## Heterogeneity in the motherhood penalty - New evidence from a factorial survey

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## **Short Abstract**

Sociological and economic research has repeatedly shown that employer discrimination has contributed to the persistent disadvantages that women, particularly mothers, face on the labor market. Discrimination may occur for several reasons. For one, employers may regard mothers as less competent and less committed than men and childless women (status-based discrimination). Moreover, they may also discriminate on normative grounds because they believe that mothers ought to prioritize caregiving over paid work (normative discrimination). Yet, so far we know little about how these different types of discrimination vary across sociodemographic subgroups. Our study therefore investigates variations in the motherhood penalty in hiring decisions by conducting a factorial survey experiment with HR managers in Germany. We ask HR managers to evaluate fictitious female applicants – who vary by age, occupation, parental status, number and age of children – in terms of expected commitment, competence and likeability and ultimately ask for their hiring recommendations. This approach allows us to disentangle how each of the experimental dimensions influences HR managers' evaluations of potential applicants. We expect higher motherhood penalties among applicants with more and younger children and in male-dominated occupations and variations with with regard to occupational status.

## **Extended Abstract**

Women today, particularly those with children, still experience major labor market disadvantages. These disadvantages are partly due to labor market discrimination, i.e., the unequal treatment of men and women where all other characteristics are equal. Mothers have greater difficulties finding jobs and getting promotions, and they earn considerably less than men and childless women (Benard and Correll 2010; Correll, Benard and Paik 2007; Firth 1982; Halpert, Wilson and Hickman 1993, Hipp forthcoming).

There are two explanations for these 'motherhood penalties'. First, mothers may face discrimination due to the persistent norm of the 'ideal worker' as someone who is 'always there' for work. Because mothers have been more involved in childrearing duties than fathers, employers tend to assume that women with children are less competent and less committed to their jobs than childless women or men. Therefore, they tend to penalize mothers by not hiring them, paying them lower wages, or not promoting them. In addition to such "status-based discrimination" (e.g., Correll, Benard and Paik 2007), a second mechanism – also known as "normative discrimination" (ibid.) may further accentuate the unequal treatment of men and women with and without children. Mothers may actually also experience discrimination due to prevailing gender norms that expect mothers to put family before work and fathers to put work before family. Women ought to stay at home to care for their children while fathers ought to go to work to ensure the family's material well-being (see Benard and Correll 2010). It thus seems that mothers inevitably will be penalized either for violating the ideal worker norm or for violating the ideal parent norm.

Yet, so far we know little about how discrimination varies across socio-demographic subgroups and under different conditions. Observational studies can show how these characteristics correlate with motherhood penalties but cannot answer the question of how much of this correlation is due to discrimination (see Gough and Noonan 2013). Existing laboratory and field experiments, by contrast, were usually not able to explore subgroup differences as they held all factors but motherhood status constant (e.g., Correll, Benard and Paik 2007, Benard and Correll 2010, Hipp forthcoming).

Drawing on theories of status-based and normative discrimination, this study therefore investigates variations in the motherhood penalty. We expect that mothers are generally less likely to receive a hiring recommendation than childless women (H1) and especially so, if they have more than one child (H2) or very young children (H3). In particular, we expect that mothers will be rated as less competent and committed (status-based discrimination). Additionally, mothers with very young children may be rated as less likeable because they violate the ideal parent norm by seeking employment (normative discrimination).

With regard to mothers' age, we expect those over the age of 40 (who are assumed to have completed childbearing) to be more likely to receive hiring recommendations than those aged 30 (and may thus be expected to have a (or another) child in the near future (H4). Concerning occupational differences, we expect the ideal worker norm to be more prevalent in male dominated occupations. Furthermore, there may be more prejudice against working mothers due to lack of experience. This in sum should result in greater motherhood penalties in male dominated occupations (H5). Based on previous research, there are competing hypotheses with regard to occupational status. High status occupations are more critical for the organization so that any reduction in (real or perceived) productivity and any lost experience due to parental leave is more consequential for employers. Motherhood penalties may therefore be more pronounced in high status occupations than in low or medium status occupations (H6a). Yet, jobs in low status occupations are typically less flexible and less autonomous and therefore less compatible with care responsibilities. Following this line of argument, motherhood penalties may be most pronounced in low status occupations and least pronounced in high status occupations (H6b). Finally, an excellent reference may refute doubts about mothers' competence, commitment and reliability and therefore reduce the chances that mothers experience status based discrimination (H7a). However, if mothers are perceived as very committed to their jobs, they may be penalized for being bad mothers (normative discrimination) (H7b).

To test these hypotheses, we conducted a factorial survey experiment with HR managers in Germany. In a factorial survey, respondents are asked to evaluate short vignettes, i.e., descriptions of hypothetical scenarios or individuals (see Auspurg and Hinz 2015). In our case, we presented HR managers with short biographies of potential applicants. The information in these short biographies includes several attributes (dimensions) such as age, number of children, age of the youngest child, occupation (a 3x3 matric distinguishing high medium and low status-jobs as well as male-dominated, female-dominated and gender balanced jobs in the health sector), and job reference from the previous employer, that varied in their levels (e.g. 1, 2 or 3 children). We aligned this information in tabular form as to resemble a CV and added pictures as pictures are usually included in applications in Germany and because pretesting revealed that study participants found it difficult to judge likeability when not provided with a picture. We then asked the HR managers to judge the hypothetical applicant with regard to a

number of characteristics such as commitment, competence and likeability and to give a hiring recommendation for each person.

The random combination of different dimensions and levels in the vignettes allow us to disentangle how each of the experimental dimensions influences HR managers' evaluations of potential applicants. Factorial surveys are therefore an efficient way to test the effects of children on parents' hiring chances under different conditions and for different demographic subgroups. By nature of the experimental design, we can achieve high internal validity and do not run into the problems that observational studies typically suffer from, e.g., self-selection, unobserved heterogeneity, and endogenous treatment. By conducting the factorial survey on a sample of HR managers, that is, the population that typically makes personnel decisions, we also achieve high external validity (see Mutz 2011). Last but not least, factorial surveys achieve high construct validity as they allow for complex descriptions and reduce social desirability (Auspurg and Hinz 2015).

Data collection will take place in early 2020.

## References

- Auspurg, Katrin, and Thomas Hinz. 2015. *Factorial Survey Experiments*. Los Angeles u.a.: SAGE Publications, Inc.
- Benard, Stephen, and Shelley Correll. 2010. "Normative discrimination and the motherhood penalty." *Gender & Society* 24(5):616-46.
- Correll, Shelley, Stephen Benard, and In Paik. 2007. "Getting a Job: Is There a Motherhood Penalty?" *American Journal of Sociology* 112(5):1297-339.
- Firth, Michael. 1982. "Sex Discrimination in Job Opportunities for Women." *Sex Roles* 8(8):891-901.
- Gough, Margaret, and Mary Noonan. 2013. "A review of the motherhood wage penalty in the United States." *Sociological Compass* 7(4): 328-342.
- Halpert, Jane A., Midge L. Wilson, and Julia L. Hickman. 1993. "Pregnancy as a Source of Bias in Performance Appraisals." *Journal of Organizational Behavior* 14(7):649-63.
- Hipp, Lena. Forthcoming. "Do hiring practices penalize women and benefit men for having children? Experimental evidence from Germany. *European Sociological Review*.
- Mutz, Diana C. 2011. *Population-based survey experiments*. Princeton, NJ: Pricenton University Press.