The Motherhood Penalty in Context: Assessing Discrimination in a Polarized Labor Market

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ABSTRACT Prior research provides important insights into employer discrimination against mothers but has focused exclusively on college-educated mothers in professional and managerial occupations. As a result, we lack evidence about whether less-educated mothers navigating the low-wage labor market experience similar disadvantages and whether the mechanisms underlying discrimination vary across contexts. These gaps are important because more- and less-educated mothers increasingly possess distinct resources and face unique demands both at home and at work, which may impact employer perceptions of conflicts between motherhood and job performance. This study reports results from an original field experiment in which 2,210 fictitious applications were submitted to low-wage service and professional/managerial job openings across six U.S. cities, experimentally manipulating signals of motherhood status. Findings provide causal evidence that employers in both contexts discriminate against mothers relative to equally qualified childless women. However, within labor market segments, distinct job demands listed in job advertisements are associated with stronger discrimination: time pressure, collaboration, and travel in professional/managerial jobs and schedule instability in low-wage service jobs. These findings have important implications for our understanding of the mechanisms underlying mothers’ disadvantages in an increasingly polarized labor market.

KEYWORDS Motherhood • Employment • Discrimination • Inequality

Introduction

Parenthood exacerbates gender inequality in the labor market (England 2005). Whereas men’s wages remain stable or increase when they become fathers (Killewald 2013; Lundberg and Rose 2002), women experience a substantial motherhood wage penalty (Avellar and Smock 2003; Jee et al. 2019). Some of the motherhood wage penalty can be explained by differences in work experience, part-time hours, and occupational changes (Budig and England 2001), but a large residual penalty persists in research adjusting for these factors and selection into motherhood (Waldfogel 1997). Social scientists theorize that this residual wage penalty may reflect changes in productivity or employer discrimination (Becker 1985; Budig and England 2001). Studies have gen-
eraly failed to support productivity explanations (Bielby and Bielby 2002; Kmec and Gorman 2010), but a growing body of scholarship suggests that discrimination may contribute to the persistent wage disadvantages of highly educated mothers in professional and managerial jobs (Benard and Correll 2010; Blair-Loy 2003; Correll et al. 2007; Turco 2010). However, as scholars have recently noted (England et al. 2016), we lack an understanding of discrimination against mothers with less education and in other labor market segments.

Research examining variation in the residual motherhood wage penalty by wages, education, and skill has produced conflicting results. Studies have alternately found larger residual motherhood wage penalties for less-educated and low- and middle-wage women compared with college graduates and high-wage women (Amuedo-Dorantes and Kimmel 2005; Anderson et al. 2003; Budig and Hodges 2014; Glauber 2018; Killewald and Bearak 2014), larger penalties for higher-skilled women (as measured by test scores) (Wilde et al. 2010), and similar penalties for women of different skill levels (England et al. 2016). However, observational studies are not well suited to differentiating between productivity and discrimination explanations (England et al. 2016; Pager and Western 2012). Although audit studies typically include a limited number of occupations and focus on hiring rather than on wages, obtaining direct causal evidence of motherhood discrimination in professional/managerial and low-wage service jobs can provide insights into the potential relevance of productivity and discrimination explanations for mothers in different segments of the labor market. These questions are particularly important because more- and less-educated mothers increasingly possess different resources and face unique demands at home and at work (Kalleberg 2011; Lambert 2008; McLanahan 2004; Williams 2010). Because discrimination is theorized to result from perceived incompatibility between stereotypes about motherhood and job performance (Correll et al. 2007; Heilman and Okimoto 2008; Turco 2010), the growing divergence by education in family life and increasingly distinct work conditions in low-wage service and professional/managerial jobs may impact how employers perceive conflicts between motherhood and employment.

This study asks whether mothers occupying distinct segments of an increasingly polarized labor market—with college graduates in professional/managerial jobs and high school graduates in low-wage service jobs—face similar penalties at the hiring stage compared with equally qualified women without children. I report results from an original field experiment in which 2,210 fictitious applications were submitted to low-wage service (cashiers and retail salespersons) and professional/managerial (accountants and marketing managers) job openings across six U.S. cities, experimentally manipulating signals of motherhood status. I argue that despite different manifestations of the “ideal worker” norm across labor market contexts, mothers face similarly negative consequences at the hiring interface because work is designed around a more general and pervasive assumption that workers are always available. Whereas many professional and managerial workers are expected to work all the time, low-wage service workers are increasingly expected to work at any time. The results provide causal evidence that employers discriminate similarly against mothers with a high school education in low-wage service jobs and mothers with a college degree in professional and managerial jobs. In addition, job demands listed in the study job advertisements that are largely specific to each context and theorized to conflict with stereotypes about motherhood—time pressure, collaboration, and travel requirements
in professional/managerial jobs and schedule instability in low-wage service jobs—are associated with stronger discrimination.

**Theory and Prior Research**

**Discrimination Against Highly Educated Mothers in Professional and Managerial Occupations**

Scholarship on motherhood discrimination often emphasizes the concept of the ideal worker—the idea that work organizations design jobs as a set of disembodied tasks or skills that assume that workers are without family responsibilities (Acker 1990). Cultural norms that mothers should assume primary responsibility for children are theorized to conflict with the norm that workers should be free of family responsibilities (Correll et al. 2007). In this account, discrimination results from conflict between the perceived time commitments necessary to be a “good mother” and an ideal worker. Although the concept of the ideal worker is applicable in principle to any job (Acker 1990), prior research has focused primarily on its manifestation and consequences for college-educated women in professional and managerial occupations, in which workers are often expected to put in long hours to signal work devotion (Blair-Loy 2003; Cha 2010; Correll et al. 2007; Kelly et al. 2010; Pedulla 2016; Rivera and Tilcsik 2016; Turco 2010; Weisshaar 2018; Williams 2001).

Qualitative and experimental studies have demonstrated significant bias against highly educated mothers in professional and managerial occupations. Qualitative interviews have revealed that employers question mothers’ commitment and ability to work long hours in law (Rivera and Tilcsik 2016), finance (Blair-Loy 2003), and the leveraged buyout industry (Turco 2010). Stereotypes that mothers with high-earning husbands will leave jobs to engage in intensive mothering appear to be salient factors in employer discrimination in professional and managerial settings (Rivera and Tilcsik 2016; Turco 2010). Lab experiments illuminate stereotypes that college-educated mothers are perceived as less competent and committed than equally qualified childless women, and study participants are less likely to recommend hiring mothers for jobs in marketing (Benard and Correll 2010; Correll et al. 2007), finance (Heilman and Okimoto 2008), and law (Fuegen et al. 2004). Additionally, the only prior audit study of discrimination by motherhood status in the U.S. context found that mothers with MBAs applying for marketing jobs received significantly fewer employer callbacks than equally qualified childless women (Correll et al. 2007). Prior research thus provides compelling evidence of bias against highly educated mothers in professional and managerial jobs, but no experimental studies have examined whether less-educated mothers experience similar disadvantages relative to equally qualified childless women in the low-wage labor market.

**Discrimination Against Less-Educated Mothers in Low-Wage Service Occupations**

The unique constellation of work and family resources and demands among less-educated women in low-wage service jobs provides a theoretical basis for competing
hypotheses about motherhood discrimination. Education and labor market segment are highly correlated: college graduates are concentrated in professional and managerial jobs, and high school graduates are concentrated in low-wage service jobs (Jacobs and Gerson 2004; Kalleberg 2011). As a result, it is difficult to differentiate between factors related to applicant education and labor market segment in assessing motherhood discrimination. Given that discrimination is theorized to be a function of the perceived incompatibility between the time commitments necessary to be an ideal worker and a good mother (Blair-Loy 2003; Correll et al. 2007; Heilman 1983; Heilman and Okimoto 2008), employer assumptions about the family characteristics of less-educated mothers and the demands of low-wage service jobs may both contribute to patterns of discrimination.

Why Employers May Not Discriminate Against Mothers in Low-Wage Service Jobs

On one hand, the work demands of low-wage service jobs may be perceived as more compatible with motherhood than those of professional and managerial jobs. First, unlike many professional and managerial jobs, long hours are uncommon in low-wage service jobs (Cha and Weeden 2014; Jacobs and Gerson 2004; Kalleberg 2011). Second, compared with professional and managerial workers, the costs of maintaining and replacing low-wage workers are low because employers invest less in training (Altonji and Spletzer 1991) and workers are much less likely to receive benefits, such as paid time off, paid maternity leave, or childcare assistance (Glass and Finley 2002; Glass and Fujimoto 1995). Finally, low-wage workers tend to be more closely supervised than professional and managerial workers (Williams et al. 2013). If the ability to monitor workers more closely reduces employers’ concerns about mothers’ work effort and productivity (Yu and Kuo 2017), employers may discriminate less against mothers in low-wage service jobs than they would against mothers in professional and managerial occupations.

Employers may also discriminate less against mothers in low-wage service jobs compared with highly educated mothers in professional and managerial jobs because the family circumstances of less-educated mothers may be perceived as conflicting less with work demands. First, relative to college-educated mothers, mothers with a high school education are more likely to be unpartnered and contribute a greater share of family income (Ellwood and Jencks 2004; McLanahan 2004). Employers may therefore believe that these mothers’ economic need to work makes them especially reliable workers (Kennelly 1999; Gerstel and Clawson 2014). Second, because mothers with a high school education spend less time with children than college graduates (England and Srivastava 2013; Lareau 2003), employers may perceive fewer conflicts between work and caregiving for high school graduate mothers than for college graduate mothers. Finally, whereas college graduate women tend to have children at older ages and have higher rates of childlessness (Monte and Ellis 2014; Van Bavel et al. 2018), employers may assume that most women with a high school education applying to low-wage service jobs are already mothers, thus diminishing the importance of an applicant signaling motherhood status.
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Why Employers May Discriminate Against Mothers in Low-Wage Service Jobs

On the other hand, there are compelling theoretical reasons to expect employers to discriminate strongly against mothers in low-wage service jobs. Although job demands differ in low-wage service and professional and managerial occupations, employers in both contexts may expect ideal workers who are always available and do not have competing family obligations (Acker 1990). Although employers in low-wage service jobs are unlikely to expect long hours, these jobs frequently require nonstandard hours (i.e., outside weekday daytime hours) and precarious work schedules that provide workers with little advanced notice, control, or predictability over their hours (Lambert et al. 2014; Presser 2003; Schneider and Harknett 2019). Furthermore, low-wage service workers have fewer work-related resources than workers in professional and managerial jobs, such as work hour flexibility or paid time off, to help manage work and family roles (England et al. 2016; Gerstel and Clawson 2014).

The limited family resources of less-educated mothers may also contribute to motherhood discrimination. Low-wage workers are unlikely to be able to afford formal childcare (Gerstel and Clawson 2014), and employers view low-wage mothers’ challenges with obtaining reliable childcare as an issue of personal irresponsibility (Dodson 2013), echoing negative cultural schemas of “welfare mothers” (Gillens 2009). Qualitative studies further showed that low-wage employers believe that family responsibilities interfere with mothers’ work attendance (Gerstel and Clawson 2014; Kennelly 1999). In addition, although high school graduate mothers spend less time with children than college graduate mothers, cultural expectations of intensive mothering may apply to all women regardless of education (Hays 1997; Ishizuka 2019). Furthermore, more- and less-educated mothers are both subject to the more pervasive cultural expectation that mothers will be primary caregivers for children (Kobrynowicz and Biernat 1997; Townsend 2002).

Labor Market Segment–Specific Job Demands and Discrimination Against Mothers

Whereas the preceding sections consider how distinct work and family characteristics of high school graduate mothers in low-wage service jobs and college graduate mothers in professional and managerial jobs may contribute to overall patterns of discrimination in each context, discrimination may vary within each labor market segment based on job demands perceived as particularly incompatible with motherhood. The unique demands of certain jobs and occupations can lead characteristics such as motherhood to be perceived as more incompatible with successful job performance than others (Gorman 2005; Turco 2010). Discrimination varies across work contexts based on the perceived relevance of stereotypes to job performance. For example, audit studies have found that hiring discrimination against gay men is stronger when job ads emphasize stereotypically masculine traits (Tilcsik 2011), gender discrimination is stronger when job ads use stereotypically gendered language (Yavorsky 2019), and race and unemployment have distinct effects on hiring based on whether job ads emphasize hard work or motivation (Pedulla 2018).
Although the ideal worker norm may exist at a broad level across jobs (Acker 1990; Williams 2001), its manifestation differs across labor market segments, with long hours expected in many professional/managerial jobs and open availability and flexibility to work any shift expected in many low-wage service jobs (Cha and Weeden 2014; Lambert 2008; Williams 2010). Professional and managerial jobs are more likely than low-wage service jobs to require long hours and involve time pressure, collaboration, and travel (Cha and Weeden 2014; Kelly et al. 2010; Williams et al. 2013). Long hours and time pressure are positively correlated and heighten work-family conflict (Karasek 1979; Schieman et al. 2009; Voydanoff 2004). Along with time pressure, collaboration requirements limit flexibility over when and where work is performed, requiring workers to be around more coworkers and clients at specific times (Goldin 2014). For example, organizational and technological changes in pharmacy have enabled pharmacists to hand off clients easily, facilitating temporal flexibility by reducing the importance of collaboration and the need for a particular pharmacist to work long and specific hours (Goldin and Katz 2016). Consistent with these arguments, evidence indicates that the residual motherhood wage penalty is larger when occupations require more collaboration (Yu and Kuo 2017). If employers assume that mothers will be less able to meet inflexible time demands, they may discriminate more strongly against mothers when jobs require collaboration. Travel requirements are also likely to be viewed as incompatible with primary caregiving responsibilities (Stone 2008; Williams 2001). These types of job demands are especially common in professional and managerial occupations (Blair-Loy 2003; Cha and Weeden 2014; Kalleberg 2011; Kelly et al. 2010), and discrimination against mothers may be stronger in jobs that signal these demands.

Despite the importance of nonstandard hours and schedule instability to the organization of working time in low-wage service jobs (Presser 2003; Schneider and Harknett 2019), we lack an understanding of how discrimination varies based on these job demands. Schedule instability is reflected in low-wage employers’ emphasis on workers’ ability to work flexible and variable hours based on employer demands and to have open schedule availability (Acs and Loprest 2008; Gerstel and Clawson 2014; Lambert 2008; Schneider and Harknett 2019; Williams 2010). Flexibility in this context is employer- rather than employee-based; workers are expected to be available to work at any time to accommodate employer needs (Gerstel and Clawson 2014). Nonstandard hours are also common in low-wage service jobs (Acs and Loprest 2008; Presser 2003) and typically necessitate worker reliance on constellations of informal childcare (Gerstel and Clawson 2014; Henly and Lambert 2005; Presser 2003). If employers assume that arranging childcare will be difficult when schedules are unstable or during nonstandard hours (when schools are closed and center-based childcare is typically unavailable), employers may discriminate more strongly against mothers when job ads signal these demands. In sum, I hypothesize that unique job demands in each labor market segment will predict stronger discrimination against mothers.

Gaps in the Literature and Study Contributions

Prior research provides important insights into discrimination against mothers with a college degree in professional and managerial jobs, but we know little about dis-
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crimination against less-educated mothers in the low-wage labor market. This study
advances scholarship on motherhood and discrimination in four ways. First, the study
produces direct estimates of employer discrimination by motherhood status for high
school graduates applying to low-wage service jobs and college graduates applying to
professional and managerial jobs. Specifying the conditions and contexts—whether
by worker education and labor market segment, occupation, or job demands—under
which discrimination is stronger or weaker is critical for understanding whether
discrimination is limited to certain types of workers (e.g., college graduates) and
workplace contexts (e.g., professional and managerial jobs) or instead applies more
broadly.

Second, the use of an experimental design provides important advantages for causal
inference relative to survey research (Pager 2007), enabling a comparison of callbacks
for equally qualified applicants who differ only on motherhood status. Detecting dis-

rimination at the hiring stage is difficult for both organizational and methodological
reasons (Pager and Western 2012; Petersen and Saporta 2004), but audit studies are
well suited for this purpose. Whereas audit studies cannot capture the range of occu-
pations possible in observational studies, this study advances our understanding by
directly measuring discrimination and moving beyond the experience of highly edu-
cated mothers in professional and managerial occupations. Third, assessing whether
employers discriminate against mothers in different segments of the labor market can
provide evidence relevant to differentiating between productivity and discrimination
explanations of the residual motherhood wage penalty for more- and less-advantaged
women.

Fourth, this study tests hypotheses about the mechanisms underlying motherhood
discrimination in each labor market segment. I examine whether job demands listed
in job ads that are largely unique to each labor market segment are associated with
stronger discrimination against mothers. For reasons of external validity, applicant
education and labor market segment are designed to be perfectly correlated in this
study: high school graduates apply to only low-wage service jobs, and college grad-
uates apply to only professional and managerial jobs. However, examining how dis-

rimination varies based on job demands listed in job ads provides important analytic
lever in isolating job-related factors for two reasons. First, job demands relevant
to stereotypes about motherhood vary systematically across labor market segments.
Second, these analyses effectively hold education and labor market segment constant
to assess how discrimination varies based on different job demands within education
groups and labor market segments. These analyses help clarify whether employers
in different segments of the labor market discriminate for different reasons, refining
theories of discrimination to incorporate distinct conditions facing workers in an
increasingly polarized labor market.

Research Design

In designing an audit study that compares the effect of the same status characteristic
(motherhood status) on distinct groups (high school and college graduates) that dif-
fer along multiple dimensions, an important challenge is determining which aspects
of applications to hold constant across groups and which to vary. This study was
designed to maximize internal and external validity while maintaining comparability with prior research. Design decisions were based on both theoretical and empirical criteria. I describe these decisions and their rationales in the subsections that follow; additional details are provided in the note on research design in the online appendix.

**Signaling Motherhood Status**

I signaled motherhood status in both the résumé and cover letter. To facilitate comparisons with Correll et al.’s (2007) study, I used a similar signal of motherhood status based on volunteer service activities. Both mothers and childless women list serving in volunteer positions for one year on their résumés. I randomly assigned whether applicants serve as a Fundraising Committee Chair or Volunteer Coordinator in a résumé section on service or relevant activities.

For mothers, the résumés list service in the parent-teacher association (PTA) of a local public elementary school.¹ One potential concern with PTA service is that it may signal not only parenthood but also being a more involved parent. Importantly, Correll et al.’s (2007) audit study showed that men were not similarly disadvantaged by listing PTA service. Like Correll et al.’s study, in this study, childless applicants’ résumés indicate volunteer service in an organization that is comparable in terms of service orientation, time requirements, skills, and job relevance. The résumés list service in either a health fundraising or disaster support organization. These organizations are unlikely to signal either parenthood or personal characteristics, such as political orientation or religiosity, that could make a comparison with PTA service ambiguous. Because childless applicants do not signal that they are not parents, some employers are likely to assume that these applicants also have children. Therefore, estimates of discrimination against mothers should be considered conservative. The applicants’ cover letters briefly mention either taking an active service role or being a leader in the community. Mothers add that they serve in the PTA of their children’s school, and childless women add that they serve in the organization listed on their résumé. Although it is methodologically important that the PTA service signal be consistent to facilitate direct comparisons of discrimination across education groups and labor market segments, employers could perceive PTA service by high school and college graduates differently given education differences in PTA participation specifically and volunteer service more generally (Calarco 2014; Ruiter and De Graf 2006). I discuss the potential impact of employer perceptions of education differences in PTA participation and volunteer service in the research design note in the online appendix.

**Outcome Measure: Employer Callbacks**

I define a callback as a request from an employer to interview or discuss either the position or the applicant’s background further. After submitting job applications, I mon-

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¹I select elementary schools close to applicants’ home addresses within each city. In addition, I select schools that have a student composition that is at least 20% non-Hispanic White and that receive an overall school quality rating of at least 7 of 10 on the website GreatSchools.org.
itored voicemail and email accounts for employer responses for up to three months for a callback. Based on information provided in the voicemail or email, I matched employer responses to the specific applicant, treatment condition, and labor market segment.

Low-Wage Service and Professional and Managerial Occupations

Given practical limitations on the number of occupations to include in an audit study, it is important to specify theoretical and empirical criteria for selecting occupations. These include relative size among women with a high school or college education, comparability with prior research, representativeness of theoretically relevant job demands within each labor market segment, and gender composition. I selected occupations that would potentially reflect the labor market experiences of large numbers of women with a high school or college education. Data from the 2015 American Community Survey (ACS) show that 9% of women with a high school education work as cashiers (the single largest occupation for high school graduate women), and an additional 4% work as retail salespersons (the fourth largest occupation for high school graduate women). Among women with a college degree, approximately 4% work as accountants (the third largest occupation for college graduate women), and an additional 2% work as marketing managers (the 11th largest occupation for college graduate women). Including marketing managers is important because it enables comparisons with Correll et al.’s (2007) audit study. Although occupations such as pharmacy are potentially theoretically important because of well-documented shifts toward work hour flexibility in recent decades (Goldin and Katz 2016), pharmacy is a much smaller occupation than accounting and marketing management.3

The study occupations are broadly representative of occupations within their respective labor market segments in terms of theoretically relevant job demands based on 2015 ACS data and Work Schedule Supplement data from the 2011–2015 waves of the National Longitudinal Survey of Youth 1997: long work hours (mean work hours and proportion overworking) and precarious work schedules (proportion with one week or less of advanced schedule notice, proportion with no schedule control, and proportion with week-to-week work hour instability). Like those in professional and managerial jobs more generally (Cha and Weeden 2014; Turco 2010), accountants and marketing managers have longer workweeks and a higher prevalence of overwork than cashiers and retail salespersons. Conversely, like those in low-wage service occupations more generally (Lambert et al. 2014; Schneider and Harknett 2019), retail salespersons and cashiers have a higher prevalence of precarious work schedules compared with accountants and marketing managers. See Table A1 (online appendix) for a comparison of study occupations along these dimensions.

I selected occupations in which it is common for women to work (≥50% female) but in which men are not numerical tokens (i.e., <15% male). The occupation percentage female in this study ranges from 54% to 76%. Large, female-dominated occupations,

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2 Most callbacks (98%) occurred within one month of application submission.
3 Based on 2015 ACS data, pharmacy is the 88th largest occupation for college graduate women, representing 0.025% of women with a college degree.
such as maids and housekeeping cleaners (89% female), registered nurses (91%), childcare workers (94%), and nursing, psychiatric, and home health aides (87%), are important because many women work in these occupations. However, including these occupations could make it more difficult to evaluate how discrimination varies across labor market segments and based on job demands, especially for jobs that involve care work. When jobs are defined primarily in terms of care, mothers’ roles as caregivers may increase perceptions of their competence while being undermined by perceptions of lower commitment (Ridgeway and Correll 2004).

**Study Cities**

I submitted job applications in six U.S. cities: Boston, Chicago, Houston, Los Angeles, New York City, and Washington, DC. To ensure that the results are not driven by characteristics unique to any particular city, I chose cities that vary in maternal labor force participation rates, unemployment rates, and legal protections for workers with family responsibilities. Table A2 (online appendix) compares study cities along these dimensions. Although cities were selected to vary on theoretically relevant dimensions, this study was not designed to examine heterogeneous effects by city characteristics. The estimated effects of motherhood status on callbacks vary somewhat across cities (see Figures A1 and A2 of the online appendix), but the inclusion of only six cities and the small sample sizes for individual cities limit inferences about city-level variation. However, analyses that drop one city at a time produce substantively identical results (see Figure A3), suggesting that findings are not driven by characteristics of any particular city.

**Identifying and Selecting Job Postings**

I identified job openings on a national job-posting website used by millions of U.S. job seekers and employers each month. The site posts a large number of job openings for the low-wage service and professional and managerial occupations in this study. To identify job postings, I used search terms specific to each occupation and imposed three restrictions. First, to minimize the burden placed on individual employers, each employer could be included only once in the study. Second, I did not apply to jobs that request salary histories or requirements, specific software or language skills not already included in both applicants’ résumés, and jobs that are temporary, part-time, or seasonal. Finally, I restricted job postings to those to which applicants could apply directly through the website rather than through external websites, which often require applicants to answer questions that would be difficult to standardize across applicants within each pair.

**Randomization**

To increase statistical efficiency, I used a matched pairs design typical of audit studies. Each employer received an application from both a mother and a childless appli-
Applications within each pair were submitted one day apart to avoid raising employers’ suspicions that applications were fictitious. I randomized whether the mother or childless candidate submitted their application first as well as the résumé and cover letter version used for each applicant. The research design note in the online appendix provides additional details on constructing work experience and other necessary résumé features, including names, home addresses, ZIP codes, email addresses, phone numbers, and education credentials—all of which were counterbalanced across mothers and childless women.

**Applicant Work Experience**

Consistent with Correll et al.’s (2007) audit study, each applicant has seven years of continuous, full-time work experience after graduating from either high school (for low-wage service job applicants) or college (for professional and managerial job applicants) in three or four jobs. Given that all résumés indicate several years of continuous work experience, all applicants demonstrate a strong commitment to paid work. Because statistical discrimination theories posit that information on applicant quality may influence discrimination (Bertrand and Mullainathan 2004; Neumark 2012), standardizing applicant years of work experience across labor market segments is important. However, given differences in completed education, holding experience constant means that implied age at application and age at first birth differ for low-wage service and professional/managerial job applicants. I discuss differences in implied age at first birth by education and their potential implications for the results in the online appendix. Although this study cannot differentiate between cognitive processes underlying discrimination based on implied age at first birth and age of children, understanding the potential moderating role of these factors represents an important direction for future research.

**Applicant Race and Ethnicity**

Because many previous studies on the motherhood wage penalty and motherhood discrimination have focused on non-Hispanic White women, I used surnames typical of non-Hispanic White women based on 2000 census data. However, race and ethnicity are likely to intersect with motherhood status and education in distinct ways (Kennelly 1999), and the results may not generalize to other racial and ethnic groups. I used the same names for high school and college graduates. Although distinctly non-Hispanic White names may signal socioeconomic status, the names used were randomized within each applicant pair and should therefore affect mothers and childless women similarly within each labor market segment.

**Submitting Job Applications and Recording Responses**

Once I identified an eligible job opening, I submitted applications in each applicant pair one day apart. Between April 2016 and July 2017, I submitted applications to
1,137 job openings. In some cases, employers removed a job listing after only one applicant in a pair had submitted an application. This occurred for 32 job listings (2.8% of listings). I exclude these listings from the analysis because employers were not exposed to both a mother and a childless applicant, but the results are substantively identical with the inclusion of these observations. The analytic sample includes 2,210 applications for 1,105 job openings.

**Statistical Methods**

To assess whether callback rates differ for mothers and childless women, I first conduct paired tests of differences in callback proportions in the full sample, separately by labor market segment, and in each occupation. I then run logistic regression models that take into account motherhood status, the order in which applications were submitted, the résumé and cover letter version used, the occupation, and the city. Because of difficulties with comparing coefficients across models and interpreting interactions in logistic regression models (Brambor et al. 2006; Mood 2010), I present average marginal effects throughout the analysis. To test whether discrimination differs by labor market segment and occupation, I present average marginal effects from logistic regression models that interact motherhood status with labor market segment and occupations.

Next, to compare job demands described in low-wage service and professional and managerial job ads that are theoretically relevant to motherhood discrimination, I conduct tests of differences in job demand proportions across labor market segments. Finally, to test whether distinct job demands in the professional/managerial and low-wage service job ads in this study are associated with stronger discrimination against mothers, I present average marginal effects from logistic regression models that include interactions between motherhood status and job demands listed in job ads. Standard errors are clustered at the employer level in all models to account for each employer receiving two applications.

**Results**

**Employer Callbacks by Motherhood Status, Labor Market Segment, and Occupation**

Figure 1 plots callback proportions for all occupations combined, by labor market segment, and within each occupation. When data are pooled across occupations, callback rates are significantly lower for mothers than for childless women. Approximately 25% of childless women—but less than 20% of mothers—receive a callback. This difference is large in magnitude and statistically significant \((p = .008)\). In the two low-wage service occupations combined, 26.7% of childless women but only 21.5% of mothers receive a callback \((p = .003)\). Similarly, in the two professional and managerial occupations combined, 22.6% of childless women but only 18.4% of mothers receive a callback \((p = .009)\). These results provide strong causal evidence that employers discriminate against mothers relative to equally qualified childless women in both low-wage service and professional/managerial jobs.
Although statistical power is more limited when occupations are analyzed separately, callback proportion estimates are consistently lower for mothers than for childless women. Callback differences are statistically significant for cashiers (23.4% for childless women and 18.4% for mothers; \( p < .05 \)), retail salespersons (29.3% for childless women and 24.0% for mothers; \( p < .05 \)), and marketing managers (23.5% for childless women and 17.4% for mothers; \( p < .01 \)). The estimated callback proportion is also lower for mothers in accounting jobs, but the gap is smaller in magnitude and not statistically significant (21.6% for childless women and 19.4% for mothers). These estimates demonstrate that discrimination is not limited to women with a college degree in time-intensive professional and managerial occupations.

Next, I present average marginal effects from logistic regression models, which provide a common metric for comparing discrimination across models and control for application order, résumé and cover letter version, occupation, and city. These model-based estimates are important if there are random imbalances in the other experimentally manipulated factors—résumé and cover letter version and application order—and these factors are independently associated with callbacks. Table 1 shows mothers’ estimated probability of receiving a callback relative to that of childless women in all occupations combined, separately by labor market segment, and in each occupation. Across all occupations combined, the probability of receiving a callback is 4.6 percentage points lower for mothers than for childless women (\( p < .001 \)). Within the two low-wage service occupations combined, the probability of receiving a callback is 5.2 percentage points lower for mothers than for childless women (\( p < .01 \)). With professional and managerial occupations combined, the probability of receiv-
Table 1  Estimated effects of motherhood status on callback probabilities in all occupations, by labor market segment and by occupation: Average marginal effects from logistic regression models

<table>
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<th>All Occupations</th>
<th>Low-Wage Service</th>
<th>Professional/Managerial</th>
<th>Cashiers</th>
<th>Retail Salespersons</th>
<th>Accountants</th>
<th>Marketing Managers</th>
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</thead>
<tbody>
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<td>-0.052**</td>
<td>-0.039*</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>2,210</td>
<td>1,088</td>
<td>1,122</td>
<td>488</td>
<td>600</td>
<td>536</td>
</tr>
</tbody>
</table>

Notes: Robust standard errors are shown in parentheses. Models 1–3 include occupation dummy variables. All models control for order of application submission, résumé and cover letter template used, and cities.

Source: Original experimental audit study data.

*p < .05; **p < .01; ***p < .001 (two-tailed tests)

ing a callback is 3.9 percentage points lower for mothers than for childless women (p < .05). Mothers in both labor market segments thus appear to be disadvantaged at the hiring stage. To test whether the effect of motherhood status differs by labor market segment, I run models that interact motherhood status with labor market segment. This estimate in column 1 of Table 2 is small in magnitude and not statistically significant.

Estimates are more imprecise when occupations are examined separately, but they demonstrate patterns of discrimination similar to the callback proportion results. In cashier jobs, the estimated probability of receiving a callback is 4.9 percentage points lower for mothers than for childless women (p < .05). Similarly, in retail salesperson jobs, the probability of receiving a callback is 5.1 percentage points lower for mothers than for childless women (p < .05). The probability of receiving a callback is estimated to be 2.2 percentage points lower for mothers than for childless women in accounting jobs, but this estimate is smaller in magnitude than estimates for the other occupations and not statistically significant. In marketing manager jobs, the probability of receiving a callback is 5.4 percentage points lower for mothers than for childless women (p < .05); this result is similar in magnitude to Correll et al.’s (2007) finding of discrimination against mothers in marketing manager jobs.4

Finally, column 2 of Table 2 tests whether discrimination differs across occupations. None of the interactions between motherhood status and occupations are statistically significant.

Job Demands Prevalent in Low-Wage Service and Professional and Managerial Job Ads

Although job ads typically indicate several job demands, the selection of job demands was theoretically driven based on prior research describing salient characteristics of

4 Correll et al. (2007) applied to marketing jobs in New York City and found callback odds ratios of 0.45 for mothers, compared with 0.57 found for New York City mothers in the current study.
The Motherhood Penalty in Context

professional/managerial and low-wage service jobs relevant to stereotypes about motherhood. For each of the 1,105 job ads in the study, I identified whether each of the five job demands described earlier is present. If a job ad used language indicating a particular job demand, the ad was coded as reflecting that demand (coded as 1). If the job ad did not use language clearly indicating a job demand, it was coded as not having that demand (coded as 0). Table 3 presents specific criteria and provides verbatim examples of each of the job demands from study job ads.

I first compare the prevalence of job demands listed in job ads across labor market segments. Low-wage service and professional and managerial job ads show very little overlap in job demands (see Figure 2). Time pressure, collaboration, and travel are much more commonly described as explicit expectations of workers in professional and managerial job ads. Employers regularly emphasize time pressure (as indicated by language involving meeting deadlines, multitasking, prioritizing, and completing tasks in a timely manner) in professional and managerial jobs (39%), but these expectations are far less common in low-wage service job ads (8%). Additionally, collaboration requirements (as indicated by language involving working closely with teams, coordinating with different departments, and working with multiple stakeholders) are much more prevalent in professional and managerial job ads (45%) than in low-wage service job ads (6%). Finally, travel requirements appear in 13% of the professional and managerial job ads but none of the low-wage service job ads. The prevalence of each of these job demands described in study job ads differs significantly across labor market segments ($p < .0001$).

Table 2  Estimated effects of motherhood status on callback probabilities by labor market segment and occupation: Average marginal effects from logistic regression models

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>-0.050**</td>
<td>-0.060*</td>
</tr>
<tr>
<td>Mother × Labor Market Segment (ref. = low-wage service)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother × professional/managerial</td>
<td>0.008</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Mother × Occupation (ref. = marketing manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother × cashier</td>
<td>0.009</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Mother × retail salesperson</td>
<td>0.010</td>
<td>(0.032)</td>
</tr>
<tr>
<td>Mother × accountant</td>
<td>0.036</td>
<td>(0.034)</td>
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<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>2,210</td>
<td>2,210</td>
</tr>
</tbody>
</table>

Notes: Robust standard errors are shown in parentheses. All models control for order of application submission, résumé and cover letter template used, and cities. Model 1 includes labor market segment main effects, and Model 2 includes occupation main effects.

Source: Original experimental audit study data.

*p < .05; **p < .01 (two-tailed tests)
Job ads that explicitly require nonstandard hours or indicate schedule instability are much more common in low-wage service occupations than in professional and managerial occupations: 43% of low-wage service job ads explicitly require workers to work hours outside standard weekday daytime hours (weekends, evenings, nights, and early mornings), compared with 2% of professional and managerial ads. In addition, none of the professional and managerial job ads but 24% of low-wage service job ads indicate schedule instability, defined as requiring open availability or a flexible or variable schedule. Each of these proportions differs significantly across labor market segments ($p < .0001$), indicating that salient job demands differ for low-wage service and professional/managerial job ads.
Next, I consider whether the labor market segment–specific job demands listed in job ads moderate the effects of motherhood status on callbacks. Table 4 provides evidence that employers discriminate more strongly against college-educated mothers in professional and managerial jobs that signal certain demands. All of these job demands and their interactions with motherhood status are included simultaneously in these models. Findings in column 1 of Table 4 demonstrate statistically significant interactions between motherhood and time pressure, collaboration, and travel requirements. Mothers’ estimated probabilities of receiving a callback are 5.7, 6.6, and 13.6 percentage points lower than those of childless women in jobs that signal time pressure, collaboration, and travel requirements, respectively. These results demonstrate that discrimination against college-educated mothers in professional and managerial occupations is stronger when job demands listed in job ads conflict more strongly with stereotypes about motherhood.

Column 2 of Table 4 tests whether nonstandard hours and schedule instability indicated in job ads are associated with stronger discrimination against mothers in low-wage service jobs. Employers appear to discriminate similarly against mothers regardless of whether nonstandard hours are required, suggesting that nonstandard hours may not be perceived as more incompatible with motherhood than daytime weekday hours. However, discrimination is stronger when job ads indicate schedule instability. The estimated probability of receiving a callback for jobs indicating

---

**Table 4**

<table>
<thead>
<tr>
<th>Demand Type</th>
<th>Professional/Managerial</th>
<th>Low-Wage Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Pressure</td>
<td>0.60</td>
<td>0.10</td>
</tr>
<tr>
<td>Collaboration</td>
<td>0.50</td>
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</tr>
<tr>
<td>Travel</td>
<td>0.40</td>
<td>0.10</td>
</tr>
<tr>
<td>Nonstandard Hours</td>
<td>0.30</td>
<td>0.20</td>
</tr>
<tr>
<td>Schedule Instability</td>
<td>0.20</td>
<td>0.10</td>
</tr>
</tbody>
</table>

***p < .001 (two-tailed tests of equality of proportions)
schedule instability is 10.1 percentage points lower for mothers than for childless women applying for the same jobs. In sum, employers appear to discriminate more strongly against mothers based on unique job demands listed in low-wage service and professional/managerial job ads.

## Limitations

This study has important limitations that should be addressed in future research. First, although criteria for selecting occupations are based on theoretical considerations and represent a significant share of employed women with a high school or college education, the study is limited in scope to two low-wage service occupations and two professional/managerial occupations. These occupations are broadly representative of key job demands faced by workers in each labor market segment, but findings may differ in occupations not considered in this study. However, given systematic patterns in job demands within labor market segments, there are reasons to expect that employers in occupations that place similar demands on workers may discriminate similarly against mothers. Analyses that include interactions between occupations and motherhood status show no clear evidence of occupational differences in discrimination, but findings for accountants raise the possibility that the degree of perceived incompatibility between motherhood and job performance may vary across

### Table 4

<table>
<thead>
<tr>
<th></th>
<th>Professional/Managerial</th>
<th>Low-Wage Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Mother</td>
<td>0.003</td>
<td>-0.054*</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.022)</td>
</tr>
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<td>Job Demands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time pressure</td>
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<td>(0.026)</td>
</tr>
<tr>
<td>Collaboration</td>
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<td>(0.028)</td>
</tr>
<tr>
<td>Travel</td>
<td>0.043</td>
<td>(0.043)</td>
</tr>
<tr>
<td>Nonstandard hours</td>
<td>-0.044</td>
<td>(0.041)</td>
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<tr>
<td>Schedule instability</td>
<td>0.013</td>
<td>(0.047)</td>
</tr>
<tr>
<td>Mother × Job Demands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother × time pressure</td>
<td>-0.057*</td>
<td>(0.024)</td>
</tr>
<tr>
<td>Mother × collaboration</td>
<td>-0.066*</td>
<td>(0.030)</td>
</tr>
<tr>
<td>Mother × travel</td>
<td>-0.136**</td>
<td>(0.051)</td>
</tr>
<tr>
<td>Mother × nonstandard hours</td>
<td>0.058</td>
<td>(0.039)</td>
</tr>
<tr>
<td>Mother × schedule instability</td>
<td>-0.101*</td>
<td>(0.043)</td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>1,122</td>
<td>1,088</td>
</tr>
</tbody>
</table>

Notes: Robust standard errors are shown in parentheses. Models include controls for order of application submission, résumé and cover letter template used, occupation, and cities.

Source: Original experimental audit study data.

*p < .05; **p < .01 (two-tailed tests)
occupations. Accountants work fewer hours and are less likely to overwork than marketing managers, which could explain the larger estimated effects for marketing managers. Future studies should select occupations with even greater variation in job demands to test this hypothesis more directly.

Second, the callback rates in this study are high compared with findings from previous audit studies (Correll et al. 2007; Gaddis 2015; Mishel 2018; Pedulla 2016; Quadlin 2018; Weisshaar 2018). However, these rates do not appear to reflect spam job openings (those used as phishing scams to collect applicant information) that have been detected in prior research (Mishel 2016; Quadlin 2018).6 The high callback rates in this study may instead indicate that employers perceive the résumés and cover letters to be of high quality. Although currently little is known about how applicant quality or overall callback rates are related to estimates of discrimination, this is an important question to address in future audit studies.

Additionally, the job demand models provide analytic leverage in isolating distinct job-related mechanisms underlying motherhood discrimination in low-wage service and professional/managerial jobs but have important limitations. First, job demands listed in job ads are not randomly assigned and therefore may be correlated with other, unmeasured aspects of jobs. Second, some professional and managerial job ads may not explicitly list certain requirements, such as nonstandard hours, because these employers could take working nights and weekends (and the long hours that necessitate them) for granted. Although time pressure may partially capture night and weekend hour expectations given the positive correlation between long hours and time pressure (Voydanoff 2004), these job ads rarely explicitly require nonstandard hours. Nonstandard hour requirements could increase discrimination in professional and managerial occupations but are not captured directly in job ads in this study. Finally, employers may already have a certain applicant type in mind when they construct job ads (Gorman 2005), which could lead more-biased employers to create job ads that emphasize certain job demands, such as schedule instability or travel. Future qualitative and survey experimental research could help to address these limitations by unpacking the cognitive and cultural processes underlying these patterns.

Such research designs could more directly measure cultural beliefs about high school– and college-educated mothers, as well as consider intersections between race/ethnicity, education, and motherhood status. For example, studies could compare employers’ beliefs and assumptions about mothers’ family resources and demands—such as marital status, partner income, fertility, childrearing approach, and childcare arrangements—and how these beliefs vary based on mothers’ education and race/ethnicity. This study focuses on non-Hispanic White women to facilitate comparisons with prior experimental and observational studies, but this focus is a significant limitation that should be addressed in future research.

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6 Because spam job openings should contact both applicants regardless of qualifications, I screened for potential spam job openings among those in which both applicants received a callback using criteria discussed by Quadlin (2018) and Mishel (2016): soliciting information such as credit card numbers (voicemail or emails), including links (emails), and being flagged as probable spam (emails). None of the callbacks met any of these criteria.
Discussion and Conclusion

Prior research has added substantially to our understanding of employment barriers faced by college-educated mothers in professional and managerial occupations, yet comparatively little research has considered the disadvantages faced by less-educated mothers in the low-wage labor market. This study directly compares discrimination based on the same status characteristic—motherhood—in two distinct segments of the labor market, providing causal evidence of discrimination by employers against mothers with a high school degree in low-wage service jobs and mothers with a college degree in professional and managerial jobs. Although little overlap occurs across labor market segments in job demands listed in job ads, jobs in both contexts are designed around a more pervasive assumption that workers do not have family responsibilities (Acker 1990; Williams 2001). In the case of many professional and managerial occupations, these expectations that workers are always available take the form of requiring long hours, occasional travel, and substantial face time (Blair-Loy 2003; Kelly et al. 2010). Although job demands take a different form in low-wage service jobs (Acs and Loprest 2008; Lambert et al. 2014; Presser 2003; Schneider and Harknett 2019), expectations that workers have open availability to work flexible or variable hours with little advanced notice, control, or predictability effectively require constant availability.

The results also provide evidence that distinct job demands listed in job ads are associated with stronger discrimination in each labor market segment. Time pressure, collaboration, and travel demands are more common in professional and managerial job ads, whereas nonstandard hours and schedule instability are more common in low-wage service ads. Moreover, employers discriminate more strongly against mothers in professional and managerial jobs when time pressure, collaboration, and travel are explicit requirements. In contrast, employers discriminate similarly against mothers in low-wage service jobs regardless of whether job ads require nonstandard hours, but schedule instability predicts stronger discrimination.

Although this study cannot provide a definitive explanation for these job demand findings in low-wage service jobs, it is possible that employers do not perceive nonstandard hours as more incompatible with caregiving than standard hours, provided that schedules are consistent from week to week. Although many mothers work nonstandard hours as a job requirement, a significant share do so for childcare-related reasons (Presser 2003). Regular evening, night, and weekend shifts may preclude formal childcare but facilitate shared caregiving with partners, family members, or friends who work standard hours (Acs and Loprest 2008; Henly and Lambert 2005). Whereas parents working stable nonstandard hours often manage childcare using a tag-team parenting approach, schedule instability causes substantial childcare difficulties (Carrillo et al. 2017). Furthermore, formal childcare may be unaffordable for low-wage workers with standard hours (Gerstel and Clawson 2014; Presser 2003; Schneider and Harknett 2019). Future research should attempt to further differentiate between schedule-related factors that shape discrimination against mothers in low-wage service jobs.

Despite being limited in scope to four occupations, this study speaks to a large body of observational studies examining variation in the residual motherhood wage penalty by wages, education, and skill. Prior research has theorized that residual motherhood wage penalties for less-educated, low-wage, and lower-skilled women may reflect
employer discrimination, yet direct causal evidence of discrimination against less-educated mothers in the low-wage labor market has been lacking. Given that theory and prior research suggest that discrimination in hiring and wages are correlated (Correll et al. 2007), discrimination may be an important contributor to both advantaged and disadvantaged mothers’ persistent wage penalties. Previous research has produced conflicting evidence about how the motherhood wage penalty varies by skill, wages, or education, but the results presented here appear to be most consistent with a recent study finding that women of different skill levels experience similar residual motherhood wage penalties (England et al. 2016). Although this study considers a limited number of occupations, it provides causal evidence that discrimination applies to both highly educated mothers in professional/managerial jobs and less-educated mothers in low-wage service jobs.

Another implication of this study is that factors that increase work-family conflict or psychological distress for workers may also exacerbate discrimination against mothers. For example, schedule instability is closely related to psychological distress for low-wage service workers (Henly and Lambert 2014; Schneider and Harknett 2019) and also predicts stronger motherhood discrimination. Similarly, high-earning occupations with more collaboration are theorized to increase work-family conflict by requiring workers to be around clients and other workers at specific times, reducing flexibility (Goldin 2014). Scholars have interpreted larger residual motherhood wage penalties in occupations with more collaboration requirements in terms of work-family conflict theories (Yu and Kuo 2017), but these requirements also appear to be a basis for stronger discrimination.

Audit studies in France and Sweden have not found evidence of discrimination against mothers (Bygren et al. 2017; Petit 2007), but little is known about cross-national variation in the effects of motherhood on women’s hiring prospects. Countries differ substantially in the generosity of family support policies and the extent to which such policies promote gender equality in paid and unpaid work or result in tradeoffs between women’s labor market inclusion and attainment (Blau and Kahn 2013; Budig et al. 2016; Collins 2019; Gangl and Ziefle 2015; Glass et al. 2016; Hook and Paek 2020; Musick et al. 2020; Pettit and Hook 2009). Gendered cultural norms, labor market institutions, and the structure of work hours also vary widely across countries (Berg et al. 2004; Boeckman et al. 2015; Cortés and Pan 2017). Given the theoretical relevance of these factors to motherhood discrimination, cross-national studies of discrimination by motherhood status in the same occupations and industries represent a promising direction for future research.

As the U.S. labor market has become increasingly polarized in recent decades (Autor and Dorn 2013; Kalleberg 2011), time demands have changed in ways relevant to motherhood discrimination. Declining institutional protections, globalization, and technological changes have contributed to the distinct organization of working time in low-wage service and professional/managerial jobs (Kalleberg 2011; Lambert 2008). Long work hours have diffused unevenly across the labor market and have risen most in professional and managerial occupations (Cha and Weeden 2014). Increasing wage returns to education (Autor et al. 2008) and the exemption of salaried workers from overtime regulations provide incentives for employers to limit labor costs by having fewer employees work longer hours (Kalleberg 2011). In the low-wage labor market, employers have sought to reduce labor costs in response to short-term fluctuations in
demand, employing schedule instability to maintain flexibility over who works and when they work (Lambert 2008; Schneider and Harknett 2019). Because both long hours and schedule instability require nearly constant availability, changes in each labor market segment create distinct conditions for discrimination against mothers.

The COVID-19 pandemic may also have important implications for motherhood discrimination. As schools and daycare centers have closed, mothers have assumed even greater caregiving responsibilities and have been disproportionately likely to reduce their labor supply (Collins et al. 2021). Statistical and status-based discrimination theories both imply that employers are likely to discriminate more strongly against mothers during the pandemic, either because replacing workers is costly or because motherhood status is more salient as caregiving demands increase and the boundaries between work and family erode. High unemployment contexts may also exacerbate motherhood discrimination because employers have more hiring discretion as the number of job applicants increases (Weisshaar 2018). Furthermore, mothers may face significant flexibility stigma and discrimination for using paid family leave provisions (Williams 2020), such as those in the Families First Coronavirus Response Act of 2020 or the American Rescue Plan Act of 2021. Whether the pandemic has distinct impacts on motherhood discrimination in low-wage service and professional and managerial jobs is unclear. If the ability to monitor worker performance reduces discrimination (Yu and Kuo 2017), the higher prevalence of telecommuting in professional and managerial jobs (Collins et al. 2021; Noonan and Glass 2012) may increase discrimination against mothers. However, whereas both more- and less-advantaged mothers’ caregiving responsibilities have increased substantially during the pandemic, mothers in low-wage jobs have far fewer family and economic resources to manage those increased demands.

The work and family experiences of socioeconomically advantaged and disadvantaged mothers have increasingly diverged in recent decades. This study extends research on discrimination against highly educated mothers in professional and managerial occupations to compare how less-educated mothers fare in low-wage service jobs. The results are consistent with the argument that distinct job demands in each labor market context exacerbate discrimination and contribute to similar disadvantages for mothers. Because less-educated mothers have far fewer family and economic resources than college-educated mothers, similar hiring penalties imply that less-educated mothers and their children may pay the highest price.

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**References**


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