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Men's Work Efforts and the Transition to Fatherhood¹

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Abstract

In this paper we tested three hypotheses: (a) the transition to fatherhood is associated with an increase in work effort; (b) the positive association (if any) between the transition to fatherhood and work effort is greater for fathers who are married at the time of the transition; and (c) the association (if any) is greater for men who make the transition at younger ages. The data are from the National Longitudinal Survey of Youth 1979 Cohort. The transition to fatherhood was associated with an increase in work effort among young unmarried men, but not for married men. Among married men who were on-time fathers, work effort decreased. Among childless men, the marriage transition was associated with increased work effort.

Keywords

Fathers; Marriage; Work

Background

The subject of this article is the impact of fatherhood on men's work effort. Researchers have drawn the conceptual models they use to study fatherhood and work largely from two literatures: (a) scholarship on how becoming a husband affects labor supply, work effort, and wages (Golden 2008; Korenman and Neumark 1991; Ribar 2004); and (b) scholarship on how becoming a mother or acquiring other family roles (e.g. caretaker of elderly relatives) affects female labor supply (Golden 2008; Herbst and Barnow 2008; Lundberg and Rose 2002; Mammen et al. 2009; Molina and Montuenga 2009; Murasko 2008; Pagani and Marenzi 2008).

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The foundation of both these literatures is Becker's classic discussion of the division of labor within households (Becker 1981). Becker argued that in order to increase efficiency, household members—particularly spouses—*specialize* in either household work (including childrearing) or work in the labor force. The resulting hypothesis is that transitions; such as, marriage or parenthood, should lead one partner to increase their work effort and the other to increase their time in household production (Monna and Gauthier 2008; Weagley et al. 2007). A more general way of formulating these ideas is that household members will specialize wherever their comparative (relative to other household members) advantage lies whether it is market work, work in a home business (such as a farm), domestic chores or childrearing (Hall and MacDermid 2009; Olsen and Xiao 1996).

Several recent studies from the U.S. that examine household production (e.g. time spent in housework, work/family trade-offs) found that it is the transition to *parenthood*, rather than marriage which appears to induce specialization (Baxter et al. 2008; Maume 2006; Sanchez and Thomson 1997). For instance, married men whose wives drop out of the labor force when the oldest child is born increase their earnings after becoming fathers. But these increased earnings appear only among men whose wives exit the labor market. Among married men whose wives work continuously before and after the baby is born, there is a drop in earnings after fatherhood (Lundberg and Rose 2000). Thus, specialization does not characterize all American households.

In addition to these findings within the U. S. that the degree of specialization varies by individual characteristics, there is substantial cross-national variation in the extent to which couples or parental partners specialize after transitions. For example, there are clear international differences in rates of maternal employment. In Spanish two-parent families, fewer than half of the mothers are employed, while in the United Kingdom, more than two-thirds are working (Martin and Kats 2003). This cross-national variation in the association between family roles and work effort illuminates how cultural differences in family forms, structural differences in labor markets, and, perhaps of most interest, national differences in family/work policies result in systematically different decisions about specialization. For example, Gupta and her colleagues (2007) found that fatherhood in Denmark brought a higher wage premium than in the U. S. They attribute this difference to more generous Danish maternity leave policies (compared to the U. S.) which lead to more specialization among Danish couples.

The same authors hypothesized that the positive association between family roles and male wages will be weaker among cohabiting than married couples because couples in cohabiting relationships have lower expectations about relationship stability than couples in marriages. And indeed, they found evidence that the differences between cohabiting and married couples were smaller in Denmark, where cohabitations are often long-lasting and resemble marriage, than they are in the U. S. where cohabitations are more transitory and culturally are more distinct from marriages (Gupta et al. 2007).

In the U. S. we not only have parents whose co-residential relationship is informal, we also have many men for whom fatherhood occurs outside marriage or a committed co-residential partnership entirely. The specialization hypothesis, which is based on the idea of a division of labor within a household, may not operate on such men at all since they do not share a household with the mothers of their children. Unfortunately, past scholarship on work effort and fatherhood has responded to this great diversity among fathers by posing research questions only about specific groups of fathers. For example, some researchers focus on *non-custodial fathers* (Argys and Peters 2001; Argys et al. 2001; Freeman and Waldfogel 1998); others on *unmarried fathers* (Carlson et al. 2004); others on *custodial fathers* (Lin and Chen 2006); still others on *low income African American fathers* (Roy 2005). The majority of studies, however,

examined changes in hours worked, wages or labor supply among fathers who are *custodial and married* (Glauber 2008; Lundberg and Rose 2000; Nock 1998; Sanchez and Thomson 1997).

This focus on specific groups of fathers is unfortunate; the result is that we lack an understanding of whether there are differences in the magnitude or even direction of the association between the transition to parenthood and work effort between married, cohabiting, and single fathers. In this sense, the U. S. is a highly interesting case for which one might develop a more general framework that can accommodate the decisions of all men about work as they move through the process of family formation. Such a framework may be usefully employed in cross-national research to accommodate cross national differences in family forms, labor markets and public policy. In the next section, we develop such a framework.

Conceptual Model

Our theoretical orientation is the Life Course Perspective (Elder 1998) which has three implications. First, our premise is that people are simultaneously involved in several domains of life—for example sexual partnership, work, school, parenthood, caring for elderly loved ones, and community service (Elder 1998). Thus, *coordination* across these different domains—such as work and fatherhood is necessary. Second, men make decisions about work and fatherhood within different *social contexts*. For example men may become fathers while married or while unmarried. These contexts change the costs and benefits associated with decisions about work and fatherhood. Third, men's decisions about work and fatherhood are not based on stable characteristics but are instead part of a broader *developmental process* and are influenced by a range of time-varying circumstances. This implies that the association between fatherhood and work may vary for men who become fathers at different ages or points in the life course. The Nature of Linkages between Fatherhood, Work and Marriage

Joint decisions

At the individual level, decisions in different realms of life are often linked because people make joint decisions about them. A simple hypothesis is that *men increase their work effort in response to becoming a father* in order to meet the added expenses a child entails. It is possible, however, that joint decision-making about work and fatherhood means that men anticipate the added expenses of parenthood, and wait until they are working enough to support a child to become a father (Dribe and Stanfors 2009).

Social context

Decisions about work and fatherhood do not take place in a vacuum, but within specific social contexts (Hogan and Astone 1986; Shanahan 2000). These social contexts can intensify or reduce the association between work and fatherhood by changing the costs and benefits associated with the decision to become a father or to work at a certain level. Social contexts can provide an *organizational* basis for links, such as when employers facilitate parental work by providing on-site childcare. The links can also be *institutional*, such as when the government provides unique job opportunities for mothers who receive public assistance, but not for fathers. Finally, they can be *normative*, such as when there are culturally prescribed expectations that fathers provide financial support and men who fail to fulfill these expectations are informally stigmatized.

We are concerned here with how the social context of *marriage* affects the association between fatherhood and work effort. The simple hypothesis is that *fathers who are married to the mothers of their children are more likely to maintain or increase a high work effort than fathers who were not married to the mothers of their children*. Married fathers are far more likely to

share a household with their children than unmarried fathers (who may cohabit with the mother of their children or who may live in separate residences). Assuming that fathers are interested in maintaining their own consumption levels, married fathers may be more likely than unmarried fathers to increase their work effort because their own consumption will be directly impacted by the added expenses of children. Non-resident fathers, in contrast, will only have their consumption impacted if they contribute to the costs of raising their children.

Over the past several decades, however, these patterns may have changed. The percentage of unmarried fathers who live with their children has increased (Casper and Bianchi 2002), which should reduce the differences between married and unmarried fathers. In addition, the institutional context unmarried men face in the U.S. in terms of their legal obligation to support their children is more stringent now than in the past (Garfinkel et al. 1998). One of the explicit, intended consequences of this shift in child support policy over time in the U.S. was to increase fathers' work effort if it was necessary to enable them to support their children¹. There was also hope that increasing the stringency of child support would lead to a reduction in non-marital fertility among men who could not afford to support children (Hao et al. 2007). This selective reduction in non-marital fertility would, in turn, lead to a larger percentage of unmarried fathers being in a position to support their children.

In sum, although there are reasons to hypothesize that the link between fatherhood and work is stronger among married than unmarried men, there are also reasons why this difference might have eroded substantially over time in the U. S. It is likely that: (a) the large percentage of unmarried fathers who share a household with their children and their mothers now; (b) the increased normative pressure on unmarried men to support their children; and (c) the increased stringency of child support policy will render the differences between married and unmarried fathers small or non-existent for recent cohorts.

Age at fatherhood

The Life Course Perspective calls attention to the fact that people who experience the same event (for example becoming a father) at different ages, may have systematically different experiences of that life event. There is a large literature on early childbearing among women that considers *off-time* and *on-time* childbearing in exactly this context (Astone and Upchurch 1994). There is a smaller, analogous literature on the timing of fatherhood (Bachrach and Sonenstein 1998; Cooney et al. 1993; Eggebeen and Litcher 1991).

If one assumes that the transition to fatherhood does have a positive association with work effort, it is possible that the *positive association is larger for men who become fathers at a younger age*. Older men are more likely than younger men to have settled into a pattern of full time work before becoming fathers, while younger men are less likely to be working at full capacity at the time of fatherhood, if for example, they are still students (Martinez and Day 1999). In addition, the younger the man, the more likely the transition to fatherhood is unplanned, making it less likely that an increase in work effort is taken in anticipation of fatherhood.

Following from this conceptual model, in our analysis we tested three broad hypotheses about work and fatherhood: (a) the transition to fatherhood is associated with an increase in work effort; (b) the positive association (if any) between the transition to fatherhood and work effort is greater for fathers who are married at the time of the transition; and (c) the association (if any) is greater for men who make the transition at younger ages.

¹Some feared that an unintended consequence of the policy change would be a decrease in men's work hours, given one of the major forms that increased stringency took was the attachment of wages. This does not appear to have happened (Freeman and Waldfogel 1998).

Data and Methods

Data

The data for our study were taken from the National Longitudinal Survey of Youth: 1979 Cohort (NLSY79). The NLSY79 are part of the National Longitudinal Survey program of the Bureau of Labor Statistics in the United States. The purpose of the program, as stated on the NLS website (National Longitudinal Surveys 2008) is as follows:

The National Longitudinal Surveys (NLS) are a set of surveys designed to gather information at multiple points in time on the labor market activities and other significant life events of several groups of men and women. For more than 3 decades, NLS data have served as an important tool for economists, sociologists, and other researchers.

The NLSY79 is a nationally representative sample of young people who were aged 14 through 21 in 1979 and who were interviewed annually until 1992 and biennially since then. A full description of the NLSY79 can be found in the Users' Guide (Center for Human Resources Research 2008). The NLSY79 comprises three independent probability samples: (a) a cross-sectional sample representative of the non-institutionalized civilian population of young people born from 1957 to 1964; (b) a sample of minority and low-income youth born at the same time; and (c) a sample of young people of the same age serving in the military. In our analyses we used data exclusively from the first, nationally representative sample. We eliminated female respondents. This gave us an initial sample of 2800 men who were African American, European American or Latino.

Since we were interested in how the transition to fatherhood changes men's work effort, we focused our analysis on men who became fathers ($n=1926$). We further eliminated men who did not participate in the survey for at least five years between ages 18 and 34 (resulting $n=1921$) and eliminated one other case that did not have any valid measure of hours worked, giving us a final sample of 1920 fathers.

We wanted to examine work during the transition to adulthood, and we also wanted to ensure that our sample did not suffer from right censoring. Therefore, our primary analyses further limited the sample to men who became fathers before age 35, since, as we describe below, we will only be examining men's work lives from ages 18 to 34. Our final sample size in our primary analyses was 1775.

The unit of analysis for our study is the *person/quarter*. Each man contributes an observation for every quarter year he was observed from ages 18 and 34. We eliminated a small number of person-quarters where the outcome (hours worked) was missing. The total number of person-quarters we observed between ages 18 to 34 among men who became fathers before age 35 who had valid data for hours worked is 111,653.

Variables

Outcome variable—The outcome variable for our study is the median *number of hours worked in a month for a given quarter year*. The NLSY79 provides data on each respondent's labor force activity for each week of the calendar year prior to the interview, including the total number of hours worked at each job. We aggregated this weekly data to a measure of each man's median monthly work hours. Using the person-quarter file (described above) we created an outcome variable that gives each man's median monthly work hours for each quarter. Men who worked 40 hours per week for each week of the entire quarter received a score of 160 on this variable.

In Figure 1 we show a box and whiskers plot, excluding extreme values (i.e., over 240)², for the person quarters observed between age 18 and 34. We present two comparisons. The first compares all men to men who ever became fathers (including those who became fathers at 35 or older). The second comparison is among men who became fathers at different ages, since one of our central concerns was whether the association between the transition to fatherhood and work effort varies by the timing of fatherhood. We separated fathers into three groups: those who became fathers (a) before age 25; (b) between ages 25 and 29; and (c) between ages 30 and 34.

The figure shows that, for all groups, the median is approximately 160 hours or a value that indicates full time work and that there is very little variation across the five groups in the right tail of the distribution. The first comparison indicates that men who became fathers are distinguished from all men primarily in the left tail of the distribution. Among men who became fathers, there were fewer who worked substantially less than full-time. Within fathers, there are also differences in work effort by the age at which the fatherhood transition occurred. Working less than full-time was more common among men who became fathers before age 25 than it was for men becoming fathers at older ages. The distribution of hours worked is similar for men who become fathers from 25–29 and those who became fathers from 30–34).

Major predictor—The major predictor variable in our analysis is *family status* in a given quarter. For each person/quarter year, a man received a score on this variable corresponding to his family status during the last month of the quarter in question. An advantage of this procedure is that it allowed us to pick up work changes that immediately preceded an anticipated change in family status. Our predictor variable distinguishes among four statuses a man could have in a quarter: (a) unmarried and childless; (b) married and childless; (c) unmarried father³; and (d) married father. For spells after the transition to fatherhood, men remained in the same family status category regardless of subsequent marital transitions, since we were interested only in their marital status at the time of the birth (e.g., men who were coded as single dads might be married at later spells, but were not married when they made the transition to fatherhood).

Overall, 77.3% of fathers were married when their oldest child was born. As we describe below, we stratified our analysis by age at first fatherhood. The first stratum is men who became fathers early (before age 25, n=812) and among these 65.8% became fathers after marriage. The second stratum is men who became fathers on-time (between ages 25 and 29, n=602) among whom 85.5 became fathers after marriage, and the third stratum is men who became fathers late (over age 29, n=361) among whom 89.5 became fathers after marriage.

It is well known that men under-report fertility; particular births at young ages and outside marriage (Rendall et al. 1999). We assumed that there was some under-reporting in our data as well. It is possible, because of the prospective nature of the NLSY79, that there is somewhat less under-reporting than in other data, since men are reporting about each birth closer in time to when it occurred. Moreover, if men under-report births from dissolved partnerships more than from current partnerships, it is more likely, in a prospective study, that the partnership is still intact at the time of the report than in a retrospective birth history, thus additionally reducing under-reporting.

²In the analyses reported here we included the outliers but top coded them at 240 hours. We did several checks to see how robust our results were to the inclusion or exclusion of extreme values and report on these in the section on robustness checks.

³There were problems with measuring cohabitation in the NLSY79 and due to these problems we were not able to distinguish unmarried fathers who were cohabiting with the mothers of their children and those who were not.

Control variables—We included a number of control variables in our multivariate analysis. We include men of three *ethnic backgrounds* in our analysis: European Americans/other (non-Latino whites, Asian Americans, missing ethnicity), African Americans (non-Latino Blacks) and Latinos and controlled for ethnicity because it is known that the determinants of labor supply vary by ethnicity (Radey 2008). We also controlled for each man's score on the *Armed Forces Qualifying Test (AFQT)* which NLSY respondents took in 1979, educational attainment, and their *current or most recent hourly wage* as reported in the most recent interview. Descriptive statistics on the major predictor and the control variables are in Table 1. Since ethnicity and AFQT do not vary over time we present statistics for *individuals* in the first panel of the table. Educational attainment, family status, and wage rate do vary within persons over time, and we, therefore, present statistics on these for *person-quarters* in the second panel of Table 1. Table 1 contains statistics for five groups: (a) all men, (b) all fathers (including those who became fathers before age 35), and (c) the three groups differentiated by age at first birth. There is a substantial amount of missing data for educational attainment, the AFQT, and wages. For educational attainment (which was categorical) we included a category of missing. For AFQT we recoded missing values to the mean and included a dummy indicator variable. For missing values for wages for a quarter, we used an imputation procedure in which wages for quarters not missing were regressed on age, basic demographics and the median wage of the man for all quarters with valid data. Observations missing on wages were assigned the value of the predictor from regression.

Analysis

General approach—We used methods referred to as growth models by developmental psychologists (Burchinal and Appelbaum 1991; Burchinal et al. 1994; Burchinal et al. 1997), hierarchical linear models by sociologists (Bryk and Raudenbush 1992) and random effects models by economists (Behrman et al. 2002). The use of this kind of model is more appropriate when there is reason to believe that the predictor (in this case the transition to fatherhood) and the outcome (in this case work effort) are decisions that, to some extent, are taken jointly. Because these are models of intra-individual change, they reduce (but do not eliminate) the endogeneity.

Functional form—The outcome variable, hours worked, was censored because all men who did not work in a given quarter received a score of 0. The appropriate statistical model for a censored outcome is a tobit model (Tobin 1958). In addition, our observations are not independent because a single man contributed many observations to our study sample. Therefore, we estimated our models using the xttoit procedure in STATA which was designed for longitudinal analyses of censored outcomes.

The tobit coefficient may be decomposed into two useful parts (McDonald and Moffitt 1980). The first part is an estimate of the association between a predictor variable and the probability that, for a given observation, the outcome is not censored. In our case, this is the probability that a man works at all during a given quarter. The second term of the decomposition is an estimate of the association between the predictor and the magnitude of the outcome if not censored. In our case, it is an estimate of the association between a predictor and the number of hours a working man worked. The decomposition formula is a function of the percentage of total observations that are uncensored, which varies for the three age-at-first-fatherhood groups that we examined.

Robustness checks—In ten percent of the quarters, men reported working a median number of hours in a month that was equivalent to working 60 or more hours per week for the month. Although the observations that were outliers accounted for only 10% of the observations (i.e., person-quarters), we determined that over three quarters of the men contributed at least

one outlying observation. We re-ran the analyses including the outlying observations without top-coding as described previously. This robustness check suggested that the results we report in the next section (where outliers are top coded) are not affected by the outliers.

A disadvantage of using a tobit model is that one may only estimate a random effects model with standard software, not a fixed effects model (difference in difference model). We re-ran our final model specification using an OLS fixed effects model. The results were very similar, so we report the tobit estimates.

Results

In Table 2, we present the most important results of our regression analysis. The numbers in Table 2 are not tobit coefficients, but rather decompositions of the tobit coefficients into their two components. In the second, third and fourth columns of Table 2, we present the association between a man's family status and the probability that he is in the labor force in a given quarter. In the fifth, sixth and seventh columns, we present (for the three groups) the association between a man's family status and the number of hours he worked if he was working.

The first row of Table 2 shows the association between the transition to unmarried fatherhood and work effort. These results suggest that unmarried men worked more after making the transition to fatherhood than before, and this association was stronger among men who made the transition to fatherhood early, relative to unmarried childless men of the same age. Among unmarried men who become fathers before age 25, the transition to fatherhood was associated with a 5.8% increase in the probability of being in the labor force, and a 10.9 hour increase in the number of hours worked among the working. There was also a positive association between the transition to unmarried fatherhood and work effort among men who became fathers between 25 and 29, but it was smaller (the confidence intervals of the estimates did not overlap). The association disappeared for men who became fathers after age 30.

In the second row of Table 2 we present the association between the transition to fatherhood among married men and work effort. Among young and late fathers there was no association, and among men who became married fathers on-time there was a significant *decline* in work effort after fatherhood.

Although it was not the main focus of our paper, in the third row of Table 2 we present estimates of the association between getting married and work effort among childless men. Getting married was associated with an increase in the probability of working and hours worked among those working. Although this was true of all groups of fathers the association is larger, the younger a man became a father.

Discussion

To summarize our results, we found mixed support for the hypotheses. We found that some men increased their work effort after fatherhood as the first hypothesis predicted. The differences among men in the association between the transition to fatherhood and work bear directly on the second and third hypotheses. With respect to differences in this association by marital status, we found the opposite of what our second hypothesis predicted: that is, *only unmarried men increase their work effort*; married men do not. As we predicted in the third hypothesis, the transition to fatherhood was associated with a greater increase in work effort among unmarried men who became fathers at younger ages than unmarried men who became fathers at older ages. There was some age variation in the association between fatherhood and work effort among married men, but it was not the variation we hypothesized: Married men who become fathers in their late twenties work less after fatherhood than before, and this

negative association between fatherhood and work was not apparent among married men who became fathers earlier or later in life.

The results also showed that among childless men, marriage resulted in increased work effort. Thus, men increased their work effort when they begin to form their families, regardless of whether they began the family formation process with fatherhood or marriage. The only exception was men who became unmarried fathers after age 30, a relatively small group. Our findings that getting married or becoming a single father resulted in higher hours worked are consistent with the specialization hypothesis. They suggest, however, that recent scholars who argue that specialization occurs at parenthood—not marriage—may not be correct. Instead, the fact that we also observed an increase among *unmarried men when they became fathers* suggests that Becker's ideas about specialization ought to be stated more generally. When they *form a family*, men reallocate their time and devote more of it to work in the labor force. When men form their families by becoming an unmarried father, this reallocation might consist of men shifting their time from leisure or education to paid work. This shift from leisure/education to work may also characterize the reallocation process among men who form their families by getting married. For this group there is also the possibility, as the specialization hypothesis predicts, that it consists of wives taking on some of the household tasks men did for themselves before marriage.

A line of speculation about the differences we observed in the association between fatherhood and work by age at fatherhood concerns the intendedness of births and this issue bears directly on joint decision-making. It is reasonable to assume that younger men are more likely to have unplanned births than older men and unmarried men are more likely to have unplanned births than married men. One interpretation of our findings is that when the transition to fatherhood is planned, the timing of the transition is explicitly coordinated with decisions about work such that the process is more properly thought of as a unitary decision. In cases when the transition to fatherhood is unplanned, however, men do respond to the transition by increasing work effort.

We did also, however, find that some married men (those who became fathers in their late 20s) actually reduced their work effort at fatherhood. This suggests that these men, like so many women, were reallocating their time from paid work in the labor force to work at home taking care of children. We do not, however, see this pattern among men who became fathers early or late. One explanation is age differentials in wages. It could be that younger married men do not earn enough to be able to afford to reduce their work effort at all, while older married men make enough more than married men in their late twenties that purchasing child care is a better option. There may also be ceiling effects here; older married men may be working so many hours before fatherhood that they cannot work that much more.

In sum, our results extend our understanding of how the transition to fatherhood is embedded in men's work lives. They support the idea that, for many men, especially older, married men for whom decisions about family life are most likely conscious and deliberate, these decisions are so intertwined with decisions about work that they are best thought of as a unitary process. They also support the idea, that under other circumstances such as non-marital births or marital births to young men, some men do respond to the transition to fatherhood by working more in a pattern that is suggestive of separate decision making.

We believe that our results illustrate how our framework, which is more general than that usually employed by economists to examine men's work and family lives, may be usefully employed in a variety of national and structural contexts. In particular, our life course framework can be usefully employed to generate historically and culturally specific hypotheses

regarding how within or between group differences in the association between fatherhood and work will manifest, which can then be tested.

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Fig. 1.
Distribution of hours worked by Fatherhood Status and Age at Fatherhood.

Table 1

Univariate statistics for predictor and control variables. National Longitudinal Survey of Youth, 1979.

	All Men	All Fathers	Became father before age 25	Became father age 25 – 29	Became father age 30–34
	<i>By Person</i>				
<i>Ethnicity</i>	%	%	%	%	%
Latino	7.8	8.3	11.3	5.8	6.9
African American	12.4	12.8	19.8	8.1	7.2
European American/Other	79.8	78.9	68.8	86.1	85.9
<i>n of men</i>	2741	1920 ^a	812	602	361
<i>Armed Forces Qualifying Tests (AFQT)</i>					
Mean	49.4	48.7	37.1	53.1	60.8
Standard deviation	29.9	29.7	26.7	28.7	28.9
<i>n of men</i>	2590	1861 ^a	756	573	348
<i>Education</i>	%	%	%	%	%
Less than high school	17.2	18.1	27.6	12.8	10.4
High school degree	44.4	45.7	54.6	44.3	35.1
Some college	21.7	20.1	14.2	23.2	24.2
College degree or more	16.8	16.1	3.6	19.7	30.3
<i>n of person quarters</i>	164,003	116,966 ^a	48,890	36,974	22,342
<i>Family Status</i>					
Unmarried childless	46.1	32.3	11.8	35.6	55.7
Married childless	14.4	12.1	3.2	14.1	22.5
Unmarried father	11.1	15.6	30.3	7.8	2.4
Married father	28.5	40.0	54.6	42.6	19.5
<i>n of person-quarters</i>	169,788	120,733 ^a	50,436	38,233	22,984
<i>Natural Log of Current or Most Recent Wage</i>					
Mean	2.0	2.1	2.0	2.1	2.1
Standard Deviation	0.7	0.6	0.6	0.6	0.7
<i>n of person-quarters</i>	130,551	94,117	38,710	30,012	18,168

^a Note Includes men who became fathers after age 34 (n=145)

Table 2

Decomposition^a of Tobit Coefficients into Association between Family Transitions and the Probability of Working and the Number of Hours Worked Among those Working

Variables	Estimated increase in probability of working among those not working			Estimated increase in number of hours worked among those working		
	Became father before age 25	Became father age 25 – 29	Became father age 30 – 34	Became father before age 25	Became father age 25 – 29	Became father age 30 – 34
Transition to Unmarried						
Fatherhood from Unmarried						
Childless	5.8	1.4	ns	10.9	2.9	ns
Transition to Married						
Fatherhood from Married						
Childless ^b	ns	-2.1	ns	ns	-4.8	ns
Transition to Married						
Childless from Unmarried						
Childless	5.3	2.4	1.4	9.9	5.2	3.1
N	812	602	361	812	602	361

^aNote Estimates are decomposition of coefficients from tobit models that include controls for race, age, and education. Full tobit model presented in Appendix A1. Sample is restricted to men who became fathers before age 34. Separate tobit models were estimated for each age group.

^bNote These effects are based on tests of whether or not coefficients in the tobit model are significantly different from each other using the lincom command in STATA. See Table A1 for details.

Appendix Table A1

Results from the random tobit model of hours worked.

Variables	Young		On-Time		Late	
<i>Family status (unmarried childless omitted)</i>	Coeff	p	Coeff	p	Coeff	p
Married childless ^a	16.8 (2.3)	***	8.2 (1.4)	***	4.8 (1.6)	***
Unmarried father	18.5 (1.9)	***	4.6 (2.1)		-1.0 (3.7)	
Married father ^a	17.1 (1.7)	***	0.8 (1.7)		2.4 (2.5)	
<i>Age</i>						
Age (linear)	5.2 (0.4)	***	10.7 (0.4)	***	11.0 (0.5)	***
Age squared	0.2 (0.0)	***	-0.4 (0.0)	***	-0.4 (0.0)	***
<i>Adolescent AFQT</i>						
AFQT (linear)	0.9 (0.1)	***	0.3 (0.1)	*	0.5 (0.1)	***
AFQT squared	0.0 (0.0)	***	0.0 (0.0)	***	0.0 (0.0)	***
<i>Ethnicity (African-American omitted)</i>						
Latino	9.0 (2.4)	***	-6.7 (3.9)		2.5 (4.6)	
European American/other	7.7 (2.2)	***	18.8 (2.6)	***	23.9 (2.5)	***
<i>Education (High School Degree omitted)</i>						
Less than high school	-10.2 (1.4)	***	-8.7 (1.9)	***	-11.3 (2.5)	***
Some College	16.5 (1.6)	***	-5.2 (1.4)	***	-3.8 (1.9)	*
College or more	55.0 (3.7)	***	55.9 (1.9)	***	56.6 (2.5)	***
<i>Wages</i>						
Natural Log of Current/most Recent	4.8 (0.5)	***	-1.2 (0.7)		2.5 (0.8)	**
Intercept	61.8 (2.5)	***	75.7 (3.4)	***	49.4 (4.2)	***
Person-spells	50436		38233		22984	
N	812		602		361	

^aNote. The estimate of the difference between married childless men and married fathers was -0.3 (ns) for young fathers, 7.3 (p<0.000) for on time fathers, and 2.4 (ns) for late fathers. These estimates were used to calculate the effect of the transition to fatherhood among married men in Table 2.

*
p < 0.05;

**
p < 0.01;

p < 0.001