Getting a Job: Is There a Motherhood Penalty?[1]

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Survey research finds that mothers suffer a substantial wage penalty, although the causal mechanism producing it remains elusive. The authors employed a laboratory experiment to evaluate the hypothesis that status-based discrimination plays an important role and an audit study of actual employers to assess its real-world implications. In both studies, participants evaluated application materials for a pair of same-gender equally qualified job candidates who differed on parental status. The laboratory experiment found that mothers were penalized on a host of measures, including perceived competence and recommended starting salary. Men were not penalized for, and sometimes benefited from, being a parent. The audit study showed that actual employers discriminate against mothers, but not against fathers.

Mothers experience disadvantages in the workplace in addition to those commonly associated with gender. For example, two recent studies find that employed mothers in the United States suffer a per-child wage penalty of approximately 5%, on average, after controlling for the usual human capital and occupational factors that affect wages (Budig and England 2001; Anderson, Binder, and Krause 2003). In a summary of economic research, Crittenden (2001) concludes that, for those under the age of 35, the pay gap between mothers and nonmothers is larger than the pay gap between men and women. As Glass (2004) notes, employed mothers are

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the group of women that now account for most of the "gender gap" in wages.

The disadvantages are not limited to pay. Cuddy, Fiske, and Glick (2004) show that describing a consultant as a mother leads evaluators to rate her as less competent than when she is described as not having children. Similarly, other studies show that visibly pregnant women managers are judged as less committed to their jobs, less dependable, and less authoritative, but warmer, more emotional, and more irrational than otherwise equal women managers who are not visibly pregnant (Halpert, Wilson, and Hickman 1993; Corse 1990). While the pattern is clear, the underlying mechanism remains opaque. Why would being a parent lead to disadvantages in the workplace for women? And why might similar disadvantages not occur for men?

This article presents a laboratory experiment and an audit study of actual employers. The laboratory experiment evaluates the hypothesis that the "motherhood penalty" on wages and evaluations of workplace performance and suitability occurs, at least partially, because cultural understandings of the motherhood role exist in tension with the cultural understandings of the "ideal worker" role. We propose that this perceived tension between incompatible cultural understandings or schemas leads evaluators, perhaps unconsciously, to expect mothers to be less competent and less committed to their jobs (Blair-Loy 2003; Ridgeway and Correll 2004). To the extent that mothers are believed to be less committed to the workplace, we argue that employers will subtly discriminate against mothers when making evaluations that affect hiring, promotion, and salary decisions. We do not expect that fathers will experience these types of workplace disadvantages since understandings of what it means to be a good father are not seen in our culture as incompatible with understandings of what it means to be a good worker (Townsend 2002). By having participants rate job applicants, we expect that applicants presented as women with children will be viewed as less competent and less committed to work, will need to present evidence that they are more qualified for the job, will be rated as less promotable, and will be offered lower starting salaries compared with otherwise similar applicants presented as women without children. We also expect that the motherhood penalty will be mediated by evaluations of competence and commitment. While the laboratory experiment allows us to isolate and examine the mechanism of discrimination, the audit study provides external validity by evaluating whether actual employers discriminate against mothers.

In the following paragraphs we review the empirical literature on the motherhood wage penalty and existing explanations for it. We then develop our theoretical argument by drawing on status characteristics theory and the literature on cultural conceptions of motherhood. Finally, we

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THE LABORATORY EXPERIMENT

Paid undergraduate volunteers rated a pair of equally qualified, same-gender (either male or female), same-race (either African-American or white) fictitious job applicants, presented as real, who differed on parental status. Pairing application materials by race and gender generates four experimental conditions where participants rate one parent and one nonparent applicant who are either African-American men, African-American women, white men, or white women. Male and female participants were randomly assigned to one of these four conditions, and parental status was counterbalanced across the two members of the applicant pair (i.e., one member of the pair was presented as a parent to half of the participants in each condition, and the other member was the parent for the other half of the participants in that same condition). Thus, the design consisted of three between-subjects factors (gender of participant, gender of applicant pair, and race of applicant pair) and one within-subjects factor (parental status).[5] We make no predictions about the effect of participant gender on applicant ratings, although the design allows us to assess if male and female evaluators react differently to parental status.

The study included 192 participants (84 men and 108 women), between 19 and 28 per condition. Four participants (2.1%) were suspicious about some aspect of the study, and consequently their data were excluded prior to analysis, creating an effective sample size of 188. Rejection rules were conservative and established beforehand. All analyses were also conducted with all available data, and no substantive differences were found.

The Use of Undergraduates

The laboratory experiment features a highly controlled setting with a diverse set of measures, allowing us to generate data that are well suited for evaluating our theoretical mechanism. In particular, the laboratory

[5] "Between-subjects" factors are those that do not vary within an experimental condition, such as participant gender, whereas "within-subjects" factors do vary. For example, in this experiment parental status is a within-subject factor since it varies across the two members of the applicant pair. Since the primary purpose of this project is to assess the effect of parental status on the ratings and evaluations of applicants, it is important that parental status be measured as a within-subjects comparison, which is more efficient than between-pair comparisons (Cohen 1988). This efficiency rationale might suggest an alternate design, where applicant race and gender were *also* measured within subject. In this alternate design male and female participants would evaluate eight sets of application materials—a parent and nonparent applicant from each race/sex combination. Pretesting established that this alternate design aroused suspicion since participants were required to examine eight sets of very similar materials. Even though between-subject comparisons are less efficient estimators they are nonetheless unbiased.

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setting ensures that we can maintain sufficient control over factors that would interfere with tests of our hypotheses (e.g., no other people in the room to prime other status characteristics, no telephone or other distractions present). However, it is not feasible to convince approximately 200 actual employers to visit the laboratory and spend one hour participating in an experiment. Therefore, by necessity we must rely on a sample of undergraduates in order to obtain a complete test of our theoretical claims regarding the discrimination mechanism. Understanding this mechanism is important if the goal is to find ways to reduce the disadvantages mothers face.

The theory presented here implies that to the extent that employers share the belief that mothers are less committed to or competent in workplace settings, they too will subtly discriminate against mothers. Qualitative research suggests that employers do, in fact, share this belief and discriminate against mothers in a range of settings (Blair-Loy 2003; Crittenden 2001; Kennelly 1999). For example, Blair-Loy quotes a chief financial officer who acknowledges deliberately rejecting women applicants on the basis of parent status. Her source conceded, "I find myself choosing men here every day over a woman with a child. If I had kids, I might not have made the same commitment to my job" (Blair-Loy 2003, pp. 119–20). Quantitative research also suggests that managers and student evaluators offer similar appraisals of applicants and that evaluators respond similarly to real and hypothetical applicants (Cleveland and Berman 1987; Cleveland 1991; Olian and Schwab 1988).

To assess more directly the extent to which employers discriminate against mothers, we conducted an audit study of actual employers. We describe this study and its results after presenting the results from the laboratory experiment. While the audit study cannot assess the mechanism of discrimination, it was designed to allow for comparability with the laboratory experiment, and provides evidence of the real-world implications of the argument evaluated here.

Procedure

Participants came to the lab individually, read a description of a company that was purportedly hiring for a midlevel marketing position, and examined application materials for two applicants for the position who differed on parental status but were otherwise similar. They examined the applicant files one at a time, and we counterbalanced which file, the parent or nonparent, they viewed first. After reviewing an applicant's file, participants immediately completed an "initial impressions" survey for that applicant, which contained items that allow us to assess whether the participants in this study view motherhood as a status characteristic

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(see "dependent measures" below). On the same instrument, participants were asked to provide a list of pros and cons for each applicant, a task intended to entice them to look more closely at the applicants' materials before proceeding to the next stage of evaluation. Participants were next instructed to look at the application materials more closely and complete an "applicant evaluation sheet" for each candidate. This instrument contained our ability standard and evaluation measures, described below. Before leaving the lab, participants answered a series of free response items to assess whether the experimental manipulations were successful and to determine if they were suspicious of some aspect of the study. They were also briefly interviewed as a further check on experimental manipulations and suspicion, and then they were debriefed and paid.

Cover Story

Participants were told that a California-based start-up communications company was conducting an employment search for a person to head up its new East Coast marketing department. They heard that the communications company was interested in receiving feedback from younger adults since young people are heavy consumers of communications technology. To further increase their task orientation, participants were told that their input would be incorporated with the other information the company collects on applicants and would impact actual hiring decisions.[6] Participants then read about the requirements of the marketing position and the proposed salary range ($135,000–$180,000).

Application Materials

Participants inspected an applicant file for each of the two applicants. Other than varying first names to manipulate race and gender (see below),

[6] The decision to use deception in experimental settings requires a careful weighing of the potential costs and benefits. As others have noted, "Experimenters often find themselves in the troublesome position of concealing the truth from their subjects in order to reveal a truth about human behavior" (Aronson et al. 1990, p. 89). If we did not use deception in this study, participants may have provided socially desirable answers (to avoid appearing to discriminate against mothers) or may not have taken the task seriously (and thus answered carelessly, rather than in a way that revealed their true preferences). Both of these would have suppressed our ability to detect real discrimination against mothers. We believe that the costs of a relatively brief (the deception and the reasoning behind it was fully explained to participants at the end of the study, meaning that participants were deceived for less than an hour in most cases) and mild (the deception did not distress the participants or violate their privacy) use of deception were outweighed by the increased risk of concluding that mothers do not face discrimination when they actually do.

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the files were identical across condition. The files contained three items: a short memo, a "fact sheet," and a résumé. The memos were similar to those used by Cuddy et al. (2004) and contained a few brief notes purportedly from a human resources staff member at the hiring company who conducted a short screening interview with the applicant. The memos and the résumés were used to manipulate parental status as described below. The "fact sheet" summarized relevant information about the potential employees (such as college grade point average) that was not presented on the résumé. The résumés listed the applicant's career goals, educational history, past work experience, and other relevant activities. The résumés indicated that the applicants had bachelor's degrees from one of two large midwestern universities and had approximately seven years of work experience. Both applicants were presented as highly productive by including "results" on the résumé, such as "increased division sales by 10% between 2000 and 2002." The fact sheet and the résumés were used to establish that the candidates were equally productive in their past jobs and that they had equivalent skills and backgrounds. One challenge of this study was to create two sets of materials that were of equivalent quality without being suspiciously similar.

Prior to the actual experiment, we pretested the two versions of the materials to assess whether they were of equivalent quality. At this stage, race, gender, and parental status information was not available to evaluators so that we could determine whether the résumés were perceived to be equal in the absence of the status manipulations to be employed in the actual experiment. A different sample ($N = 60$) drawn from the same population as in the actual experiment rated these two "template" résumés, one at a time, using seven-point scales ranging from "not at all" to "extremely" capable, efficient, skilled, intelligent, independent, self-confident, warm, and sincere. No significant differences were found between participants' ratings of the two résumés on any of these eight traits. Participants also indicated which of the two applicants appeared more qualified for a marketing position with a new start-up company, and no significant association was found between résumé template and being more qualified ($\chi^2 = 1.79$, $df = 3$), indicating that one applicant did not appear significantly more qualified than the other. Nonetheless, to ensure that differences in résumés were not systematically impacting the results, parental status was counterbalanced in the actual experiment across the two versions of the résumés for each condition.

Race and Gender Manipulations

Following Bertrand and Mullainathan (2003), the race and gender of applicants were manipulated by altering first names on the applicant files.

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Bertrand and Mullainathan (2003) used birth certificate data to generate a list of names commonly given to white and African-American children in the mid-1970s and then pretested these names to establish that they evoked the race and gender attributions predicted (see Bertrand and Mullainathan 2003, app. A). We used the following first names taken from this list: Allison and Sarah (white females), Ebony and Latoya (African-American females), Tyrone and Jamal (African-American males), and Brad and Matthew (white males). Each member of the applicant pair, regardless of race or gender, had one of two last names that were consistent across condition.

Parental Status Manipulation

Parental status was manipulated on the résumé and on the human resources memo. The résumé for the parent member of the applicant pair listed "Parent-Teacher Association coordinator" under the heading "other relevant activities." The nonparent was instead described as the fundraiser for his/her neighborhood association. Fuegen et al. (2004) successfully used a similar manipulation to indicate parental status. Following Cuddy et al. (2004), the memo for the parent member of the pair included the following phrase: "Mother/father to Tom and Emily. Married to John/Karen." The nonparent was described as simply "married to John/Karen."[7]

Dependent Measures

According to the theory, if motherhood operates as a status characteristic, then mothers will be perceived as less competent or committed than nonmothers. As a result, mothers will be judged by a harsher standard than other potential employees and will be viewed as less hirable, less promotable, and deserving of lower starting salaries. To evaluate this argument, there are eight dependent measures: two that measure the traits of competence and commitment, two that measure the ability standard participants used to judge the applicants, and four that serve as our key evaluation measures. The eight measures are moderately correlated, with correlations ranging .25–.45.

Competence and commitment measures.—During the first phase of eval-

[7] We did not give the spouses and children of the African-American applicants "black" names. The goal was to make race of applicant salient, but hold all other factors constant. While one of the applicants was presented as a parent, the application materials for the other member of the pair made no mention of children, although she or he was described as married. We use the phrases "nonparent" or "childless" for convenience even though it would be more correct, even if awkward, to refer to these applicants as "women (or men) who did not give evidence of being a parent."

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uation, participants rated applicants on a series of items, including items intended to measure the extent to which they viewed the candidates as competent. Following Cuddy et al. (2004) we created a composite competence measure by calculating a weighted average of participants' ratings of the applicants on seven-point scales ranging from "not at all" to "extremely" capable, efficient, skilled, intelligent, independent, self-confident, aggressive, and organized (mean = 5.48, SD = .69, alpha = .85).[8]

To measure perceived commitment, we included a single-item question on the "applicant evaluation sheet" which asked participants how committed they thought the applicant would be relative to other employees in similar positions at the company. They were given 10 choices ranging from "more committed than 0% of other employees" to "more committed than 99% of other employees." On average participants viewed the applicants as more committed than 74.7% of other similar employees (SD = 18.0%). The main empirical prediction is that if motherhood is a status characteristic, the mean competence and commitment ratings should be lower for mothers than for nonmothers.

Ability standard measures.—Participants answered two items on the second phase of evaluation designed to provide ability standard measures. The first question was "in what percentile would the applicant need to score on his/her management profile exam in order for you to consider him/her for employment?" Participants were given choices ranging from the fifth to the ninety-ninth percentile. The "management profile exam" was described to participants as providing evidence about potential for advancement. The mean for the score-required item was 68.7 (SD = 30.3), indicating that applicants would need, on average, to score in approximately the sixty-ninth percentile or higher in order to be hired.

Participants were further asked, "How many days could this applicant arrive late or leave early per month before you would no longer recommend him/her for hire?" The mean for the days late item was 3.43 days (SD = 2.12). According to the status-based discrimination mechanism, if motherhood operates as a status characteristic, mothers will be judged by a harsher standard than nonmothers. They will be required to score in a *higher* percentile than nonmothers before being considered hirable and will be allowed *fewer* days of being late or leaving early.

Evaluation measures.—Four evaluation measures were included on the applicant evaluation sheet. Participants were asked what *salary* in dollars they would recommend for each applicant if the applicant were hired.

[8] While we followed Cuddy et al. in creating our competence composite variable, the results presented in this article do not hinge on the exact composition of the variable. That is, individual items produce qualitatively similar results, as do composites created from smaller subsets of the items.

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Recall that the participants were told that the proposed salary range was $135,000–$180,000. The mean salary recommended was $145,000 (SD = $22,400). Participants were also asked to estimate the likelihood that an applicant would be subsequently *promoted* if hired. Responses were on a four-point scale ranging from "most certainly will NOT be promoted" to "most certainly will be promoted," with a mean response of 3.14 (SD = .67), suggesting that applicants, if hired, were generally viewed as moderately promotable. Participants were further asked if they thought the applicant, if hired, should be recommended for a *management-training* course designed for those with strong advancement potential. Overall, 83.5% of applicants were recommended for this course. Finally, participants were asked for each applicant if they would recommend her/him for hire. Overall, 66.5% of applicants were recommended for *hire*. Since they were evaluating two applicants (one at a time), it was possible at this stage for participants to recommend hiring both applicants, although most did not—112 participants recommended only one of two applicants for hire, whereas 7 recommended none and 69 recommended both. The main empirical predictions are that mothers will be offered lower starting salaries, be rated as less promotable, be less likely to be recommended for management, and be less likely to be recommended for hire.

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Do Actual Employers Discriminate against Mothers?

It is worth returning to the question of how the use of undergraduate students as evaluators impacts our findings. One concern with students is that, lacking workplace and hiring experience, they might be more likely to rely on stereotypes when making hiring decisions. If undergraduates are more likely to rely on stereotypes than employers, our study will overestimate the magnitude of the motherhood penalty. Conversely, because of their lack of workplace experience, students are less likely than people with more extensive experience to have had a "bad experience" with an employed mother and to generalize from this experience when evaluating other employees who are mothers. Further, to the extent that younger adults hold more egalitarian gender beliefs, they might be less likely than older adults to discriminate against mothers. Our study might thus underestimate the magnitude of the motherhood penalty. While the laboratory data are ideally suited to evaluate the mechanism of discrimination, they cannot establish the extent to which actual employers penalize mothers in the hiring process. To address this question, we turn to the audit study.

THE AUDIT STUDY

Overview

The audit methodology combines experimental design with real-life settings. As in laboratory experiments examining discrimination, audit studies isolate a characteristic of interest (e.g., race or gender) and test for discriminatory behavior. Distinct from most laboratory studies, audit study participants are the people who make important decisions about actual applicants, such as employers conducting new employee searches. While laboratory experiments occur in more highly controlled settings, thereby permitting closer investigation of the social and cognitive processes involved in an act of discrimination, audit studies provide greater generalizability of the results. Local and national organizations have conducted audits to measure discrimination based on gender and race in the housing and job markets since the establishment of the Fair Housing Act (Title VIII of the Civil Rights Act of 1968; Yinger 1986) and the Civil Rights Act of 1964 (Fix, Galster, and Struyk 1993; Pager 2003; Bertrand and Mullainathan 2003). The current study is the first to use the audit methodology to measure employment discrimination based on parental status.

To conduct this study, résumés and cover letters from a pair of fictitious, equally qualified, same-gender applicants (both female or both male) were

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sent to employers advertising for entry- and midlevel marketing and business job openings at a large, Northeastern city newspaper over an 18-month period of time. Job openings were randomly assigned to either the male pair or female pair condition. As with the lab experiment, the same-sex pair contained one parent and one nonparent, and parental status was counterbalanced across members of the pair. We monitored whether gender and parental status impact the odds that an employer will call back an applicant. Two additional features of the audit study design increase our ability to compare it to the laboratory experiment: (1) applicant résumés in the audit study were based on the templates used in the laboratory experiment, and (2) the actual jobs to which applications were sent were similar to the marketing position described in the laboratory experiment.

The design for this study was patterned after a recent audit study that examined the effect of race on employment decisions (Bertrand and Mullainathan 2003). The authors found that, depending on the race of the applicant, 5%–8% of their hypothetical applicants received a callback when applying for executive, management, and sales positions. Based on this callback rate and to ensure that we had sufficient statistical power to evaluate the effect of parental status, we submitted 1,276 résumés and cover letters to 638 employers over the 18-month period following procedures described below.

Procedure

Each week all entry- and midlevel marketing and business jobs that matched our applicants' qualifications were selected from the Sunday edition of a newspaper in a large Northeastern city. On average, 13 job openings were selected per week, with a minimum of one job and a maximum of 39 jobs selected in one week over 18 months. We randomly assigned selected jobs to one of two conditions (male or female applicant pair), and then generated a pair of same-gender résumés and cover letters. Résumés were based on the same templates used in the laboratory experiment, presenting two applicants with uninterrupted work histories and equally strong educational credentials and professional experience. One member of the applicant pair was presented as a parent, as we describe below. Parental status was counterbalanced across the two versions of the application materials. Résumés and cover letters were submitted in the appropriate format, as requested by the employer in the job advertisement (i.e., e-mail, fax, or paper). Within each pair, applications were sent to employers one day apart, counterbalancing whether the parent or nonparent applied first. The purpose of this delay was to avoid

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raising undo suspicion by having our two sets of application materials arrive simultaneously.

Gender was manipulated by assigning female- and male-sounding first names to the résumés and cover letters. Since race did not impact the magnitude of the motherhood penalty in the laboratory experiment and because of the large number of applications already required to detect the effects of gender and parental status, race was not manipulated in the audit study. Instead applicants were given the same gender-appropriate "white names" that were used in the laboratory experiment.

Parental status was manipulated on the résumé and on the cover letter. Consistent with the laboratory experiment, the résumé for the parent member of the applicant indicated that she or he was an officer in an elementary school parent-teacher association, while the nonparent member of the pair was presented as an officer in a college alumni association. In the laboratory experiment, we also manipulated parental status on a memo purportedly from the human resources department of the hiring company. Since we could not use this manipulation in the audit study, we instead manipulated parental status on the cover letter. The cover letter for the parent member of the applicant pair mentioned that she or he was relocating with his or her "family" to the city where the job was located. The cover letter for the nonparent member of the pair also mentioned that she or he was relocating to the hiring city, but did not mention a family.

We occasionally had to make slight adjustments to the application materials in order to satisfy conditions in the job advertisements. If salary requirements or histories were also requested, for example, a sentence was added to both cover letters stating that the applicant was flexible and prepared to discuss salary if interviewed for the position. If a job required fluency in a language other than English, this was added to both résumés. Of the 638 job advertisements, 83 (13.4%) requested salary requirements or histories, and 34 (5.3%) required fluency in a language other than English.

After applications were submitted, we monitored whether or not job candidates received a callback from potential employers by phone or e-mail. Each hypothetical applicant had his/her own voice mail number and e-mail address, allowing us to track positive responses from employers. Any invitation to an interview on the phone or at a company office was considered a "callback." When an applicant received a callback, we responded nonobtrusively (by e-mail or leaving a message during nonwork hours) indicating that the applicant was no longer interested in the position.

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SUMMARY AND CONCLUSIONS

In this project, we make two main contributions. First, we isolate and experimentally evaluate a status-based discrimination mechanism that is proposed to explain some of the disadvantages mothers experience in the paid labor market. While survey research has established that employed mothers experience a per-child wage penalty, net of the usual human capital and occupational factors that affect wages, this research has been unable to assess whether discrimination is in part responsible for this wage penalty.

The experiment presented here strongly supports the status-based discrimination mechanism. This is the first study to show consistent, significant evidence for the motherhood penalty over a broad range of measures. By experimentally holding constant the qualifications and background experiences of a pair of fictitious job applicants and varying only their parental status, we found that evaluators rated mothers as less competent and committed to paid work than nonmothers, and consequently, discriminated against mothers when making hiring and salary decisions. Consistent with our predictions, fathers experienced no such discrimination. In fact, fathers were advantaged over childless men in several ways, being seen as more committed to paid work and being offered higher starting salaries. The fact that evaluators offered higher salaries to fathers suggests that cultural beliefs about gendered labor markets and a family wage still shape the allocation of organizational rewards. One unexpected

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finding was that childless women were advantaged over childless men on several measures, including being seen as more competent and being more likely to be recommended for hire, although they were not offered significantly higher salaries. It is possible that evaluators perceive childless women as especially committed to paid work.

The second contribution we make in this project is to show that real employers discriminate against mothers. Ours is the first audit study to test for hiring discrimination on the basis of parental status, and therefore the first to provide causal evidence that mothers experience hiring discrimination. By using application materials adapted from the laboratory experiment to apply to over six hundred jobs, we found that prospective employers called mothers back about half as often as nonmothers. Fathers, by contrast, were not disadvantaged in the hiring process. In general, the findings of the audit study correspond closely to those from the laboratory study, providing converging evidence for the motherhood penalty across two studies employing different methods and samples.

While the data support the main hypothesis, the project has several limitations. First, the experiment only evaluated the status-based discrimination mechanism for a high-status job that appeared to require high levels of commitment. Whether mothers would experience the same type and amount of discrimination in lower-status jobs or in jobs that are more or less gender-typed is an open question. While we expect the motherhood penalty to apply to a wide range of jobs (as all jobs require some degree of competence and commitment), the magnitude of the effect likely varies with the job type. Existing survey analyses have found a motherhood penalty across a wide range of occupations and jobs. Additionally, one study has shown that the magnitude of the wage gap is actually largest for those who have only a high school–level education, suggesting that the penalty is not limited to high-status jobs (Anderson et al. 2003). Thus, although there is reason to suspect that the mechanism described here would apply in a wider range of jobs, experiments that vary the type of job are needed to evaluate this prediction.

Second, this study examines discrimination only at the point of hire. We predict that women who give evidence of being a mother would be held to a harsher standard and suffer decreased workplace evaluations at other junctures, such as when promotion decisions or decisions to award raises are made, but whether the mechanism holds at these other crucial junctures is also an empirical question. Finally, the study examines only one avenue for getting a job. It is possible that evaluators are more or less discriminating, for example, when candidates are recommended through social networks.

The results of this study have implications for understanding some of the enduring patterns of gender inequality in paid work. The motherhood

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penalty appears robust both internationally and historically. One analysis of income data found a motherhood penalty in Australia, Canada, the United Kingdom, the United States, Germany, Finland, and Sweden (Harkness and Waldfogel 1999). A more recent analysis (Misra, Budig, and Moller 2005) discovered a motherhood penalty in Austria, Germany, Italy, Luxembourg, the Netherlands, Canada, the United Kingdom, the United States, Belgium, France, and Sweden. Furthermore, the motherhood penalty appears to have remained stable over time (Avellar and Smock 2003). This study offers a partial explanation for the mechanism behind a widespread, durable phenomenon with implications for a broad segment of the population.

More generally, a gender gap in wages has persisted over the vast movement of women into paid labor in the United States since the early 1970s. While the magnitude of the gap decreased over much of this period (Charles and Grusky 2004; Blau and Kahn 2004), a sizeable gap remains, and the gap has not narrowed in recent years (Institute for Women's Policy Research 2006). As Glass (2004) notes, employed mothers are the group of women who account for most of this gap. While many factors are certainly responsible for its persistence, this study suggests that cultural beliefs about the tension between the motherhood and "ideal worker" roles may play a part in reproducing this pattern of inequality. A second enduring pattern of gender inequality is the so-called "glass ceiling," a metaphor for the barriers that restrict women's movement up the career ladder to the highest positions in organizations and firms. To the extent that employers view mothers as less committed to their jobs and less "promotable," the glass ceiling women face could be, in part, a motherhood ceiling.

Writing for the National Center for Policy Analysis, Denise Venable (2002) describes an analysis from the congressional budget office that found that among people ages 27 to 33 who have never had children, women's earnings approach 98% of men's. She concludes, "When women behave in the workplace as men do, the wage gap between them is small." Claims of unequal pay, she continues, "almost always involve comparing apples and oranges." However, since most employed men and employed women have children at some point in their lives, the most illustrative "within fruit" comparison is not the comparison of childless men to childless women, but the comparison of men with children to women with children. As the two studies reported here show, when women "behave as men do," giving evidence of being a parent, they are discriminated against, while their male counterparts are often advantaged by their parental status. Far from being an "apples to oranges" comparison, the male and female applicants who were evaluated in these studies were exactly

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equal by experimental design. That parental status disadvantaged only female applicants is strong evidence of discrimination.

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