Beyond the Baby Bump: Subtle Discrimination Against Working Mothers In the Hiring Process

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Received: 8 January 2022 / Published online: 24 January 2022 © The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2022

Abstract
Despite a large proportion of working mothers in the American workforce, research suggests that negative stereotypes and discrimination against working mothers continue to exist. In a set of two experimental studies, the current paper examined subtle discrimination against non-pregnant, working mothers in different hiring settings. In Study 1, using a between-subject field experiment and applying for geographically dispersed jobs with manipulated resumes, we found evidence for subtle discrimination, such that mothers received more negativity in callback messages than women without children, men without children, and fathers. They were also rejected more quickly than women without children and fathers. In Study 2, using a more controlled experimental paradigm, we tested our hypothesis in a hypothetical interview evaluation setting. We found that mothers faced more interpersonal hostility across different job types as compared to women without children. Together, these studies highlight the presence of subtle discrimination against working mothers at different stages of the hiring process.

Keywords Discrimination · Motherhood · Social roles · Hiring

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Research indicates that mothers experience higher levels of discrimination across different employment settings, both formally (e.g., in pay, hiring, and promotion opportunities) and interpersonally (e.g., incivility, hostility), as compared to fathers, men without children, and women without children (Budig & England, 2001; Budig & Hodges, 2010; Correll et al., 2007; Hebl et al., 2007; Heilman & Okimoto, 2008). The obstacles that mothers face at work are often referred to as the “maternal wall,” which is a metaphorical impediment to working women’s success once they have children (Barnett, 2004; Williams, 2001). As approximately 80–90% of women will become mothers during their lifetime (Johnson, 2008; Taylor et al., 2010), and a majority (70%) of mothers who have children under 18 are employed (US Bureau of Labor Statistics, 2019), there are widespread social and economic implications to the workplace discrimination that mothers face.

Given this pervasive phenomenon, a growing body of research has examined mechanisms through which discrimination against mothers occurs (e.g., Benard & Correll, 2010; Cuddy et al., 2004; Güngör & Biernat, 2009). Social role theory posits that women are prescribed qualities associated with the caregiving role (Eagly, 1987). Consistent with this notion, due to their caregiving roles, mothers are often perceived to be less competent, warmer, and less committed to work than women without children (Botsford-Morgan et al., 2013; Correll et al., 2007; Cuddy et al., 2004). In turn, these negative stereotypes may manifest as negative treatment toward mothers in both subtle and overt forms. Although fatherhood status does not appear to negatively affect working men (Fuegen et al., 2004), mothers are less likely to be hired, called back for an interview, given training opportunities, and more likely to be recommended for lower salaries as compared to non-mothers (Correll et al., 2007; Cuddy et al., 2004).
Despite these findings, extant research has mostly focused on more overt forms of discrimination against working mothers, neglecting the more ambiguous (i.e., subtle) but equally detrimental form of discrimination that mothers may experience. Due to evolving social attitudes and changing civil rights laws, this more contemporary form of discrimination often manifests in lower intensity, subtle behaviors that are more difficult to detect and can be masked as accidental (Jones et al., 2016; Jones et al., 2017). The few studies that have examined subtle discrimination against working mothers focus on the experiences of pregnant women. The stereotypes of pregnant women share some similarities with post-birth mothers, but there are also some differences between the two (e.g., Botsford-Morgan et al., 2013; Jones, 2017). Pregnancy is a dynamic stigma that changes visibility and stability over time, while motherhood is a permanent yet potentially concealable stigma (Jones et al., 2016).

As such, the current paper aims to examine subtle discrimination against non-pregnant working mothers using a set of two experimental studies that examine the experiences of working mothers across different stages of the hiring process: resume screening and interview evaluation. In the first study, utilizing a between-subject field experimental design, we proposed and tested whether subtle discrimination against working mothers exists in the form of message negativity and reject speed during the resume screening stage. In the second study, extending findings from the field experiment that uncovered evidence of subtle discrimination against working mothers, we examined the extent to which the same discrimination manifests against working mothers when being evaluated for job suitability in interview evaluation settings.

This paper makes two important contributions to organizational scholarship. First, by focusing on subtle discrimination against working mothers, we examine an important but often understudied part of mothers’ (rather than pregnant women’s) experiences in hiring settings. Existing work on workplace discrimination against post-birth mothers has largely focused on overt and formal discrimination such as hiring and performance evaluation outcomes (e.g., Correll et al., 2007; Cuddy et al., 2004), which only provides a partial picture of these employees’ experiences. Given that subtle discrimination can be as impactful as overt discrimination, especially when occurring chronically (Jones et al., 2016), it is essential to examine the full spectrum of mothers’ workplace experiences.

Second, we adopt a robust methodological approach by examining our research question experimentally in both laboratory and non-laboratory settings. In Study 1, we use a field experiment design with experimentally manipulated resumes to apply for geographically dispersed jobs in various industries. In doing so, we advance the methodology used in previous hiring discrimination studies, which are mostly conducted in laboratories or the field within a particular industry and geographical region. In Study 2, our use of a more controlled experimental paradigm extends our Study 1 findings to the interview evaluation setting and allows for examining possible boundary conditions. Our coupling of these complementary approaches increases internal and external validity and maximizes the robustness and generalizability of our findings. Together, this pair of studies shed light on the often-overlooked manifestations of discrimination against non-pregnant working mothers.

### Defining Subtle and Overt Discrimination

Popular conversations about discrimination primarily focus on its more egregious forms, such as being passed over for a desirable job assignment, not being hired, or even experiencing violence related to a stigmatized social identity. All of these examples reflect *overt discrimination*, or “explicitly negative demeanor and/or treatment enacted toward social minorities on the basis of their minority status membership” (Jones et al., 2016; p. 1509). Examples of overt discrimination include bullying, hostile sexism, and hostile racism. Overt discrimination is clear in intention and can occur formally or interpersonally. Targets and observers can easily recognize overt discrimination as a reaction to a certain stigmatized social identity. Consequently, due to evolving societal attitudes and increasing civil rights protections over the past few decades, many forms of overt discrimination are now illegal and generally deemed unacceptable by the public. Unsurprisingly, overt discrimination is related to negative consequences, such as less favorable career outcomes, poorer physical and mental health, and higher turnover (e.g., Jones et al., 2016).

In contrast, *subtle discrimination* can be defined as negative behaviors ambiguous in intent and can be enacted consciously or unconsciously due to targets’ minority status membership (Jones et al., 2016). Examples of subtle discrimination include everyday racism, benevolent sexism, and incivility. Subtle discrimination can occur formally or interpersonally, and its defining characteristic is being vague in intention and therefore easily masked as trivial or harmless. For instance, incivility, such as being interrupted mid-conversation, experienced by targets can be brushed off as general rudeness or lack of courtesy (Cortina, 2008). Because of its ambiguous nature, subtle discrimination is often difficult to identify and is therefore not unlawful or widely socially condemned. Nevertheless, research has suggested that subtle discrimination is at least equally, if not more, detrimental to targets’ work and health outcomes (e.g., Cortina et al., 2013; Madera & Hebl, 2012; Jones et al., 2016) and may also occur more chronically (Dovidio & Gaertner, 1998; Swim et al., 1995). When coupled with its
ambiguous nature, it can place targets in a consistent state of discomfort, which can deplete their resources and influence key work and personal outcomes (Jones et al., 2016, 2017). Next, we will discuss the theoretical background of discrimination against working mothers and empirical evidences for its subtle manifestations.

**Hiring Discrimination Against Working Mothers**

Theoretical explanations for workplace discrimination against mothers can be grounded in status characteristics theory and social role theory. Status characteristics theory (Berger et al., 1977) contends that when one social category (e.g., gender) is more socially valued than another (e.g., male vs. female; Ridgeway, 2001), the social category becomes a status characteristic and members of the valued group are regarded as having greater worth and competence. Following this line of logic, the motherhood penalty hypothesis (Ridgeway & Correll, 2004) proposes that motherhood, due to mothers’ role as primary caregivers, is a socially devalued status in the context of work. Given this socially devalued status at work, mothers are viewed as less worthy and competent, and therefore less desirable as job candidates.

Furthermore, social role theory contends that gender-based stereotypes are derived from the traditional distribution of labor between men and women (Eagly, 1987). Specifically, men are typically prescribed breadwinner roles, while women are prescribed caregiving roles. As a result, people are expected to possess characteristics that will enable them to succeed in their respective prescribed roles; men are expected to be assertive, independent, and competitive, while women are expected to be nurturing, warm, and relationship-oriented. Extending social role theory, role congruity theory asserts that women are treated more negatively in the workplace because their professional roles are incongruent with their prescribed caregiving roles (Eagly & Karau, 2002). Because the professional role is characterized by masculine characteristics such as assertiveness and independence (i.e., characteristics that men are expected to already have), women are viewed as lacking the necessary qualities to succeed as professionals. Taken together, these theories suggest that being a mother is a devalued social characteristic in the work context that signals incompetence. Mothers who work outside of the home defy traditional gender expectations, which results in negative, prejudiced reactions. Therefore, people often expect working mothers to be less suitable for their professional roles and treat mothers more negatively in the work context.

It is also important to note that although the theoretical basis of discrimination against post-birth working mothers and pregnant workers is similar, the experiences of these two groups of women are not identical. Pregnancy is a dynamic stigma, and its increasing visibility can increase the salience of women’s femininity (which is incongruent with the working role and, thus, lower social status; Hebl et al., 2007). Furthermore, pregnancy can be viewed as disruptive and unstable depending on a mother’s health throughout her pregnancy (Grandey et al., 2020). In contrast, post-birth motherhood tends to be viewed as a more stable and permanent stigma that is also invisible because of its lack of physical manifestation. As exemplified by literature in other social science fields (e.g., sociology, economics), discrimination against mothers is not limited to pregnant women as researchers have found disparities in work outcomes between post-birth mothers and other social groups (Benard & Correll, 2010; Correll et al., 2007; Heilman & Okimoto, 2007). Therefore, we argue that motherhood status is qualitatively different from pregnancy status and merits separate attention.

Empirical evidence has largely supported these complementary theoretical frameworks by finding that mothers face pervasive negative stereotypes and discrimination in professional settings. Because mothers are presumed to carry the primary caregiver role, they are perceived as less available and agentic than non-caregiving parents, which are usually men (Henle et al., 2019). Compared to fathers and women without children, mothers are viewed as less committed and less competent but warmer (Cuddy et al., 2004; Heilman & Okimoto, 2007). These negative stereotypes can manifest in overt discrimination toward mothers in various work settings, such as hiring, pay, and promotion (Budig & England, 2001; Correll et al., 2007; Fuegen et al., 2004). For example, one of the first studies on hiring discrimination against mothers was an audit study of accounting firms, where manipulated resumes that only differed by gender and parental status were sent out to apply for accounting positions (Firth, 1982). Results showed that women were less likely to be called back than men, and mothers were less likely to be called back than women without children. A second, more recent study used the same methodology of applying to job openings advertised in a local newspaper and found the same pattern of results: mothers were less likely to receive callbacks than non-mothers (Correll et al., 2007). Further experimental evidence found that mothers were evaluated as less competent, committed, and punctual, and as a result, less likely to be recommended for hire (Correll et al., 2007).

Even though there is a substantial body of evidence that mothers experience hiring discrimination, recent research suggests that such overt manifestations of discrimination may not be as rampant today as they were in previous decades. For instance, recent field experimental evidence indicated that pregnant job applicants did not experience differences in callback rates in retail or professional jobs.
One possible explanation is that negative perceptions of working mothers have not disappeared, and they may manifest in more subtle, ambiguous manners. Indeed, there is little oversight or formal laws and regulations prohibiting subtle discrimination compared to overt discrimination. While people may try to avoid overt discrimination in employment settings, research has shown that attempts to suppress negative stereotypes can result in discrimination emerging in the form of subtly negative behaviors (Macrae et al., 1994). Thus, if evaluators inhibit themselves from engaging in overt discrimination, their negativity toward working mothers may instead surface in the form of subtle discrimination.

In support of this theoretical reasoning, evidence from field experiments (Botsford-Morgan et al., 2013; Hebl et al., 2007) has shown that the same woman applying for retail jobs experienced more rudeness and hostility when she was wearing a pregnancy prosthesis than when she was not visibly pregnant. Such subtle discrimination is not limited to retail settings; similar results were also observed when pregnant women applied for professional jobs, which are not as low paying or physically demanding as retail jobs (Walker & Botsford-Morgan, 2019). Although our focus is on post-birth mothers, stereotypes of pregnant women are similar to those of mothers, and pregnant women are expected to fulfill traditional roles associated with mothers (i.e., staying at home and being primarily committed to their children; Hebl et al. 2007). Therefore, it is reasonable to expect such negative treatment to extend beyond giving birth when mothers remain in the workforce.

Indeed, beyond the hiring context, research has found that mothers are perceived as less likable, less desirable as coworkers, and more interpersonally hostile (Benard & Correll, 2010; Heilman & Okimoto, 2007; Okimoto & Heilman, 2012). In addition, managers perceive mothers as having a higher level of work-family conflict, even when controlling for actual employee experience of work-family conflict (Hoobler et al., 2009). Furthermore, mothers experience increasing amounts of hostility and incivility (e.g., receiving insulting remarks) in the workplace as the number of children they have increases (Miner et al., 2014). Given this body of evidence, it is logical to infer that mothers may experience subtle discrimination in the hiring context. Despite these evidence, extant research on non-pregnant mothers largely focuses on overt, formal outcomes, such as salary, hiring recommendation, and allotment of training opportunities (Budig & England, 2001; Correll et al., 2007; Cuddy et al., 2004). Therefore, building on past work on discrimination against pregnant applicants, we posit that mothers are likely to experience subtle discrimination in non-face-to-face hiring settings, such as through callback communications and evaluations. We argue that subtle discrimination in these settings, although not received by mothers in real-time, can still have negative effects. For instance, because callback messages are relatively standardized and neutrally worded, negative messages may stand out more prominently. Similarly, being rejected more quickly may signal to mothers that they are not considered as serious applicants. Finally, hiring managers may display interpersonal hostility not only in interview evaluation process, but also in subsequent negotiation when they make the job offers. Considering the job search process involves applying for many jobs, the cumulative effect of these subtle indicators of discrimination can be detrimental to mothers. Altogether, we propose that:

Hypothesis: Working mothers will experience a higher degree of subtle discrimination in the hiring context than women without children, fathers, and men without children.

Study 1: Methods

Materials

Experimental Manipulations

We utilized a 2 (gender: male or female) × 2 (parental status: parent or non-parent) between-subjects design.¹ Two real resumes with equivalent qualifications (Master’s degree, eight years of experience in an analyst position, and equivalent leadership experience, awards, skills, and abilities) were used for the male and female applications. The female and male names used on the applications were common Caucasian names (Jane and Edward Anderson). Following previous work in this area (Correll et al., 2007; Fuegen et al., 2004), the applicant’s parental status was manipulated by indicating their membership as a “member of the Northern Virginia Parents Association” (among a list of other

¹ Mirroring past studies with similar designs (e.g., Botsford-Morgan et al., 2013; Walker & Botsford-Morgan, 2019), we also manipulated counter-stereotypic, individuating information on the resumes to test for effects of such individual remediation strategies in reducing hiring discrimination. Specifically, we created four levels for this manipulation: providing evidence for applicants’ competence, commitment, flexibility, or none (i.e., control). The wording of the individuating information was adapted from similar work on this topic (Benard & Correll, 2010; Morgan et al., 2013). This resulted in a 2 (gender: male or female) × 2 (parental status: parent or non-parent) × 4 (individuating information: none, competence, commitment, and flexibility) between-subjects design. Because this was outside the scope of this paper, we did not include the methods and results related to individuating information in the main body of this paper. However, for more details on our manipulations and related results, please see Appendix B.
activities) and briefly mentioning them as having a family in the summary section of the resume (“I am willing to relocate with my family”). In the non-parent condition, the applicant was described as a local neighborhood association member and did not mention family in the summary section (“I am willing to relocate”). In total, we sent out 1008 applications (252 applications per condition for four conditions). However, because some of the positions were later cancelled, we removed 115 applications from our data, resulting in 893 applications in the final analysis.

**Pre-Testing the Resumes**

The resumes were pre-tested using a sample of 179 working adults with hiring experience. Participants were randomly shown one of the resumes and then asked to evaluate the resume on a series of items, including competence, flexibility, commitment, hireability, warmth, and likability. Results showed that the male and female versions of the resumes were viewed as equivalent, and the parental status manipulations were successful. Full results and details of the pre-testing procedure are provided in Appendix A.

**Design and Procedure**

We submitted job applications to online job openings and varied information on the applicants’ resumes regarding gender and parental status. Subtle discrimination was measured by time elapsed from application to response, the length of the correspondence, and independent coders’ ratings of the positivity and negativity of the response.

Major career search websites, such as Indeed.com, Monster.com, and CareerBuilder.com, were used to locate job openings that matched the qualifications of the applicants portrayed in our pre-tested resumes. Indeed.com was the most frequently used website (76.56%) because it contains the most comprehensive list of job openings obtained by continually searching thousands of other websites to collect new postings. Resumes were submitted to jobs that fit the qualifications of the applicant (eight years of experience, Master’s degree, business/research/data analyst background). The search terms included “business analyst/associate,” “data analyst/associate,” “research analyst/associate,” and “consultant.” Additional requirements included were that the jobs must be located within the USA, require at least a bachelor’s degree, and the opening must be posted by the hiring company (as opposed to a contracted hiring agency). Because the hypothetical applicant address is located in the Washington, D.C. area, we applied to positions all over the country except the D.C. metropolitan area. This ensured all jobs applied to required relocation, therefore eliminating that as an alternate explanation. Two researchers had to agree that each job was a good fit before an application was submitted. Each job application was randomly assigned one of the four possible resumes (i.e., between-subject conditions) to rule out any selection effect regarding the industry, geographic areas, occupation, or company size that may skew our results. In addition, all job descriptions were saved. Two independent coders rated each job description on a variety of criteria, including educational requirements, the number of years of experience required, and match for applicant’s skills, education, and experience. The coders’ ratings were consistent (ICC (1,2) = 0.70). Thus, a scale was formed by averaging the two ratings and then averaging across the three dimensions (experience, education, and skills) for a composite measure of qualification match. We also collected the following information about each posting: geographic location of the position, industry, company size, and gender diversity of the board. These organizations are dispersed throughout the country (27.5% Northeast, 24.13% South, 21.9% Midwest, 20.1% West Coast) from a variety of industries. Over 60% of those organizations are privately owned or subsidiaries. Over 60% of the organizations have a board of directors, with a mean percentage of female board members of 20.84% (SD = 60.15%; n = 642). Size of the organizations ranged from 10 to 2.2 million employees (M = 24,703.2; SD = 99,493.5; n = 663). As can be seen in our correlation matrix (see Table 2), the percentage of female board members and the number of employees in the organization are not significantly correlated to any of our dependent variables of interest except for response time for callbacks.

**Measures**

**Independent Variables**

The independent variables were gender (male or female) and parental status (non-parent or parent).

**Dependent Variables**

Subtle discrimination was measured by 1) rejection speed (i.e., the time elapsed between application and rejection in days), 2) length of response messages in characters (via email or phone), and 3) positivity and negativity of the response message. Because callback messages can be conceptualized as a form of interaction from the hiring organizations and are analogous to hiring managers’ in-person behaviors in interview context (e.g., King & Ahmad, 2010; King et al., 2006), we determine that similar positivity and negativity measures are appropriate to assess the quality of the callback messages. We reason callback message quality (in both length and choice of words/tone reflected) is an indication of subtle discrimination because callback messages...
Descriptive statistics of key variables of interest for each condition can be found in Table 1, and a correlation matrix of key variables can be found in Table 2. As seen in our correlation matrix (Table 2), the percentage of female board members and the number of employees in an organization are not significantly correlated with any of our dependent variables of interest except for response time for callbacks. Therefore, we controlled for those two organizational characteristics for any analyses run with rejection speed as the dependent variable.

Our hypothesis predicted that mothers experience more subtle discrimination than women without children, fathers, and men without children. We conducted a two-way factorial ANOVA (with gender and parental status as IVs) to compare rejection speed, response length, and negativity of the messages between those received by mothers and those received by women without children, fathers, and men without children. Results showed that gender and parental status did not interact to predict negativity of responses \( F(1, 248) = 0.26; p > 0.05 \).

In light of this non-significant finding, we conducted a post-hoc analysis to examine the factor structure of the construct negativity of response. Results indicated that the two-factor structure was a statistically better fit than the one-factor structure, suggesting that it may be more appropriate to divide the negativity measure into two dimensions:

| Conditions | Positive Callbacks | Negative Callbacks | Speed of Call-back (in days) | Length of Callback (standardized z-scores) | Message Positivity | Message Negativity |
|------------|--------------------|--------------------|-------------------------------|---------------------------------------------|--------------------|--------------------|
| N          | N                  | M(SD)              | M(SD)                         | M(SD)                                      | M(SD)              | M(SD)              |
| Non-Father/ Control | 3 | 14 | 35.50 (54.94) | 0.51 (1.05) | 2.60 (0.30) | 1.03 (0.09) |
| Non-Father/ Individuating | 8 | 33 | 22.71 (29.66) | 0.14 (0.66) | 2.71 (0.59) | 1.05 (0.14) |
| Father/ Control | 0 | 0 | N/A | N/A | N/A | N/A |
| Father/ Individuating | 9 | 53 | 37.19 (50.36) | 0.12 (0.65) | 2.69 (0.62) | 1.06 (0.15) |
| Non-Mother/ Control | 3 | 11 | 32.14 (32.93) | 0.02 (0.61) | 2.65 (0.73) | 1.02 (0.09) |
| Non-Mother/ Individuating | 15 | 36 | 25.64 (48.92) | 0.05 (0.87) | 2.77 (0.66) | 1.08 (0.22) |
| Mother/ Control | 0 | 0 | N/A | N/A | N/A | N/A |
| Mother/ Individuating | 33 | 49 | 21.95 (30.25) | -0.08 (1.34) | 2.62 (0.69) | 1.11 (0.30) |

Two independent coders blind to the conditions (after removal of all language that indicates the gender of the applicant from callback messages) coded all of the responses for negativity (enthusiastic, friendly, warm, polite, comfortable, interested, negative, hostile, annoyed, nervous) on a scale from 1 to 5 (1 = not at all; 5 = a great deal), and the positive adjective items were later reverse-coded. These items were adapted from previous field studies measuring interpersonal treatment (e.g., King & Ahmad, 2010; King et al., 2006). There was consistency across coders \( ICC (2,2) = 0.86 \), and therefore the averages of those ratings were utilized for the analysis.

**Study 1: Results**

We received 71 positive and 196 negative callbacks, which resulted in a total callback rate of 29.80% (and a positive callback rate of 7.92%). Based on our coding of job descriptions to match applicants’ experience, education, and skills, the mean composite score for match of job qualifications was 3.89 out of 5 (SD = 0.83), indicating a good fit of qualification between the resume and the job posting. We conducted a 2 (gender: male or female) × 2 (parental status: non-parent or parent) ANOVA on the job descriptions’ composite ratings. Results showed that the applicants’ qualifications were a good fit for the jobs they applied for. Additionally, the level of qualification match did not vary across conditions or correlate with any of our dependent variables of interest. Descriptive statistics of key variables of interest for each condition can be found in Table 1, and a correlation matrix of key variables can be found in Table 2. As seen in our correlation matrix (Table 2), the percentage of female board members and the number of employees in an organization are not significantly correlated with any of our dependent variables of interest except for response time for callbacks. Therefore, we controlled for those two organizational characteristics for any analyses run with rejection speed as the dependent variable.

Our hypothesis predicted that mothers experience more subtle discrimination than women without children, fathers, and men without children. We conducted a two-way factorial ANOVA (with gender and parental status as IVs) to compare rejection speed, response length, and negativity of the messages between those received by mothers and those received by women without children, fathers, and men without children. Results showed that gender and parental status did not interact to predict negativity of responses \( F(1, 248) = 0.26; p > 0.05 \).

In light of this non-significant finding, we conducted a post-hoc analysis to examine the factor structure of the construct negativity of response. Results indicated that the two-factor structure was a statistically better fit than the one-factor structure, suggesting that it may be more appropriate to divide the negativity measure into two dimensions:

2 In addition to subtle discrimination, we also measured overt discrimination, operationalized as rates of positive and negative callbacks from the hiring organization. A chi-square test comparing positive and negative callbacks rates among mothers, non-mothers, fathers, and non-fathers did not reveal any differences. Further tests comparing overall response rates (positive and negative) versus non-response from hiring organizations revealed the same pattern of findings; there were no significant differences among groups.

3 The negativity composite included: negative, hostile, annoyed, and nervous, as well as reverse-coded items for enthusiastic, friendly, warm, polite, comfortable, and interested.
The overall negativity measure was divided such that the positively-worded items (comfortable, interested, warm, polite, enthusiastic, friendly, positive) are grouped into one dimension, and the negatively-worded items (hostile, nervous, awkward, annoyed, and negative) are grouped into another.
not differing in rejection speed, mothers still received more negative messages than non-fathers do. Altogether, despite the relatively scripted nature of callback communication, working mothers still incurred more subtle discriminatory treatment than other applicants.

Unexpectedly, we did not find any significant difference among men and women with and without children in message negativity. This may be due to a measurement issue of the negativity measure, as it contains both negative adjectives and reverse-coded positive adjectives. Although this is consistent with previous research using this measure, we argued that it may not be appropriate to combine both positively and negatively worded items in one measure, as the absence of positivity does not always indicate the presence of negativity and vice versa. Indeed, our factor analysis of the negativity measures supports this, such that the data showed a better model fit with a two-factor structure than a single factor. Therefore, we separated the negativity measure into two dimensions and analyzed them separately.

Our results revealed no difference in callback message positivity, though mothers do receive more negativity in messages than men and women without children. One possible explanation is that callback messages tend to be relatively neutral to maintain professionalism. The subtle differences in negativity between mothers and other groups are likely driven by implicit bias against mothers (e.g., being less committed, less competent), such that the negativity is expressed without the person being conscious of that.
Otherwise, in most scenarios that do not involve working mother applicants, hiring managers may just maintain a neutral tone (i.e., neither positive nor negative) because that is standard in professional communication, and those without negative stereotypes that are associated with motherhood are treated as regular applicants.

Study 2

There were several limitations from Study 1 that we attempt to address in Study 2. First, Study 1 was focused on one particular profession at the resume screening stage, limiting the generalizability to other job industries and stages of hiring. Second, it is possible that our manipulation of parental status, though effective, might be construed as individuals being involved in caretaking roles by getting involved in parent-related activities instead of simply indicating parental status. Finally, increasing reliance on technology such as artificial intelligence during resume screening may affect the results of our study.

As a result, we sought to extend our findings from Study 1 by examining the experiences of subtle discrimination during interview evaluation in an experimental study. Specifically, we examined the degree to which subtle discrimination occurs against working mothers at the next stage of the hiring process after resume screening: interview evaluation. Existing evidence for subtle discrimination experienced by mothers is mostly focused on pregnancy (e.g., Botsford-Morgan et al., 2013; Hebl et al., 2007). However, as mentioned earlier, pregnancy and post-birth motherhood are qualitatively different experiences for women. The first is dynamic in visibility and disruptiveness but temporary, while the latter is invisible but permanent. Furthermore, the current understanding of discrimination faced by post-birth working mothers is mostly on overt, formal outcomes, such as salary recommendations and allotment of interview opportunities (e.g., Budig & England, 2001; Correll et al., 2007; Cuddy et al., 2004). As mentioned earlier, given the evolving social and legal landscape related to civil rights, it is reasonable to expect bias against motherhood will manifest in subtle ways as well. Therefore, we extend our findings from Study 1, which focuses on written communication from organizations during the resume screening stage, by focusing on evaluations in the next step of the hiring process: interviews. Specifically, we expect that during interview evaluations (when people are given more unstructured information about the applicants), mothers will continue to be viewed negatively because they experience the same stereotypes as pregnant mothers, such as being viewed as less competent, committed, and flexible (e.g., Correll et al., 2007; Cuddy et al., 2004), which can result in subtle discrimination.

Furthermore, we aim to address the limitations of our Study 1 by examining two possible boundary conditions for discrimination against working mothers: job gender type and modality. Based on role congruity theories (Eagly & Karau, 2002; Heilman & Okimoto, 2007), women, especially mothers, may be seen as less fit for jobs that are more traditionally masculine (e.g., car sales, accounting, engineering) as opposed to feminine (e.g., clothing sales, human resources, gender studies) because their femininity is perceived to be misaligned with the masculinity necessary to succeed in those jobs. Therefore, we reason that mothers face more subtle discrimination during the hiring process for more masculine jobs as opposed to feminine ones. Moreover, women traditionally shoulder a disproportionate amount of caregiving responsibilities, and society also perceives them to be the main caregiver for their children (Eagly, 1987). This was exacerbated during the recent COVID-19 pandemic when mothers had to assume most homeschooling and childcare responsibilities, as large portions of the workforce became remote and children had to attend school virtually from home (Petts et al., 2021). As a family-friendly accommodation once afforded to a minority of employees and perhaps stigmatized (Leslie et al., 2012), remote work has become the norm. Having at least one parent work from home has become a necessity for many families because all other forms of childcare support are unavailable. As mothers are expected to be primarily responsible for childcare, we posit that mothers who indicate they are available for in-person work may be subject to more subtle discrimination during the hiring process since they are seen as violating their prescribed caregiving role.

Study 2: Methods

Participants

We recruited 950 working adults through Amazon’s Mechanical Turk (mTurk) to participate in this experiment. To identify appropriate participants and detect inattention, we included prescreening qualification questions and an attention check question in the survey (Aguinis et al., 2021; Cheung et al., 2017). Participants were required to be 18 years of age or older, employed for at least 20 h per week, and residing in the USA. The final analysis included 888 participants (53% women) after removing responses ($n = 62$) that failed attention or manipulation checks. The average age of the participants was 37 years old ($SD = 9.87$), and about half of the participants indicated they were a parent (50.8%). The majority of participants were Caucasian (75.1%), with an additional 8.9% African American, 7.6% Asian, 5.7% Hispanic, and 2.7% Other. Participants received $1.50 for completing the survey.
Experimental Design and Procedure

The current study mirrors the protocol used in Hebl et al. (2007) and used a 2 (gender of applicant: male or female) × 2 (parental status of applicant: parent or non-parent) × 2 (job gender type: masculine or feminine) × 2 (job modality: remote-only or available in-person) between-subjects design. First, participants were asked to imagine themselves as employment placement agents and read a brief description of an applicant’s interview. Specifically, participants read, “We are interested in understanding job placement processes. Please imagine that you work for an employment placement agency and read the following applicant profile. You will be asked to recall this profile and provide your evaluations concerning job suitability and job placement.” Then, depending on the condition to which the participant was randomly assigned, they were provided with an interview summary that described the applicant as a “… woman/man seeking full-time employment in a position suiting her/his abilities… (who) did not express interest in any one particular type of job but did express enthusiasm to apply her/his diligent work ethic anywhere and can learn quickly. During the interview process, the applicant was punctual, courteous, and articulate. If hired, the applicant stated that she/he could start immediately. The applicant came across as very responsible and friendly during the interview.” Half of the participants were randomly assigned to the parent condition, and their interview summary included, “When asked how she/he spends her/his spare time, the applicant replied that she/he enjoys spending time with his wife/ her husband and children.” The remaining half of the participants were randomly assigned to the non-parent condition, and their interview summary included, “When asked how she/he spends her/his spare time, the applicant replied that he/she and her husband/ his wife enjoy decorating their new house.” The participants were also randomly assigned to the modality condition and told, “This applicant is only available for remote/in-person work.”

Participants were then instructed to assess the applicant for six jobs, assuming that the hypothetical applicant has the necessary credentials/qualifications for the position. Half of the participants were randomly assigned to the “feminine” condition. They evaluated the applicant for a variety of positions, including those of a family lawyer, kindergarten teacher, clothing store customer service associate, pediatrician, women and gender studies professor, and human resources associate. The other half of the participants were randomly assigned to the “masculine” condition. These participants evaluated applicants on an array of parallel positions such as a corporate lawyer, high school math teacher, car dealership customer service associate, psychiatrist, structural engineering professor, and accounting associate. Participants were then asked to indicate the extent to which they agreed with items that measured perceived job suitability and interpersonal hostility toward the applicant.

Manipulation Check

Participants were asked about the applicant’s family situation (“Please indicate the applicant’s family situation: woman without children, woman with children, man without children, or man with children”) and whether the applicant was available for in-person work. 62 responses were removed from the main hypothesis testing due to incorrect answers to the manipulation check questions.

Measures

Independent Variables

The independent variables are the gender of the applicant (male or female), the parental status of the applicant (parent or non-parent), job gender type (masculine or feminine), and job modality (in-person or remote only).

Dependent Variables

Subtle discrimination was operationalized as interpersonal hostility and job suitability ratings. Because the setting of this study did not involve any direct communication between the perceiver and hypothetical applicant, using the same positivity and negativity measures utilized in Study 1 as indicators of subtle discrimination would be inappropriate. For instance, it may not be as meaningful to measure perceivers’ “nervousness” toward the hypothetical candidate described in an interview profile. Therefore, we instead adopted the measure of subtle discrimination utilized by the experimental paradigm on which the study was based (Hebl et al., 2007). Specifically, we used the seven-item interpersonal hostility measure from Hebl et al. (2007; α = 0.94) to capture participants’ interpersonal hostility toward the fictitious applicants. The participants used a 7-point scale (1 = strongly disagree; 7 = strongly agree) to indicate their level of agreement with each item. Specifically, participants responded to items that described the applicant as (a) “a lazy worker,” (b) “would complain a lot,” (c) “would try to get out of doing work,” (d) “would expect to have their work done for them,” and (e) “would be too moody to be an effective worker,” and that the participant (f) “would be angry if I had to work with this applicant,” and (g) “wouldn’t give this person a position of power.” Job suitability was rated on a
single item for each of the six positions “Do you think the applicant is suitable for the following positions?” on a scale from 1 to 5 (1 = definitely not; 5 = definitely yes). We reason that even though these indicators of subtle discrimination will not be directly perceived by applicants at the interview evaluation stage, it still reflects bias and may even manifest again during the negotiation process after offers are being made, when it would directly impact mothers.

### Study 2: Results

Descriptive statistics for the key variables of interest can be found in Table 3. For our hypothesis testing, we conducted a 2 (gender of applicant: male or female) × 2 (parental status of applicant: parent or non-parent) × 2 (job gender type: masculine or feminine) × 2 (job modality: in-person or remote) between-subject ANCOVA on each of the dependent variables of interests: job suitability and interpersonal hostility. All analyses include gender and parental status of the participant as control variables.

Results indicated there was a significant interaction between gender and parental status of the applicant on interpersonal hostility [$F(1, 838) = 10.16; p = 0.001$], such that mothers ($M = 1.85; SD = 0.95$) experienced more interpersonal hostility than non-mothers ($M = 1.66; SD = 0.76$), while non-fathers ($M = 1.78; SD = 0.81$) experienced more interpersonal hostility than fathers did ($M = 1.68; SD = 0.80$) (see Fig. 3). Post hoc independent samples t-test indicated that mothers are evaluated with higher interpersonal hostility compared to non-mothers [$t(418) = 2.32; p = 0.02$] and fathers [$t(401) = 1.93; p = 0.04$], though not significantly different from non-fathers [$t(401) = 1.10; p = 0.10$]. Interactions among gender of applicant, parental status, and job gender type or job modality were not significant (see Table 4). Moreover, there were no significant interactions among our key variables of interest on job suitability. The only exception was gender of the applicant and job gender type interacting to influence likelihood to hire [$F(2, 838) = 6.41; p = 0.00$], such that women were more likely to be offered a feminine type ($M = 5.71; SD = 1.02$) than masculine typed professions ($M = 5.30; SD = 1.11$). Thus, our hypothesis was partially supported.

### Study 2: Discussion

We conducted Study 2 for two primary reasons. First, we wanted to determine whether the patterns of subtle discrimination observed in Study 1 at the resume screening stage with job applicants also occur in the interview evaluation process. Second, we examined two additional boundary conditions that may influence hiring discrimination against working mothers: job gender type and job modality. Consistent with our findings from Study 1, our analyses suggest that mothers suffer subtle discrimination during interview evaluation, such that participants indicated higher rates of interpersonal hostility when evaluating mothers. Moreover, this pattern of results held even when accounting for job gender type and job modality, which further bolsters the robustness of our finding. We further found support for women being more likely to be offered a feminine-typed profession than a masculine one. This corroborated with past research that suggests women are seen as not having the necessary qualities to succeed in a professional role, especially when the job type is more stereotypically masculine (e.g., Koch et al., 2015; Lyness & Heilman, 2006).

### General Discussion

The purpose of the current paper was to determine whether subtle discrimination against working mothers exists across different stages of the hiring process. Overall, our results provided some support for our hypothesis, such that working mothers experience subtle discrimination in both aspects of the hiring process that were examined: resume screening and interview evaluation. During resume screening, mothers were treated with more negativity in callback messages and rejected more quickly than women without children and men (with or without children). They were also rejected more quickly compared to non-mothers and fathers. During interview evaluation, people indicated higher interpersonal
hostility when evaluating mothers than non-mothers, whereas the opposite was true for men.

Although our studies do not consistently find mothers experiencing more subtle discrimination than all other groups (i.e., non-mothers, non-fathers, fathers), mothers do receive more subtle negative treatment than non-mothers do, supporting the notion that women become further stigmatized in employment settings when they become mothers. It is important to note that the mean ratings and standard deviation for our subtle discrimination measures in both Study 1 and 2 are low due to context restriction. However, considering that our coding was conducted by trained research assistants and displayed high inter-rater reliability, and our other self-reported measures were validated, we believe we found statistically significant differences in those ratings on gender and parental status of the hypothetical applicant because hiring managers exhibit more subtle negativity toward mothers. This is important because as suggested by research, although subtle discrimination may be low in intensity, it can still have cumulative negative effects of targets, especially when chronic in nature (Cortina, 2008; Jones et al., 2017).

Taken together, our studies found support for the existence of subtle discrimination across different professions and industries during both resume screening and interview evaluation. This builds on the limited research that suggests mothers experience interpersonal hostility and incivility (Botsford-Morgan et al., 2013; Miner et al., 2013). Although there is a substantial body of evidence pointing to overt discrimination suffered by non-pregnant working mothers (e.g., Budig & England, 2001; Correll et al., 2007; Fuegen et al., 2004), their experiences of subtle discrimination have been under-examined, and the limited evidence mostly focuses on pregnant, rather than post-birth, mothers. Our findings suggest that subtle discrimination against working mothers is not only specific to pregnancy when women have an increasingly visible sign of their stigma; it continues after women have given birth. Based on social role and role congruity theories, working mothers, whether pregnant or not, violate the social norms of women being caregivers by entering the work domain and are not viewed as having the necessary masculine qualities (i.e., independence, competence) to succeed in professional roles (Eagly, 1987; Eagly & Karau, 2002). Working mothers also violate the ideal worker norm because they are assumed to have childcare responsibilities, and therefore cannot devote themselves to work above all else (Williams, 1998). These departures from both societal expectations result in negative attitudes and stereotypes against working mothers, which may, in turn, manifest in negative treatment (Cuddy et al., 2004; Heilman & Okimoto, 2008). Overt discrimination may be less common due to its more egregious violation of social norms and illegality in some cases, but negative attitudes toward working mothers may continue to manifest in more subtle ways that are less documented, whether in the form of rejection speed during the resume screening stage or interpersonal hostility during the evaluation of interviews.

Theoretical and Practical Implications

Altogether, our paper contributes to a growing body of research that suggests modern discrimination often manifests in more subtle ways because it is illegal to overly discriminate in formal settings and socially unacceptable to discriminate based on non-job-related characteristics (Cortina, 2008; Hebl et al., 2002; Jones et al., 2007). By expressing bias through less discernible ways, people can still be perceived as conforming to norms and not violating the expectations for egalitarianism (Crandall & Eshleman, 2003). Indeed, people may have attempted to suppress
Table 4 Analysis of variance for study variables

| Effect                        | Interpersonal hostility |                     |                     | Job suitability |
|-------------------------------|-------------------------|---------------------|---------------------|-----------------|
|                               | $F$ (1, 838) $p$ $\eta^2$ | $F$ (1, 838) $p$ $\eta^2$ | $F$ (1, 838) $p$ $\eta^2$ |
| Gender of participant        | 29.50 .00 .03           | 10.50 .00 .01       | 0.43 .51 .00       |
| Parental status of participant | 14.19 .00 .02           | 0.92 .34 .00       | 5.82 .02 .01       |
| Gender of applicant (G): woman, man | 0.13 .72 .00           | 2.37 .12 .00       | 0.54 .46 .00       |
| Parental status of applicant (P): non-parent, parent | 0.08 .78 .00           | 2.51 .11 .00       | 1.81 .18 .00       |
| Job condition (J): feminine, masculine | 0.05 .83 .00           | 0.12 .73 .00       | 0.73 .39 .00       |
| Modality (M): in-person, online | 9.74 .00 .01           | 17.28 .00 .02       | 26.05 .00 .03       |
| G×P                           | 10.16 .00 .01           | 2.59 .11 .00       | 1.60 .21 .00       |
| G×J                           | 2.75 .10 .00           | 6.41 .01 .01       | 0.40 .53 .00       |
| G×M                           | 0.39 .53 .00           | 1.54 .22 .00       | 0.00 .98 .00       |
| P×J                           | 1.71 .19 .00           | 0.58 .45 .00       | 1.10 .30 .00       |
| P×M                           | 0.27 .60 .00           | 0.00 1.00 .00      | 0.82 .37 .00       |
| J×M                           | 1.40 .24 .00           | 1.39 .24 .00       | 9.49 .00 .01       |
| G×P×J                         | 1.47 .23 .00           | 0.10 .76 .00       | 0.04 .85 .00       |
| G×P×M                         | 0.00 .98 .00           | 0.00 .99 .00       | 0.02 .90 .00       |
| G×J×M                         | 0.01 .91 .00           | 1.70 .19 .00       | 0.71 .40 .00       |
| P×J×M                         | 0.04 .84 .00           | 0.63 .43 .00       | 3.88 .05 .00       |
| G×P×J×M                       | 0.69 .41 .00           | 1.10 .30 .00       | 0.63 .43 .00       |
their negative attitudes and stereotypes against mothers that ultimately still emerge in subtler forms in less structured settings. Our findings extend previous related research that focuses on subtle discrimination against mothers across different employment settings. The fact that there is some evidence of subtle discrimination, despite the highly structured context of hiring evaluations, is a powerful indicator of the persistence of discrimination against working mothers. These less obvious penalties for motherhood status may extend beyond hiring as women enter the organizations, as suggested by prior literature that found mothers facing mistreatment at work (Berdahl & Moon, 2013).

Furthermore, the ongoing COVID-19 pandemic has had a detrimental impact on working mothers by removing both formal and informal childcare support and forcing a large portion of mothers to reduce working hours or drop out of the workforce (McKinsey, 2021). With this increase in childcare responsibilities, it becomes even more difficult for mothers to conform to both ideal worker and ideal mother roles, which may provide justification for employers to express their prejudice and negative attitudes. In addition, the decreasing proportion of mothers in the workforce further places mothers at a higher risk of discrimination, as numerical representation can be related to women’s experiences in the workplace (Cohen & Swim, 1995; Kanter, 1977; King et al., 2010).

Finally, although not a central finding, our results suggested that contrary to mothers, fathers may experience more positive treatment than men without children. Based on our two studies, non-fathers were not rejected at a significantly different speed from mothers, and they were also not evaluated with significantly lower interpersonal hostility as mothers. This pattern of results is consistent with existing literature in social sciences that suggests fathers may be viewed more favorably than non-fathers, as evidenced in the “fatherhood premium” in wages/salary and promotion (Glauber, 2008; Hodges & Budig, 2010). Although the findings for fatherhood premium in hiring settings is more mixed, some experimental evidence suggesting that fathers are recommended higher salaries than non-fathers (Correll et al., 2007). This, along with our current findings from Study 1 and 2, suggests that future research is necessary to understand the effects of fatherhood on men’s career outcomes, particularly in hiring settings. There may be further boundary conditions that may explain the inconsistent findings. Considering most of the work to date about gender and parental status largely focuses on women, further examination is necessary to examine whether all men face the advantage of enjoying higher status and being deemed higher in worth in workplace setting, as suggested in existing theories.

Practically, our findings suggest that organizations, especially hiring managers, should increase their awareness of the subtle manifestations of discrimination against working mothers beyond formally documented decisions. Indeed, subtle negative treatment can have an equally deleterious impact on working mothers’ work and health outcomes (Jones et al., 2016) and may contribute to job withdrawal and turnover in the long term. Considering maternal turnover is costly and negatively impacts organizational diversity goals, it is crucial for employers to consider approaches to reduce subtle discrimination throughout the employee lifecycle, beginning with the hiring process.

Limitations and Future Directions of Research

The current paper has several advantages over previous studies, such as the focus on subtle discrimination against post-birth mothers across a variety of occupations, complementary designs that maximized internal and external validity, and the inclusion of geographically dispersed jobs across the country. However, the findings should also be interpreted in light of several limitations, which are detailed below.

First, while both studies cover jobs from different industries, Study 1 only focused on one specific type of job (business or research analyst with previous work experience). We also did not measure perceptions of hiring managers to assess stereotypes against working mothers. Although previous research did not find evidence for overt discrimination in both hiring context for retail and entry-level professional jobs among pregnant applicants, it is possible that overt discrimination can surface at higher rungs of the career ladder. Recent research has suggested that the size of the motherhood penalty varies among women of different earning levels. Specifically, women with higher skills and higher pay experience the highest total penalty (England et al., 2016). This may also be extended in the hiring context, where the expectations for employees’ competence, commitment, and flexibility for those positions are higher than those of lower-paid, lower-skilled jobs. Future research should examine stereotype content and discrimination across different job and skill levels.

Secondly, we only focused on the effects of parental status on women’s experiences in hiring settings in this paper. Research has indicated that mothers experience more negative career outcomes such as decreased promotability and lower salary if they seek family-friendly accommodations, such as requesting flexible work schedules, telework arrangements, and family leave (Judiesch & Lyness, 1999; Manchester et al., 2013). Future research should examine both subtle and overt discrimination experienced by mothers when they use family-friendly organizational policies.

Finally, while the current paper focused on the important but understudied issue of subtle discrimination against working mothers, we did not account for the other dimensions of discrimination, such as formality and intentionality. Previous research has suggested that women differ in their identification...
of discrimination depending on these dimensions (Lindsey et al., 2015). This negative treatment can still produce deleterious effects on women’s careers and lives outside of work (Jones et al., 2016; Jones et al., 2018). Future research should capture these manifestations of discrimination to provide a more comprehensive view of discrimination faced by working mothers.

### Conclusion

With the large and increasing proportion of mothers in the workforce, it is important to ensure these women have equal access to jobs and receive equal treatment. As evidenced by our two experimental studies, mothers experience persistent subtle discrimination across different hiring settings, underscoring the pervasiveness of subtle discrimination against post-birth mothers, even during the relatively structured process of hiring evaluations and decisions. These findings have widespread implications for research and practice and indicate a need for researchers to identify methods to prevent or reduce subtle discrimination toward mothers.

### Appendix A

#### Pre-Testing Procedure and Results

A total of 179 professionals from the USA with hiring experience participated in the pre-testing study by completing a brief (10 min) survey online. Participants were randomly assigned to view one of the 16 resumes and then evaluated the resume on a series of items. The participants were 44.7% male, had an average age of 35.36, and had an average of 9.54 years of work experience. Participants were recruited by contacting individuals in Masters in Business Administration (MBA) programs, using a snowball sampling method of personal contacts who had hiring experience and Amazon’s Mechanical Turk (MTurk). Approximately 46.4% (83) of the respondents were from MTurk and were paid $1.00—$1.50 for their participation. Participants who participated through the snowball sampling method were entered in a drawing to win one of two $25 Amazon gift cards.

Participants were randomly assigned to view one of 16 resumes and asked to rate the resume on a series of items, including the applicant’s competence, flexibility, commitment, parental status, hireability, warmth, likability, and the likelihood that the respondent would offer the applicant an interview. The items measuring competence, flexibility, commitment, hireability, warmth, and likability, were measured on a 1 (strongly disagree) to 5 (strongly agree) scale. The likelihood that the respondent would offer the applicant an interview was measured on a 1 (very unlikely) to 7 (very likely) scale. The individuating information was presented as follows: “My performance is consistently in the top 10% of employees and I am a highly efficient, skilled, and competent worker.” (competence), “Flexible schedule and willing to work whenever necessary.” (flexibility), and “Extremely committed worker who is willing to put in the work required to excel. Commitment to work is one of my greatest strengths.” (commitment).

First, the resumes from the male control non-parent and female control non-parent conditions were compared to determine whether the resumes were rated equivalently. The applicant’s name was not included on any of the resumes shown in pre-testing so that the gender of the applicant would not influence ratings. Results showed that there were no significant differences ($p > 0.05$) in the ratings of the male and female control non-parent resumes on any of the key variables (likelihood to offer an interview, hireability, competence, flexibility, commitment, warmth, likability).

After establishing that the male and female versions of resumes were viewed equivalently, the two versions of the resumes were collapsed to test whether the manipulation for parental status was successful. We conducted a chi-square test to examine whether resumes with the parental status manipulation (i.e., being member of Northern Virginia Parent Association) is effective. Results indicated that participants were significantly more likely to identify the resume that included “member of parent association” as one belonging to a parent ($\chi^2(1, 190) = 61.75; p = 0.00$). 96 out of 102 (94.6%) of participants shown the non-parent resume identified the applicant as non-parents correctly, while 79 out of 90 (87.7%) participants that were shown the parent resume identified the applicant as parent correctly. In addition, applicants providing individuating information about commitment were measured as more committed ($M = 4.12, SD = 1.04$) than applicants in the control condition ($M = 3.71, SD = 0.75$; $t(92) = -2.20, p < 0.05$). Applicants providing individuating information about flexibility were viewed as more flexible ($M = 4.10, SD = 0.90$) compared to the control condition ($M = 3.67, SD = 0.90; t(90) = -2.85, p < 0.05$). However, the competence manipulation was unsuccessful such that the resumes with individuating information about competence ($M = 3.87, SD = 0.69$) were viewed as equally competent to the applicant in the control condition ($M = 3.87, SD = 0.79; t(95) = -0.01, p = 0.99$).

In response to these findings, the individuating information about competence was strengthened to read,  

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6 The original design for the experiment is a 2 (gender of applicant: male or female)×2 (parental status of applicant: parent or non-parent)×4 (individuating information: competence, commitment, flexibility, or none), which yields 16 conditions. Due to the shift of focus of the paper, we are only reporting the gender and parental status manipulations and associated results in the main manuscript. Details regarding the results related to individuating information can be found in Appendix B.
“Consistently ranked among the top 10% of employees and honored with achievement awards for excellent performance. Appointed by senior management to lead project teams and manage projects worth over $3 million.” and tested again with 25 additional participants recruited through a snowball sampling method of individuals with hiring experience. The demographics of the sample of 25 people were comparable to the initial sample. However, they had a slightly higher mean level of work experience, and there were more females in this sample (28% male, 15.36 years work experience, average age of 36.28). Participants were randomly assigned to view either the male non-parent or female non-parent resume with the new competence information and rate them on the same series of items in the initial survey (likelihood to offer an interview, hireability, competence, flexibility, commitment, warmth, likability). There were no significant differences in ratings of competence (or any of the other key variables) across the male (M = 4.00, SD = 0.82) and female versions (M = 4.47, SD = 0.64, t(23) = 1.60, p = 0.12) of the resumes with the new competence information so the male and female resumes were collapsed and compared to the control condition. Results revealed that the manipulation was successful; the applicants who provided the new competence information were viewed as significantly more competent (M = 4.28, SD = 0.72) compared to those in the control non-parent condition (M = 3.83, SD = 0.72; t(46) = -2.16, p < 0.05) and also when compared to the collapsed non-parent and parents control conditions (M = 3.83, SD = 0.72; t(75) = -2.42, p < 0.05).

Appendix B

Methods and Results Related to Individuating Information and Work-Family Policies

In addition to subtle and overt discrimination, we also manipulated counter-stereotypic, individuating information provided by the applicant and measured organizational work-family policies to examine their roles in moderating subtle and overt discrimination against working mothers. We also manipulated applicants’ competence, commitment, and flexibility for individuating information, based on existing empirical literature that suggests those are stereotypes against working mothers (Botsford-Morgan et al., 2013; Ridgeway & Correll, 2004). For more details on the manipulations, please see Appendix A. We further had two independent coders recording the number of organizational work-family policies available in the organization’s websites. Each organization received one “point” for each of the policies they mention on the website. If two coders disagreed about a policy, a third coder viewed the website information to resolve the disagreement. The policies coded include support, flexibility, and parental leave policies. The support policies were: on-site childcare, off-site childcare, childcare subsidies, flexible spending accounts for dependent care, adoption assistance, new parent support program, and other childcare support resources. Flexible policies included telework, the opportunity to reduce from full-time to half-time, flexible working hours or alternative work schedules, and job sharing. Parental leave policies were coded as one point for each of the following: maternity leave offered, paternity leave offered, maternity leave paid, paternity leave paid. The policies coded did not include mandatory statements from the EEOC stating compliance with fair hiring practices, as they are not discretionary and hence not a good indication of organizational work-family culture.

We predicted that mothers who provide individuating information experience less formal and interpersonal discrimination than those who do not. Due to the small number of callbacks for each individualizing information condition, we collapsed across all individualizing information conditions into one group and compared it with the control condition (i.e., no individuating information) group. We conducted logistic regressions to examine the effects of gender, parental status, and usage of individuating information on formal discrimination (i.e., rates of positive and negative callbacks). Results showed that gender, parental status, and individuating responses did not interact to predict rates of positive (Exp(B) = 1.35; p < 0.05) or negative callbacks (Exp(B) = 1.60; p < 0.05). After that, we conducted 3-way (gender, parental status, and individuating information) ANOVA analysis to examine the effects of gender, parental status, and individuating information on interpersonal discrimination (i.e., response time, response length, positivity and negativity of the messages). Results showed that gender, parental status, and individuating information did not interact to predict rejection speed [F(1, 133) = 0.19; p > 0.05], response length [F(1, 248) = 0.79; p > 0.05], positivity of response [F(1, 248) = 0.04; p > 0.05], and negativity of responses [F(1, 248) = 0.79; p > 0.05]. Individuating information did not alleviate formal or interpersonal discrimination for mothers. Our prediction was not supported.

Furthermore, we predicted that number of organizational family-friendly policies moderates the relationship between motherhood and hiring discrimination, such that as number of family-friendly policies increases, formal and interpersonal discrimination against mothers decreased. We conducted logistic regressions to examine the effects of gender, parental status, and the number of organizational work-family policies on formal discrimination (i.e., rates of positive and negative callbacks). Results showed that gender, parental status, and organizational work-family policies did not interact to predict rates of positive (Exp(B) = 0.66; p > 0.05) or negative callbacks (Exp(B) = 1.45; p > 0.05). We conducted moderated regression to test the effects of gender,
parental status, and organizational work-family policy on interpersonal discrimination (i.e., response time, response length, positivity, and negativity of the messages). Results showed that gender, parental status, and organizational work-family policy did not interact to predict rejection speed \( F(1, 133) = 2.05; p > 0.05 \), response length \( F(1, 248) = 2.55; p > 0.05 \), positivity of response \( F(1, 248) = 0.04; p > 0.05 \), and negativity of responses \( F(1, 248) = 0.79; p > 0.05 \). The number of work–family policies did not alleviate formal or interpersonal discrimination for mothers. Our prediction was not supported.

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