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Fertility Intentions, Career Considerations and Subsequent Births: The Moderating Effects of Women's Work Hours

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Abstract

Prior research indicates a negative relationship between women's labor force participation and fertility at the individual level in the United States, but little is known about the reasons for this relationship beyond work hours. We employed discrete event history models using panel data from the National Survey of Families and Households (N = 2,411) and found that the importance of career considerations mediates the work hours/fertility relationship. Further, fertility intentions and the importance of career considerations were more predictive of birth outcomes as women's work hours increase. Ultimately, our findings challenge the assumption that working more hours is the direct cause for employed women having fewer children and highlight the importance of career and fertility preferences in fertility outcomes.

Keywords

Fertility; Work; Childbearing; Intentions; Career importance; Event history analysis

Introduction

Numerous studies have provided evidence that women's labor force participation reduces fertility and vice versa. Workplace and educational structures (Williams 2000) as well as a continued gendered division of housework and childcare (Coltrane 2000) presumably make combining work and childrearing difficult. Beyond opportunity costs and structural barriers that might impede women's fertility, however, it is unclear how work and fertility *preferences* affect the likelihood of giving birth.

Women who place high importance on their careers tend to also highly value motherhood (McQuillan et al. 2008); yet valuing both career and motherhood have been called "competing devotions" (Blair-Loy 2003). Anecdotal evidence of high-earning women (with incomes over $100,000) has suggested that women who place high importance on their

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careers and work many hours during their prime childbearing years have often been unable to also meet their fertility intentions (Hewlett 2002). Though prior research has investigated the effects of work hours (i.e., working full- or part-time as compared to not employed) on fertility, we have not found evidence that the effect of career importance on birth outcomes has been empirically explored using nationally-representative data. We also have not found prior research examining whether career or fertility preferences are moderated by work hours.

Our goal in this study was to explore the relationship between women's employment and fertility by examining the relationships between valuing career considerations in the fertility decision-making process and fertility intentions and women's work hours, as well as the impact of intentions and importance of career on birth outcomes by women's work hours. It is important to understand how women's labor force participation, beyond solely the number of hours worked, reduces their fertility. As women's fertility has fallen globally—often below replacement level—women's labor force participation has often been perceived as the reason for the decline. Many industrialized societies have enacted expensive policies aimed at encouraging women to have more children; these policies have been based on the assumption that by reducing the direct or indirect costs associated with childrearing, women will opt to have more children. If career is more important to women than having children, however, policies aimed at reducing costs of children may not be terribly successful. Identifying reasons behind the negative employment–fertility relationships is therefore critical before successful programs can be developed or implemented.

Literature Review

Dramatic changes in the last several decades of the twentieth century significantly impacted the family and patterns of fertility in the United States. As rates of postsecondary schooling and labor force participation have increased, women steadily postponed marriage and fertility (Fields and Casper 2001; Morgan 2005). Fertility has decreased over this time as well, falling from approximately 3.1 children per woman aged 40–44 in 1976 to 1.9 children per woman in the same age group in 2008; childlessness rates during this time period have also nearly doubled, to 18 % in 2008 (Dye 2010). On the aggregate, therefore, fertility in the U.S. has hovered around replacement level, but at the individual level, many factors affect women's fertility. Fertility intentions and marital status have been shown to be the primary predictors of fertility outcomes at the individual level (Schoen et al. 1999), but prior research has indicated that employed women are less likely to meet their fertility intentions than non employed women in industrialized countries; on average, employed women give birth to approximately one fewer child than they originally intended (Brewster and Rindfuss 2000).

The Negative Effect of Female Employment on Fertility: The U.S. Context

Researchers have long noted the inverse relationship between women's labor force participation and fertility in the U.S. (Collver 1968; Freedman and Coombs 1966; Reed and Udry 1973). Many of these studies were unable to determine a causal relationship due to a lack of longitudinal data, however, which is necessary in order to keep track of the sequencing of employment and fertility and the accuracy of reported intentions (Cramer

1980; Mason 1974). A few early studies used non-recursive models to examine the sequencing of actual or intentions of employment and fertility, with results suggesting that fertility influenced work and mixed results regarding the influence of employment on fertility (Cramer 1980; Hout 1978; Smith-Lovin and Tickamyer 1978; Waite and Stolzenberg 1976). Most of these early studies failed to include both intentions and behaviors though, and they were conducted during a time when the majority of mothers were not employed.

More recent studies have suggested that despite the increasing normalcy of mothers of young children in the paid labor force—to the point where now the majority of mothers of infants are employed (Bureau of Labor Statistics 2008)—a negative relationship continues to exist between women's employment and fertility within the U.S. Many global studies have shown that this relationship is bi-directional, and much of the interest in recent years on the topic has focused on European countries with below-replacement fertility (see Matysiak and Vignoli 2008 for a comprehensive meta-analysis). The U.S. context is unique, however, as fertility has remained much higher than in many industrialized societies despite less generous social policies (Liu and Hynes 2012).

Despite higher fertility in the U.S. than other industrialized nations, women's employment has remained associated with lower fertility. Using data from the 1974–1994 NLSY, Budig (2003) found that both part-time and full-time employment reduced the likelihood of giving birth. Cheng (1996) found similar results for African American women. While these studies demonstrated that women in the workforce tend to have fewer children, intentions were not included in their analyses. Therefore, it is unknown whether employment reduces the likelihood of fertility regardless of intentions, or if women in the labor force have lower intentions to begin with. Further, these studies did not examine the reasons for the relationship beyond part- or full-time work status. While women's work hours are likely to reduce their fertility overall, there might be important distinctions between those who work solely to contribute to the household income and those who place a high importance on their careers.

Though many studies predicting fertility outcomes at the individual level have utilized demographic and life course characteristics (e.g., Schoen et al. 1999), preferences and values often have been left out of models predicting subsequent births despite evidence that they are important predictors (Barber and Axinn 2005). There are several noteworthy exceptions; Hayford and Morgan (2008) demonstrated that greater religiosity was associated with higher fertility intentions and higher overall fertility. Liu and Hynes (2012) examined women's perceived difficulty in balancing work and family, attitudes about maternal employment, and work hours, and found that higher family-to-work spillover increased the likelihood of a birth and job exit, whereas positive attitudes towards maternal employment and working more hours were associated with lower likelihood of subsequent birth and job exit. The study sample was limited in several ways, however; first it included a regional sample of working mothers of infants at the first wave of data. Further, their measures of attitudes regarding maternal employment were global attitudes, not regarding the participants feelings about their own maternal employment. Finally, their data did not include fertility intentions, which the authors noted as a limitation. As noted above, it is important to consider the shift

from non-employment to part-time employment for fertility outcomes (Budig 2003), as well as the role of fertility intentions, one of the largest predictors of individual fertility outcomes (Schoen et al. 1999).

Theoretical Framework

We draw on two theoretical perspectives for this study. We focus on women's preferences regarding their careers and their fertility intentions utilizing Hakim's (2003) preference theory. We also consider the importance of economic factors regarding the opportunity costs of children (e.g., Becker 1993) and highlight the relevance of socioeconomic and life course factors for birth outcomes.

Hakim's (2003) preference theory is based upon research that indicated that women fall into one of three distinct groups regarding their fertility and employment preferences. "Home centered" women preferred not to work and viewed family life and children as main priorities throughout life. They tended to have the largest families and worked fewer hours or not at all, unless the family was experiencing financial hardship. "Work-centered" women reported high commitment to work and less value on motherhood. Hakim noted that childless women tended to be concentrated in this group, and women in this group who did have families tended to fit their families in around their work. The group that Hakim identified as largest and most diverse, however, was the "Adaptive" group—women who wanted to combine work and family. Women in this group placed more or less importance on career, and they worked many or few hours. While Hakim noted that many women who worked part-time fell into the "Adaptive" group, many also worked full time, depending on career, health insurance, and family income needs. Nonetheless, Hakim (2003) claimed that preferences "…have a strong impact on behaviour: on employment rates, hours worked, fertility, and patterns of marriage and divorce" (p. 342).

Hakim's preference theory has been applied to the employment and fertility relationship in the European context. Hakim (2003) utilized data from Great Britain to identify the three groups. In addition, Vitali and colleagues (Vitali et al. 2009) applied Hakim's preference theory to test the effects of work-family lifestyle preferences on fertility intentions and behavior across eleven European countries and found that while lifestyle preferences were not associated with fertility intentions, they significantly predicted realized fertility.

Given that work-family preferences and conflicts have not been found to predict women's fertility intentions in prior research (e.g., Liu and Hynes 2012; Vitali et al. 2009; Shreffler et al. 2010), we posit that perhaps women's stated fertility intentions are more a reflection of their individual preferences, much like work preferences. Thus, women's work behaviors may also reflect their career and fertility preferences.

The Preference Theory Suggests the Following Hypotheses

Hypothesis 1—Placing a higher importance on career is associated with greater work hours.

Hypothesis 2—Having greater fertility intentions is associated with working fewer hours.

As has been found in the aforementioned research on women's employment and fertility in European nations, women's fertility outcomes in the United States are likely dependent on both their career and family size preferences. Following previous research that has shown that women's work hours decrease fertility outcomes, we expect that working more hours results in a lower likelihood of giving birth. The importance of career for fertility outcomes has not yet been explored in the United States, but we believe it may be an important factor explaining why women's employment reduces their fertility. Fertility intentions are strong predictors of birth outcomes, especially for married women (Schoen et al. 1999), and thus we expect to find that higher fertility intentions predict a higher likelihood of giving birth.

Hypothesis 3—Working more hours is associated with a reduced likelihood of giving birth.

Hypothesis 4—Placing greater importance on career is associated with a lower likelihood of giving birth.

Hypothesis 5—Having higher fertility intentions is associated with a greater birth probability.

Additionally, we expect interaction effect between work hours and preferences regarding career and family. As Hakim (2003) noted, some women work more hours due to their specific job structures or financial needs, not because they have a particularly high work commitment. Work hours have been shown to depress fertility overall, but it is unclear how work hours affect the relationship between individual preferences regarding work and family and fertility outcomes. For example, women who work more hours but also report higher fertility intentions may differ from women who work more hours but report lower fertility intentions. Women who both work many hours and place a high value on career are perceived as "Work centered" and are expected to be particularly less likely to give birth. Alternatively, women who work many hours but also report high fertility intentions may be more "Adaptive" or even "Family centered" and thus more likely to give birth.

Hypothesis 6—Women who are more "Family centered" or "Adaptive" (i.e., high intentions to give birth even if work hours are high) are more likely to report a subsequent birth.

Hypothesis 7—Women who are more "Work centered" (i.e., work more hours and place a high value on career) are less likely to report a subsequent birth.

In addition to individual preferences, the opportunity costs of having children have been identified as potential barriers for childbearing. Becker (1993) posited that as women's economic opportunities expanded during the latter half of the twentieth century, they experienced increasing costs of bearing and raising children. Women responded to these increased opportunity costs by both reducing intended family size and by delaying childbearing and reducing their overall number of children. According to this perspective, opportunity costs associated with childbearing rise with women's education, income and work hours, but fall if their income proportional to their husband's income is low.

Opportunity costs should be lower for women who are out of the labor force and partnered, since wage losses are of less relevance. Opportunity costs should also be higher depending on life course considerations. Single women, for example, may face higher costs of children in part because they tend to have lower family income, but also because no one else may be available in the household to help with childcare or housework. The more children a woman has previously given birth to may also increase opportunity costs associated with a subsequent birth due to fewer available resources (regarding time, energy, and financial resources) to devote to an additional child.

The opportunity costs perspective therefore supports the following:

Hypothesis 8—Women who have greater human capital and socioeconomic status are expected to have lower birth probabilities.

Hypothesis 9—Women who are single, older, and have more children in the household in the first wave are expected to have lower birth probabilities.

Method

Sample

The data used for the present study are from the first two waves of the National Survey of Families and Households (NSFH). The sample for the first wave used a multistage national probability cluster sampling design; potential participants were randomly drawn from 100 sampling areas in the United States. Letters were sent to each sample address, providing information about the survey and alerting the household that an interviewer would visit their home. Primary respondents were selected at random from screening interviews and interviewed in person. Wave I was completed in 1987–1988 and included 13,007 respondents ages 19 and older. The first wave included significant life-history details such as childhood experiences, leaving the parents' home, marital and cohabitation experience, and fertility, education, and employment histories. Minorities, single-parent families, families with step-children, recently married persons, and cohabiting couples were oversampled in an effort to obtain adequate sample sizes for these groups. The second wave was conducted in 1992–1994 and included 10,005 of the original respondents. The second wave contained information about changes in the individuals' lives in the period since the first wave. More detailed information about the sample and data collection can be found in Sweet, Bumpass, and Call (Sweet et al. 1988).

The sample for this study was restricted to all non-surgically sterile women ages 19–39 who were primary respondents at Wave I and who responded to the fertility questions in Wave II. Nine women in the "other race" category were also eliminated from the sample, because the group was too small and diverse to provide meaningful information. These restrictions limited the sample to 2,411 women.

Measures

Dependent Variable

Birth(s) Between Study Waves: Respondents reported births and/or adoptions, as well as current pregnancies, in Wave II of the survey. The birth measure was created as a dichotomous variable with 1 representing women who reported births, adoptions, or current pregnancies that occurred between the two waves and 0 indicating that none of the above occurred. In addition, the timing of the birth/adoption was extracted from the survey data and used in the construction of a discrete event history dataset used for the analysis of the birth odds. If there were multiple births/adoptions in the interval, we only coded the occurrence and timing of the first.

Independent Variables

Work Hours: The number of hours the respondents stated they usually work in a week was included in analyses as a continuous variable and ranged from 0 (not employed) to 60 h per week. Because only a very small fraction (less than 1 %) of the women reported more than 60 h of work per week and to reduce the influence of this small number of potential outliers, we recoded them to 60 work hours for the analyses.

Career Importance: Respondents were asked about how important certain considerations were regarding their fertility decisions. Career importance was measured by respondents indicating how important the statement, “Having time and energy for my career” was to their decisions about fertility. Responses ranged from 1 “Not at all important” to 7 “Very important.”

Fertility Intentions: Intentions were measured by a series of questions in Wave I: “Do you intend to have a(nother) child sometime?” If no: “How sure are you that you will not have (more) children: very, moderately, not at all sure?” If yes: “How sure are you that you will have (more) children: very, moderately, not at all sure?” Responses from these two items were combined and scored 1 (very sure will not have a child), 2 (moderately sure will not have child, 3 (not at all sure will not have a child) 5 (not at all sure will have more) 6 (moderately sure will have more, to 7 (very sure will have more). Following Thomson’s (1997) reasoning and her use of these items, this coding intentionally leaves a larger interval between 3 and 5, those who intended and those who did not intend but were not sure about intentions, than between intentions in the same direction but with varying levels of certainty. Repeating the analysis coding equal intervals between all categories found that the coding strategy had little effect on the substantive findings.

Control Variables—Several demographic characteristics associated with employment status, desires for large families, or fecundity could create a spurious relationship between work variables, intentions, and fertility outcomes and were included in the analyses as control variables. These included age, race, education, income, marital status, and parity reported in the first wave of data. *Age* was coded as a continuous variable from 19 to 39. *Education* was also coded as a continuous variable representing the number of years in school completed. The respondents’ race/ethnicity was included as dummy variables for *African Americans*, *Hispanics*, and *Asians* with *whites* as the reference category. Income

was measured by the *log of annual household income* and by a variable created to measure the *proportion of the annual household income* that the respondent earned. Marital status, which has been found to have strong effects on fertility intentions and behavior, was coded into a dummy variable for *married* with *single/never married/disrupted marriage* as the reference category. Because number of children was found to be a strong predictor of future fertility behavior (Schoen et al. 1999), parity was included as a set of dummy variables for *no children* (reference category), *one child*, *two children*, and *three or more children*.

Analytic Strategy

In the models tested, we used OLS multiple regression to examine the effect of preferences (i.e., career importance and fertility intentions) on work hours. For the analysis of birth outcomes, we used a discrete event history model (Allison 1984). We created a standard discrete event history data set to model the occurrence a birth or adoption since the women were interviewed in Wave I of the study. Each respondent was represented in the data by up to six records corresponding to each year between the first and second interview. The first birth (or adoption) was coded as a 1 in the record for the year in which it occurred. Records for years before a birth were coded 0. Records for years after the first birth were dropped from the analysis. Women who had no births between the waves were coded 0 in the record for each year and all years were retained in the dataset. Once this dataset was prepared, logistic regression analysis was used to model first birth over the interval between the waves. All the independent variables were assessed at the first wave. The models included controls for background and socioeconomic variables. Because fertility was assessed after the measure of work hours, the causal direction of the effect could be more clearly estimated.

To assess whether these statistical models were correctly specified, we examined the variables for evidence of nonlinearity (with the introduction of quadratic and cubic terms) and for interaction effects among the independent variables. Our final models included terms to examine statistically significant interaction effects and curvilinear relationships. In an effort to reduce the loss of cases and survey information due to missing values, missing data were single-imputed using the EM method in the SPSS missing values module (SPSS 1997). The data were also weighted in the analyses using the weights provided in NSFH to yield nationally representative data, and the analyses were conducted with the SVY regression and logistic regression procedures in Stata to account for the effects of the weights and clustered design effects in the NSFH data on the estimates and their standard errors.

Results

Descriptive statistics of the variables used in this study are presented in Table 1. Approximately 39 % of the women in the study gave birth in the 6 years between the waves, and slightly more than half of respondents reported birth intentions. The mean score for career importance was a 3.9; slightly over the neutral response for the measure, which ranged from 1 to 7. Respondents averaged 24 work hours per week and 63 % were in the labor force (not shown). The standard deviations of the continuous variables reveal considerable degrees of variability in fertility intentions, career importance, and hours

worked. The average age in the first wave was 27.5 years, and 62 % of the women were married. Over 52 % of the women already had a child in Wave I. The annual household income was around $24,000 and women reported earning slightly more than half (53.2 %) of the household income, primarily reflecting the inclusion of single-women households.

We first examined the effects of career importance and fertility intentions on work hours. Table 2 shows the multiple regression model for hours worked. Career importance had a significant effect on hours worked; higher career importance was associated with more hours worked, supporting Hypothesis 1. Women with greater career preference tended to work more hours. Hypothesis 2, however, was not supported; our results did not reveal a significant association between fertility intentions and work hours. Therefore, women who intended to give birth were not working fewer hours, as hypothesized. The regression results also found that being older, having higher educational attainment and higher household income, and proportion of income contributed by the woman and being single were significantly related to higher reported work hours. As number of children in the household increased, work hours decreased. Interestingly, race/ethnicity and marital status were not significantly associated with hours worked.

Table 3 presents the results of the discrete event history analysis in which the effects of hours worked, career importance, and fertility intentions on whether the woman had a child in the interval between the waves were estimated. The total sample size in these models was 10,343 as records for each year between the waves were included for each respondent up to the birth of the first child in the interval between waves. The number of respondents, 2,411, remained the same as used in the regression models. In Model 1, only the control variables and work hours were included. Career importance and fertility intentions were added in Model 2, and significant interaction and curvilinear effects were included in Model 3. The coefficients in Model 1 provided support for Hypothesis 3 and the effect of work hours on fertility. Increased work hours resulted in a small but significant ($p < .05$) decrease in the odds of giving birth. In this model, age inversely affected the odds of a birth, and African American women had substantially higher (39 %) odds of a birth than white women (the reference category). Married women had over twice the odds of an unmarried woman of giving birth. Already having children in Wave I also increased the odds of a birth, but this was only significant for those with one or three or more children.

In Model 2 we added career importance and fertility intentions to the equation. Both were statistically significant ($p < .01$) in the expected direction with greater importance of career decreasing birth odds, supporting Hypothesis 4, and increased intentions having a strong effect on the odds of a birth (odds ratio of 1.35), supporting Hypothesis 5. Adding these variables to the equation reduced the effect of work hours to non-significance. Socioeconomic status significantly predicted birth odds, partially supporting Hypothesis 8. Women with higher household income were significantly likely to give birth. African American women also had greater birth odds. Life course variables also significantly predicted birth odds, though not necessarily in the expected direction; older women, married women, and women with children had significantly higher birth odds. These findings partially support Hypothesis 9.

Because we hypothesized that work hours would moderate the relationship between intentions and odds of having a child and career importance and the odds of having a child, these interactions were added in Model 3. Exploration of the patterns in the data also found additional interactions involving these variables which were also included. Examination of the shape of the relationships also found a significant curvilinear effect for career importance which is also included in Model 3. (The coefficient for the curvilinear term in the table is not significant because of the interaction effect with work hours also included in the model. When the work hours interaction was dropped from the model, the curvilinear term was significant.).

The pattern of findings that emerged is easier to understand by charting the pattern of relationship observed. We first examined the interaction of hours worked and fertility intentions. The findings shown in Fig. 1 support Hypothesis 6 that “Home centered” women (i.e., women with intentions to give birth) would be particularly likely to meet their intentions, even working more hours. For the purpose of the figure, we categorized work hours into four groups ranging from women who reported no work hours to those working 50 h per week. The lines in the figure show the predicted relationship between intentions and birth probability estimated from the coefficients in Model 3. In the equation used to generate the lines, control variables were fixed at their sample means to adjust for their effects. We plotted the probability of a birth rather than the log odds so the lines are curved reflecting this transformation. Two patterns can be ascertained from the figure. First, the effect of intentions on birth probability becomes stronger the more hours the women worked. Secondly, the probability of a birth among women with high intentions does not appear to differ much by work hours; the largest differences in work hours occur at the lowest levels of intentions. At this level, women who do not work report the most births.

The relationship between career importance and the odds of a having a child is more complex. There was a significant curvilinear relationship between career importance and the odds of a birth, and the degree of curvilinearity varied significantly by the women’s work hours. This relationship is shown in Fig. 2. We used the same set of four categories of work hours to show the relationship and also adjusted for the control variables by setting them to their overall sample mean in the equations used to plot the lines. Among women who did not work, the relationship was linear, with increased importance of the career leading to a slight reduction in the probability of a birth. This slope for women working no hours was not statistically signifi-cant or significantly curvilinear. Among women who worked, however, the curvilinearity was substantially more pronounced and statistically significant. Both low and high importance ratings were related to a lower probability of having a child, although high importance clearly had a stronger impact on reducing the birth probability substantially. The finding that women placing high importance of their career on their fertility decisions were less likely to add a child in the period between the waves conforms to our expectations about the moderating influences of work hours. The pattern of findings showing lower odds of fertility among working women giving low importance ratings to career appears upon closer analysis to be primarily an artefact of fitting a quadratic curve and is not substantively meaningful. When the analysis was recomputed restricting the sample to those with importance ratings of 1 or 2, the coefficients did not show lower birth probabilities for working women compared to those working no hours. Thus, Hypothesis 7 was supported;

"Work centered" women—those both working many hours and placing high importance on career—had the lowest birth probability.

There also were significant interactions between intentions and marital status and between intentions and career importance on the odds of having a child (not shown). The effect of fertility intentions on the odds of having a child was substantially stronger for married than unmarried women. Among the unmarried there was only a small (not statistically significant) effect of intentions on birth odds, but the effect was strong and significant among the married women. Fertility intentions and career importance also interacted in affecting birth odds. As the rating of the importance of the career increased, the effect of intent on fertility declined. At the highest importance level (7), the slope of births on intentions was effectively zero (−.025). This may indicate that as having time and energy for a career becomes more important, it is more difficult for women to take the steps to meet their fertility intentions.

Discussion and Conclusion

Despite evidence documenting the negative relationship between women's employment and fertility in the United States, there is a lack of empirical research on reasons for the relationship. The purpose of this article was to determine how career and family preferences inform and interact with work hours and, in turn, predict fertility outcomes. The findings presented here highlight the importance of career and fertility preferences for birth outcomes; the negative employment–fertility relationship is more complex than the current focus on work hours suggests.

Hakim (2003) noted that women may work many hours because they highly value their careers; but they may also simply be filling a financial need in their household or working at a job that happens to require more hours. Additionally, women may be focused on their careers but not currently employed for a variety of reasons, including pursuing additional education and training that professional careers might require. Thus, we cannot take for granted that work hours indicate a woman's career or family focus.

Our analysis of work hours revealed that there is, indeed, an association between career importance and hours worked, but there is no association between fertility intentions and hours worked. Prior research on work-family conflict and fertility intentions also has not found a relationship between difficulty balancing work and family roles and what women want regarding their childbearing (e.g., Liu and Hynes 2012; Shreffler et al. 2010). Thus, it appears that preferences regarding career are particularly salient for work behaviors, and preferences regarding family are less salient for work behaviors.

Similar to prior research, we found that women who work more hours have lower birth odds over time. Once we added career and family preferences to the model, however, the effect of work hours was no longer significant. This finding highlights the importance of including preferences and values in fertility research; career importance is more important than work hours in driving the negative employment–fertility relationship.

The interactions between career and fertility preferences and work hours for birth probabilities revealed interesting findings as well, supporting preference theory. Women with higher intentions to give birth were more likely to meet those intentions than women with lower intentions. Interestingly, women who worked more hours were more likely to meet their fertility intentions, whether they are high or low, than women who were not employed. Perhaps women who work many hours need to be more intentional when it comes to balancing fertility and their jobs. Additionally, as career importance increased, the probability of giving birth decreased, and the effect was more pronounced for women working more hours. This finding highlights that "Work centered" women are the least likely to give birth.

This study highlights the necessity of including career and fertility preferences in analyses regarding the effect of women's employment on fertility. Though largely ignored in previous literature, career importance emerged as an important variable with both main and moderating effects.

In addition to showing the importance of preferences for fertility outcomes, this study raises new questions pertaining to career importance and fertility. Future studies should explore the causal connections between career and family preferences and behaviors; critiques of Hakim's (2003) theory suggest that causality can go in the opposite direction, for example, actual fertility can trigger changes in values and preferences (e.g., Beets et al. 1999). Future studies should be replicated once more recent longitudinal data becomes available that includes preferences as well as fertility outcomes. Although women's labor force participation and fertility rates have changed little since the NSFH was conducted, many more births today are non-marital births, now accounting for nearly 40 % of all births (Dye 2010). Some evidence suggests that lower-income women and young adults may view marriage and fertility as independent events (Edin and Kefalas 2005; Pagnini and Rindfuss 1993), though recent qualitative studies of cohabiting women and couples reveal that pregnancies occurring in cohabiting contexts are largely unplanned, and most cohabitors continue to view marriage as a prerequisite for fertility (Sassler and Cunningham 2008; Sassler et al. 2009). However, it is unclear how these changes in union formation may affect the employment/fertility relationship. Additionally, future data collection efforts should further explore career preferences. The NSFH measure for career importance is somewhat limited in scope as it focused on fertility considerations; subjective career importance could affect fertility outcomes differently. Finally, future studies should consider additional factors associated with work that might impact fertility; for example, working nonstandard shifts is negatively associated with women's well-being (Campione 2008). Perhaps characteristics of the specific job may prevent women from meeting their fertility intentions. In addition, closer investigation of demographic differences may reveal distinctions in the female employment–fertility relationship; work-to-family spillover and crossover affects men's and women's fertility intentions differently (Shreffler et al. 2010), and childbearing affects working adults' perceived work-family conflict differently by race/ethnicity (Delgado and Canabal 2006).

The findings presented here have important implications for both research and policy. As previous research has suggested, women who are employed are less likely to give birth.

However, that is only part of the story; women who work more hours tend to place more importance on their careers. These women are particularly less likely to give birth. On the other hand, women who have high intentions to give birth are quite likely to do so—even when they work many hours. Our findings highlight the importance of preferences for women's fertility outcomes; researchers and policymakers who puzzle at the higher fertility in the United States despite fewer social policies that enable women to balance work and family should consider cross-cultural comparisons of career and family preferences and values.

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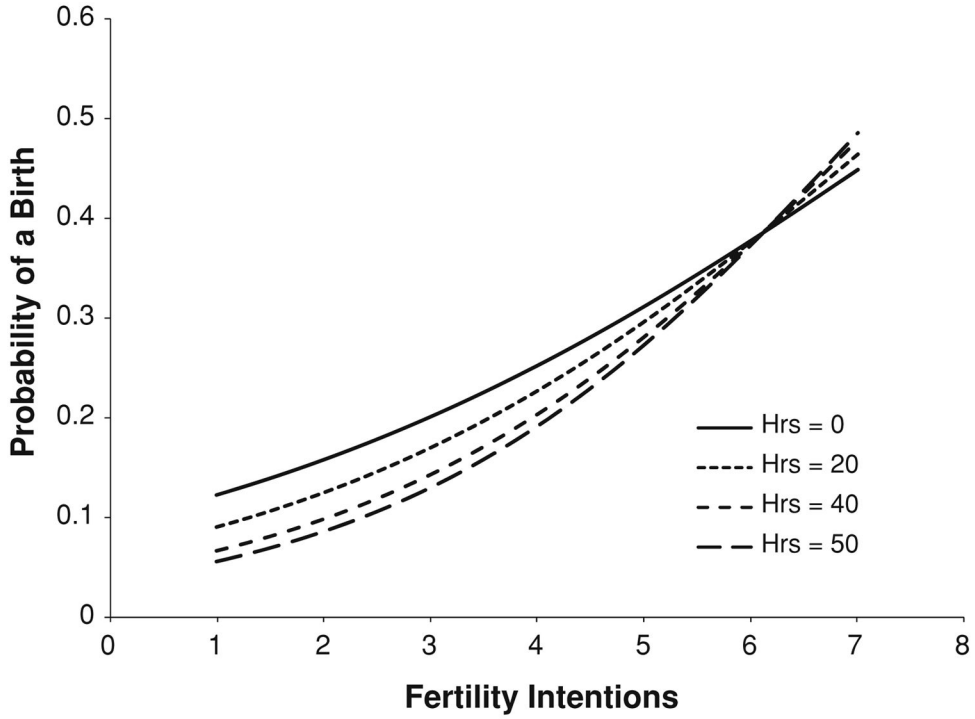

Fig. 1.

Moderating effects of work hours on the effect of fertility intentions on child birth probability

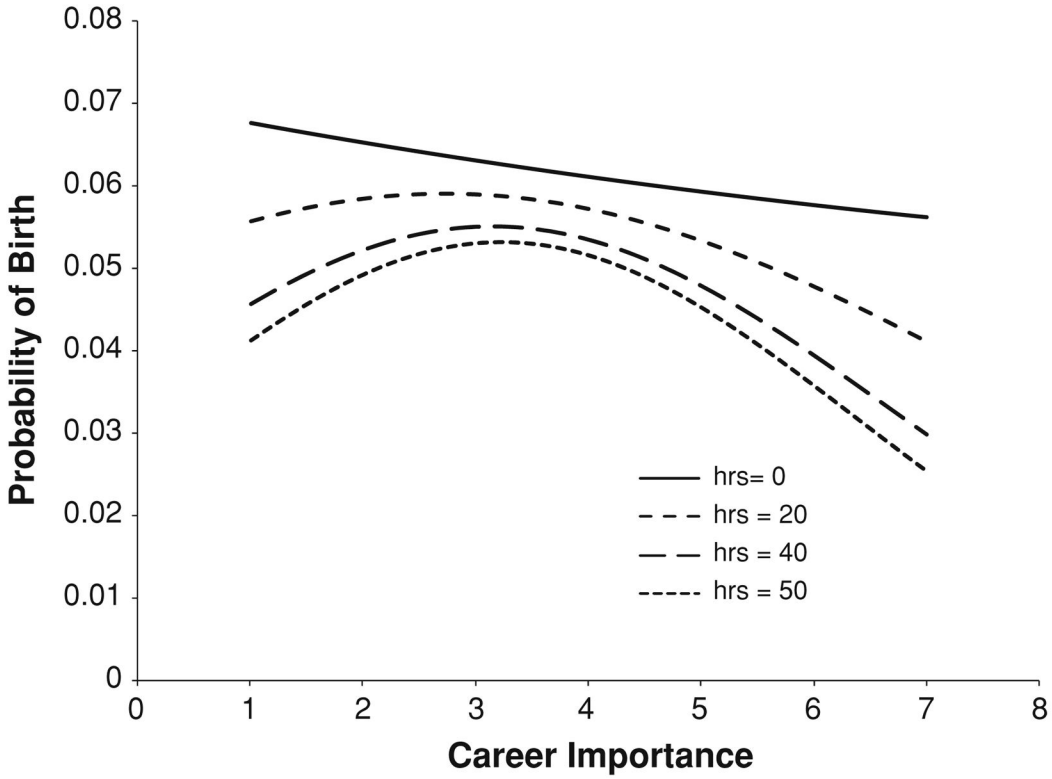

Fig. 2.
Moderating effect of work hours on the effect of career importance on birth probability

Table 1

Descriptive statistics for variables used in the analyses

Variable	Mean or %	SD	Min	Max
Birth between waves	39.30 %		0	1
Age	27.50	5.95	19	39
Educational attainment	12.89	2.36	2	20
Log annual household income	9.67	1.06	4.61	12.58
Proportion income earned by wife	53.17 %		0	1
White	78.76 %		0	1
Black	12.79 %		0	1
Hispanic	6.39 %		0	1
Asian	2.05 %		0	1
Married	61.66 %		0	1
No children	46.23 %		0	1
One child	24.16 %		0	1
Two children	18.71 %		0	1
Three or more children	10.90 %		0	1
Hours worked	24.21	19.47	0	95
Career importance	3.91	2.09	1	7
Fertility intentions	4.67	2.27	1	7

Note N = 2,411

Table 2

Regression model for hours worked

Independent variables	***b***	**SE**
Age	0.276**	0.099
Educational attainment	0.758**	0.187
Log annual household income	4.230**	0.608
White (reference group)		
African American	2.064	1.218
Hispanic	1.012	1.772
Asian	−0.050	3.553
Proportion income earned by woman	10.907**	1.242
Not married (reference group)		
Married	0.961	1.163
No children (reference group)		
One child	−6.708**	1.104
Two children	−14.076**	1.417
Three or more children	−15.180**	1.652
Fertility intentions	−0.301	0.245
Career importance	0.825**	0.244
Constant	−36.7685	
R-square	0.214	

Note

* $p < .05$,

** $p < .01$

$N = 2{,}411$

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Table 3

Discrete event history analysis of a birth between the survey waves

Independent variables	*b*	Model 1		*b*	Model 2		*b*	Model 3	
		SE	Odds ratio		SE	Odds ratio		SE	Odds ratio
Hours worked	−0.006*	0.003	0.99	−0.005	0.003	1.00	−0.0275**	0.009249	0.9729
Age	−0.112**	0.009	0.89	−0.065**	0.011	0.94	−0.0626**	0.010625	0.9393
Educational attainment	0.024	0.021	1.02	−0.011	0.021	0.99	−0.01947	0.021173	0.9807
Log annual household income	0.179**	0.061	1.20	0.143*	0.060	1.15	0.138552*	0.061881	1.1486
Proportion income earned by wife	0.019	0.106	1.02	0.023	0.105	1.02	0.032461	0.105816	1.033
White (reference group)			1.00			1.00			
African American	0.327**	0.117	1.39	0.434**	0.126	1.54	0.369855**	0.130827	1.4475
Hispanic	0.178	0.184	1.19	0.170	0.188	1.18	0.140086	0.193911	1.1504
Asian	−0.424	0.436	0.65	−0.432	0.453	0.65	−0.42917	0.44986	0.6511
Not married (reference group)			1.00			1.00			
Married	0.891**	0.122	2.44	0.805**	0.118	2.24	−0.67116*	0.314792	0.5111
No children (reference group)			1.00			1.00			
One child	0.666**	0.106	1.95	0.666**	0.106	1.95	0.624866**	0.107459	1.868
Two children	0.067	0.132	1.07	0.458**	0.135	1.58	0.479487**	0.135851	1.6152
Three or more children	0.471**	0.175	1.60	0.795**	0.180	2.22	0.823662**	0.179153	2.2788
Career importance for childbearing				−0.065**	0.024	0.94	−0.05191	0.125917	0.9494
Career importance squared							0.001208	0.016434	1.0012
Fertility intentions				0.298**	0.027	1.35	0.049154	0.051133	1.0504
Fertility intentions × hours worked							0.002546*	0.001103	1.0025
Fertility intentions × married							0.255007**	0.05359	1.2905
Hours worked × career importance							0.007483	0.004175	1.0075
Hours worked × career importance squared							−0.00108*	0.000522	0.9989
Constant	−2.090	0.556		−3.884	0.599		−2.41048	0.66108	

Note

#$p < .05$ one-tailed,

*$p < .05$,

**$p < .01$

Number of records = 10,343

Number of respondents = 2,411