

Conversations with the Experts

Differences in Disadvantage: Variations in the Motherhood Penalty across White Women's Earnings Distribution



Michelle Budig

Bio: Michelle J. Budig is an Associate Professor of Sociology and the Associate Director of the Social and Demographic Research Institute at the University of Massachusetts. Her research interests include gender inequality in labor markets, work and family conflict, social inequality, nonstandard employment arrangements, and social policy. Her recent publications investigate gender differences in factors leading to self-employment participation, feminist theory on the family, the relationship between women's employment and fertility histories, and earnings penalties associated with caring labor and motherhood. In 2003, her research won the Rosabeth Moss Kanter Award for Research Excellence in Families & Work, presented by the Center for Families at Purdue University and the Boston College Center for Work & Family. Her current research examines motherhood wage penalties in a comparative perspective, racial/ethnic discrepancies in the effects of human capital on wages, and racial/ethnic differences in the rising trends of childlessness and only-child families.

*An Interview with Michelle Budig
by Judi Casey*

There have been numerous articles written about the motherhood penalty, including previous Network News publications featuring [In Paik](#), [Joan Williams](#) and [Shelley Correll](#). How is your research different?

Past research has amply demonstrated that children are linked to wage penalties for women in the United States (Anderson, Binder, and Krause, 2003; Avellar and Smock, 2003; Budig and England, 2001; Glauber, 2007a; Waldfogel, 1997), and in other industrialized countries (Harkness and Waldfogel, 2003; Misra, Budig, and Moller, 2007; Todd, 2001; Waldfogel, 1998). Many of these studies find that mothers' reduced work experience due to interruptions for child bearing, and reduced working hours when children are small, partially explain the wage penalties they incur. But a significant penalty remains even after statistical models account for lost human capital and reduced labor supply among mothers.

Some of this residual penalty may be due to employer discrimination. The work of Correll, Benard, and Paik (2007) offers strong evidence that part of this penalty results from employers' more negative evaluations of mothers, relative to other workers, lower call-backs for mothers for job applications, and reduced salary offers for mothers. Moreover, Joan Williams and the WorkLife Law Center are finding that employers do treat workers with greater family responsibilities more negatively; particularly those who attempt to make use of workplace family policies. Together, these bodies of work show how both the "supply" side factors producing the motherhood wage penalty (reduced human capital of mothers) and the "demand" side factors (employer discrimination) operate.

My recent research with Melissa Hodges asks whether all women experience similar penalties for having children and whether the mechanisms producing the penalty operate in the same way for all women. Past research has estimated wage penalties as a mean function of the conditional distribution of women's earnings. But we know that there are significant levels of earnings inequality among women, which begs the question of

whether women of different earnings levels incur different penalties for having children. Our *American Sociological Review* article, *Differences in Disadvantage: Variations in the Motherhood Penalty across White Women's Earning Distribution*, investigates whether this penalty is experienced similarly among all women or whether it varies between low-, medium-, and high-wage workers. We developed a fixed-effects quantile regression model to estimate whether the proportional wage penalty differs across women's earnings distribution. Our broad finding was that the women with the least to lose actually lose the most for having children.

Can you describe your research methods and the rationale for selecting your sample?

Methods

Our estimation of statistical differences in the motherhood wage penalty at multiple points of women's earnings distribution represents a significant methodological contribution to the literature. Past research on the motherhood penalty uses a variety of regression methods to estimate children's average impact on women's average earnings. These methods estimate the size of the motherhood penalty as a mean function of the conditional distribution of earnings. Estimating the impact of children at the mean, however, tells us little about how children may affect women at the tails of the earnings distribution or whether highly paid women incur smaller or larger penalties for children compared with women with lower earnings. Moreover, this approach implicitly assumes a single, undifferentiated labor market. Quantile regression (Koenker and Bassett, 1978), little used in sociology (but see Hao, 2002; Hao and Naiman, 2007), is a promising method for investigating varying effects of children across the distribution of women's earnings. Extending this approach to panel data (Koenker, 2005) allows us to test whether child penalties significantly differ by earnings level. Furthermore, we can test whether the mechanisms producing the motherhood penalty are similar for women with differing levels of earnings.

Sample

We pool the 1979 to 2004 waves of the National Longitudinal Survey of Youth, a national probability sample of individuals age 14 to 21 years in 1979. Respondents were interviewed annually up to the 1994 survey and biannually thereafter. Due to requirements of the fixed-effects method, we limit the sample to women who were employed at least two years of the 26-year period. Our initial models included all racial groups, but we found inconsistent patterns in the motherhood wage penalties. Given the complex differences in the shapes of the earnings distributions for African American, Latina, and non-Hispanic white women, our analysis is constrained to white women.

How do income levels affect the motherhood penalty?

Results show that having children inflicts the largest penalty on low-wage women, proportionately, although a significant motherhood penalty persists at all earnings levels. We also find that the mechanisms creating the motherhood penalty vary by earnings level. Family resources (e.g., spousal earnings), work effort (e.g., hours worked), and compensating differentials (e.g., family-friendly job characteristics) account for a greater portion of the penalty among low earners. Among highly paid women, by contrast, the motherhood penalty is significantly smaller and largely explained by lost work experience due to childbearing.

Our findings show that estimates of average motherhood penalties obscure the compounded disadvantage mothers face at the bottom of the earnings distribution, as well as differences in the type and strength of mechanisms that produce the penalty. Understanding these differences will help policy makers target appropriate solutions to the varying needs of women workers.

Can you discuss the factors that have the greatest impact on the earnings potential of women? Did you see a difference in these factors across income levels?

As I mentioned, the wage penalty for motherhood is proportionately largest for the lowest-paid workers; moreover, different mechanisms explain the penalty for low-wage and high-wage women. We find that reduced

work hours explains roughly one-third of the baseline motherhood penalty at the lowest levels of earnings but virtually none of the penalty among higher-earning women. Conversely, reduced human capital, particularly job experience, accounts for a larger portion of the unexplained penalty among the highest-earning women (40 to 50%) but virtually none of the penalty among low-earning women. Finally, compensating differentials (e.g., family-friendly job characteristics) explain none of the residual penalty among high-earning women but between 59 and 42% of the residual penalty at the two lowest earnings levels.

The larger penalties among the lowest-paid are not due to their attempts to keep wages low enough to receive social welfare. Receipt of AFDC [Aid to Families and Dependent Children] and [Temporary Assistance for Needy Families] TANF payments is not linked with variation in the size of the motherhood penalty. It is well-documented that women on the lower end of the earnings distribution experience difficulty combining work and family obligations. Low-paying jobs typically entail the fewest benefits (e.g., health and life insurance and sick time), the closest supervision, and the least autonomy in setting the pace and intensity of work. Indeed, when analyzing penalties by age of the children, we see that the penalty per preschooler is almost five times as great at the lowest quantile of earnings, compared with higher quantiles. Further supporting this argument, we find that work effort accounts for significantly more of the motherhood penalty at the lowest quantile, indicating that women with low-wage jobs are more likely to reduce work hours or experience job turnover to accommodate motherhood.

Employer changes induced by work-family conflict may account for some of the unexplained penalty at the lowest quantiles. Other research finds that a common solution to work-family conflict for low-income mothers without access to family leave is to simply quit their jobs with the intent of starting over when family crises abates. Whatever the source, it is clear that, according to our results, the women who can least afford it pay the largest proportionate penalty for motherhood.

How does having children affect the salary and hiring opportunities for fathers?

The motherhood penalty compares women against women to see how children reduce wages. However, among men, fatherhood increases earnings, as documented in another article co-authored with Melissa Hodges, published in the December 2010 issue of *Gender & Society*. Some of this fatherhood bonus is due to the fact that fathers work longer hours, have greater experience, and typically hold higher-ranking jobs. In unpublished distributional analyses that Melissa and I have done, we also find that the highest-earning men earn the largest proportional fatherhood bonuses, while low-wage men, who interestingly are most likely to increase work hours with fatherhood, do not receive a wage bonus. Cross-nationally, in collaborative research with Irene Boeckmann, we find fatherhood bonuses in many countries.

What surprised you the most about these findings? What further research is needed?

Before we estimated any of the models, I had thought we would find larger motherhood penalties among the highest earning women. I thought this because there is more employer discretion in wage setting at the top of the earnings distribution than there is at the bottom, given minimum wage laws. However, we find fairly consistent, although smaller, proportionate motherhood penalties among highly paid women.

Also surprising was our finding of a motherhood bonus among married and previously married women at the very top of the earnings distribution is somewhat unexpected but not without parallels in extant literature. We find no evidence that these rare motherhood premiums are attributable to having “house husbands”; if anything, it appears that high-earning women with fully employed husbands are the most likely to receive a motherhood premium. It is also possible that high-performing women receive favorable treatment from employers for having children, similar to the way men receive favorable treatment (Correll et al., 2007) and a wage bonus (Glauber, 2007b) for fatherhood.

You recently presented at the Joint Economic Committee of Congress, “[New Evidence on the Gender Pay Gap for Women and Mothers in Management](#).” How might state and federal policy reduce the motherhood penalty?

Our findings of larger motherhood penalties experienced by the lowest earners underscore the importance of supporting low-wage women with children. There are few transfers to low-income families in the United States, although the Earned Income Tax Credit (EITC) currently reduces qualifying families' tax burden by roughly \$3,000 for one child to just under \$5,000 for two or more children. Expanding the EITC to more families and increasing the tax credit could reduce child poverty and reduce the inequality generated by sizeable motherhood penalties among low-income female workers.

More broadly, in National Science Foundation-funded cross-national research on 22 nations I've conducted with collaborators Joya Misra and Irene Boeckmann, we have identified three key policies that are linked to smaller motherhood penalties:

1. Early Childhood Education for preschool children and publicly supported, affordable, high-quality care for children under age two enables mothers to maintain connections to employment and, therein, dramatically reduces the motherhood wage penalty.
2. Universal, moderate length, job-protected leaves following the birth or adoption of a child reduces motherhood penalties. The Family and Medical Leave Act needs to be extended to all workplaces and workers, and ideally should be longer than 12 weeks.
3. Universal, shorter-term paid maternity and paternity leave are linked to smaller motherhood penalties. Short-term paid maternity leave (six to 12 weeks) reduces mothers' job quits after birth and increases returns to work with the same employer. Moreover, non-transferable paid leave for fathers is clearly linked to smaller motherhood penalties.

What can employers do to improve pay equity for working mothers?

We need to address workplace discrimination against mothers and those using family benefits. Some American workplaces offer work-family benefits to some workers: paid leave, flexible scheduling, flexible work location, part-time options, and childcare assistance. But these benefits vary in availability, and employees often fear reprisals from using these benefits. Federal-level work-family policies could equalize access to work-family benefits and reduce discrimination against workers who use legally sanctioned work-family benefits.

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