skills are well developed;
- Most basic values are shared;
- The ability to deal with change and stress is well developed.

² Stanley, Markman, and Jenkins (2002).

³ Horn (2003).

⁴ See http://faq.acf.hhs.gov/cgi-bin/acfrightnow.cfg/php/enduser/std_alp.php?p_cat_lv1=119.

⁵ Personal Responsibility, Work, and Family Promotion Act of 2003 (H.R. 4 passed by the House and referred to Senate Committee).

More fundamental issues, not addressed in this policy brief, concern the appropriate role of government in a traditionally private issue. Most basically, is there any role for government in explicitly promoting marriage? Alternatively, should actions be taken to eliminate marriage disincentives in existing program rules? A good summary of the issues and arguments surrounding marriage promotion as part of the welfare system can be found in Brett (2003).⁶

The question of explicit government involvement is complicated by the fact that government policies implicitly affect marriage decisions in many ways. For instance, the “marriage penalty” in the Federal income tax, treatment of spousal income in welfare determination, and availability of benefits for spouses of military personnel treat married and unmarried individuals differently. State policies such as covenant marriage, mandatory divorce education, state funding for marriage support, and different divorce laws for parents also affect marital decisions.⁷

Another concern raised by welfare practitioners and women’s advocates is the possibility that an individual might feel pressure to alter their marital decisions or remain in abusive relationships. A recent ACF document states that evidence suggests that “marriage programs may be especially effective for troubled couples” (Horn, 2003). The study cites reductions in reports of spousal abuse (husband to wife) among male alcoholics from 48 to 16 percent. In practice there is likely to be a delicate balance between efforts to repair and strengthen unhealthy marriages and the need to end an abusive situation.

⁶ Also see Jones-DeWeever (2002) for arguments on the privacy of the marriage decision and alternatives for achieving poverty reduction and child well-being.

⁷ See Gardiner et al. (2002) for detailed information on policies by state.

3. Why Marriage?

Marriage has long been an implicit part of welfare programs especially in determining eligibility and benefit levels. The literature on marriage has taken two general approaches. The first is to identify the factors that influence the decision to marry and the second is to identify the effects of marriage on desirable outcomes. From the above it is immediately apparent that either approach must be undertaken with great caution as there is likely to be a serious simultaneity problem. To be precise, it is not evident whether program goals, such as employment, affect marriage rates or whether marriage affects employment outcomes (or some combination).

Expected effects of the TANF welfare reforms on marriage are unclear. The increased financial independence achieved through work might diminish the need for marriage in order to obtain financial security. On the other hand, working may improve a recipient's self-confidence, increasing their attractiveness to potential partners (thereby making marriage more likely). Empirical evidence on welfare and marriage decisions is mixed (Bitler, Gelbach, and Hoynes, 2002; Schoeni and Blank, 2000; Horvath and Peters, 2000; Gennetian and Knox, 2003.)

The alternative question of how marriage affects desirable outcomes is the focus of the following analysis. Outcomes include those targeted by welfare policies such as employment rates and earnings, as well as general health and child-well being measures. Previous research concerning marriage and low-income persons generally suffers from one fatal flaw; namely, the outcomes of interest for married individuals are directly compared with those for unmarried individuals without accounting for systematic differences in characteristics such as age and education.⁸

This treatment is particularly problematic for the two outcomes most often used to justify marriage promotion: poverty and child well-being. The characteristics that make an individual more attractive to a potential spouse are likely the same characteristics that make one a better parent and decrease the probability of poverty. This argument is supported by studies indicating that unmarried parents value marriage⁹ but are hesitant to enter into a financially unstable union.¹⁰ Essentially, the finding that marriage is correlated with positive outcomes might only indicate that both marriage and the positive outcomes are related to some other component, such as education or confidence.

A recent study using survey data from the Fragile Families and Child Wellbeing Study suggests that there might be significant differences in age, education, health, and wages between married and unmarried respondents (Sigle-Rushton and McLanahan, 2001). An examination of women's labor supply indicates that marriage currently plays a small role in the work decisions of women and factors such as education are a much more important determinant (Cohen and Bianchi, 1999). Evidence also suggests that women "at risk" of being in poverty and experiencing out-of-wedlock childbirth are substantially less likely to marry.¹¹

⁸ See Ooms (2002) for a comprehensive but concise presentation of the commonly cited statistics and arguments in favor of marriage promotion.

⁹ Carlson, McLanahan, and England (2001); Harknett and McLanahan (2001).

¹⁰ Edin (2000).

¹¹ Lichter, Graefe, and Brown (2003).

A 2002 report to the U.S. Department of Health and Human Services controls for different characteristics between married and unmarried persons. Results of the study consistently indicate that married mothers experience better financial outcomes than single mothers or those living with a partner or other adult (Lerman, 2002). Lerman makes use of panel data (National Longitudinal Survey of Youth—NLSY)¹² and multiple estimation techniques but there are several key limitations for applying his results to current policy initiatives aimed at welfare recipients. First, the characteristics of individuals included in the national probability sample used in the study are likely to be quite different than those of *Families First* participants. For instance, almost 30 percent of NLSY respondents were married, while only 21 percent of *Families First* survey respondents were married in 2001.

Second, individuals in the NLSY data were born between 1958 and 1965 making the youngest respondent 33 years old and the oldest 40 years old at the end of the survey in 1998. The average age of *Families First* recipients and recent leavers analyzed below is just over 29 years in 2001. It is probable that the social norms regarding marriage experienced by the two samples are significantly different.

Additional concerns include the fact that almost 30 percent of the NLSY observations have missing values for family status (married, cohabitation, single, etc.). This poses a significant problem if those with missing values differ systematically from those who reported marital status. Finally, economic status is only evaluated for women in the survey years following their first pregnancy.

The analyses conducted in the following section augment the current literature in several important ways. First, the data allow for an analysis targeted at the specific population of interest: *Families First* participants and recent leavers. Second, prior research and simple tabulations of our data indicate that there are significant differences between married and unmarried individuals. Multivariate analysis of longitudinal data allows us to control for these differences in isolating the effects of marriage. Further, the following presentation considers a wide array of employment, economic stability, and child well-being outcomes that are of potential interest to decision makers.

¹² Sponsored by the U.S. Department of Labor.

4. Marriage Effects for Current and Former Families First Participants

This section examines marriage and its effects among participants and recent leavers of the *Families First* program. We begin by summarizing the data and conducting tests for statistical differences among married and unmarried respondents in a preliminary effort to identify possible effects of marriage on employment outcomes, economic stability, health status, and child well-being. We then undertake multivariate analyses to isolate the effects of marriage that remain after controlling for other factors, such as age and education.

Data are drawn from the first four waves of the *Family Assistance Longitudinal Study*.¹³ This ongoing survey contains data for 2,596 individuals in the first wave, 1,979 in the second, 2,490 in the third, and 2,621 individuals in the fourth. The respondents include a large random sample of individuals who were on Tennessee's welfare program, *Families First*, as of January 2001, in addition to two over-samples (participants in Adult Basic Education and Family Services Counseling).¹⁴ As the proceeding analysis makes use of subgroups of the data, only the random sample is used in order to avoid inappropriate use of the existing sample weights. Using the random sample leaves maximum sample sizes of 1,935, 1,474, 1,810, and 1,919 for each of the four waves. In addition to data in the survey, county-level unemployment rates are used to control for local economic conditions.¹⁵

4.1 Marriage Trends

The survey, conducted roughly every six months, provides a unique and valuable opportunity to observe individual participants and their marital status over time. We simplify our analysis by combining the various marital status options into two groups: married and not married.¹⁶ Marriage statistics for the 1,119

¹³ The FALS is a collaborative effort of the Tennessee Department of Human Services, the Bureau of Business and Economic Research/Center for Manpower Studies at the University of Memphis, and the Social Work Office of Research and Public Service, the Center for Literacy Studies, and the Center for Business and Economic Research, all at the University of Tennessee.

¹⁴ It should be noted that *Families First* operates in Tennessee under a waiver from federal guidelines. Participants are required to be engaged in a work activity for 40 hours per week immediately upon entering the program, although exemptions are granted in certain cases as in most states. While this work requirement is more strict than national guidelines, Tennessee allows more of the required hours to be spent in education and training. Furthermore, Tennessee's array of support services is relatively generous. *Families First* participants may accumulate no more than 18 months of benefits in any given spell, and no more than 60 months over the course of their lifetime. For more details, see Center for Business and Economic Research (2000).

¹⁵ Unemployment for June of 2002 was collected from the Bureau of Labor Statistics Local Area Unemployment Statistics (LAUS). Population and land area data are from the U.S. Census Bureau, 2000 Census (<http://factfinder.census.gov/servlet/BasicFactsServlet>).

¹⁶ "Married" includes those indicating that they were currently married or married but separated. "Not married" includes those indicating that they were single (never married), divorced, engaged, cohabiting or widowed. In Waves 1 and 2 roughly 60 percent of respondents in the "married" category identify themselves as married but separated. This distinction is potentially important as those who are married but separated may differ systematically (for example in age or education) from those who identify themselves as married. An analysis categorizing the married but separated respondents into the "not married" category is a possible extension of the following work but is precluded by an inability to precisely identify married but separated respondents in Waves 3 and 4 (respondents were first asked whether they were currently married, only those responding "no" were then given the option of married but separated). This highlights the more general issue of self-reported marital status and whether respondents are categorizing themselves based on legal or social definitions of marriage. This distinction is particularly important in policy prescription. For example, increasing the level of commitment between couples may generate more positive outcomes and require different policy goals than a program targeted at increasing the number of legal marriages. The distinction between legal and social classification is not reliably addressed in the survey, particularly the latter two waves.

Table 1: Marriage Transitions

Wave 1	Wave 2	Wave 3	Wave 4	
Not Married N=884 79.00%	Not Married N=853 96.49%	Not Married N=805 94.37%	Not Married N=780 96.89%	
			Married N=25 3.11%	
		Married N=48 5.63%	Not Married N=9 18.75%	
			Married N=39 81.25%	
	Married N=31 3.51%	Not Married N=11 35.48%		Not Married N=11 100.00%
				Married N=0 0.00%
	Married N=20 64.52%	Not Married N=2 10.00%		
			Married N=18 90.00%	
Married N=235 21.00%	Not Married N=36 15.32%	Not Married N=22 61.11%	Not Married N=20 90.91%	
			Married N=2 9.09%	
		Married N=14 38.89%	Not Married N=4 28.57%	
			Married N=10 71.43%	
	Married N=199 84.68%	Not Married N=19 9.55%		Not Married N=12 63.16%
				Married N=7 36.84%
	Married N=180 90.45%	Not Married N=11 6.11%		
			Married N=169 93.89%	

Source: Authors' calculations using first 4 waves of FALS data.

individuals who participated in each of the four waves of the survey are presented in Table 1. As of Wave 1, 884 individuals (79 percent) were not married while 235 were married. Of those not married in Wave 1, 88 percent remained unmarried in each of the following waves, while 12 percent reported being married in at least one subsequent wave.

Of those married in Wave 1, 72 percent remained married in each of the three subsequent waves. The remaining 28 percent switched marital status at least once. In summary, Table 1 indicates that marital status (married vs. unmarried) does not change during the panel for 85 percent of the respondents. Specifically, most participants and recent leavers in the survey data were not married initially and remained unmarried thereafter. About 15 percent of our sample experienced at least one, and often multiple, changes in marital status over the two-year period.

To address the issue of whether the married and unmarried respondents in the FALS data differ in significant ways, Tables 1-6 present characteristics and outcomes by marital status. The two groups are profiled on the basis of demographics, health status, employment outcomes, economic stability, and child well-being. Throughout, statistics that are significantly different are indicated with bold type.¹⁷

4.2 Basic Demographics and Characteristics

Simple tabulations and summary statistics are presented in the following section. Although the results are suggestive, they should be viewed with caution as no attempt is made to control for other variables, such as age or education, when drawing comparisons between the married and not married.¹⁸ However, the results are interesting as they do not generally support the findings (that the married are consistently better-off than the not married) of earlier work employing the same analysis methods.

As shown in Table 2, married respondents were 4 years older on average. They were also more likely to be white and less likely to be black. Data in Table 3 reveal that married respondents were less likely to be living in one of the four major urban counties.¹⁹ The average number of kids under the age of eighteen was slightly higher for married respondents but the difference (2.50 for married and 2.35 for not married) was only significant in Wave 4.

Table 3 includes what is perhaps a surprising result when it comes to self-reported health status. Married individuals are more likely to report having fair or poor health, while those not married are more likely to be in the excellent category. The differences in health status are significant across all four waves.²⁰ Interestingly, there were no significant differences in education by marital status.

¹⁷ Significant results are merely suggestive, as the cause for the statistical difference may or may not be marital status.

¹⁸ Deprivation rules (e.g. a recent labor force attachment for married recipients), which determine eligibility, differ for married and single recipients and might also lead to systematic differences between the two groups.

¹⁹ Urban counties were defined as Davidson, Hamilton, Knox and Shelby.

²⁰ Results in this section are simple tabulations and health results do not control for other characteristics such as age. For instance, married individuals are generally older allowing for the possibility that the difference in health status is merely a function of age, not marital status.

Table 2: Basic Demographics as of FALS Wave 1

Variable	Married	Not Married	Total
Age (Average)	32.42	28.46	29.30
Race (Percent)			
Black	39.95	69.28	63.07
White	57.84	28.75	34.91
Hispanic	0.98	0.53	0.62
Other Race	1.23	1.38	1.35
Female (Percent)	93.87	98.49	97.51
Maximum Sample Size	408	1,520	1,928

Sample sizes differ by category and are available upon request.
 All differences between married and not married in Table 2 are statistically significant at the 1 percent level.

Table 3: Additional Demographic Characteristics by Marriage

Variable	Wave 1			Wave 2			Wave 3			Wave 4		
	Married	Not Married	Total									
Urban (Percent)	51.60	70.33	66.35	53.20	69.69	66.32	50.12	66.43	62.65	50.86	67.31	63.32
Number of Kids under 18	2.30	2.27	2.28	2.35	2.25	2.27	2.42	2.32	2.35	2.50	2.35	2.39
Health Status (Percent)												
Poor	5.91	3.76	4.22	11.92	4.73	6.21	13.37	6.78	8.31	9.68	7.24	7.83
Fair	13.55	9.11	10.05	21.19	15.05	16.31	31.26	24.68	26.20	30.75	23.91	25.57
Good	49.75	54.85	53.77	32.78	30.95	31.33	31.98	37.09	35.90	36.13	35.15	35.39
Very Good	17.49	15.12	15.62	20.20	25.19	24.16	16.47	18.76	18.23	16.56	18.75	18.22
Excellent	13.30	17.16	16.35	13.91	24.08	21.98	6.92	12.70	11.36	6.88	14.96	13.00
Education (Percent)												
Less than High School	35.32	33.27	33.70	35.91	38.88	38.27	34.61	35.51	35.30	33.55	34.87	34.55
High School	40.55	43.80	43.12	31.21	31.55	31.48	42.00	37.74	38.73	35.48	34.80	34.97
Post-Secondary	24.13	22.93	23.18	32.89	29.57	30.25	23.39	26.74	25.97	30.97	30.32	30.48
Maximum Sample Size	407	1,515	1,922	302	1,163	1,465	419	1,391	1,810	466	1,453	1,919

Bold entries are significantly different for married and unmarried respondents at the 5 percent level of significance.

Table 4: Employment, Income, and Poverty by Marriage

Variable	Wave 1			Wave 2			Wave 3			Wave 4		
	Married	Not Married	Total	Married	Not Married	Total	Married	Not Married	Total	Married	Not Married	Total
Employment Rate	35.63	36.03	35.95	37.42	42.18	41.20	36.28	44.24	42.40	40.34	42.95	42.31
Hours (Average per week)	31.55	31.60	31.59	33.65	32.83	32.98	33.85	33.55	33.61	35.15	34.28	34.48
Hourly Wage (Average)	6.96	6.93	6.94	7.71	7.30	7.38	7.66	7.67	7.67	8.12	7.94	7.98
Total Household Income (Yearly average)	7,562	6,857	7,007	8,871	7,773	7,999	12,083	9,088	9,782	13,024	9,650	10,469
Poverty Rate	89.68	88.84	89.02	86.38	86.59	86.54	76.61	79.63	78.93	74.89	78.60	77.70
Income as a Percent of the Poverty Line (Average)	44.86	43.14	43.51	51.27	47.76	48.48	64.15	54.85	57.03	70.56	58.01	61.11
Maximum Sample Size	408	1,520	1,928	302	1,166	1,468	419	1,390	1,809	466	1,453	1,919

See Table 3 for notes.

It is important to keep these basic differences in mind when assessing the relationships, if any, between marriage and outcomes of interest. For instance, one might expect employment rates and wages to differ by age. These differences would likely translate into differences in poverty rates and the severity of poverty experienced by a family. Merely comparing poverty rates across marital status without accounting for systematic differences in age and other observable characteristics would generate misleading conclusions about the effects of marriage.

4.3 Employment, Income, and Poverty

Table 4 includes information on employment, hours worked, hourly wage, household income, and the occurrence and severity of poverty. Results in Table 4 follow the general practice in the literature on marriage effects; direct comparisons are made between married and unmarried individuals. For this reason, significant differences must be treated with caution as variations in basic demographics are not taken into account.

Employment rates were higher for the not married in all four waves but the difference was only significant in the third wave (36 percent for the married and 44 percent for the not married). Hours and hourly wage are roughly the same for both groups as none of the differences are significant. This is not entirely unexpected, as some of the flexibility in choosing hours is eliminated by work requirements and more generally by the discontinuous nature of employment (i.e. only schedules of 30 or 40 hours a week may be offered).²¹ The fairly homogeneous skill set of respondents reduces the expected variation in wage.

Household income, as one might have expected, was significantly higher for the married in all four waves. Poverty rates and income as a percentage of official poverty lines are also included to put the household income differences in perspective. The data support the conclusion that married individuals have more household income. However, total household income provides only a small insight into the financial health of a household as married households generally have at least one additional person to provide for, namely the spouse.

Poverty lines are based on the number of children and adults in the household and provide a more accurate depiction of the household's financial situation. In our sample, there are no statistically significant differences in poverty rates between married and unmarried households.²² For both groups, nearly three-quarters had household incomes below the poverty line in each of the four waves. Poverty rates were as high as 89 percent in Wave 1.

We examine the severity of poverty by calculating household income as a percentage of the poverty line. Table 4 reveals that the severity of poverty is significantly correlated with marriage in the third and fourth waves of the survey. Married households had roughly 70 percent of the income needed to reach the

²¹ Variation in hours worked is greater for *Families First* leavers in Waves 1 and 3, but higher for participants with work requirements in Waves 2 and 4.

²² This is not entirely unexpected as the sample is fairly homogeneous; all respondents were either current or former *Families First* recipients.

poverty line in Wave 4 while unmarried households only had 58 percent of the necessary income.²³ To put this in perspective, the average married household would need a 43 percent increase in household income in order to get out of poverty, and the average unmarried household would need a 72 percent increase.

4.4 Economic Stability

Statistics presented in Table 5 address the question of economic stability in terms of food, housing, ability to pay basic bills, and car access. Surprisingly, married respondents were statistically more likely to have cut meals due to lack of money during the last three waves. As of Wave 4, 27 percent of married respondents had cut meals in the last six months compared to 20 percent of the not married. Between 10 and 16 percent of all respondents moved due to an inability to pay housing expenses. The likelihood of moving was not significantly different by marital status.

Respondents in Waves 3 and 4 were asked whether there was a time in the last six months when their electricity had been shut off or their phone disconnected because they were unable to pay the bill. Roughly 14 percent had experienced a disruption in electrical services and more than one third had their phone disconnected. Again, there were no statistically significant differences between married and unmarried respondents.

Car access was significantly higher for married individuals. Car access rates for the married ranged from 58 percent to 67 percent over the four survey waves. Access for the unmarried was lowest in Wave 2 at 44 percent and was only slightly more than half in Wave 4 at 51 percent. Of those with car access, just over 60 percent were insured in Waves 3 and 4. Insurance statistics did not differ by marital status.

4.5 Child Well-Being

One of the often-cited arguments in favor of marriage promotion is that children are better-off in married households.²⁴ Table 6 contains several indicators of child-well being including education outcomes, suspensions from school, and health status. The following data must be interpreted with caution for at least two reasons. First, survey responses are subject to the respondent's interpretation of the question, their environment, and other survey biases. For instance, one concern with interviews is that the participant may tailor responses in an effort to "please" the interviewer, possibly overstating good health or academic expectations.²⁵ When making relative comparisons between married and unmarried survey respondents, the survey bias only distorts the results to the extent that responses differ systematically by marital status.

Second, the results are not intended to answer the question of whether those children currently living with an unmarried parent would be better off if that parent were to become married. The data do address the differences between those who have chosen marriage (and were married at the time of the survey) and those who were not married. Given these caveats, it can be said that the results are a bit surprising and do not suggest that welfare children in married households are significantly better off than those in unmarried households.

²³ These calculations include households with incomes above the poverty line.

²⁴ See Horn (2003), McLanahan and Sandefur (1996), and Waite and Gallagher (2000).

²⁵ See Mitchell and Carson (1989, pages 235-240) for additional explanation and sources of bias in survey data.

Table 5: Economic Stability

Variable	Wave 1			Wave 2			Wave 3			Wave 4		
	Married	Not Married	Total									
Cut or Skipped Meals Due to a Shortage of Money	42.36	38.43	39.26	35.33	27.91	29.43	29.59	25.05	26.11	26.51	19.92	21.51
Could Not Afford Housing Expenses and Moved in with Others				12.97	12.38	12.50	15.75	13.84	14.29	10.28	10.59	10.51
Electricity Shut Off Because of Unpaid Bills*							13.09	14.68	14.30	14.75	13.33	13.69
Phone Disconnected Because of Unpaid Bills*							37.27	37.90	37.75	31.78	36.08	35.00
Access to a Car	59.31	44.26	47.45	57.95	43.73	46.66	61.34	45.93	49.50	66.67	51.20	54.95
Car Is Insured**							61.11	62.10	61.81	64.61	64.80	64.75
Maximum Sample Size	408	1,516	1,924	302	1,164	1,466	419	1,389	1,808	465	1,453	1,918

Entries are percentages. See Table 3 for additional notes.

* In the last six months.

** Only asked of those with car access.

Table 6: Child Well-Being

Variable	Wave 3			Wave 4		
	Married	Not Married	Total	Married	Not Married	Total
<i>Oldest*</i>						
Child will Graduate High School [†]	88.89	91.37	90.54	88.89	87.82	88.15
Child will Attend College [†]	65.93	81.07	75.77	62.35	72.60	69.62
Child is up-to-date on Shots ^{††}	98.31	98.25	98.26	100.00	98.98	99.15
Child has been Suspended in the Last 6 Months ^{†††}	7.79	10.91	10.07	13.16	15.99	15.23
Health Status						
Poor	0.25	1.03	0.85	1.56	0.99	1.12
Fair	9.18	8.13	8.37	9.58	8.17	8.51
Good	27.54	26.16	26.48	27.84	25.49	26.06
Very Good	30.77	28.16	28.76	28.95	26.62	27.18
Excellent	32.26	36.51	35.54	32.07	38.73	37.13
Maximum Sample Size	403	1,353	1,756	449	1,420	1,869
<i>Youngest*</i>						
Child will Graduate High School [†]	88.89	100.00	95.00	92.31	91.30	91.67
Child will Attend College [†]	77.78	90.00	84.21	63.64	76.19	71.88
Child is up-to-date on Shots ^{††}	91.28	93.89	93.30	90.21	94.91	93.74
Child has been Suspended in the Last 6 Months ^{†††}	9.32	5.41	6.63	13.56	12.82	13.02
Health Status						
Poor	0.64	1.75	1.46	0.87	1.81	1.57
Fair	8.86	8.74	8.77	9.33	7.82	8.21
Good	27.07	26.12	26.36	21.87	25.88	24.85
Very Good	27.07	27.43	27.34	27.11	26.78	26.87
Excellent	36.31	35.96	36.05	40.82	37.71	38.51
Maximum Sample Size	314	915	1,229	343	997	1,340

Entries are percentages. See Table 3 for additional notes.

*Children under the age of 18 to whom the respondent is a parent or guardian.

[†] Asked only if child was 15 or older.

^{††} Asked only if child was less than 5 years of age.

^{†††} Asked only if child was 5 or older.

Questions were asked about the oldest and youngest child in the household in Waves 3 and 4. For the oldest child, married survey respondents in each wave were significantly less likely to think that their child would attend college.²⁶ There were no significant differences in expectations of high school graduation. In Wave 3, children of married parents were less likely to have been suspended in the last six months. Health did not differ significantly by whether the child lived in a married household. For the youngest child, the only significant difference was that a child in an unmarried household was slightly more likely to be up-to-date on his or her shots.

The results in Tables 1-6 imply a great deal of caution in suggesting that marriage causes better or even different outcomes; the statistics presented merely *suggest* relationships. Basic characteristics such as age, health, and location differ significantly between married and unmarried respondents. Without taking these differences into account, it cannot be concluded that marriage is the determining factor for observed variations in outcomes. The numbers do indicate possible areas worthy of further investigation to establish that a causal relationship does or does not exist. Multivariate analysis is used to address this issue, and results are presented in Table 7 and discussed below.

4.6 Miscellaneous Statistics

Figure 1 details spousal employment and earnings for married respondents and cohabitation rates for unmarried respondents. Spousal participation in the labor market and earnings are central to the contention that married households are better off financially. Figure 1 indicates that just more than half of the spouses, 51.6 percent and 55.6 percent, worked as of Waves 3 and 4. Among those who worked, the average monthly earnings were just under \$1,100 in both waves.²⁷ Both employment and earnings increased slightly between Waves 3 and 4.

Another statistic cited by marriage proponents is that many individuals, although not married, are living with a marriageable partner at the time of child birth.²⁸ However, it has been claimed that cohabitation (living with an unmarried partner) does not provide the stability and child well-being benefits of marriage.²⁹ Cohabitation rates for survey respondents are presented in Figure 2. The low rates seem consistent with the most recent “Fragile Families” research suggesting that although many cohabiting parents are committed to each other prior to the birth of the child, relationships deteriorate quickly after the child’s birth (more than half are no longer in a committed relationship 2 to 5 months after the birth).³⁰ In Wave 1, 2.4 percent of single respondents were cohabiting. This number increased slightly during the remaining waves to just fewer than 3 percent by Wave 4. To the extent that these figures are accurate, they do not suggest that the sample of single but potentially marriageable respondents is particularly large.

²⁶ Differences in educational expectations and health status were not significant for children in households that switched marital status (from married to not married or visa versa) and those that did not; however, sample sizes were quite small.

²⁷ Earnings were reported by category (6 categories ranging from less than \$500 to more than \$2,400). In order to calculate average earnings, the middle value of each category was assigned to each observation within that category. Those in the top bracket of \$2,400 or more (only 4 percent of spouses) were assigned a value of \$2,400.

²⁸ Horn (2003).

²⁹ White House (2002).

³⁰ See Mincy et al. (2004) and Parke (2004).

Figure 1: Spouse's Employment and Earnings

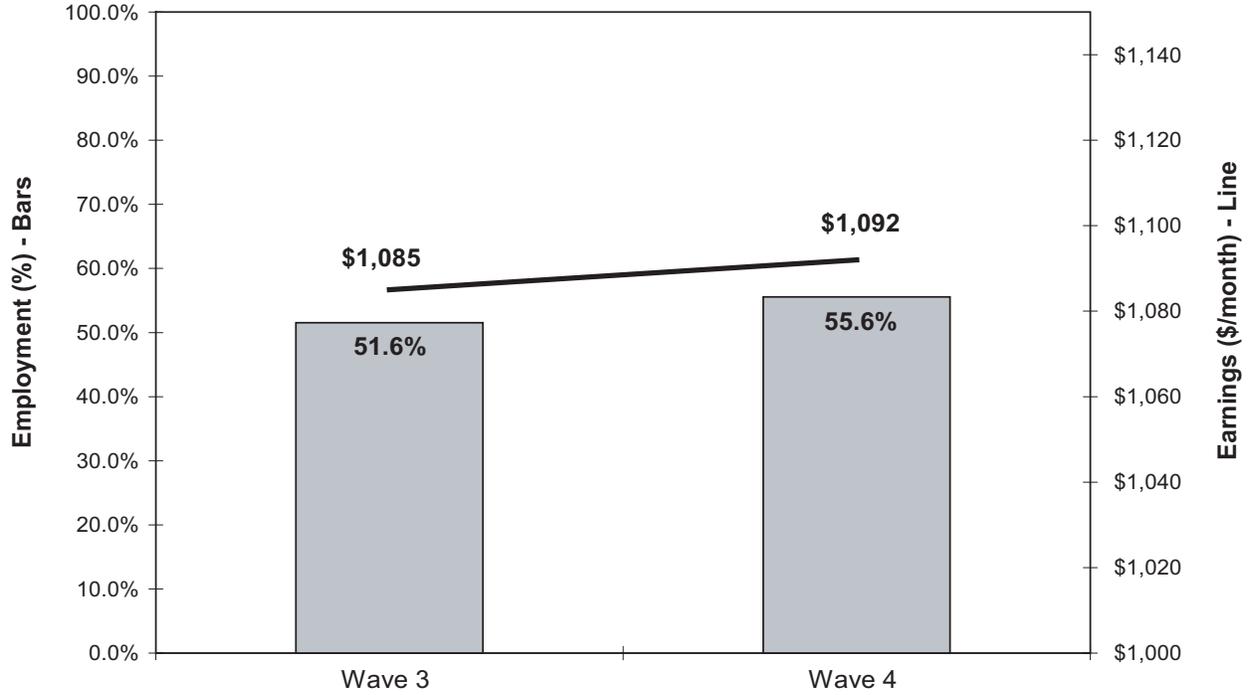
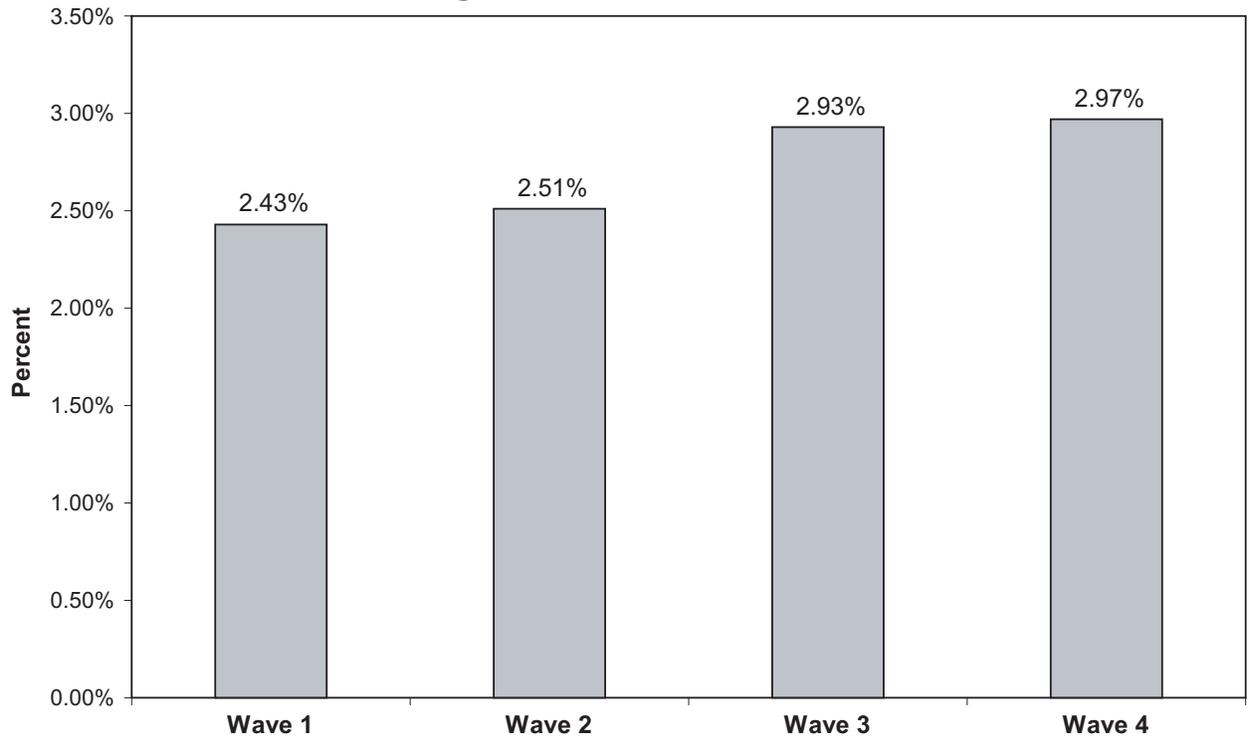


Figure 2: Cohabitation Rates



4.7 Multivariate Results

The following analysis provides a more reliable assessment of the effects of marriage on a variety of outcomes. Aside from controlling for other important variables such as age, race, and gender, the panel of survey data provides a solution to the potentially serious problem of simultaneity. To avoid results that are driven by simultaneous decisions and address the issue of causation, we use marital status from Waves 1 and 3 to explain outcomes observed in Wave 4.³¹ We combine marital status as of Waves 1 and 3 into three explanatory variables. The first indicates that an individual was married in *both* Waves 1 and 3, while the second and third indicate that a person was unmarried in Wave 1 but married in Wave 3 and visa versa. The reference category is individuals not married in both Waves 1 and 3. Again to avoid simultaneity, all other control variables (location, parent provided child care, work requirement, etc.) are defined as of Wave 1.³²

Employment and hours results from the multivariate analysis are presented in Table 7. Employment, a dichotomous outcome, was estimated using a probit model. Entries for the employment model are marginal effects calculated for the average respondent.³³ The hours model was estimated using a two-stage sample selection model, which estimates employment in the first stage and hours in the second.³⁴ Entries for hours are the coefficients associated with each explanatory variable.

Employment results indicate that those married in Waves 1 and 3 are more than 14 percentage points *less* likely to be employed in Wave 4 compared to those who were unmarried in both waves. This translates into a 32 percent reduction in the probability of being employed. Effects of switching marital status are insignificant. In other words, becoming married between Waves 1 and 3 does not increase the probability of employment in Wave 4, all else equal.

Unearned income³⁵ is significant in the employment model and implies that an increase of \$100 decreases the likelihood of employment by nearly 3 percentage points or about 6 percent. A one year increase in age increases the probability of employment but the effect diminishes with age. Education has the expected influence on employment; more education leads to increased employment rates. Perhaps surprisingly, employment increased with the number of children, as an additional child improved the probability of

³¹ The Wave 2 sample size was smaller than all other waves, so we avoid using Wave 2 data in order to increase the sample size for our analysis.

³² Due to data availability issues, Wave 3 unearned income and spousal income are used. Results were broadly similar when we used Wave 4 information for all explanatory variables.

³³ Marginal effects represent the effect on the probability of employment of changing each variable by one unit, holding all other variables at their mean values.

³⁴ This two-step method is applied because the variable of interest, hours of work, is only observed for those who are employed. It is likely that the decision to become employed is not random, so estimating our hours equation on the sample of employed individuals might be inappropriate. This method requires us to include an “identifying” variable in the first-stage employment equation that does not appear in the second-stage hours equation. We chose to use an indicator for car access for this purpose, as prior research indicates that car access is highly correlated with employment but not hours (Bruce and Richards, 2003).

³⁵ Unearned income is defined as total household income (including earnings, *Families First* benefits, money from friends and relatives, Supplemental Security Insurance, and unemployment benefits) less the earnings of the respondent and his or her spouse.

Table 7: Selected Multivariate Analysis Results

Variable	Outcomes as of Wave 4	
	Employed	Hours
Married Waves 1 & 3	-14.22 *	-1.58
Married in Wave, 1 Unmarried in Wave 3	7.94	-4.28 *
Unmarried in Wave 1, Married in Wave 3	5.60	-5.35 **
Unemployment Rate	1.55	-0.45
Unearned Income (Hundreds of Dollars per Month)	-2.85 ***	11.87
Spouse's Earnings (Hundreds of Dollars per Month)	0.20	0.80
White	5.47	-0.26
Hispanic	-21.90	9.75 **
Other Race	22.96	-8.97 *
Urban	4.18	-1.64
Female	21.45 *	-10.40 **
Age	2.48 *	0.38
Age Squared	-0.05 **	0.00
Less than High School	-12.04 ***	-1.90
More than High School	10.01 **	-2.50 *
Number of Kids	3.55 ***	0.17
Cash Assistance	-11.32 ***	-2.23 *
Parent Provides Child Care	-8.24 *	1.87
Work Requirement	1.41	-0.11
Constant		49.46 ***
Average Employment Rate	44.64	
Average Number of Hours per Week		34.02
Sample Size	1100	1100
Method of Estimation	Probit	Selection Model

Additional results available upon request from the authors.

* Significant at the 10 percent level. ** Significant at the 5 percent level. *** Significant at the 1 percent level. See text for additional notes.

working by 8 percent (3.55 percentage points). This may reflect the added financial burden from the additional child. Alternatively, it may reflect the notion that working parents can afford to have more children. Receiving cash assistance (*Families First*) or parent-provided child care both decrease employment rates by more than 15 percent.³⁶

Compared with respondents not married in both Waves 1 and 3, individuals who switched marital status (i.e., who either gained or lost a spouse) between Waves 1 and 3 worked between four and six fewer hours per week as of Wave 4. Those who were married in both Waves 1 and 3 did not work a statistically different number of hours in Wave 4 than those who were unmarried in both Waves 1 and 3.

Looking briefly at the other results in Table 7 we find that Hispanic respondents worked almost 10 more hours per week than their black counterparts (the reference category). Female respondents worked about 10 fewer hours per week than male respondents. The effects of education were not as consistent or large as the effects of gender; however, those with some education beyond high school worked 2.5 fewer hours than those with a high school education. Respondents on cash assistance as of Wave 1 worked about two fewer hours per week.

4.8 Other Outcomes of Interest

Similar models were estimated for other outcomes, including hourly wages, health, economic stability, and poverty. Marital status was not found to have uniformly significant effects on these outcomes, so we highlight only a few interesting results and suppress full results for brevity.³⁷ Results for respondent health were mixed. Individuals married in Wave 1 and unmarried in Wave 3 were more likely to be in fair and very good health (reference category is good) than those unmarried in both waves. These results seem to suggest that ending a marriage can be detrimental to the health of some but beneficial to others.³⁸

There was also some evidence to suggest that becoming single affects a household's economic stability. Individuals married in Wave 1 and unmarried in Wave 3 were about 15 percentage points more likely than those not married in either wave to have their electricity shut-off because they were unable to pay the bill. The same individuals were also more than 10 percentage points more likely to move in with others because they could not afford housing costs. Poverty rates, income as a percentage of the poverty line, and an array of child well-being indicators were not affected by marital status in our multivariate setting.

³⁶ Parent-provided child care indicates that one of the child's parents provided child care.

³⁷ Full results for all unreported specifications are available upon request.

³⁸ A simple tabulation of switches in marital and health status indicates that those who switched marital status between Waves 1 and 3 experienced more changes in health status over the same period. Future research efforts could be aimed at exploring this relationship in added detail.

5. Conclusions

The Bush Administration brought marriage to the forefront of the welfare debate with the healthy marriage initiative. The Administration's plan is built around the idea of providing the tools essential for healthy marriages to individuals who choose marriage for themselves. Marriage promotion was selected as a policy tool due to the large amount of evidence indicating that marriage reduces poverty and improves child well-being. However, by directly comparing poverty and child well-being statistics of the married and unmarried, this literature makes the critical assumption that the basic characteristics of the married and unmarried are the same. This assertion has been discounted by previous research and is not supported by our data.

This study contributes to the ongoing debate in several important ways. First, we allow for systematic differences in characteristics such as age and education between married and unmarried respondents. Second, a unique panel data source allows for a targeted analysis of Tennessee *Families First* participants and recent leavers. Finally, the survey data permit an analysis of the effects of marriage on a wide variety of outcomes including employment, poverty, health status, and child well-being.

Contrary to the existing literature, our results indicate that marital status generally does not improve employment, health, or child well-being outcomes. Our key findings include:

- Those married in Waves 1 and 3 were significantly *less* likely (32 percent) to be employed than their unmarried counterparts.
- Switching marital status in either direction led to a decrease in the number of hours worked per week by four to six hours compared to unmarried respondents.
- Results for health status of the respondent are mixed. Ending a marriage between Waves 1 and 3 was associated with improved health for some and worse health for others.
- Respondents transitioning from married to unmarried between Waves 1 and 3 were more likely to be unable to pay the electric bill or to move in with others than their continuously unmarried counterparts.
- No evidence was found to suggest that marriage leads to lower poverty rates or improved child well-being for *Families First* participants and recent leavers.

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