The labyrinth of leadership: female, family, career considerations

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The Labyrinth of Leadership:
Female, Family, & Career Considerations

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presented by

Jamie Gloor
from the United States of America

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April 2016 at the request of
Prof. Dr. Bruno Staffelbach
Prof. Dr. Gudela Grote
The Faculty of Business, Economics and Informatics of the University Zurich hereby authorizes the printing of this dissertation, without indicating an opinion on the views expressed in the work.

Zurich, 06.04.2016

The Chairman of the Doctoral Board: Prof. Dr. Steven Ongena
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To the women of the world: may your career choices be yours to make freely—Independent of your gender or desire for family; may gatekeepers select you based on your qualifications—not their own expectations; may your coworkers treat you with civility and respect—signals that you are welcome in the workplace; and may the myth of the “leaky pipeline” be once and for all put to rest, replaced with a more accurate metaphor: the “labyrinth of leadership.” To the men, what we share is more powerful than what divides us; women can’t do it alone: #heforshe.
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List of Abbreviations

ANOVA Analysis of Variance
ANCOVA Analysis of Covariance
AP Assistant Professor
CEO Chief Executive Officer
CFI Comparative Fit Index
CI Confidence Interval
CREW Civility, Respect, and Engagement at Work
FSO Swiss Federal Statistical Office
LERU League of European Research Universities
LLCI Lower Level Confidence Interval
OECD Organisation for Economic Co-Operation and Development
OLS Ordinary Least Squares
PhD Doctor of Philosophy
Post-doc Post-Doctoral Student
RMSEA Root Mean Square Error of Approximation
U.S. United States of America
ULCI Upper Level Confidence Interval
WEF World Economic Forum
Chapter 1

General Abstract

Equality is derived from the late Latin *aequalitas*, meaning similarity, while equity is derived from the late Latin *aequitas*, meaning even and just. In the scope of this dissertation, I examine processes contributing to the lack of gender equality in leadership and professorships, oftentimes due to a lack of gender equity. Specifically, men have employment advantages compared to women in traditionally male-dominated positions and occupations (Eagly & Karau, 2002; Heilman, 2001; 2012; Koch, D’Mello, & Sackett, 2015), with mothers facing additional penalties (Crosby, Williams, & Biernat, 2004; Heilman & Okimoto, 2008). These barriers perpetuate the aforementioned gender gaps, which widen at the early career stage (Catalyst, 2012; 2013; 2015; LERU, 2012) and overlay with women’s prime childbearing years (Livingston, 2015).

I draw on insights from intersectionality theory (Crenshaw, 1989) to examine gender and parenthood during the early career stage. I use converging methods (e.g., experiments, field experiments, and multi-wave field research) to assess multiple actors (i.e., employees, gatekeepers, leaders, and team members). With this evidence, I outline the problem in context and provide evidence of a theory-based solution.

In Chapter 3, I examine early career entry with 3 experimental examinations of gatekeepers. I find the distinction between hiring childless women and mothers is blurred, driven by gatekeeper conceptions that young women will experience future career interruption or reduced dependability (i.e., the “maybe baby” effect). These expectations drive gatekeeper perceptions that young childless women and mothers are riskier hires than young

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1This chapter is written entirely and exclusively by Jamie Lee Gloor.
2Etymology source: www.etymoline.com
childless men (Studies 1-3). Results support the maybe baby effect in employment decisions (Gloor & Okimoto, under review) and the social role theory (Eagly, 1987), and outline a boundary condition of lack of fit theory (Heilman, 1983).

In Chapter 4, I examine the early career employment experience in a team context with a multiple wave field study. I find that young childless women report more incivility compared to mothers and childless men, which has important downstream career implications (i.e., higher career withdrawal, lower career satisfaction and career identity). Results support the maybe baby effect in employment experiences (Gloor & Okimoto, under review) and selective incivility theory (Cortina, 2008).

In Chapter 5, I examine an intervention to restore gender equity in leadership (in the case that women make it through gatekeeper selections and persist despite early career coworker incivility) with a randomized field experiment. I find restoring gender equality at the team level via gender demography trumps societal gender stereotypes, circumventing backlash towards women leaders and eliminating the male advantage in followers’ responses to leadership (Studies 1-2). Results support the social identity model of organizational leadership (van Knippenberg & Hogg, 2003), and outline a boundary condition of role congruity theory (Eagly & Karau, 2002).

Finally, I describe my findings’ implications for women in the labyrinth of leadership (Eagly & Carli, 2007) and outline specific, evidence-based implications for theory and practice (e.g., employees, managers, organizations, and policy).
In Switzerland as in most economically developed nations, approximately 84% of adults and 75% of mothers with young children are employed (OECD, 2004; 2016). Thus, working and having children is the norm. Employment grants more than economic benefits to employees just as offspring grant more than increased well-being to parents (Nelson, 2013). Indeed, people classify themselves into multiple, hierarchically organized social categories (e.g., a woman, a parent, a Swiss citizen; Tajfel & Turner, 1985). Occupying multiple roles also benefits individuals by affording additional sources of identity (Marks, 1977). So most people choose employment and parenthood, and thus are potentially reaping these manifold benefits. But what if these two roles conflict—even if a woman has not yet chosen parenthood or taken on a leadership role?

In the current dissertation, I aim to address this question specifically for women, as women face additional employment barriers and penalties pertaining to parenthood (e.g., lower pay and probability of promotion; Crosby et al., 2004; Heilman, 2012; Heilman & Okimoto, 2008). Alternatively, men typically benefit by becoming fathers (e.g., Cuddy et al., 2004; Heilman & Okimoto, 2008). By assessing this core question at the crux of the employment exodus and the prime of childbearing (Livingston, 2015), I seek to show how actual (or impending) motherhood in the modern age manifests in gatekeeper hiring decisions and everyday employment interactions with colleagues. In the case that women succeed despite these early career obstructions and go on to achieve professorships or leadership positions, I test a theory-based intervention to restore gender equity in responses to leadership (Figures 2.1-2.2).

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3This chapter is written entirely and exclusively by Jamie Lee Gloor.
**CHAPTER 1**
General Abstract

**CHAPTER 2**
Women in Leadership: Review & Explanations

**CHAPTER 3**
The Maybe Baby Effect at the Intersection of Gender and Parenthood: A Series of Experiments with Hiring Managers

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The Maybe Baby Effect at the Intersection of Gender & Parenthood: Time-Lagged Field Research & Experiment with Early Career Employees

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**CHAPTER 5**
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**CHAPTER 6**
Final Remarks

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*Figure 2.1. Outline of dissertation*

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*Figure 2.2. Overall scope of dissertation (figure created using statistics from LERU, 2012)*
Delineations. Before I begin, I make two fundamental delineations. First, I use “professorships” and “leadership roles” interchangeably (sometimes conflated) to refer to end-stage career positions. Although there are other forms of academic leadership that might better fit the broader conception of leadership (e.g., presidency or deanship), the personnel pipelines are similar in shape for professorships and executive leadership positions (Catalyst, 2013; 2014; 2015; Schilling Report, 2015). Specifically, although there are generally more women professors (18%) than women CEOs (4-6%), there are comparable numbers of women professors and women on executive boards (10-16.9%). Secondly, I use the terms sex and gender interchangeably to refer to the dichotomous groupings of men and women or males and females. This is meant to aid comprehension, not to dismiss or disrespect the broader, continuous gender spectrum. Moreover, zero participants selected the “other” gender option in any of the experiments or surveys in this dissertation (Chapters 3-5).

Current Status of Women in Leadership

Women are missing in leadership positions relative to their time-lagged representation in education (see Figure 2.3). However, this pattern of results is not limited to a particular country or occupation, as no country in the world has reached gender parity (WEF, 2015), and the gender gap is found across executive leadership (Catalyst, 2015), professorships (LERU, 2012), and politics (WEF, 2015). However, gender gaps tend to be larger in statistically, historically, and/or stereotypically masculine domains (Eagly & Karau, 2002; Heilman, 1983; Paustian-Underdahl, Walker, & Woehr, 2014). We have a minority of women in leadership since the origin of such statistics, yet progress towards gender equality is truly moving at a snail’s pace. According to an analysis of the British Parliament’s gender composition, “…a snail could crawl the entire length of the Great Wall of China in 212 years, just slightly longer than the 200 years it will take for women to be equally represented in Parliament” (Equality and Human Rights Commission, 2008). We need to understand the process to make progress.
There are diverging explanations for the gender gap that generally fall into two categories: supply-side issues (e.g., choices and preferences) and demand-side issues (e.g., bias and discrimination). I present relevant theory, findings, and my own critical appraisal of the theory and findings in the following sections. My focus is largely supply-side perspectives, as I provide in-depth explanations of several demand-side explanations in Chapters 3-5.

Supply-Side Explanations

Here, I describe several management, economics, sociology, and psychology theories pertaining to supply-side processes, namely, the qualities or decisions inherent in women themselves that contribute to their employment and professional outcomes. When possible, I proceed in chronological order, from older theory and findings to the most contemporary.

The Gender Differences Model. The gender differences model states that males and females are psychologically vastly different groups (Hyde, 2005). This theory was revived in 1992 when American author and relationship counselor John Gray published his novel, “Men are from Mars, Women are from Venus.” The gender differences discussion gained further
attention (but also wide criticism) later in 2005 when Larry Summers, American economist and then president of Harvard University, explained the under-representation of female scientists at elite universities to stem from “innate” differences between men and women and “a different availability of aptitude at the high end” (Hemel, 2005).

Although this argument has been most recently and volubly used in the context of STEM (Science, Technology, Engineering, and Mathematics), similar arguments have been made about men and women’s biological differences and their effects on leadership ability. However for leadership, women—not men—were said to have the advantage because they are interpersonally sensitive and nurturing (e.g., “the feminine advantage;” Eagly & Carli, 2003; Yukl, 2002). It is beyond the scope of this dissertation to explain in detail why or how these differences are thought to have come about from a supply-side perspective, but evolutionary selection processes are most often purported to have produced these differences, based on the assumption that certain behaviors are more adaptive for men or women because of sexual selection and parental investment, respectively (see Buss, 1989; Buss & Schmitt, 1993).4

**Choices & Interests.** Secondly, women’s choices have also been proffered for the differential, gendered outcomes in professorships and leadership. Ceci and Williams are two most recent proponents of this research who argue against sex discrimination as contributing to women’s lack of representation in professorship (2011; 2015). Instead, they argue that recent revolutions such as blind reviews in journals have lessened the knowledge and influence of scholar gender in article publication and grant funding, both of which are key indicators of scholarly productivity and success (2011). Instead, the authors point to structural variables that are correlated (but not causally related) to gender (e.g., resources, teaching-heavy or research-heavy faculty positions). Summarizing, Ceci and Williams argue that the most salient contributors to women’s underrepresentation are women’s choices, whether free

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4Alternatively, for a demand-side, social roles explanation of the origins of sex differences in social behavior, see Eagly and Wood (1999).
or constrained by biology/society. They argue that these choices are more likely to lead to positions with fewer resources, and thus, contribute to gendered outcomes in professorships.

Similarly, peoples’ interests are related to the choices they make, including career choices. For example, a person’s vocational interests or “the expression of personality in work, hobbies, recreational activities, and preferences” (p. 3), are fundamental to the career development process (Holland, 1966). In other words, people seek out those acts that they find interesting, and women and men might differ in their vocational interests. Later, Prediger (1982) simplified Holland’s model (1966) with a dichotomous data/ideas and things/people dimension to explain the link between people’s interests and occupations. Then in 2009, Su, Rounds, and Armstrong presented meta-analytic results in overwhelming support of Prediger’s (1982) dimension, with especially large effects for the things/people dimension.

Even more recently, research building on this idea of gendered preferences and choices found that women do not have different preferences or make alternate choices as men, but they do have more interests or alternatives than men. Wang, Eccles, and Kenny (2013) examined a large sample of American youth with high verbal and math ability, first as high school seniors and then again 15 years later. The authors found that of youth with high math skills and high verbal skills, women were more likely than men to choose non-STEM careers. Dovetailing with these results is research that examined large, diverse samples, and found a profound, consistent gender gap in the core life goals as well as the number of goals that men and women reported (Gino, Wilmuth, & Brooks, 2015). That is, women reported more life goals than men with less emphasis on power. So men and women’s interests may not differ as much qualitatively, but quantitatively, which predicts life goals and occupations.

**Human Capital Theory.** The Human Capital model logically follows the choice arguments. According to Human Capital Theory, one’s incentive to invest in education and job-related training is directly proportional to the time one expects to work over his or her lifetime (Polachek, 2004). In the context of gender and employment, for example, Human
Capital Theory would explain women’s (and men’s) work effort, performance, and/or pay via the choices individuals make in allocating investments of time and effort to professional and family roles (Lobel & St. Clair, 1992). For example, some economists have (controversially) proposed that women’s unpaid labor invested in childrearing and household tasks is time- and effort-intensive; thus, women compensate with less demanding employment (Becker, 1985). Similarly, social capital can be understood as a means to predict returns from human capital. For example, Becker (1975) argues that a man earns his CEO position because of his human capital, namely, he is smarter and/or more educated than his peers. Although certainly important for success, Burt (1998) argues that human capital without social capital is worthless, and social capital depends on employee gender. For example, there are strong and consistent gender differences in returns on social capital, especially for new employees. For newcomers, social networks are key means to achieve legitimacy in traditionally male-dominated organizations and positions (Burt, 1998). These newcomers initially borrow legitimacy from their superiors, but when they are promoted, this legitimacy becomes their own. However, we know that women are less likely to be promoted than men (Cuddy, et al. 2004; Heilman & Okimoto, 2008; Koch et al., 2015). Thus, this success constraint results in a legitimacy problem for women (Burt, 1998), which is unrelated to their human capital, and impairs their rates of promotion and professional success. Summarizing, women compensate for their (actual or expected) unpaid labor with less demanding jobs, potentially with fewer opportunities for advancement. But in addition to having comparatively less human capital than men, women also benefit less from social capital; clearly barriers to career success.

Critical Response to Supply-Side Explanations

The gender differences model proposes that biological dissimilarities in ability explain the lack of women in leadership or masculine fields (i.e., STEM). According to the data, however, notable differences between men and women are few. Indeed, there are truly more gender similarities than differences (Hyde, 2005; Hyde, 2014; Maccoby & Jacklin, 1974;
Vecchio, 2002) with the vast majority of gender differences to be expected from societal stereotypes (i.e., 78%) actually non-existent or very small in magnitude (Hyde, 2005; Maccoby & Jacklin, 1974). Thus, claims of gender differences are overinflated and cannot provide a consistent or meaningful explanation for the pervasive and persistent gender gap.

Choice and interests theories propose that women choose to stay at home with children and/or to work in less powerful or prestigious positions because of their personal preferences or desires, which differ from men’s preferences or desires. However, as previously described, meta-analytic evidence indicates only small and sparse gender differences in abilities (Hyde, 2005; Hyde, 2014; Maccoby & Jacklin, 1974), with the exception of women being more interested in people (Su, Rounds, & Armstrong, 2009).

Second, the authors fail to address the wealth of large-scale and experimental research that has documented gender effects in evaluation and hiring (e.g., see Heilman, 2012; Koch et al., 2015), sizeable differences that are found across academic disciplines even before beginning doctoral studies (Milkman, Akinola, & Chugh, 2012; 2015; Moss-Racusin et al., 2014). Third, the authors only casually mention socialization and constrained choices. However, people regularly confront multitudes of gendered messages from family, friends, educators, coworkers, and media (Eccles, Jacobs, & Harold, 1990; Lytton & Romney, 1991; Witt, 2000). Thus, social influences are not minor, consistently transmitted, compelling everyday choices.

There are additional economic issues that surely influence women’s choices to work or stay at home, the most notable is perhaps the gender pay gap. In 2015, the global average of annual earnings by gender was 21,000 for men, but only 11,000 for women (WEF, 2015). According to this measure of gender disparity, society is regressing, as we have doubled the global gap in annual earnings in only a decade (WEF, 2015). In light of this information, paired with the high price and rare availability of childcare (see Feierabend & Staffelbach, 2014), it seems to be a rational choice for women to leave the workplace to raise children instead of men. Indeed, women are paid only 70-80 Rappen for every Franc that men earn,
40% of which is unexplainable (i.e., due to discrimination; FSO, 2016). Thus, counter to much of the gender differences research that explains away the significant gender bias in earnings with part-time work\(^5\) or employment breaks, there remains a sizeable, unexplained gap in earnings after these factors are controlled (FSO, 2016). This discrepancy in reward allocation is also consistently documented in experiments for equally qualified men and women (Moss-Racusin et al., 2012). Thus, working women are valued less than working men, which likely contributes to women’s and families’ career decisions in the case of childbirth.

Theories of human capital (Becker, 1975) and social capital (Burt, 1998) argue that women pursue less education, seek out lower status and lower pay positions compared to men due to their intentions to bear children in the future. This is ostensibly because women will stay at home to take care of the family in the case of childbirth. Even if remaining in the workplace, however, women do not reap the same professional returns as men from their education, ability, and connections as men. First, although the family wage gap should be closing because more women and mothers are employed than ever before (FSO, 2015c), this statistic has actually doubled in the last decade. Second, scholars have shown a lack of evidence that women’s plans for intermittent employment make women’s choice of traditionally female occupations rational in an economic sense (e.g., England, 1982). In other words, there is little evidence that women choose certain occupations because they intend to minimize costs from childbirth and childrearing. Instead, there is more recent and growing evidence that women’s investments in human and social capital simply produce less success than men’s (see Hoobler, Lemmon, & Wayne, 2014). Indeed, executive and professorial networks may be difficult for women to access given that men hold the majority of these positions (traditionally and statistically; Catalyst, 2012; 2013; 2015; LERU, 2012), producing homophily and resistance to female “outsiders” (McPherson, Smith-Lovin, & Cook, 2001).

\(^5\)In Switzerland, a total of 61% of mothers work part-time, but only 7.6% of fathers (O’Dea, 2012).
Finally, the gender and family gaps persist even after controlling for relevant human capital characteristics (e.g., education, employment breaks, demographics; FSO, 2016).

In summary, I identified several, theoretically- and empirically-based arguments and inconsistencies in the theories detailed here as sole explanations for the gender gap in leadership or professorships. Perhaps the principal flawed assumption across these supply-side theories is that women’s decisions about professional or private/family pursuits are endogenous, or inherent in women themselves. Thus, I proceed to the demand-side explanations, on which this dissertation focuses and this research is primarily based, to show why women’s decisions are also exogenous, that is, influenced by external forces.

Demand-Side Explanations

In this section, I describe several management, economic, sociological, and psychological theories pertaining to demand-side processes, namely, those factors and processes influencing others’ employment-related perceptions, decisions, or behaviors towards women. When possible, I proceed in chronological order, from older theory and findings to the most contemporary. As I discuss demand-side biases in great detail in Chapters 3-5, I only briefly review it here.

Bias and Stereotypes. Madeline Heilman and Alice Eagly are two of the key proponents of bias and stereotype theories to explain the scarcity of women in leadership positions. Stereotypes can be defined as “generalizations about groups that are applied to individual group members simply because they belong to that group,” with gender stereotypes pertaining to the attributes of women and men (Heilman, 2001, p. 141). Heilman’s lack of fit theory (1983), argues that gender stereotypes produce biased judgments and decisions that impede women’s advancement in the workplace through two key pathways: descriptive and prescriptive stereotypes. Descriptive, feminine stereotypes of what women are like (i.e., warm and communal) do not match stereotypes of professionals or leaders, which are typically masculine (i.e., competent and agentic). This creates a perception of poor fit and lowered
performance expectations in selection and promotion decisions. If women do achieve professional or leadership roles, disapproval and social penalties ensue due to the perceived lack of fit between women’s current roles and the prescriptive, feminine stereotypes of what women should be like. A wealth of (mostly) experimental evidence still supports the lack of fit theory’s core claims (see Heilman, 2001; 2012).

Similarly, Eagly (1987) explains the lack of female leaders through social roles, which can be defined as “socially shared expectations that apply to persons who occupy a certain social position or are members of a particular social category” (Eagly & Karau, 2002, p. 574). Gender roles then are those beliefs about the attributes of women and men (e.g., communality/warmth and agency/competence, respectively) that follow from historical or traditional sex-typical roles of men as breadwinners and women as homemakers (Eagly, 1987). But gender role beliefs are problematic for women in leadership for two main reasons. First, a normative component means that people believe the qualities or behaviors of women and men are also desirable for women and men. Secondly, people generally assume correspondence between people’s actions and inner dispositions. Thus, the gender roles and social roles are incongruous for women and leaders, resulting in women being viewed as less qualified and less effective leaders than men (Eagly & Karau, 2002), which makes achieving leadership more difficult for women than for men.

Noticeable across the theories of lack of fit (Heilman, 1983), social role (Eagly, 1987) or role incongruity (Eagly & Karau, 2002) is that not all stereotypes of women are negative. For example, women are perceived as warmer than men, generally eliciting the likeable housewife prototype as a default. This pattern of results has been documented for women both as a social group (Fiske, Cuddy, Glick, & Xu, 2002) and as individuals (Cuddy et al., 2004; Heilman & Okimoto, 2007). Yet the stereotype content for women is ambivalent, that is, comprising both positive and negative content across the two primary domains of social cognition (i.e., competence and warmth; Fiske et al., 2002). For example, housewives or
homemakers are typically viewed as high in warmth, but low in competence (Fiske et al., 2002). This impression is consistent with their gender role, but inconsistent with a professional role. In this case, low competence can be used to justify the in-group’s treatment towards them (Biernat & Manis, 1994; Foschi, 2000). Alternatively, feminists and female professionals are typically viewed as low in warmth, but high in competence (Fiske et al., 2002). This impression is consistent with a professional role, but inconsistent with their gender role. In this case, low warmth can be used to justify the in-group’s treatment toward them (Biernat & Manis, 1994; Foschi, 2000). Thus, even positive stereotypes of women are injurious to their achieving leadership positions given the stereotype content’s ambivalence, which makes stereotypes especially difficult to detect or change, and allows for shifting evaluation standards (Fiske, 2012).

Finally, it is noteworthy that men also face a perceived lack of fit (Heilman, 1983) with female sex-typed occupations (Williams, 1992). However, these roles are typically low-status and do not contribute to broader patterns of gender inequity, with men’s chances of leadership customarily enhanced such cases (i.e., the “glass escalator”).

**Statistical Discrimination.** As described above, stereotypes and expectations of women are incongruent with managerial stereotypes and expectations. But the negative employment consequences ensuing from these mismatched conceptions of what women are typically like can also be explained by statistical discrimination (Phelps, 1972). This phenomenon is derived from economic theory and refers to cases in which an individual employee is judged on the basis of the employer’s perceptions of his or her demographic group (Konrad & Cannings, 1997). In other words, an employer will discriminate against a woman if the employer believes that women are generally less qualified, less reliable, or less long-term employees than men (Phelps, 1972). In cases of information asymmetry, for example, a potential employee’s sex is taken as a proxy for relevant work-related information. That is, the employer does not know if the woman will stay long-term (and cannot ask by
law), so the employee is judged based on her group membership rather than on her own characteristics or abilities (Aigner & Cain, 1977). This is consistent with employer responses to those in “mommy track” positions, whereby employers make fewer investments in women because they are considered higher risk (Konrad & Cannings, 1990).

Although increasingly uncommon in modern management research, statistical discrimination theory has primarily been used to explain discrimination in labor markets in response to the inability for statistical theories to explain labor market discrimination (i.e., unequal pay for equally abled workers) under conventional neoclassical assumptions (Aigner & Cain, 1977). It also echoes similar arguments from Heilman’s lack of fit theory (1983) such that there is a lack of fit between expectations of women and expectations of professionals. And similarly to Biernat and Manis’ (1984) shifting standards model of social stereotyping, this lack of fit results in different standards of evaluation for women and women such that women must prove their competence and commitment, for example, while men could achieve the same perceived competence or commitment with less (Konrad & Cannings, 1990; 1997).

Summarizing the bias, stereotypes, and discrimination theories, men and women have distinctive patterns of managerial advancement because they belong to different social groups, with women’s stereotypes being incongruent with professional stereotypes and leadership roles. Thus, when managers use employee sex as a proxy, this results in hiring, evaluation, and promotion biases to the detriment of women and their representation in leadership.

**Importance of Family**

Finally, family is a key concept to consider when discussing the scarcity of women in leadership and professorships for three central theoretical reasons, namely, the amplification of gender stereotypes for women, the substitution of parental roles for gender roles, and the asymmetrical division of unpaid labor. First, lack of fit theory (Heilman, 1983) argues that parenthood heightens gender stereotypes and roles for women because it epitomizes feminine, warm characteristics. Thus, having children may be especially problematic for women and
mothers (particularly in masculine jobs and professions), yet have little effect or even benefit men who become fathers (Heilman, 1983; 2001; 2012; Heilman & Okimoto, 2007; 2008). Alternatively, gender role theory (Eagly, 1987) argues that parenthood may simply replace gender roles. In other words, there would not be an interactive effect of gender and parenthood for women, but a main effect of gender. According to either theoretical framework, however, mothers face at least as many challenges as women without children in achieving professorships and positions in the upper echelons.

In Switzerland as in most economically developed nations, mothers contribute about double the amount of time on childrearing and household as men (FSO, 2013). Yet this choice is constrained, as mothers often stay at home due to a mixture of social, economic, and organizational pressures. Childcare is typically unaffordable and/or unavailable (see Feierabend & Staffelbach, 2015). Societal stigma, including beliefs that working mothers are bad for young children, reinforces stay-at-home-mothering (FSO, 2015b). Thus, for some women, leaving work to stay at home is a genuine choice. However, this choice is not an easy one, complicated by additional layers of stereotypes, social pressures, and backlash.

Furthermore, if employers’ stereotypes or expectations of employee commitment or dependability change with parenthood (King, 2008), then this would also influence employers’ decisions. Empirical evidence supports this proposition, such that the pay and promotion gaps for women compared to men further widen for mothers, notwithstanding equal qualifications and experience, and after controlling for other relevant variables (Baker & Milligan, 2008; Berger & Waldfogel, 2004; Cuddy et al., 2004; Heilman & Okimoto, 2008; Waldfogel, 1998). Yet changes in family structure may also influence women’s decisions. Gender differences proponents such as Larry Summers surmised that women with young children are simply unwilling or unable to put in the long workweeks necessary to succeed (Hemel, 2005). Sheryl Sandberg, a modern figurehead for gender equality in leadership and
COO of Facebook, also contends a human capital stance that women withdraw from professional duties even in mere anticipation of children (Sandberg, 2013).

Summarizing, family changes such as becoming a parent have historically generated additional challenges for women striving to get ahead. Supply-side theories suggest women are incapable or unwilling to balance challenging work and growing family life, which might motivate women to withdrawal from professional activities as preemptive or reactive measures. Alternatively, demand-side theories argue that motherhood might polarize or replace women’s gender roles and stereotypes, accentuating their femininity, and creating additional incongruity with leadership prototypes or roles.

In the subsequent chapter, I describe how current policy conditions and fertility rates may have shaped the current employment experience for women—especially at the intersection of parenthood—making these historically consistent findings somewhat outdated and insufficient to explain modern day management practices (e.g., hiring). In response, I propose and outline a new theoretical framework of risk assessment in personnel selected based on “maybe baby” expectations.

**Summary & Forecast of Remaining Chapters**

In this chapter, I outlined a brief history of women in leadership and professorship positions, showing a persistent, pervasive, and stagnant scarcity of female academics and executives. To explain this gender gap, I presented multiple theories of the supply- and demand-side processes contributing to women’s or gatekeepers’ beliefs, decisions, attitudes, and behaviors, which contribute to women’s employment and career outcomes. Finally, I outlined key family factors as potential moderators of this gender effect. In the next sections, I present my original research examining supply- and demand-side perspectives at the intersection of gender and parenthood (Chapters 3-4) or at the intersection of leaders and teams (Chapter 5).
Chapter 3

The Maybe Baby Effect at the Intersection of Gender & Parenthood:
A Series of Experiments with Hiring Managers

Abstract

Women face numerous employment disadvantages relative to men, however, mothers may face even greater employment obstacles. We outline a third group, namely, young women who do not yet have children but are expected to soon become mothers. We propose that the likelihood of having a child in the near future increases employers’ perceptions of risk associated with hiring young women. We experimentally test this theoretical proposition in three samples of gatekeepers. We find (1) an increase in the risk associated with hiring young women who are believed to desire children, (2) the risk is higher for young childless women than for young childless men, and (3) the risk associated with expected future dependability and career interruptions—but not family friendly program use—accounts for the relation between applicant gender and hiring risk. Implications for theory and practice, especially in contexts with asymmetrical parental leave, are discussed.

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\[6\] This chapter is based on a paper authored by Jamie Lee Gloor, coauthored by Tyler Okimoto (University of Queensland). This chapter is based on an earlier version that was presented at the Annual Meeting of the Academy of Management in Vancouver, Canada, in August 2015, coauthored with Professor Bruno Staffelbach and Anja Feierabend (University of Zurich). A previous version was also presented at the Society for Australian Social Psychologists in Newcastle, Australia, in April 2015. Financial support for this paper was awarded to the first author with a Swiss National Science Foundation doc.mobility grant.
Introduction

“No self-respecting small businessman with a brain in the right place would ever employ a lady of child-b earing age.” - Godfrey Bloom, Former Member of the European Parliament

Women’s numerous employment disadvantages relative to men have been consistently demonstrated in the empirical literature, especially in traditionally male positions and occupations (Heilman, 2012), and notwithstanding equal performance and qualifications (Koch, D’Mello & Sackett, 2014). However, not all women are affected equally as mothers may face greater employment obstacles (Benard & Correll, 2010; Correll, Benard, & Paik, 2007; Cuddy, Fiske, & Glick, 2004; Fuegen, Biernat, Haines, & Deux, 2004; Heilman & Okimoto, 2008; Okimoto & Heilman, 2012). As the quote above illustrates (BBC News, 2004), it is possible that even childless women may experience motherhood penalties under certain conditions. The research presented here investigates employment decisions pertaining to this third group of women at the intersection of gender, age, and parenthood, namely young women who do not yet have children but are of child-bearing age and thus are expected to soon become mothers. We propose that the likelihood of having a child in the near future, as signaled by age and gender or personal desire, increases employers’ perceptions of risk associated with hiring young women, judgments with consequences for career progression.

To our knowledge, employers’ consideration of age, gender, and potential parenthood in personnel assessments has not yet been systematically examined in the literature despite its prominence in practice and the media. For example, the head of a Spanish business group recently and very publicly reported that when it comes to hiring, she “preferred women over the age of 45 or less than 25, because when women become pregnant, we end up with a problem” (Kassam, 2014). In qualitative, comparative research, a German manager noted that, “After three women in this company had gotten pregnant one shortly after the other, my boss did not want to hire women anymore” (Peus & Traut-Mattausch, 2008). A similar sentiment came from a hiring manager in India, “She’s 26 years old... Soon, she may marry
someone...have children and leave the job. She is a risky hire.” (Joshi, Neely, Emrich, Griffiths, & George, 2015). Thus, practitioners may be unwilling to hire young women due to their likelihood of having a child in the near future, hereafter the “maybe baby” effect.

A pair of recent studies provides support for the likelihood of a maybe baby effect at the macro-level; economists identified that country-level increases in maternity benefits were negatively associated with women’s employment, pay, and promotion rates (Fernández-Kranz & Rodríguez-Planas, 2014; Thomas, 2014). However, to our knowledge, no study has examined this effect at the micro-level, identifying the causal, individual processes that underlie these societal-level patterns. Accordingly, we conducted three experiments in two different countries, providing the first test of the maybe baby effect in organizational decision-making. Specifically, we examine organizational gatekeepers’ perceptions of risk when hiring childless female applicants. Drawing from lack of fit (Heilman, 1983) and social role (Eagly, 1987) theories, while incorporating insights from intersectionality theory (Crenshaw, 1989), we argue that the ambiguity surrounding the “maybe baby” intentions of young women blurs the lines between gender and motherhood, resulting in attributions of risk when hiring young women.

**Gender Stereotypes in Hiring and Evaluation**

Occupational disadvantages faced by women often stem from gender-based stereotypes. Gender is a primary and visible domain for impression formation and categorization, emerging very early in development (Zemore, Fiske, & Kim, 2000). As a personal characteristic, gender provides the strongest and most reliable basis of categorizing people, more so than age, race, or occupation (Fiske, Haslam, & Fiske, 1991). Categorical gender stereotypes describe women as typically having communal attributes (e.g., warm, kind, and nurturing), while men typically have agentic attributes (e.g., agency, competence, and dominance; Prentice & Carranza, 2002). These stereotypical expectations are important because they play a key role in evaluative processes in the workplace (e.g., hiring and
performance evaluations). As these processes typically involve ambiguity via vague criteria, a lack of objective information, and poorly defined evaluation structures, they leave room for stereotypes to influence what information is attended to, interpreted, and later recalled about a target (see Heilman, 2012).

The lack of fit model (Heilman, 1983) explains more precisely how these stereotypes translate into bias against women in organizational settings. Specifically, there is a perceived lack of fit between the attributes and behaviors associated with effective leadership (e.g., agency and competence) and those attributes and behaviors associated with women. As a consequence, in absence of disconfirming evidence to the contrary, female targets are often assumed to be ill-equipped for leadership roles (Heilman, Block, Martell, & Simon, 1989; Powell, Butterfield, & Parent, 2002). More broadly, women are seen as a poor fit for employment in masculine settings and roles based on the perceived distinction between the female stereotype and the attributes deemed critical for male sex-typed work (Heilman, Martell, & Simon, 1988), which tend to be higher-status and higher-paying. In contrast, the attributes associated with high status occupations and leadership are congruent with stereotypical beliefs about men. Although men also face a perceived lack of fit with female sex-typed occupations (c.f., Williams, 1992), these roles are typically low-status and do not contribute to broader patterns of gender inequity.

Gender role theory (Eagly, 1987) makes similar predictions following from the historical distributions of men and women into breadwinner and homemaker roles (respectively), which have led to both genuine and perceived gender differences, and ultimately produced gender norms and differences in behavior. As people infer correspondence between peoples’ acts and their inner dispositions, women and men are expected to have attitudes and skills congruent with their traditional roles. This creates stereotypes that foster gendered decision-making in candidate selections, for example, which limits women’s representation in counter-stereotypic roles including high-status, traditionally
masculine positions that women aspire to occupy (Eccles, 1987). Similarly, role congruity theory also argues that the greater incongruity between gender stereotypes and the attributes deemed necessary for leadership results in less favorable evaluations of women leaders and potential leaders (Eagly & Karau, 2002).

Notably, the critical element in both of these theories involves the lack of consistency between gender stereotypes and roles and the characteristics thought to be necessary for leadership success. Moreover, these distinct social roles are widely held across cultures and have been documented across the world (Schein, Mueller, Lituchy & Liu, 1996; Schein, 2001), although specific features of the context determine the size of its effect.

**Gender Bias and Motherhood**

Importantly, the bias faced by women in organizational settings is more pronounced for mothers. Parental status for women exemplifies their stereotypically nurturing and communal traits, painting them as “prototypical” women and enhancing reliance on and confidence in the accuracy of gender stereotypes (Cuddy et al., 2004; Heilman & Okimoto, 2008). Consequently, women who are also mothers are perceived as less competent and are less likely to be promoted than childless women without children, whereas men face no penalties or even benefit from becoming fathers (Benard & Correll, 2010; Correll et al., 2007; Cuddy et al., 2004; Fuegen et al., 2004; Heilman & Okimoto, 2008).

Parents, and mothers in particular, also face expectations pertaining to family-life, as well as the balance between work and family. For example, despite their increased representation in the workforce, mothers continue to contribute the lion’s share of home and childcare responsibilities (i.e., unpaid work; OECD, 2014), and women are still considered the primary caregiver (Ridgeway & Correll, 2004). In a related vein, parents are expected to be less available, work fewer hours per week, and take more sick days than non-parents (Fuegen et al., 2004). Supervisors of early career professors perceive junior faculty mothers as less committed and less flexible than fathers (King, 2008), despite those mothers self-
reporting more commitment than fathers. Similarly, parents are evaluated as less committed to their job compared to non-parents, despite having equivalent qualifications (Heilman & Okimoto, 2008). Despite these assumptions, in reality self-reported organizational commitment and gender are not consistently correlated (e.g., Aven, Parker & McEvoy, 1993; Mathieu & Zajac, 1990).

Importantly, these gendered expectations about availability and time at work are apparent in personnel selection; potential absences due to family obligations are discussed in hiring decisions approximately four times more often for mothers than for fathers (Kennelly, 1999). The assumption that mothers are less committed to their jobs is even further compounded by social pressures to conform to gender roles; working mothers are also assumed to be less effective as parents compared to non-working mothers and working fathers (Okimoto & Heilman, 2012). Thus, having children, paired with the associated expectations of asymmetrical burden it entails for women compared to men, further contributes to motherhood bias and persisting gender inequity (see Crosby, Williams, & Biernat, 2004).

**Maybe Baby?**

The current research extends beyond this existing literature to critically probe the scope of these motherhood effects. Are women without children able to avoid stereotypical assumptions about parental roles and the resulting motherhood bias? Motherhood is an age-dependent characteristic, with contemporary working women typically having children in their thirties. Thus, even if a young woman is childless, her age might signal future motherhood, as well as the accompanying cost-related assumptions.

More specifically, we propose that even childless women may face motherhood penalties under specific (yet ordinary) conditions, blurring the distinct parenthood boundaries previously outlined by existing research and theory. Derived from critical race and feminist perspectives, intersectionality theory (Crenshaw, 1989) highlights the meaning and experience of simultaneous membership in multiple social categories. Although the
intersection of gender and parenthood (Benard & Correll, 2010; Cuddy et al., 2004; Fuegen et al., 2004; Güngör & Biernat, 2009; Heilman & Okimoto, 2007; 2008; Okimoto & Heilman, 2012) and race, gender, and parenthood (Correll et al., 2007) have been examined, to our knowledge, no study has explicitly examined the intersection of gender and parenthood at a specific age. Age is a key demographic factor in the context of gender, parenthood, and potential employment discrimination as most highly educated mothers are at least 30 years of age at the birth of their first child (Livingston, 2015), and age may be an important signal to gatekeepers of women employees’ potential fertility (Petit, 2007). Thus, considering age may be particularly informative, offering a more comprehensive picture of gender hiring discrimination (Perry & Finkelstein, 1999).

In summary, not having children does not necessarily mean that women can avoid motherhood bias. For example, a young woman may refute gender stereotypes, promoting herself as highly committed to the organization and as being a particularly effective leader. However, if she is of childbearing age, there may still be some ambiguity in judgments about the stability of those attributes and behaviors. So although a female target may effectively avoid gender role bias by exhibiting the attributes and commitment necessary to succeed in a male sex-typed job, organizational gatekeepers may still perceive an element of risk associated with her hiring. As a consequence, when it comes to the “maybe baby” effect, hiring bias may diverge somewhat from the more commonly examined areas of perceived competence, warmth, and commitment in the context of gender and motherhood bias research (e.g., Benard & Correll, 2010; Cuddy et al., 2004; Heilman & Okimoto, 2007); young childless women may indeed be evaluated as competent and committed to the firm. Nonetheless, we suggest that “maybe baby” bias manifests in judgments of the risk associated with hiring a young childless woman, rooted in the belief that her dependability and commitment may change, as well as the predicted investment that the organization will need to make if/when she utilizes work-life allowances.
Perceived Hiring Risk as a Function of Expected Costs

We define risk as “the multidimensional probability distribution of realizing losses on a range of dimensions” (Conchar, Zinkhan, Peters, & Olavarrieta, 2004). Specifically in personnel decisions, we argue that applicant gender triggers beliefs and stereotypes pertaining to cost, commitment, and childcare responsibilities for women, while applicant age cues the salience and potential fulfillment of these expectations. This combination of gender and age may influence gatekeepers’ perceived probabilities of “maybe baby” or potential parenthood risks, which could involve a range of longer-term implications for young women’s hireability.

First, young women may present a perceived risk of reduced organizational commitment in the future. Such commitment risks may involve the potential for reduced productivity and/or costs associated with an increase in lateness or absenteeism. As discussed earlier, gender and parenthood roles have been shown to negatively impact expectations of organizational commitment (Fuegen et al., 2004; Heilman & Okimoto, 2008), especially for mothers (King, 2008). While it has been shown that non-mothers are seen as more committed to the job than mothers, the looming “maybe baby” question suggests that a young woman’s commitment is still a potential risk factor for the future.

This potential for reduced commitment also more directly impacts the risk of voluntary turnover. Gender roles pertaining to caregiving and family responsibilities (Ridgeway & Correll, 2004) may create expectations of increased attrition risks for women, especially following the birth of a first child. Indeed, young women of childbearing age may be especially risky and are often portrayed as “flight risks” for employers or “quitters” (Hoobler, Lemmon, & Wayne, 2011; Lyness & Judiesch, 2001). Fueling such beliefs is the controversial notion of an “opt out” revolution in which even successful, well-educated women leave the workplaces after becoming mothers and choose family over career (Belkin, 2003). In reality, women largely report aspirations akin to men’s. For example, a large, longitudinal survey of business school graduates indicates that men and women hardly differ
in terms of their life and career goals (Ely, Stone, & Ammerman, 2014), and large proportions of employees do not leave their careers to care for children (Ely et al., 2014; Stroh et al., 1996). Nonetheless, this expectation constitutes a potential risk of investment losses, which might be especially notable in selections for early career, leadership-track positions. Indeed, gender discrimination in hiring is more prominent in long-term rather than short-term contracts (Petit, 2007; Wolfinger, Mason, & Goulden, 2008).

Finally, employers may be concerned about the added organizational costs of family-friendly policies (e.g., parental leave, flexible schedules, and childcare assistance), or in the words of one employer, “instituting family policies would draw ‘beneficiaries’ to [their] firm while letting other employers escape the costs of hiring mothers” (Glass & Camarigg, 1992). New mothers may be expected to take advantage of such programs more often than existing mothers who may already have such services organized elsewhere, while women who do not desire children would have no need for these programs. Although such costs are an organizational investment that is often instrumental in helping to retain talented female employees, it is nonetheless an expense that would not be incurred for similarly qualified men, or similarly qualified women who already have children or are beyond childbearing age. Indeed, organizational costs have been named as important factors that are weighted in gatekeepers’ hiring decisions (Graffam, Shinkfield, Smith, & Polzin, 2002). Thus, considering how employee demographics translate into perceived organizational costs may better inform potential for hiring discrimination against young women in personnel selection processes.

Notably, the risk of incurring these costs is particularly high in contexts with generous allowances and flexible work practices for mothers. Moreover, the gender discrepancy in these potential costs is inflated in contexts where parental entitlements are not extended to men (or where it is socially inappropriate for men to utilize them). This has relevance for understanding why this effect has not yet been identified in the existing empirical research. Most research examining gender and parenthood has largely been conducted in the United
States (e.g., Benard & Correll, 2010; Correll et al., 2007; Cuddy et al., 2004; Fuegen et al., 2004; Heilman & Okimoto, 2008; Okimoto & Heilman, 2012), a context with no standardized or federal parental leave policy applicable to all employees. A generous parental leave policy may be a key contextual element that could asymmetrically increase employer risk perceptions associated with hiring young women relative to young men (Fernández-Kranz & Rodríguez-Planas, 2014; Thomas, 2014), particularly if it provides comparatively more benefits to mothers than to fathers. Thus, countries where organizations are required to offer greater parental benefits may show a greater “maybe baby” effect, counterintuitively undermining the very individuals they were designed to help. Similarly, as countries and organizations move toward attempting to close the gender pay gap by offering such entitlements, these costs will become more relevant.

In summary, this discussion has identified three potential “maybe baby” risks: dependability, career interruption, and family-friendly program use. These perceived risks associated with new mothers are problematic for several reasons. We know that decision-makers are generally risk-averse (i.e., a general preference for possibly lower returns with known risks rather than higher returns with unknown risks; Kahneman & Tversky, 1979). Decision-makers are also more likely to underweight outcomes with small probabilities and overweight outcomes with nearly certain probabilities (Kahneman & Tversky, 1979). Thus, gatekeepers may avoid seemingly sure losses associated with hiring young women who may soon have children for the seemingly more certain wins with hiring young men. On the broader organizational and societal levels, “maybe baby” penalties stemming from inflated judgments of risk can lead to the under-utilization of talent if not promoting the best people, incurring significant costs for individuals and societies in light of the substantial time and funds invested in the training and education of women who constitute the majority of educated persons (e.g., OECD, 2013). “Maybe baby” penalties might also undermine the value of family friendly policies; while such policies may help to facilitate keeping mothers in
the talent pool, they may have unintended consequences that reduce their likelihood of being included in that pool in the first place.

The Current Research

In the following three studies, we test for the existence of a “maybe baby” effect by investigating the impact of applicant age, gender, and desire for children on gatekeepers’ perceptions of risk among targets applying for early career positions in management. In Study 1, we examine the perceived risk associated with young women, contingent on women’s desire to have children. We expect that young childless women who are believed to be interested in children and family will constitute a greater perceived risk than young childless women who are believed to be uninterested in having children. In Study 2, we examine the perceived risk associated with hiring young childless women as compared to young childless men, mothers, and fathers with equivalent qualifications. Even in absence of information suggesting an interest in having children, we expect that organizational gatekeepers will perceive the greatest risk in hiring young childless women. Finally, in Study 3, we attempt to replicate the pattern of results in Study 2 as well as identify precisely why hiring young childless women is seen as riskier than hiring equivalent childless men. We attempt to accomplish this by considering the various types of employer risks (e.g., dependability, career interruption, and family-friendly program use).

The current research makes several theoretical and conceptual contributions. First, we explore the topic of hiring risk, which may diverge from the more commonly examined areas of competence and warmth in the context of gender and parenthood bias research (e.g., Benard & Correll, 2010; Cuddy et al., 2004; Heilman & Okimoto, 2007). Second, incorporating insights from intersectionality theory (Crenshaw, 1989), we illustrate that age effectively blurs the lines between motherhood and childless women, resulting in motherhood bias spill-over, which we refer to as the “maybe baby” effect. To our knowledge, this is a previously undocumented and unexplained effect in the research literature, but one that
presents a more modern and comprehensive picture of gender hiring discrimination. Third, we enhance the existing literature on gender and parenthood biases by studying employment decisions among real organizational gatekeepers in non-American contexts (i.e., Switzerland and Australia), national contexts where there are greater parental leave entitlements that are asymmetrically afforded to mothers versus fathers. In Switzerland (Studies 1 and 2), maternity leave grants 14 weeks to mothers (8 weeks mandatory leave), while paternity leave is not required by law (State Secretary for Economic Affairs, 2014); in fact, it is common practice that organizations offer just one day of paternity leave for fathers, and only on a voluntary basis. In Australia (Study 3), paid parental leave is only offered to one parent (i.e., “the primary carer”) for up to 18 weeks, while fathers (or partners) are eligible for a maximum two weeks of government-funded pay on application (Department of Human Services, 2014). Together these contributions extend our knowledge of how motherhood biases impact the career progress of women, even those who do not have children.

**Study 1**

To determine whether there is a bias against young women because of their motherhood potential, we provided participants with information about three individuals who had recently applied to leadership-track positions in management and who differed in their desire for children. Each participant reviewed all three applicants: a woman with an apparent desire not to have children, a woman with an apparent desire to have children, and a woman with no information implying desire for children (control). Our primary dependent variable of focus was perceived risk. However, in Study 1 we supplement this prediction by comparing patterns of risk with evaluations of commitment, for which we make divergent predictions. As discussed earlier, young women who desire children may trigger conceptions of added costs or losses due to family-friendly program use, potential attrition, or less promotion potential for long-term, leadership positions than women who do not desire children. Thus, we expect that the apparent desire for children will increase gatekeeper perceptions of risk. In contrast,
we expect no differences in judgments of current levels of commitment across targets, predictions that are consistent with past research showing parents are perceived as having more commitment deficits than non-parents (Fuegen et al., 2004; Heilman & Okimoto, 2008). Yet, here we only examine young childless women, and thus we expect no differences in judgments of current levels of commitment across targets. In summary, we expect the following:

Hypothesis 1: Young women who want children will be rated as a higher employment risk than women who do not want children.

Method

Sample & Procedure

Participants were Executive MBAs in Switzerland. In total, 39 eligible participants were contacted and 31 finished the survey with complete data (79.5% overall response rate). Men constituted 67.7% of the final sample. The average respondent age was 39.29 years ($SD = 6.12$). Our sample was diverse in nationality, but mostly Swiss (74.2%), with the remaining hailing from other European countries. About half of the sample reported being parents (54.8%). Our sample reported significant working experience ($M = 15.13$ years, $SD = 7.00$).

In a randomized, double-blind experiment and 3-condition within-subjects design, participants took part in a “social media study.” Each participant was presented with two social media profiles (i.e., LinkedIn and Facebook) from three different targets. Of note, it is not uncommon for practitioners to use social networking sites such as LinkedIn and Facebook for applicant recruitment and information (Davison, Marais, & Bing, 2011). Each profile contained the same background information: name, gender, age, civil status, degree, education, current position, previous work experience, and a personal interest (e.g., music or travelling). All three targets were women as indicated by applicant names (i.e., “Stefanie,” “Daniela,” or “Susanne”) and profile photos, which were partially occluded, ostensibly for the applicants’ anonymity. Targets were also described as 31 to 35 years of age. All profile
information was developed for equivalence from actual resumes of early career women. To further mask the purpose of our study, we also included 13 unrelated filler items in the questionnaire.

**Manipulated desire to have children.** Each participant was presented with three applicants, each representing the three experimental conditions. The order of condition presentation was randomized. Desire to have children was manipulated subtly, but in two ways. First, a Facebook post subtly suggested a lack of interest in having children (i.e., “…we could not do this with kids!”), current interest in having children (i.e., “…[I would like to have] kids, one day!”) or provided no information about desire for children (i.e., “[a music festival] cannot come soon enough!”). Second, personal interest in family was indicated by varying particular groups being followed on LinkedIn. The target with no desire for children followed “The Travel Channel,” the target with desire for children followed “Work & Family Researchers,” and the target with no information followed “University Alumni Association.”

**Measures**

**Candidate commitment.** Participants’ perceptions of the applicants’ commitment were assessed with 3 items from Heilman and Okimoto (2008). Items were measured on a 7-point Likert Scale from “strongly disagree” to “strongly agree” (Cronbach’s alphas = .85-.88). Items included, “If hired, do you think that the applicant would…be very committed to the company?”, “…be willing to make sacrifices for the job?”, and “…make work a top priority?”

**Candidate hiring risk.** Participants’ perceived risk associated with hiring the applicants was assessed with a single-item adapted from Cabrera (2010): “Please indicate the risk category that best expresses the amount of risk you perceive in hiring the candidate.” The item was measured on a 7-point Likert scale from “no risk” to “extremely risky.” Although a single item measure is not typically ideal, supplemental analyses of the original scale (Cabrera, 2010) indicates that the single item used in the current study is very strongly and positively correlated with the 5-item measure, \( r = .771, p < .001, N = 256 \) (Fleming, personal
communication, January 23, 2015). Moreover, such single item indices are both common and acceptable in studies of risk, judgment, and decision-making (e.g., Bergkvist & Rossiter, 2007); guidelines for the use of single-item measures in decision-making also verify its appropriateness within the current research context (Diamantopoulos, Sarstedt, Fuchs, Wilczynski, & Kaiser, 2012).

**Demographic information.** Participants completed demographic questions including gender, age, duration of employment, nationality, and parental status.

**Results and Discussion**

A series of repeated-measures analysis of variance (ANOVA) analyzed the main effects of applicant desire for children on perceived candidate risk and job commitment (see Table 3.1).

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<thead>
<tr>
<th>Variable</th>
<th>Candidate Risk</th>
<th>Candidate Commitment</th>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>No Desire for Children</td>
<td>3.42&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.46</td>
</tr>
<tr>
<td>Desire for Children</td>
<td>4.06&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.53</td>
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<tr>
<td>Control (No Desire Info.)</td>
<td>3.58&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>1.31</td>
</tr>
</tbody>
</table>

*Note.* Ratings were completed on 7-point scales with higher numbers representing more of each construct. Means with different subscripts within columns differ significantly (p < .05).

Initial ANOVAs with participant sex and parenthood status as factors did not indicate any significant effects or interactions, nor was either factor correlated with our dependent measures. Thus, data from male and female, parents and non-parents was combined.
For perceived risk in hiring the applicant, there was a main effect of desire for children, $F(2, 60) = 3.10, p = .05, \eta^2 = .09$. Paired t-test comparisons indicate that, consistent with our hypothesis, the applicant who desired children was rated as a significantly higher risk ($M = 4.06, SD = 1.53$) than the applicant who did not desire children ($M = 3.42, SD = 1.46$; $t(30) = -2.27, p = .03$, Cohen’s $d = .43$), whereas neither applicant with an indicated desire for children significantly differed from the control group for whom no desire for children was indicated ($M = 3.58, SD = 1.31$; $t_{(30)} = 0.62$ to 1.03, $p$s = .08-.54). Thus, Hypothesis 1 was supported.

For perceived commitment, there was no significant effect of desire for children, $F(2, 60) = 1.11, p = .34$, (see Figure 3.1). Paired t-tests comparisons further verified that, consistent with our expectations, none of these differences were significant, $t(30) = -1.30$ to .96, $p$s = .20-.53.

![Figure 3.1](image)

*Figure 3.1.* Perceived hiring risk and commitment according to applicant desire for children (Study 1). Ratings completed on 7-point scales with higher numbers more of each construct.

These results supported our hypothesis and expectations for both of our outcome measures. Apparent desire for children did not affect anticipated job commitment, yet it negatively affected hiring risk. In Study 2, we sought to provide further support for our theoretical predictions by examining the risk implied by gender and parental status, rather
than explicit statements suggesting desire for future parenthood. Moreover, Study 2 expands the investigation to another gatekeeper sample in a different occupational category: academics.

**Study 2**

Although Study 1 shows employability risk associated with young women, the design did not make the additional comparison to men. In other words, although it is clear that women who desire children are seen as riskier hiring prospects, it is not yet clear whether this is a risk associated with motherhood versus parenthood in general. Although unlikely given the subtlety of the manipulation, it is also possible that Study 1 participants may have guessed the purpose of the study causing them to respond in a different way. This would have worked against our predictions, as people are generally motivated to avoid appearing discriminatory. Nonetheless, replicating these patterns in a between-subjects design reduces the likelihood of demand effects.

In Study 2 we further examined the risk associated with hiring young childless women compared to equivalently qualified childless men and mothers. For the comparison between childless women and existing mothers, it is unclear whether childless women would be seen as riskier because of the inherent uncertainty about their parental status, or whether young women would be seen as equally risky given their potential for having (additional) children. Therefore, we remain open to any emerging pattern of data between mothers and childless women. However, for the comparison between childless women versus childless men, we expected:

*Hypothesis 2: Young childless women will be evaluated as a higher employment risk than young childless men.*
To facilitate a fully crossed analysis, we also assessed hiring reactions to an equivalently qualified father; however, given that this target is not the focus of our investigation, we did not make specific predictions about fathers.

**Method**

**Sample & Procedure**

Study 2 examined a specific male sex-typed occupational context that is masculine in both stereotype and demographic representation: business academics (Catalyst, 2012; FSO, 2013). Given that academic hiring committees are typically dominated by professorial faculty in Switzerland, the participant pool included professors of business administration and related disciplines (e.g., economics, information technology, and banking and finance) from all 12 federal and cantonal (state) universities in Switzerland. In total, 369 eligible participants were contacted and 73 respondents returned completed surveys (19.8% response rate). Of these surveys, one additional survey was eliminated as a univariate outlier on risk aversion (i.e., $SD \geq 3$), resulting in a final sample of 72 participants.

Men constituted 88.9% of the final sample, which corresponds to the proportion of business and economics professors in Switzerland who are men. The average age was 50.94 years ($SD = 8.22$). Participants reported an average of 22.89 years ($SD = 9.29$) experience working in academia. Our sample was very diverse in nationality: approximately one-third were Swiss (30.6%), although the vast majority hailed from other European countries. The vast majority of the sample (80.3%) was parents and experienced in academic hiring (80.6%).

Study 2 utilized a randomized, double-blind experiment in the field with a 2 (male vs. female) x 2 (childless vs. parent) between-subjects design. Gatekeepers were randomly assigned to evaluate 1 of the 4 sets of application materials attributed to a man or a woman, with or without children. The experiment was designed in this way to avoid gender-conscious responding and to ensure there were no differences across the applications except for gender and parenthood. Gender was manipulated in the name of the applicant (e.g., “Stefan” or...
“Stefanie”) and by listing the applicant gender as “Male” or “Female,” respectively. Parenthood status was manipulated by the civil status item “Married, no children” or “Married, two children.” Although real application forms typically do not request this information, piloting indicated that it was not perceived as inappropriate or odd, and this information often comes to light during the interview process. Age was indicated indirectly by listing the years of the applicant’s master’s (2007) and PhD degrees (2010), implying the approximate age of 32 years.

**Application materials.** The application materials designed for this experiment were adapted from Moss-Racusin and colleagues (2012) to fit the requirements of an assistant professor applicant in a management field and were constructed using actual submissions for such a position. The application materials were then piloted with academics experienced in the field of management in Switzerland (N = 10). Minor adjustments were made according to the feedback to ensure that the materials were typical for an applicant at this level and in this field. In the final experimental sample, the application materials were rated as typical (M = 4.90, SD = 1.29), as measured on a 7-point Likert scale from “very atypical” to “very typical”. Three participants rated the materials as “very atypical,” and were excluded from the sample.

Each application contained the same information: name, gender, civil status, degree, education, research experience, teaching experience, service, awards and grants, research stays, languages, referees, and an excerpt from research and teaching statements. Finally, the application materials were prefaced with additional text (adapted from Moss-Racusin et al., 2012) to reinforce the credibility of the cover story and to adjust for differences in expectations and practices related to hiring young faculty applicants across the fields of study.

**Measures**

**Candidate hiring risk.** Perceived risk was measured as in Study 1.

**Modern sexism.** Modern sexism may be relevant to hiring, as sexist participants may be especially unlikely to hire women or mothers compared to men or fathers. Participants
rated the degree to which they agreed with 10 questions measuring unintentional negativity toward women (e.g., “Nowadays, women are treated fairly in the workplace”; adapted from Eckes & Six-Materna, 1998). This scale is similar to the Modern Sexism scale (Swim, Aikin, Hall, & Hunter, 1995), but was designed for German-speaking samples, then forward- and back-translated from German to English, as is the standard procedure for language adaptation. Items were measured on a 7-point Likert scale from “strongly disagree” to “strongly agree” ($\alpha = .85$).

**Risk aversion.** Risk aversion may be relevant to hiring, as risk-averse participants may be especially unlikely to hire women if women are perceived as being relatively riskier candidates. Participants rated the degree to which they agreed with 6 questions measuring participants’ general disposition toward avoiding risks (e.g., “I am not willing to take risks when choosing a job or a company to work for”; adapted from Judge, Thoresen, Pucik, & Welbourne, 1999). Items were measured on a 7-point Likert scale from “strongly disagree” to “strongly agree” ($\alpha = .81$).

**Demographic information.** Participants completed demographic questions including current position, gender, age, employment in academia, nationality, and parenthood status. Additional items were included as part of a larger study on mentoring, which also served to further mask the purpose of the study.

**Results and Discussion**

A between-subjects ANCOVA analyzed the main and interactive effects of candidate gender (male or female) and candidate parenthood (childless or with children) on perceived candidate risk (see Table 3.2), controlling for participant-rated risk aversion and modern sexism. Degrees of freedom across analyses vary slightly due to sporadic missing data. Initial ANOVAs with participant sex and parenthood did not indicate any main effects or interactions; thus, data from male and female participants, parents and non-parents were combined.
Table 3.2. Perceived Hiring Risk According to Applicant Gender and Parenthood (Study 2)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Childless</th>
<th>Parent</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>4.56 (1.32)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.41 (1.18)&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>33</td>
</tr>
<tr>
<td>Male</td>
<td>3.50 (1.23)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.61 (1.20)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>32</td>
</tr>
<tr>
<td>n</td>
<td>30</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Ratings were completed on a 7-point scale with higher numbers representing more risk. Means with different subscripts differ significantly (*p* < .05).

There were no main effects of gender or parenthood, *F*(1, 61) = 1.993-2.467, *ps* = .12-.16. These null effects were qualified by a joint effect of gender and parenthood, *F*(1, 61) = 4.26, *p* = .04, *η<sup>2</sup> = .07 (see Figure 3.2). The young childless woman was rated as more risky (*M* = 4.56, *SD* = 1.32) than the childless man (*M* = 3.50, *SD* = 1.23), *t*(27) = 2.12, *p* = .04, Cohen’s *d* = .83. Both the mother (*M* = 4.41, *SD* = 1.18) and the father (*M* = 4.61, *SD* = 1.20) were also rated as similarly risky as the childless woman, *t*<sub>32</sub> = -.11 to 0.53, *p*<sub>s</sub> = .58-.91 (see Table 2 & Figure 2). Further analysis controlled for individual differences relevant to attitudes toward women (i.e., modern sexism) and risk aversion. These additional predictors did not change the pattern of data, nor did they account for the observed differences in risk, *F*(1, 48) = 3.97, *p* = .05, *η<sup>2</sup> = .08.
Figure 3.2. Interactive effect of candidate gender and parenthood in predicting hiring risk (Study 2). Ratings were completed on a 7-point scale with higher numbers meaning more risk.

These results supported our Hypothesis 2. Women applicants were rated as more risky than men, but only among non-parent applicants. In Study 3, we aimed to replicate these results for a third time. We again broaden the scope of the investigation by considering yet another employment context, as well as a new national context of Australia. In addition, we sought to test our underlying theoretical assumptions by examining beliefs about various potential organizational costs, and whether or not these predicted costs accounted for (i.e., mediated) gatekeepers’ perceptions of hiring risk toward young childless women.

Study 3

Because the participants from Studies 1 and 2 were gatekeepers in Switzerland, it was unclear how generalizable our results were about reactions to potential parenthood outside of German-speaking or European contexts. Thus, we sought to replicate these results in another gatekeeper sample from a country with a similarly asymmetrical parental leave policy context: hiring managers in Australia. Thus, we again tested this prediction:

Hypothesis 2: Young childless women will be evaluated as a higher employment risk than young childless men.
We also added several measures to further test our ideas and determine why potential mothers but not potential fathers are anticipated to be a greater hiring risk. Specifically, we examined anticipated dependability, career interruption, and family-friendly program use (see Figure 3.3). Each of these measures functions as a proxy for potential employer costs resulting from hiring a young childless woman. As we previously proposed, a young, currently childless woman might have a child in the near future and is thus a risky hire because she might suddenly become less dependable, experience a career interruption, or utilize expensive family-friendly program offerings.

*Hypotheses 3: Risk will be positively associated with (a) expected dependability, (b) career interruption, and (c) family-friendly program use.*

*Hypotheses 4: The relation between gender and risk will be mediated by (a) expected dependability, (b) career interruption, and (c) family-friendly program use.*

*Figure 3.3. Theoretical model of multiple mediation (Study 3)*

**Sample & Procedure**
Participants were 116 currently employed managers with hiring experience in Australia, recruited for paid participation via Qualtrics panel service. An additional 36 participants began the survey, but were removed from the dataset because they failed basic reading comprehension checks. Men constituted 52.6% of the final sample. The average age was 46.23 years ($SD = 11.36$). About half of the sample reported being parents (60.3%). Participants had significant working experience ($M = 25.22$ years, $SD = 11.56$).

In a randomized, double-blind experiment in the field, gatekeepers were presented with 1 of the 3 sets of application materials, attributed to a childless man, a childless woman, or a mother. The experiment was designed in this way to avoid gender-conscious responding and to ensure there were no differences across the applications except for gender and parenthood.

Stimuli mirrored those in Study 1. Participants were shown two social media profiles that were adapted from Study 1 for appropriateness in an Australian context using feedback from experienced Australian business professionals ($N = 5$). Importantly, the only information that differed across the profiles was gender (male or female) and parenthood (no children or 2 children). Gender was manipulated via applicants’ names (i.e., “Sarah” or “Daniel”). Parenthood was manipulated via the cover photo on the Facebook profiles (i.e., the mother was shown with her husband and 2 young children, whereas the non-parent applicants were shown only with their spouses). All participants were described as married. Finally, age “32 years” was listed in the “about” section of the Facebook profile and in the instructions.

**Measures**

**Candidate hiring risk.** Perceived hiring risk was assessed as in Studies 1 and 2.

**Career interruption.** Participants’ perceptions that the applicant will experience a career interruption in the next 5 years was assessed with 1 item from Wayne, Shore, and Liden (1997).
Dependability. Participants’ perceptions of expected costs incurred from the applicant’s dependability was assessed with 3 items from Heilman and Okimoto (2008), rated on a 7-point Likert scale from “very unlikely” to “very likely” ($\alpha = .86$). Items included expectations that the applicants would take sick days, arrive late, and leave work early.

Family-friendly program use. Participants’ perceptions of the applicants’ expected use of family-friendly program offerings were assessed with 4 items adapted from Ali, Metz, and Kulik (2014). Items were measured on a 7-point Likert scale from “very unlikely” to “very likely” ($\alpha = .83$). Items included flexible hours/scheduling, on-site childcare, off-site childcare, and paid parental leave (in excess of federal requirements).

Demographic information. Participants completed demographics questions including gender, age, employment experience, and parental status.

Results and Discussion

Descriptive statistics, correlations, and reliabilities are reported in Table 3.3. Regression was used to facilitate the test of the indirect (mediated) effects. Experimental conditions were effect coded with stepwise values to indicate the effect of being female (childless male = -1, childless female = 1, mother = 1), as well as the additional effect of motherhood (childless male = 0, childless female = -1, mother = 1). The pattern of results was largely unchanged by control variables (e.g., participant gender and participant parenthood).

Regression analyses. Applicant gender predicted perceived risk ($b = .26, \beta = .19, SE = .12, p = .04$); female applicants were evaluated as riskier hires than males (see Figure 3.4 and Table 3.4). However, applicant motherhood did not predict risk ($b = .15, \beta = .12, SE = .11, p = .19$). Thus, replicating Study 2 and supporting Hypothesis 2, hiring risk was greater for women ($M = 3.57, SD = 1.11$) compared to men ($M = 3.12, SD = 1.01$, Cohen’s $d = .41$), regardless of motherhood.
Figure 3.4. Effects of candidate gender and parenthood in predicting perceived hiring risk (Study 3). Ratings were completed on a 7-point scale with higher numbers representing more risk.

Condition gender also significantly predicted expected career interruption ($b = .47, \beta = .27, SE = .16, p = .004$), expected dependability ($b = .47, \beta = .30, SE = .14, p = .001$), and family-friendly program use ($b = .54, \beta = .31, SE = .15, p < .001$). Thus, Hypotheses 3a-c were supported. We also found that participants expected career interruptions to be more likely for women applicants than men regardless of parenthood ($b = -.19, \beta = -.11, SE = .15, p = .22$). However, mothers were expected to be less dependable ($b = .35, \beta = .24, SE = .13, p = .007$) and to utilize family-friendly programs ($b = .51, \beta = .31, SE = .14, p < .001$) more than childless women.
Table 3.3: Means, Standard Deviations, Correlations, and Scale Reliabilities (Study 3)

<table>
<thead>
<tr>
<th>Variables</th>
<th>8</th>
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<th>SD</th>
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<td>8. Program Use</td>
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<td>7. Dependability</td>
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<td>6. Career Interruption</td>
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<td>5. Risk</td>
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<td>4. Condition</td>
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<td>3. Condition Gender</td>
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Note: Scale reliabilities are reported on the diagonal.
Table 3.4. Regression Analysis Results (Study 3)
Multiple mediation analyses. We examined the direct and indirect effects of applicant gender on hiring risk using 5,000 bootstrapped resamples and bias-corrected 95% Confidence Intervals (CIs), controlling for applicant motherhood. The indirect effect of applicant gender on risk was significant via career interruption (point estimate = .11; 95% CI = (.03, .25)) and dependability (point estimate = .10; 95% CI = (.02, .24)), but not family-friendly program use (point estimate = -.02; 95% CI = (-.14, .08)). The total indirect effect of applicant gender on risk was positive and significant (point estimate = .19; 95% CI = (.03, .39)), while the direct effect of applicant gender on risk did not differ from zero (point estimate = .07; 95% CI = (-.17, .30)). This pattern of results was largely unchanged by control variables or removing family-friendly program use from the model. Thus, our results support Hypothesis 4a-b, but not 4c.

These results generally support our hypotheses. First, replicating Study 2, female applicants were again rated as significantly riskier than men, regardless of motherhood. Thus, our “maybe baby” effect has now been replicated across 3 separate samples, using within- and between-subjects designs, and in gatekeeper samples from multiple countries (e.g., Switzerland and Australia) and sectors (e.g., academia and general business).

Second, extending beyond the previous two studies, we tested our underlying theoretical assumptions by examining the mediating roles of various types of employer costs potentially incurred when hiring potential mothers. We found that expected future dependability and career interruption significantly mediated the effect of target gender on perceived risk, but that the expected use of family-friendly programs did not explain that relation. While mothers were indeed seen as least dependable and most likely to take a career interruption, childless women were nonetheless evaluated negatively on these expected behaviors compared to childless men, which translated into greater perceptions of hiring risk.

Thus, it seems that in countries with asymmetrical parental leave policies, family-friendly program use and its potential costs to organizations might not contribute to
gatekeepers’ hiring decisions because the government provides these benefits. Instead, gatekeepers’ expected risks or organizational costs resulting from hiring young potential mothers include lost productivity and work time or general career interruptions. Thus, our previous argumentation that the country policy context highlights perceived “maybe baby” risk still holds. Specifically, mandated or elongated maternal leave policies at the federal level translate into certain or lengthier career interruptions for women and the organizations that employ them.

General Discussion

This is the first study to identify the “maybe baby” effect whereby young childless women are identified as “risky” in the hiring process. Across three studies, we find evidence that the mere chance of having a child in the near future as signaled by desire (Study 1), or more subtly by age and gender (Study 2 and 3), increases employers’ perceptions of risk associated with hiring young women. We also demonstrated the novelty of risk as distinct from the seemingly related, previously studied concept of commitment. We showed that young, childless women are perceived as riskier hires than young childless men, whereas young childless women and parents are similarly risky job candidates. Finally, we showed that gatekeepers’ expectations of applicant dependability and career interruption mediate the relationship between applicant gender and perceived risk, while expected use of family-friendly programs does not.

Theoretical Implications

We make several theoretical and conceptual contributions. First, in addition to drawing from the lack of fit (Heilman, 1983) and social role (Eagly, 1987) theories as is common in studies of gender and parenthood (e.g., Heilman & Okimoto, 2007; 2008; King, 2008), we also incorporated insights from intersectionality theory (Crenshaw, 1988). With this framework, we outlined and demonstrated the importance of considering gender, parenthood, and age to more accurately construct the meaning and experience of early career
women. The data largely support social role theory (Eagly, 1987) given that women were generally seen as a higher hiring risk than men. In other words, being a parent is risky, but being a young woman is also risky, and thus childless women still suffer the risk associated with parenthood. This pattern of findings does not lend direct support to predictions derived from the lack of fit theory (Heilman, 1983) which would suggest that mothers alone carry the burden of a perceived lack of commitment; instead it is the social role expectations more broadly that seemed to drive judgments of risk.

Second, we explored the topic of risk, which diverges somewhat from the commonly examined areas of competence or competence/agency and warmth/communality in the context of gender and parenthood biases (e.g., Benard & Correll, 2010; Cuddy et al., 2004). Importantly, our incorporation and explicit description of age in the examination of risk and commitment with “potential parenthood” is perhaps helpful in clarifying the lack of consistent findings in this area (e.g., Fuegen et al., 2004; Heilman & Okimoto, 2008). To our knowledge, this distinction between more affective commitment (what we refer to here as “commitment”) and continuance commitment (what we refer to here as “risk”) has not yet been empirically validated in parenthood and personnel selection research. As previously mentioned in recent qualitative research and popular media (BBC News, 2004; Kassam, 2014; Peus & Traut-Mattausch, 2008), we find evidence that age, in addition to explicit desire, are specific and strong signals to gatekeepers that women may soon become mothers. This complements the sparse existing research suggesting that age and gender (Petit, 2007) or age, gender, and sexuality (Baert, 2014) signal applicant fertility or “maternity risk” (Skilling, 2014), and thus, negatively influence gatekeepers’ perceptions of potential hires in personnel selection. Furthermore, our findings support the recent proposition by Joshi and colleagues (2015) that the not-so-subtle gender bias is alive and well in modern organizations- it just lives elsewhere, namely, in risk perceptions.
Third, we complement the existing literature on gender and parenthood biases by studying employment decisions related to women, mothers, and potential mothers in non-American contexts with asymmetrical parental leave. Past research in American contexts made clear distinctions between reactions to mothers versus childless women. However, in the cultural contexts of the current research, we find evidence of a third group of young women, “potential parents,” who are situated between childless women and mothers, and whom gatekeepers treat differentially compared to their male counterparts. However, it is important to note that the existence of the “maybe baby” effect may be at least partly due to the norms within these specific cultural contexts. For example, in the employment context for Studies 1 and 2, new mothers are not only allowed, but actually required by law to leave the workforce following childbirth. Thus, they will undoubtedly be away from their job for at least the duration of the maternity leave, if not more permanently (i.e., to become a stay at home parent). The context for Study 3 does not require mandatory leave, but does hold strong cultural norms about leave expectations for new mothers that accompany the maternity leave entitlement. In a similar vein, men are not automatically entitled to paternal leave in the employment contexts examined in this study, and they are not expected to leave work at all following childbirth. Thus, there may be context-dependent patterns that are influenced by asymmetrical leave entitlements. These contexts may elicit particularly strong “maybe baby” effects, suggesting the need for further research that better delineates the normative conditions that limit the scope of this effect.

In light of this, it may seem like a less intuitive finding that fathers were rated as risky as mothers in Study 2, and more risky than childless men. In contrast to our finding for women, the perceived hiring risk may not be gender-related for men, but parenthood-related instead. For example, a father may be expected to be less able to re-locate after having children. As Study 2 examined an academic context in which relocation in pursuit of tenure-track positions may be necessary for one’s career (Wolfinger et al., 2008), this explanation
seems plausible. Future research should seek to clarify the potential factors that contribute to risk associated with fathers.

**Practical Implications**

Backed by commitment from leaders, awareness and intervention efforts are key because in the end, gatekeepers may exemplify the “maybe baby” effect at integral points in women’s careers. As with other types of decision-making under risk conditions (see Kühberger, 1998), framing effects might be helpful in reducing the expected risks in hiring young childless women. Specifically, decision-makers can employ cognizant risk assessments, weighing the relative risks and rewards of various decision scenarios to make optimal choices, which are helpful not only in the context of corporate strategy, but also hiring strategy (Cabrera, 2010). Such a strategy could complement other nudges in personnel selection procedures to reduce the negative effects of gatekeeper biases and inefficiencies in hiring processes (e.g., joint rather than separate evaluations of applicants; Bohnet, van Geen, and Bazerman; *in press*).

Although the onus for addressing such biases should not be on young women themselves, there are nonetheless strategies that young women employees might initiate in an effort to alleviate any potential employer bias in perceptions of risk. For example, young women and mothers may proactively clarify their involvement and desire for advancement (King, 2008). This may be especially helpful in pre-employment discussions, or in the wake of other periods of job or organizational uncertainty (Proudfoot, Kay, & Mann, 2015). In light of the significant gender- and parenthood-related biases in supervisors’ perceptions that can have cumulative effects (see Eagly & Carli, 2007; Hoobler et al., 2014), women and mothers may do well to clarify and reinforce their performance and career goals as early as practically possible.

**Strengths, Limitations, and Future Research**
Some limitations should be noted. First and foremost, we used a single-item to measure risk. Notably, however, additional analyses of the original scale (Cabrera, 2010) indicate that our single item is very strongly and positively correlated with the full-length, multi-item measure. This may be particularly true in judgments of risk, which has been used extensively in economics research and can be clearly conveyed in a simple format; including additional items that reiterate the same simple theme introduce noise to the measure. Similarly, other single-item measures have been published and accepted as valid, producing more efficient alternatives to longer multi-item scales (e.g., Nagy, 2002; Wanous, Reichers & Hudy, 1997). In the case of risk judgments, it is unlikely that a multiple-item measure would have produced fundamentally different results.

Second, the current study examined perceptions of risk in hiring applicants for leadership-track positions. However, gender-related biases have been documented in the context of other gatekeeper decisions that are relevant to leadership attainment, yet only occur after employees have been hired (e.g., promotions, Heilman & Okimoto, 2008; allocation of challenging work, training, and development, Hoobler et al., 2011). Thus, future research could extend the scope of the “maybe baby” effect and its career implications by demonstrating gatekeeper perceptions of risk in the context of other employment decisions or contexts.

Conclusions

Across three studies, we find evidence that gatekeepers express a “maybe baby” effect driven by women’s age or desire for children that may disadvantage young childless women in employment decisions. This highlights a need for increased attention and objectivity in personnel selection and employment decisions, especially at early career stages. Such decision-making inefficiencies are harmful as they prevent us from establishing workforces whose diversity reflect that of the students we educate and the talents we develop, thus inhibiting the hiring of our best candidates. Although mothers have been highlighted as an
especially disadvantaged group, it seems that even potential motherhood is hazardous for women striving to get ahead.
Chapter 4

The Maybe Baby Effect at the Intersection of Gender & Parenthood:
Time-Lagged Field Research & Experiment with Early Career Employees

Abstract

Gender stereotypes are heightened during the early career phase due to expectations of impending childbearing and organizational costs, which asymmetrically influence women compared to men (i.e., the “maybe baby” effect). The present research aims to document this “maybe baby” effect in the everyday employment experiences of early career childless women. We suggest that coworkers view childless women as higher risk and cost than men, and thus treat childless women with incivility (i.e., subtle disrespect), which negatively affects women’s careers. In a time-lagged survey study ($N = 413$), we examined target’s experiences of workplace incivility and career outcomes (i.e., career identity salience, career satisfaction, and career withdrawal cognitions) one year later. As expected, women experience more incivility than men, but only for childless employees. Being a woman is not directly associated with career outcomes, but is indirectly linked via incivility for childless employees. Converging experimental results from the instigators’ perspective ($N = 476$) indicate that women receive less civility (i.e., politeness) than men, especially childless targets. Discussion focuses on the importance of examining gender with parenthood for understanding modern workplace (mis)treatment and the gender gap in leadership and professorships.

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Introduction

A wealth of research has documented workplace penalties at the intersection of gender and parenthood, with mothers facing greater penalties than women without children (e.g., promotions, hiring, and pay), regardless of their ability, qualifications, or performance (Benard & Correll, 2010; Correll, Benard, & Paik, 2007; Cuddy, Fiske, & Glick, 2004; Fuegen, Biernat, Haines, & Deux, 2004; Heilman & Okimoto, 2008). However, more recent research indicates that these once dichotomous demographic boundaries between childless women and mothers may be blurred for early career employees due to expectations of impending childbearing (i.e., the “maybe baby effect”; Gloor, Okimoto, Feierabend, & Staffelbach, 2015), a fertility risk further heightened by recent policy initiatives targeting new mothers, but not fathers (e.g., see Fernández-Kranz & Rodríguez-Planas, 2014; Miller, 2015; Thomas, 2015).

Although this “maybe baby” effect has been documented in organizational gatekeepers’ personnel selection procedures (Gloor et al., 2015), blatant discrimination like gender bias in hiring is illegal and increasingly unacceptable; indeed, subtle mistreatment such as incivility has emerged as the more common, modern form of discrimination (Cortina, 2008; Cortina, Kabat-Farr, Leskinen, Huerta, & Magley, 2013; Cortina, Magley, Williams, & Langhout, 2001; Swim, Aikin, Hall, & Hunter, 1995). Thus, we propose that the likelihood of having a child in the near future increases coworkers’ perceptions of childbearing risks, judgments that manifest in uncivil everyday treatment of working women, which triggers negative consequences for their career progression. Building on theories of selective incivility (Cortina, 2008) and the “maybe baby” effect (Gloor et al., 2015), we propose a moderated mediation model (Preacher, Rucker, & Hayes, 2007) whereby experienced workplace incivility serves as a mediating mechanism of the relations between employee gender and three career-related consequences (i.e., career identity salience, career satisfaction, and career withdrawal cognitions), with employee parenthood as a first-stage moderator (see Figure 1).
We argue that only for childless employees, women experience more incivility than men and thus, have less positive career cognitions and attitudes.

Our theoretical contributions are three-fold. First and foremost, we consider parenthood as a moderator to reconcile the inconsistent findings regarding gender differences in the experience of workplace incivility (e.g., Cortina et al., 2001; Lim, Cortina, & Magley, 2008; Krings, Johnston, Binggeli, & Maggiori, 2014; Lim & Lee, 2011). Drawing from intersectionality perspectives, which argue that multiple axes of identity should be considered to more accurately represent individuals’ identities and employment experiences (Crenshaw, 1989), we answer the call of Aquino and Thau (2009) to examine moderators in the demographics-victimization relationship. From an empirical standpoint, we complement our time-lagged survey study of employee experiences of incivility with robustness checks and examinations of observed incivility (Study 1), as well as an experimental assessment of the instigator’s perspective (Study 2). Our results provide converging evidence that people do treat childless women employees with less civility. By combining a field study and an experiment study, we fill the gap in the limited existing research that have examined the interactive effects of gender and parenthood on workplace mistreatment (Berdahl & Moon,
2013; Miner, Pesonen, Smittick, Seigel, & Clark 2014), which largely relies on self-report surveys and by nature cannot causally show if childless women are indeed targeted with more mistreatment, or if they are simply more sensitive to interpersonal experiences.

Second, we add to the workplace incivility literature by adopting a career perspective. Previous workplace incivility studies have largely relied on stress theories, exploring the effects of incivility on employee well-being or work outcomes (e.g., job satisfaction and turnover; Cortina et al., 2013; Cortina et al., 2001; Henschovis & Barling, 2010; Henschovis, Christie, & Reich, 2014; Lim & Cortina, 2005; Lim et al., 2008; Lim & Lee, 2011). However, little research has examined the impact of workplace incivility on employees’ cognitions or attitudes towards their broader vocations. Guided by career construction theory (Savickas, 2002), we examine the influence of workplace incivility on three different, downstream career-related outcomes in a sample of early career academics. It is perhaps especially advantageous to examine career-related outcomes in a sample of early career academics given the highly competitive academic job market, the clear relevance of career withdrawal for an academic career compared to the private industry (i.e., employees outside of academia may be more likely to quit their company than their vocation), and the importance of workplace respect for new employees (Ng, 2015). We aim to show that even subtle, interpersonal treatment at work influences employees’ career choices, revealing incivility as another impediment in the labyrinth to leadership (Eagly & Carli, 2007) or professorships (Wolfinger, Mason, & Goulden, 2008).

Third, we contribute to the research on how gender and parenthood influence career development. There is plentiful research that investigates the role of employees’ gender and parenthood in affecting managers’ employment decisions in hiring and promotion (e.g. Benard & Correll, 2010; Correll et al., 2007; Cuddy et al., 2004; Fuegen et al., 2004; Heilman & Okimoto, 2008), whereas few have explored whether gender and parenthood together affect employees’ careers through their interpersonal experiences at work. We propose that
workplace incivility acts as one mechanism that links the interactive effects of gender and parenthood on career attitudes.

In the following, we review theories of incivility and modern discrimination, highlighting the key roles of employee gender, parenthood, and potential parenthood in predicting everyday social treatment at work.

**Incivility as Modern Discrimination**

Before explaining our theory and outlining our hypotheses, we clarify incivility and selective incivility. Incivility’s lexical origins can be traced to the Latin “incivilis,” meaning “not of a citizen.” Workplace incivility is defined as “low intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect” (Andersson & Pearson, 1999, p. 457). It is important to emphasize that different from bullying, mobbing, or blatant discrimination, incivility is inherently ambiguous in nature. Consequently, incivility is exceptionally difficult for target sense-making and attribution, often interpreted at the personal rather than the group-level, and thus is especially harmful for targets (see meta-analysis by Hershcovis & Barling, 2010).

Even if unintentional, incivility can be a veiled manifestation of modern discrimination (i.e., “selective incivility”), specifically targeting certain groups (e.g., women or racial minorities; Cortina, 2008; Cortina et al., 2013). That is, despite being facially neutral, generally uncivil behaviors may not be entirely generic, and instead represent covert expressions of gender or racial bias in the workplace. Selective incivility echoes notions from other theories of modern discrimination, such as aversive racism (Dovidio & Gaertner, 1998), modern prejudice (Swim et al., 1998), and second generation biases (i.e., exclusions of members from non-dominant groups; Sturm, 2001). A critical component inherent across these theories is the ambivalent and ambiguous nature of bias and prejudice, which makes it easy for instigators to maintain egalitarian face, but simultaneously difficult for targets and managers to detect (see Hershcovis, 2011, for a comprehensive critique and review of
incivility and related concepts).

Scholars often suggest that selective incivility will be targeted towards women (rather than men) because women are perceived as incompetent at work (e.g., Cortina, 2008). Yet, much of this research remains theoretical, and empirical findings are mixed regarding gender differences in the reported experience of incivility. Consistent with selective incivility theory (Cortina, 2008), the majority of incivility research has found that women reported more incivility than men (e.g., Cortina et al., 2001; Cortina et al., 2013; Lim et al., 2008; Miner et al., 2014). However, a few scholars have found that women reported the same rates of incivility as men (e.g., Krings et al., 2014), or that men reported more incivility than women (e.g., Lim & Lee, 2011). These results align with a recent review of the broader workplace aggression literature by Aquino and Thau (2009), who found that victimization prevalence rates according to gender were also mixed, leading the authors to suggest subsequent research pursue moderators rather than raw demographic effects. We propose that this suggestion, paired with a recent incidental finding from Miner and colleagues (2014), may help to clarify these inconsistent effects in the case of incivility. Miner and colleagues found that the gender difference in experienced incivility was double in size for childless employees compared to parents. Drawing from the intersectionality theory (Crenshaw, 1989), we examine the interaction of gender and parenthood in predicting workplace incivility to further clarify these mixed effects and more accurately construct the meaning and experience of early career women.

**Incivility, Gender, and (Potential) Parenthood**

Occupational disadvantages often stem from stereotypes, namely, generalized and oversimplified ideas tied to social group membership (i.e., what women are generally like). According to Eagly’s gender role theory (1987) and Heilman’s lack of fit model (1983), prototypically female attributes (i.e., warm and communal) do not match prototypical leader attributes, which are stereotypically masculine (i.e., agentic and competent). This mismatch
causes women to be viewed as a poor fit for positions in masculine settings and roles, which are typically of higher status and higher pay. Furthermore, often-vague employment processes (e.g., hiring decisions and performance evaluations) leave room for stereotypes to influence the information that is attended to, interpreted, and later recalled (see Heilman, 2012). In other words, gender stereotypes and ambiguity fuel organizational biases and discrimination.

The aforementioned organizational biases and discrimination women face have traditionally been shown to be more pronounced for mothers than for non-mothers (e.g., Cuddy et al., 2004; Heilman & Okimoto, 2008), because parental status for women epitomizes the feminine traits of communality and warmth (Heilman, 1983). Thus, having children contributes to the persisting gender inequality (Crosby, Williams, & Biernat, 2004). However in the current research, we propose that even childless women are held to stereotypical assumptions pertaining to gendered assumptions and parental roles. Specifically, we suggest that expectations of future motherhood may trigger conceptions of risk and uncertainty in employing childless women, driven by expectations of impending career interruption and reduced dependability (Gloor et al., 2015). This is problematic because people are generally risk-averse (Kahneman & Tversky, 1979). As a result, coworkers may tend to avoid their childless female coworkers, because they are expected to leave work for a shorter (i.e., mandated maternity leave) or a longer period of time (i.e., “opting out”; Belkin, 2003) in the case of childbirth. Given that highly educated women have fewer children these days (Livingston, 2015), women who are already mothers may not be considered as risky as childless women. For example, a working mother triggers less risk of long-term loss or “opting out” compared to a childless women because the mother has already had a child and returned to work.

If young women are expected to have a child and leave the workforce while young men can have a child without mandated leave, the risk of human resource loss seems comparably higher for women employees than men (Gloor et al., 2015). This asymmetrical
perceived risk in hiring women compared to men is not a recent phenomenon (e.g., statistical discrimination theory; Phelps, 1972; Konrad & Cannings, 1997), but it may be amplified by modern, asymmetrical parental leave policies. Building on the expectation that women are expected to leave the workforce after having children more often than men (i.e., the “opt out” revolution; Belkin, 2003), modern federal plans for mandated (or elongated) parental leave often target women benefactors, but not men or other caregivers. Although these policy initiatives targeting childbearing women aim to promote women’s benefits and well-being, they may shift the landscape of what parenthood means for working women (e.g., lower pay and likelihood of promotion; Fernández-Kranz & Rodríguez-Planas, 2014; Thomas, 2015) and increase childless women’s disadvantage in professional contexts.

Indeed, several scholars have recently documented evidence in-line with this “maybe baby” effect (Gloor et al., 2015) in countries such as Spain and the United States, where economists have shown that mandated maternity leave or childcare coverage at the federal level negatively influence women’s employment, pay, and promotions (Fernández-Kranz & Rodríguez-Planas, 2014; Thomas, 2015). Gloor and colleagues (2015) elucidated the micro-level decision-making process contributing to these effects, namely, gendered expectations of costs (i.e., reduced future dependability and increased chance of career interruption) that drive gatekeepers’ perceptions of risk in hiring young women, but not men. Furthermore, this risk is eliminated when women ostensibly do not plan to have children (Gloor et al., 2015). Given that coworkers typically assume that they have to cover the brunt of new mothers’ work while the mothers are on leave (Jones et al., 2013), these gendered expectations of impending childbirth and its costs are also likely to manifest at the micro-level in everyday interactions with coworkers. In other words, employees may expect that their childless female colleagues will have a child in the near future, and whether cognizant or not, these expectations might manifest as selective incivility. Based on the unique maybe baby stereotype of childless women, we hypothesize the following:
Hypothesis 1a: Having children moderates the relation between gender and experienced workplace incivility, such that the relation is stronger for childless employees than for employees with children.

We also seek to extend the meaning and implications of our findings by linking gender, parenthood, and workplace incivility with individual-level, work-related outcomes, namely, career identity salience, career satisfaction, and career withdrawal. Arguably, career effects imply broader effects reaching beyond a particular position, and thus may be especially informative for the persistent and pervasive gender gaps in leadership (Eagly & Carli, 2007) and professorships (Wolfinger et al., 2008). Thus, in the following, we describe why incivility may threaten one’s career-related cognitions and attitudes.

Workplace Incivility & Career Outcomes

As previously stated, incivility is an ambiguous, isolating phenomenon (Hershcovis et al., 2014). Indeed, regular, ambiguous mistreatment from colleagues signals to targets—or even social groups—that they do not belong to the work group or are not welcome in the employment environment (Cortina, 2008). Research comparing different forms of workplace aggression shows that targets experience more self-doubt when mistreatment is ambiguous rather than clearly discriminatory (Ruggiero & Taylor, 1995). When experiencing ambiguous mistreatment (compared with blatant mistreatment such as sexual harassment), employees are also less likely to depersonalize the event or attribute blame to the instigator (Hershcovis & Barling, 2010). Thus, this sense-making attributional process explains how ambiguous mistreatment such as incivility may particularly threaten targets’ sense of self.

Although incivility has been theorized (Andersson & Pearson, 1999) and empirically shown to threaten a person’s broader identity (Andersson & Pearson, 1999) and self-worth (Aquino & Douglas, 2003), questions remain regarding incivility’s specific effect on targets’ career-related identity. To substantiate our claims concerning the effect of workplace incivility on career identity, career satisfaction, and career withdrawal, we draw from the
career construction theory (Savickas, 2002), which is rooted in Erikson’s ego-identity model (1968). According to Erikson (1968), individuals develop a conscious sense of self (i.e., an ego identity) through social interactions. This is an iterative process through which an individual modifies and adapts his or her ego identity in response to everyday experiences with others. The career construction theory (Savickas, 2002) relates this process with work-life, as individuals construct their careers by transforming their identities into work roles.

The critical assertion of the career construction theory (Savickas, 2002) is that career exploration is a key aspect of developing one’s own career identity. Exploration means that a person elicits information about him- or herself and the environment in which a career would be pursued. Then, the person considers this information in making important life choices, including which career to pursue. So if an employee experiences workplace incivility—perhaps especially in the exploration stage during early career—this may be interpreted as a negative signal about the employee’s career chance, his or her specific career choice, or the work environment necessary to achieve the desired career. Therefore, incivility might prompt an employee to reconsider his or her career choice, thus weakening the employee’s career identity, career satisfaction, and/or desire to remain in a particular career. Combining these expectations, we hypothesize the following:

**Hypothesis 2a:** Workplace incivility is negatively related to career identity salience.

**Hypothesis 2b:** Workplace incivility is negatively related to career satisfaction.

**Hypothesis 2c:** Workplace incivility is positively related to career withdrawal cognitions.

Integrating the proposed moderation effect of employees’ parenthood status on the gender differences in workplace incivility and the proposed career consequences of workplace incivility, we hypothesize that:

**Hypothesis 3:** Having children moderates the relation between gender, workplace incivility, and (a) career identity salience, (b) career satisfaction, and (c) career withdrawal cognitions, such that the indirect effect of gender on work outcomes through workplace incivility is larger for childless employees than for employees with...
STUDY 1

We examine whether or not the “maybe baby” effect manifests in everyday social interactions using a time-lagged survey study of employees. We aim to show how employee demographics predict workplace incivility and how incivility predicts multiple career-related consequences: career identity salience, career satisfaction, and career withdrawal cognitions. We address our theoretical proposition of the “maybe baby” effect at the largely overlooked intersection of gender and parenthood within the early career context. This is the crux where the gender gap widens, concurrently overlaying with employees’ prime childbearing years (Catalyst, 2013; 2015; Livingston, 2015; Swiss Federal Statistical Office, 2016; United States Census Bureau, 2011). Consequently, it is during this time that gender-based stereotypes may also be heightened and most relevant (see Gloor et al., 2015).

Method

Sample and Procedure

To recruit participants, we emailed early career academics, including doctoral students, post-doctoral researchers, and assistant professors from all 12 cantonal and federal universities in Switzerland. Participants were asked to complete a time-lagged study over a 1-year period. Both surveys were completed online. The first survey measured demographics, experienced and observed workplace incivility, while the second survey measured career identity salience, career satisfaction, and career withdrawal cognitions. Participants were rewarded with the chance to win gift cards to a local bookstore for both data collections.

An initial sample of 1,897 academics, including 1,118 PhD students, 571 post-doctoral researchers, and 208 assistant professors agreed to participate in the study and completed the first survey. Of the 604 initial participants who also completed the second survey, 53 participants contained missing data, representing a response rate of 29%. In addition, several participants had to be excluded due to changing jobs, becoming pregnant, or having a baby.
between data collections (n = 138) because these professional and private life events would cloud our key variables and confuse our demographic categories of interest. For example, it is unclear if a pregnant woman should be coded as childless, a mother, or some third category in-between. Alternatively, changing jobs implies new work environments, colleagues, and/or power dynamics, which could significantly alter interpersonal interactions and the civility of the work environment, as well as the referents for the career outcome measures. Thus, the final sample consisted of 413 participants.

The sample consisted of 213 women (51.57%), with an average age of 30.35 years (SD = 4.43). The number of children per participant ranged from 0 to 3 (M = 0.22), with 371 childless participants and 42 parents. Although our sample has few parents, this is representative of the Swiss population whose average age of maternity is 31.7 years (Swiss Federal Statistical Office, 2016). Only 158 participants were native citizens with the rest mostly of other, European nationality. Most participants were doctoral students (71.91%), followed by post-doctoral researchers (21.55%), and assistant professors (6.54%), from Science, Technology, Engineering, and Math (STEM, e.g., natural and physical sciences, engineering, and mathematics; 56.66%) or non-STEM (e.g., education, psychology, literature, and law; 43.34%) disciplines.

Measures

All items were measured via a self-report survey and scored from 1 (strongly disagree) to 5 (strongly agree), unless otherwise noted.

**Experienced incivility.** We measured personally experienced workplace incivility with 7 items from the Workplace Incivility Scale developed by Cortina and colleagues (2001). Participants indicated the frequency with which they had experienced disrespectful, rude, or condescending treatment from colleagues in the past year on a 5-point scale (0 = never to 4 = many times). A sample item is: “Interrupted or spoke over you” (α = .89).

**Observed incivility.** Although not specifically hypothesized, we also measured
observed workplace incivility (i.e., disrespectful behavior in the workplace that is witnessed among colleagues, but not personally experienced; Miner-Rubino & Cortina, 2004). With this measure, our aim is to show that young childless women are not simply overly sensitive or attentive to disrespectful treatment in general. We measured observed workplace incivility with 3 items from Miner-Rubino and Cortina (2004). We adapted this measure from its original form to assess general instances of incivility—not those explicitly directed towards female colleagues. Participants indicated the frequency with which they had witnessed disrespectful, rude, or condescending treatment from colleagues towards other colleagues in the past year on a 5-point scale (0 = never to 4 = many times). A sample item is: …ignore, fail to listen to, or interrupt a co-worker? (α = .87).

**Career identity salience.** Career identity salience refers to the primacy or centrality of a person’s vocation in his or her sense of who they are. We measured career identity salience with 2 items derived from Lobel and St. Clair (1992). The items are: The major satisfactions in life come from my career and The most important things that happen to me involve my career (α = .75).

**Career satisfaction.** Career satisfaction refers to a person’s subjective sense of contentment with his or her career-related achievements. We measured career satisfaction with a single item: I am satisfied with the success I have achieved in my professional career so far. Although single item measures are not typically ideal, other single item measures of satisfaction have been shown to be efficient measures that are highly correlated with multiple item scales (e.g., job satisfaction; Nagy, 2002; Wanous, Reichers, & Hudy, 1997).

**Career withdrawal cognitions.** Career withdrawal cognitions refer to turnover intentions related not to one’s job, but to one’s broader career or vocation. We measured career withdrawal cognitions with 3 items derived from Blau (1985). Items included: I’m thinking about leaving academia, I have the intention to look for a different position outside of academia, and I intend to leave academia (α = .93).
Gender. A dummy variable was created for gender (0 = male, 1 = female), because no participants selected our third option of other gender.

Parenthood status. Parenthood status was assessed with a dichotomous, self-report variable of having children (1) or not having children (0). However, given gender deviants theory, which argues that caretaking for children may influence rates of social mistreatment beyond the mere parenthood status (Berdahl & Moon, 2013), we also used caretaking for children as an alternative measure of parenthood status. However, our results remained unchanged.8

Control variables. We also measured and controlled for participants’ age (continuous in years) and nationality (0 = Swiss, 1 = non-Swiss), because these factors have been shown to influence participants’ experiences of workplace incivility (Cortina et al., 2013; Krings et al., 2014). We also controlled for participants’ academic discipline and position, given that these factors are associated with gender demography, which has been also shown to influence rates of workplace incivility for women as gender demography skews male (Cortina et al., 2013).

Results

To examine discriminate validity, we conducted a series of confirmatory factor analyses. Results showed that a five-factor model provided a good fit to the data, $\chi^2(95, 413) = 170.696, p < .001, \text{CFI} = .978, \text{RMSEA} = .044, \text{SRMR} = .032$. The five-factor model fit better than a four-factor model which combined experienced incivility and observed incivility into one factor ($\chi^2(99, 413) = 495.951, p < .001, \text{RMSEA} = .099, \text{CFI} = .884, \text{SRMR} = .059$), a three-factor model in which experienced and observed incivility were combined, as well as career identity and career satisfaction were combined ($\chi^2(103, 413) = 613.117, p < .001, \text{RMSEA} = .110, \text{CFI} = .851, \text{SRMR} = .073$), and a single-factor model ($\chi^2(106, 413) = 1995.250, p < .001, \text{RMSEA} = .208, \text{CFI} = .449, \text{SRMR} = .201$).

8 The results for caretaking as a moderator are available from the first author upon request.
Descriptive statistics, correlations, and reliabilities are displayed in Table 1. Initial ANOVAs with participant gender and parenthood did not indicate any significant main effects or interactions; thus, data from male and female participants, parents and non-parents were combined in subsequent analyses.

### Hypothesis Testing

Given that our predictors are both dichotomous variables, we calculated an Analysis of Variance (ANOVA) and an Analysis of Covariance (ANCOVA) model, controlling for participant age, nationality, academic discipline, and position; regression results remain generally unchanged (see Table 2). The ANCOVA revealed no main effect of gender, $F(1, 405) = 0.070, p = .791$, or parenthood on experienced incivility, $F(1, 405) = 2.147, p = .144$. However, as expected, these null effects were qualified by a significant joint effect of gender and parenthood, $F(1, 405) = 4.240, p = .040, \eta^2 = .010$ (see Figure 2). A series of t-tests showed that childless women ($M = 0.595, SD = 0.698$) experienced more incivility than childless men ($M = 0.434, SD = 0.594$, Cohen’s $d = 0.256$), $t(369) = 2.378, p = .018$. 

### Table 1

**Means, Standard Deviations, Correlations, and Scale Reliabilities**

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>30.35</td>
<td>4.43</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Nationality</td>
<td>0.62</td>
<td>0.49</td>
<td>0.03</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Discipline</td>
<td>0.57</td>
<td>0.50</td>
<td>-0.06</td>
<td>0.12</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Position</td>
<td>0.35</td>
<td>0.60</td>
<td>0.68***</td>
<td>-0.2</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Gender</td>
<td>0.52</td>
<td>0.50</td>
<td>-0.14**</td>
<td>-0.04</td>
<td>-0.10</td>
<td>-0.17***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>6. Parenthood</td>
<td>0.10</td>
<td>0.30</td>
<td>0.57***</td>
<td>-0.07</td>
<td>0.00</td>
<td>0.57***</td>
<td>-0.11</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>7. Experienced Inciv</td>
<td>0.52</td>
<td>0.65</td>
<td>0.09</td>
<td>0.09</td>
<td>0.08</td>
<td>0.03</td>
<td>0.10</td>
<td>0.01</td>
<td>(0.89)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Observed Inciv</td>
<td>0.94</td>
<td>0.99</td>
<td>0.05</td>
<td>-0.02</td>
<td>0.12</td>
<td>-0.03</td>
<td>0.12</td>
<td>-0.02</td>
<td>0.57***</td>
<td>(0.87)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Career Identity</td>
<td>3.09</td>
<td>0.88</td>
<td>0.02</td>
<td>0.09</td>
<td>0.02</td>
<td>0.00</td>
<td>-0.01</td>
<td>0.06</td>
<td>0.09</td>
<td>-0.10*</td>
<td>(0.75)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Career Satisfaction</td>
<td>3.46</td>
<td>1.00</td>
<td>0.01</td>
<td>-0.05</td>
<td>-0.07</td>
<td>0.05</td>
<td>0.04</td>
<td>0.05</td>
<td>-0.21***</td>
<td>-0.13*</td>
<td>0.15***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Career Withdrawal</td>
<td>3.22</td>
<td>1.30</td>
<td>-0.19***</td>
<td>-0.07</td>
<td>0.20***</td>
<td>-0.29***</td>
<td>-0.03</td>
<td>-0.19***</td>
<td>0.15***</td>
<td>0.21***</td>
<td>-0.32***</td>
<td>-0.23***</td>
<td>(0.93)</td>
</tr>
</tbody>
</table>

*Note. N = 413 for variables except for observed incivility (N = 399). Participant nationality coded as 0 = Swiss, 1 = non-Swiss; discipline coded as 0 = non-STEM and 1 = STEM; position coded as 0 = PhD, 1 = Post-doc, and 1 = Assistant Professor; gender coded as 0 = male, 1 = female; parenthood coded as 0 = non-parent, 1 = parent; Scale reliabilities reported on the diagonal.

* $p < .05$, ** $p < .01$, *** $p < .001$
Although mothers experienced slightly less incivility ($M = 0.364$, $SD = 0.478$) than fathers ($M = 0.584$, $SD = 0.700$), this difference was not statistically significant, $t(40) = 1.079$, $p = .287$. Thus, Hypothesis 1a is supported.

As an attempt to rule out sampling bias as a contributor to our findings, we also examined the effects of target gender and parenthood on experienced incivility using the initial, full sample of all participants who reported their gender and parenthood status ($N = 1,848$). As expected, an ANCOVA revealed that childless women reported the most experienced incivility ($M = 0.706$, $SE = 0.028$, $n = 791$), followed by childless men ($M = 0.593$, $SE = 0.029$, $n = 704$), mothers ($M = 0.503$, $SE = 0.065$, $n = 149$), and fathers ($M = 0.416$, $SE = 0.059$, $n = 204$). These findings are in line with our findings from the complete, clean sample ($N = 413$), also supporting Hypothesis 1a. Given that the mean rates of reported incivility were even higher in the initial, complete sample compared with the complete, clean sample, our findings are likely conservative, perhaps underestimating the true effects of gender and parenthood on experienced incivility.

![Graph](image)

Figure 2. The joint effect of participant gender and parenthood on experienced workplace incivility, controlling for participant age, discipline, position, and nationality (Study 1)

As an exploratory analysis, we also examined participants’ reports of observed incivility. ($N = 399$). Counter to our findings for personally experienced incivility, we did not
find an interactive effect of gender and parenthood on observed incivility as calculated with control variables, $F(1, 391) = 0.195, p = .659$, or without control variables, $F(1, 404) = 0.045, p = .832$. As we document divergent patterns of results for the two types of social mistreatment, this finding supports our proposition that young, childless women are not simply overly sensitive to or attentive towards discriminatory treatment.

**Moderated Mediation**

We used the Hayes’ (2013) Process macro for SPSS to test the hypothesized moderated mediation model. Hayes’ macro adopts a bootstrapping procedure to obtain bias-corrected 95% Confidence Intervals (CIs) for the conditional direct and indirect effects at different levels of the moderators (Preacher et al., 2007; Shrout & Bolger, 2002). Given our use of 5,000 bootstrapping resamples in our moderated mediation analysis, in particular bias-corrected intervals, as well as the sizeable effects from previous research (e.g., Miner et al., 2014), insufficient statistical power is not a threat to our analysis (Preacher et al., 2007).

Consistent with ANCOVA results and supporting Hypothesis 1a, the interaction of gender and parenthood was significant in predicting experienced workplace incivility ($B = -.451, SE = .219, p < .05$; see Table 2). Also as expected, experienced workplace incivility was negatively related to career identity salience ($B = -.143, SE = .068, p < .05$) and career satisfaction ($B = -.310, SE = -.076, p < .001$), but positively related to career withdrawal cognitions ($B = .296, SE = .094, p < .01$). Thus, Hypotheses 2a-2c are all supported.
The indices of moderated mediation were .064 (SE boot = .045, 95% CI = (.002, .186)), .140 (SE boot = .074, 95% CI = (.026, .325)), and -1.33 (SE boot = .070, 95% CI = (-.312, -.026)), in predicting career identity salience, career satisfaction, and career withdrawal cognitions respectively. According to Hayes (2013), when the moderator is dichotomous, the index of moderated mediation is a test of equality of the conditional indirect effects in the two groups. Thus, parenthood moderates the mediation whereby gender affects the three career outcomes via workplace incivility.
Next, we examined the conditional effects of gender on career-related outcomes. The estimates and bias-corrected bootstrapped 95% CIs for the conditional direct and indirect effects are shown in Table 3. As expected, for childless employees, with the mediation of workplace incivility, the conditional indirect effects of employee gender on career identity salience (point estimate = -.028, 95% CI = (-.075, -.002)), career satisfaction (point estimate = -.061, 95% CI = (-.128, -.021)), as well as career withdrawal cognitions (point estimate = .058, 95% CI = (.016, .127)) were all significant. However, for parent employees, none of the conditional indirect effects of employee gender on the three career-related outcomes through the mediation of experienced workplace incivility were significant. Thus, Hypotheses 3a-c are
fully supported. Furthermore, we also found that parenthood did not moderate the direct effects of gender on any of our career outcomes.

**Discussion**

These results supported our hypotheses and expectations. Although employee gender did not consistently predict experienced incivility, there was a significant joint effect of employee gender and parenthood such that childless women reported the most uncivil experiences. This pattern of effects remained consistent in analyzing the complete, initial sample or the final, clean sample. However, we did not find the same interactive effects for observed incivility. We also documented multiple downstream career consequences of incivility for childless women, including positively valenced (i.e., career identity salience and career satisfaction) and negatively valenced (i.e., career withdrawal cognitions) outcomes.

One limitation of Study 1 is that all data were self-reported. Thus, we cannot infer from Study 1 whether gender and parenthood interactively influence employees’ real experiences of workplace mistreatment, or whether they change employees’ sensitivity or perceptions of interpersonal experiences. To avoid the limitation of using targets’ self-reported data and eliminate effects of potential confounding factors, we adopted an experimental study (Study 2) from the instigator’s perspective to test whether the (in)civility of people’s interpersonal behaviors depend on targets’ gender and parenthood. Moreover, Study 2 expands our investigation to a broader employee sample from a different country: the United States.

**STUDY 2**

Study 1 showed greater incivility experiences in early career childless women, but no such pattern for observed incivility. Yet, it remains possible that childless women are simply more sensitive to or attuned to their own uncivil experiences. Furthermore, it is important to note that the existence of the “maybe baby” effect in Study 1 may be at least partly due to the norms within the specific, Swiss cultural context. For example, in Switzerland, new mothers
are actually required by law to leave the workforce following childbirth. Thus, they will undoubtedly be away from their job for at least the duration of the maternity leave, if not more permanently to become a stay at home parent. Our context for Study 2 does not require mandatory leave, instead offering only optional, unpaid leave available to approximately 60% of employees through the Family and Medical Leave Act.\(^9\) However, there remain strong cultural norms about leave expectations for new mothers, but not fathers (see Rudman & Mescher, 2013). As there may be a context-dependent pattern influenced by asymmetrical leave entitlements in Study 1 that may elicit a particularly strong “maybe baby” effect, Study 2 in a new sample and parental leave context is a more conservative test to illustrate the robustness of these effects.

Our main goal is to replicate Hypothesis 1a from Study 1, but from the instigator’s perspective rather than the target’s perspective. To reduce the threat of socially desirable responding, we use a between-subjects design and experimental vignette method to assess instigators’ commissions of civility. Specifically, we measured the likelihood of making a request with “please” towards targets differing only by gender and number of children. Neglecting to say “please” has been noted as an example of workplace incivility and lack of respect since its seminal research (e.g., Andersson & Pearson, 1999). Cortina and colleagues (2013) have also recommended examinations of instigators’ cognitions using creative methods to reduce demand effects and socially desirable responding in the context of incivility. Building on Hypothesis 1a from Study 1, we hypothesize the following:

**Hypothesis 1b:** Having children moderates the relation between gender and received workplace civility, such that the relation is stronger for childless employees than for employees with children.

**Method**

**Sample and Procedure**

\(^9\)See www.nationalpartnership.org.
Participants were recruited via Amazon.com’s Mechanical Turk. Eligible participants were restricted to American adults with English as a native language. The study was conducted in English and approximately 5-7 minutes in duration. Only those individuals who correctly responded to our three screening questions measuring attention and comprehension were allowed to participate and receive compensation as outlined by Buhrmester, Kwang, and Gosling (2011).

Of the 548 who began the survey, 480 participants fulfilled these criteria. A $2 \times 3$ between-subjects design was adopted and participants were randomly assigned to 1 of 6 conditions for a man or a woman target with 0, 1, or 3 children. In previous experimental studies, parenthood manipulations included candidates having 1 child (Cuddy et al., 2004) or 2 children (Fuegen et al., 2004), or vaguely as *has children* (e.g., Heilman & Okimoto, 2008). However, working men may also be perceived as gender deviants with more children and caretaking responsibilities (Berdahl & Moon, 2013), an effect that may not be captured with previous manipulations of parenthood because 2 children is average (The World Bank, 2016). Thus, our target profiles comprised a childless woman (or man), a mother (or father) with 1 young child, or a mother (or a father) with 3 young children. Due to extensive missing data, 4 cases were deleted. Thus, the final sample size was 476, with a response rate of 86.86%. Our sample was composed of 49.6% women, 44.1% parents, and 80.9% White/Caucasian individuals. Mean age was 37.51 ($SD = 12.51$), and mean work experience was 16.89 years ($SD = 11.84$).

Measures

**Civility.** We developed 3 brief vignettes that presented everyday workplace interactions between participants and a fictional target colleague. Interactions were derived from behaviors listed in the Workplace Incivility Scale (Cortina et al., 2001), including professional collaborations and team camaraderie (see Appendix A). Participants indicated how they would verbally respond to their colleague in each scenario. Our key outcome of
interest was the “please” response. However, we also adapted 4 responses from a study of politeness in verbal requests by Holtgraves and Joog-nam (1990), including a bald request (e.g., Complete the report soon.), positive and negative politeness requests (e.g., You’ll complete the report soon, won’t you? and Would you mind completing the report soon?, respectively), and off/record hints (e.g., It would be great if we could complete this project today.). We also added a “no response” option. With 6 total responses instead of just the 1 “please” response, our vignettes better approximate the full range of possible responses along a spectrum of politeness. Having multiple responses also further occludes the true purposes of our study.

**Piloting.** As this was a new measure, we first conducted pilot testing in a sample of American adults ($N = 100$). We presented participants with all 3 scenarios involving a gender neutral target colleague. Participants rated the perceived politeness of each of the 6 responses on a 9-point Likert type scale ($1 = extremely impolite$ to $9 = extremely polite$). Pilot testing indicated that the “please” response was the most consistently high-rated in politeness across vignettes.

**Main Experiment.** In the main experiment, participants responded to all 3 vignettes indicating how likely they would respond to a fictional target colleague. Unlike piloting, targets in Study 1 systematically varied by gender (i.e., Jennifer or John) and parenthood (i.e., 0, 1, or 3 children). Target profiles were adapted from Cuddy and colleagues (2004) to represent a childless woman (or man), a mother (or father) with 1 young child, and a mother (or father) with 3 young children. With the exception of gender and number of children, the profiles were identical: the target was a 32-year-old MBA holder with 6 years of work experience in management/finance, work duties such as identifying issues and synthesizing conclusions into recommendations, hobbies of swimming and tennis, and was married.

Participants rated the likelihood that they would respond to all 3 scenarios in each of the 6 ways as measured on a 9-point Likert-type scale ($1 = extremely unlikely$ to $9 = extremely
likely). A sample of a “please” response is, Please complete the report soon (α = .67).

Warmth & Competence. Warmth and competence are the two central dimensions of social cognition as people differentiate each other according to liking (i.e., warmth) and respecting (i.e., competence; Fiske, Cuddy, Glick, & Xu, 2002). These are the primary categories for impression formation, which account for the vast majority of the variance in perceptions of everyday social behaviors (i.e., more than 80%; Fiske et al., 2002; Wojciszke, Bazinska, & Jaworski, 1998). As warmth and competence have also been proposed as contributors to workplace social mistreatment (e.g., Berdahl & Moon, 2013; Cortina, 2008; Fiske et al., 2002) or shown to drive employment penalties towards women (Heilman & Okimoto, 2007; 2008), we also measured participants’ perceptions of the target’s competence and warmth with 9-point, bipolar adjective scale items derived from previous research on gender stereotypes (Cuddy et al., 2004; Heilman & Okimoto, 2007; 2008). Four items (i.e., unorganized-organized, ineffective-effective, not competent-competent, and not productive-productive) measured competence (α = .90) and another four items (i.e., not understanding-understanding, not supportive-supportive, insensitive-sensitive, and cold-warm) measured warmth (α = .92). We also included two filler items (i.e., impractical-practical and intolerant-tolerant).

Control variables. We controlled for participant gender, parenthood, and age because they have been shown to influence biases towards women and/or parents (Koch, D’Mello & Sackett, 2015; Okimoto & Heilman, 2012).

Results

Descriptive statistics, correlations, and reliabilities are displayed in Table 4. Post-hoc power analyses indicate 0.99 power given our analysis, which is more than sufficient power (i.e., greater than 0.80; Faul, Erdfelder, Lang, & Buchner, 2007). As we found no significant differences in perceived warmth, competence, or civility towards targets with 1 or 3 children, $F$s(1,320) = 0.005-1.001, $p$s = .318-.942, these conditions were collapsed into a single
grouping of parents. Thus, we examined civility with a 2 (male or female target) × 2 (childless or parent target) Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA) with warmth, competence, and control variables included as covariates. However, initial ANOVAs with participant gender and parenthood did not indicate any significant main effects or interactions; thus, data from male and female participants, parents and non-parents were combined.

Civility

A 2 × 2 ANOVA revealed a significant main effect of target gender on civility, \( F(1, 472) = 4.626, p = .032, \eta^2 = .010 \), such that participants were more civil towards men (\( M = 5.435, SD = 1.841 \)) than women (\( M = 5.175, SD = 1.992, \) Cohen’s \( d = .135 \)). However, there was no significant effect of target parenthood on civility, \( F(1, 472) = 0.007, p = .933 \). These effects were qualified by a significant interaction between target gender and parenthood, \( F(1, 472) = 4.688, p = .031, \eta^2 = .010 \) (see Figure 3). A pair of t-tests indicate that, consistent with our hypothesis, childless women received less civility (\( M = 4.916, SD = 2.024 \)) than childless men (\( M = 5.724, SD = 1.873; t(152) = -2.570, p = .011 \), Cohen’s \( d = .414 \)), whereas there was no difference in received civility between mothers (\( M = 5.306, SD = 1.969 \)) and fathers (\( M = 5.303, SD = 1.817; t(320) = .013, p = .990 \)). Thus, Hypothesis 1b is supported.
As robustness checks, we also calculated our model controlling for perceptions of target warmth and competence. However, our key interaction remained statistically significant, $F(1, 470) = 4.175, p = .042, \eta^2 = .009$. ANCOVA results controlling for perceptions of target warmth and competence, as well as participant gender, parenthood, and age, also remained statistically significant, $F(1, 467) = 4.086, p = .044, \eta^2 = .009$. Thus, it is unlikely that the interactive effect of gender and parenthood on civility is entirely driven by perceptions of childless women’s competence or warmth.

**Discussion**

These results supported our hypothesis and expectations. We found a significant joint effect of target gender and parenthood such that childless women received the least civility. This effect held with and without control variables included in the model, and persisted above and beyond instigators’ perceptions of targets on the core dimensions of person perception: warmth and competence. Thus, across samples, methods, and measures of civility and incivility, it seems that childless women—not mothers—are the most at-risk of receiving less respect and more disrespect in workplace social interactions. Although we found inconsistent main effects of target gender across our studies, this finding dovetails with the mixed existing research examining demographic main effects in incivility and workplace aggression (Aquino
& Thau, 2009; Berdahl & Moon, 2013; Miner et al., 2014), and demonstrates the importance of intersectional perspectives such as including parenthood as a moderator of gender.

**Discussion**

By simultaneously integrating moderating and mediating mechanisms, we show how target demographics predict incivility, how incivility influences career identity salience, career satisfaction, and career withdrawal cognitions, and for whom incivility is most prevalent and problematic: childless women. This speaks to the importance of intersectional perspectives (Crenshaw, 1989), in particular, examining gender with parenthood to advance the understanding of modern discrimination and workplace mistreatment. We also show that this pattern of results is not apparent for observed instances of workplace incivility, but only personally experienced incivility. Furthermore, we replicate this pattern of results in an experimental design from the instigator’s perspective in a completely new sample, showing the interactive effects of gender and parenthood on civility above and beyond social perceptions of target warmth and competence. In light of these consistent and sizeable effects, our converging evidence suggests that it is unlikely that young childless women are simply overly sensitive or attentive towards social mistreatment. Instead, and in contrast to much of the existing literature on gender and motherhood in the workplace, childless women may be most at risk of workplace penalties such as more disrespectful and less respectful treatment at work during the early career phase.

Our intersectional approach not only resolves inconsistencies in existing research, but we also propose a new theory to reconcile these findings by incorporating contextual barriers beyond organizations that might influence women’s workplace experiences (see Joshi, Neely, Emrich, Griffiths, & George, 2015). Germane to the current research, recent and widespread parental leave policy changes at the federal- (e.g., Switzerland in 2005; State Secretary for Economic Affairs, 2014) or the organizational-level (e.g., Amazon, Google, Facebook, Netflix, and Spotify; Williams, 2015) may have highlighted the transition to parenthood as a
prominent factor potentially effecting future employee dependability or continuity, contingent on childbearing (Belkin, 2003; Gloor et al., 2015). As women are both allowed to and expected to take parental leave more often than men (Ray, Gornick, & Schmitt, 2010; Rudman & Mescher, 2013), even if policies appear equitable, they inadvertently highlight women of childbearing age. Taking these policies and cultural expectations, paired with a low average fertility rate (i.e., less than 2 children per woman in Switzerland and the United States; The World Bank, 2016), currently childless women may be particularly at risk of “maybe baby” (Gloor et al., 2015) and “opt out” expectations (Belkin, 2003). Indeed, we showed that gender bias is “alive and well” within organizations outside of the formal, visible, and overt manifestations (Joshi et al., 2015, p. 1471), residing instead in the informal, less visible, and covert manifestations of incivility—especially towards childless women.

Theoretical Implications

A wealth of recent research has examined workplace incivility (Cortina et al., 2001; Cortina et al., 2013; Krings et al., 2014; Lim et al., 2007; Miner et al., 2014) or the gender gap in leadership (see Eagly & Carli, 2007). However, less often do researchers explicitly combine these two streams of research at the crux of the gender gap: the early career phase and transition to parenthood. Such research is increasingly important in the modern era given the counterintuitive effects of policy initiatives intended to assist women with balancing family and career (e.g., Fernández-Kranz & Rodríguez-Planas, 2014; Thomas, 2015). In line with Gloor and colleagues (2015) who documented the “maybe baby” effect in gatekeepers’ hiring decisions, our results show that this increased risk of impending childbearing and career interruption may also manifest in young childless women’s everyday employment experiences.

By identifying childless women as a potentially overlooked, yet at-risk group within the early career context, our studies are highly relevant to inform the gender gap in leadership and academia (Catalyst, 2013; 2015). Indeed, identity salience motivates attitudes and
behaviors in support of an identity (Ashforth & Mael, 1989), and lower career identity may result in less effort or poorer performance (Lobel & Clair, 1992). Although previous studies have also linked incivility with stress or turnover intentions pertaining to specific positions (Cortina et al., 2013; Cortina et al., 2001; Hershcovis & Barling, 2010; Hershcovis et al., 2014; Lim & Cortina, 2005; Lim et al., 2008; Lim & Lee, 2011), we were able to show potentially broader implications of incivility on withdrawal from an entire career. This provides evidence that selective incivility pushes young childless women out of the personnel pipeline, and may be one of the contributors to the lack of women professors (Catalyst, 2015) and the labyrinth to leadership (Eagly & Carli, 2007).

**Practical Implications**

Our results show that targets of workplace incivility tend to have more negative career attitudes, which are not only harmful to their own career but also detrimental to organizations’ effective functioning. Thus, it is in employers’ as well as employees’ best interests for organizations to measure and monitor work culture and civility, intervening when possible. For example, Leiter and colleagues tested an incivility intervention in a hospital setting with positive, lasting results. The Civility, Respect, and Engagement at Work (CREW) intervention involves assessment and feedback about groups’ baseline levels of civility and incivility, clear communication regarding civility and incivility with specific goals for addressing areas in need for improvement, leadership support, and encouragement of employee ownership. Results indicate that the CREW intervention significantly increased coworker civility and respect, improved employee job satisfaction, but also reduced supervisor incivility, employee cynicism and absences (Leiter, Laschinger, Day, & Oore, 2011). Furthermore, intervention effects on coworker civility and supervisor civility continued to improve up to one year after the intervention, while intervention-related improvements in work attitudes were sustained (Leiter, Day, Oore, & Laschinger, 2012). Thus, practitioners can use the CREW intervention as a model to reduce incivility and its
negative consequences, as well as enhancing civility and its positive outcomes for individuals and organizations (Porath, Gerbasi, & Schorch, 2015).

Second, based on the theoretical model we have advanced in this research, it follows that interventions might aim to mitigate incivility’s prevalence via targeting the unfair (and often inaccurate) “maybe baby” expectations. Organizations should adopt interventions that can increase employees’ awareness of second-generation biases such as those that are discriminatory but purported as fact, given that selectively uncivil acts are facially neutral, allowing instigators to maintain an egalitarian image (Cortina et al., 2013). As second-generation biases and modern sexism are especially subtle and pernicious (see Cortina, 2008), interventions should address explicit biases operating outside of conscious awareness and those at the implicit level (see Moss-Racusin et al., 2014). Such interventions are most effective when coupled with organizational or leadership emphasis that gender-based biases are incorrect and ill advisable or else they risk inadvertently condoning stereotypes (Duguid & Thomas-Hunt, 2015).

However, gender-based stereotypes are highly ingrained in modern society, and ambivalent stereotypes comprising both hostile and benevolent content such as those towards potential mothers (Hebl, King, Glick, Singletary, & Kazama, 2007) may be especially difficult to detect or change (Fiske et al., 2002). Thus, managers may also consider instituting career- or leadership-identity enriching conditions (Ely, Ibarra, & Kolb, 2011), which could diminish incivility’s negative career consequences. Such strategies might include creating safe “identity workspaces.” For example, women can foster coaching relationships through peer groups where they can share their experiences and help each other in sensemaking or interpreting critical career messages (e.g., performance feedback) or more sensitive topics such as gender bias (Ibarra, Ely, & Kolb, 2013). Indeed, others have documented important buffering effects of supportive, mentoring relationships in response to workplace discrimination that extend beyond targets to those who merely witness or know about
Such an intervention might be especially important at the transition from childless to motherhood in light of the critical employee identity and impression management processes during this time (see King & Botsford, 2009).

**Strengths, Limitations, & Future Research**

A key strength of this research is our complementary results derived from converging methods, namely, a time-lagged survey study of the target’s perspective (Study 1) complemented by an experimental assessment of the instigator’s perspective (Study 2). We also documented consistent evidence across diverse groups of highly-skilled European employees (Study 1) and a broad group of working adults in the United States (Study 2), with participants in both samples hailing from multiple organizations; this bolsters the generalizability of our findings.

Yet, our research is not without its limitations. Given our study design of Study 1, we cannot make definitive conclusions about the causal nature of the relations we examined. However, previous longitudinal and daily diary research has shown that negative consequences occur because of mistreatment, rather than the reverse (e.g., Glomb, Munson, Hulin, Bergman, & Drasgow, 1999; Hirschcovis et al., 2014). We also collected data for our multiple career outcome measures after we collected data of incivility, which further aligns with the temporal order of our theory. Although our use of single-source data in Study 1 might raise concerns of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) or issues of endogeneity, we used an exogenous predictor and moderator in both Study 1 and Study 2. Thus, only the pathways from the mediator to the outcomes (Study 1) could be threatened by endogeneity. However, a series of two-stage least squares regressions (as recommended by Antonakis, Bendahan, Jacquart, & Lalive, 2010) indicate that common-method bias is not a threat to our findings. Finally, our sampling procedures only allowed us

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10Complete results available from the first author upon request.
to calculate response rates from the participants who began our studies, not the entire eligible sample, so we cannot rule out sampling bias. However, we documented the same pattern of findings by analyzing the complete, cleaned sample or the original, full sample. Thus, participant attrition is unlikely to be systematic or non-random, as it did not significantly alter our results.

To more clearly assess one of the propositions of the “maybe baby” effect (Gloor et al., 2015), and to further rule out alternative explanations for the increased rates of reported incivility by young childless women (e.g., target negative affectivity, Miner-Rubino & Cortina, 2007), future research could assess observed incivility specifically towards young, childless women. This would build on research by Miner-Rubino and Cortina (2004) and Chui and Dietz (2014), for example, which assessed observations of incivility specifically directed towards female colleagues via survey or experimental methods (respectively). Alternatively, in the case of changes in federal parental leave policies, instrumental variable research could take advantage of systematic parental leave changes to more clearly test rates of incivility towards young childless women before and after the policy changes are instituted.

**Conclusion**

Our studies advance theory and research on modern discrimination and workplace mistreatment by clarifying the interaction between gender and parenthood in explaining incivility’s prevalence and effects. Building on recent research pertaining to gender stereotypes and expectations of impending motherhood (Gloor et al., 2015), we are also the first to document the “maybe baby” effect from the target’s (Study 1) and coworker’s (Study 2) perspectives as manifesting in everyday interactions with colleagues. Specifically, we find that parenthood moderates the effects of employee gender on experienced incivility (Study 1) and received civility (Study 2), a selective social mistreatment that entails multiple downstream career consequences, such that childless female employees are at highest risk of incivility and its negative consequences. We hope that this study supplies a springboard
for future research by signaling the value of intersectionality perspectives—of assessing gender *with* parenthood—to highlight the meaning and experience of employees’ simultaneous membership in multiple social categories, and what it might mean for modern social (mis)treatment and the gender gap in leadership and academia.
Chapter 5

Intervention to Restore Gender Equality in Leadership:
A Randomized Field Experiment\textsuperscript{11}

Abstract

Prototypicality can be benchmarked according to the leader (i.e., attributes that characterize “leaders”) or the group (i.e., attributes that characterize the follower group) and is a key determinant of leadership effectiveness. Given these benchmarking processes are often biased in favor of men and the persistent lack of women leaders, we examine if gendered group prototypes trump gendered leader prototypes. In a randomized field experiment, we manipulate leaders’ group prototypicality via group gender demography in 35 teams and examine followers’ ratings of leader prototypicality and behavior 3 months later (as a proxy for leadership effectiveness). As expected, leader gender predicts leader prototypicality and indirectly predicts leadership effectiveness via leader prototypicality, effects that are larger in male majority teams (i.e., 20\% women) than in gender-balanced teams (i.e., 50\% women). Our findings support a context-based approach to leadership and team construction as a method to “fix the game” for gender equity in leadership without backlash towards women leaders or detriment for men leaders.

\textsuperscript{11}This chapter is based on a paper authored by Jamie Lee Gloor, with coauthors Manuela C. Morf and Professor Dr. Uschi Backes-Gellner. This chapter is based on a paper presented at the Leadership Excellence and Gender Symposium at Purdue University in Indiana, U.S., in March 2016. A previous version was presented at the Annual Meeting of the Academy of Management in Vancouver, Canada, in August 2015. An even earlier version of this chapter was presented at the Leadership, Diversity, & Inclusion Workshop at Copenhagen Business School in Copenhagen, Denmark in December 2014.
Introduction

“Addressing the glass ceiling may revolve as much around addressing local group prototypes as around addressing more societal stereotypes.” –Daan van Knippenberg (2011)

Prototypicality, or the condition of embodying a group, is a key determinant of leadership effectiveness (Hogg, 2001; van Knippenberg, 2011; van Knippenberg & Hogg, 2003). However, prototypicality may be benchmarked according to the leader (i.e., attributes that characterize “leaders”) or the group (i.e., attributes that characterize the follower group). Yet leader prototypes produce gender discrepancies in leadership, as stereotypical beliefs about good leadership (i.e., leadership prototypes) are gendered in favor of males (Eagly & Karau, 2002; Lord & Hall, 2003). Given the masculinity and male majority of many positions (Eagly, Makhijani, & Klonsky, 1992; Koenig, Eagly, Mitchell, & Ristikari, 2011), group prototypes also frequently converge in organizations in the favor of males. Indeed, despite women’s considerable progress entering the managerial ranks in recent decades and composing at least half of the workforce and higher education degree earners (Perry, 2013), women remain a stagnant, miniscule minority at the highest levels (i.e., the “glass ceiling;” Catalyst, 2015; Morrison, White, VanVelsor, & the Center for Creative Leadership, 1994). To amend this contrariety, we propose a contextual intervention suggested by the quote above (van Knippenberg, 2011)—a mere rearrangement of the existing human resources in many cases—to restore gender equity in responses to leadership: group prototypicality.

Bridging the leadership, social identity, gender and diversity literatures, the current study aims to test van Knippenberg’s (2011) claim by examining the local team gender context’s effects on perceptions of leaders as an intervention to increase gender equity in leadership. We propose that the immediate social relational context of group gender demography (i.e., the share of women in the team) may weaken or even override more general leader prototypes to improve followers’ responses to women leaders. Specifically, women

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12We use the terms “gender” and “sex” interchangeably to denote the grouping of people into female and male categories.
leaders can be more effective (i.e., as effective as men leaders) without cost, training, individual intervention, or backlash with a contextual intervention at the team-level. We test this proposition in a randomized field experiment using 35 newly created teams with leaders.

**Leader-Centric Approaches**

Every year, organizations in the United States alone spend an estimated $14 billion on leadership development programs (Loew & O’Leonard, 2012). This estimate reflects executives’ value of such programs; top leaders rank leadership development among their highest current and future human-capital priorities, with approximately two-thirds ranking leadership development as the top concern (McKinsey & Company, 2012). This is an astonishing figure in its own right, but also because leader-centric trainings and interventions are exceptionally costly with no guarantee of transfer. Specifically, recent reviews of managerial training programs indicate vague evidence of only moderate effectiveness with little to no transfer to the job (e.g., Baldwin & Ford, 1988; Burke & Day, 1986; Burke & Hutchins, 2007).

Much of recent leadership research is also leader centric, focusing on what differentiates effective leaders from non-effective leaders. For example, leadership scholars debate gender as a crucial, core characteristic that significantly affects leader prototypicality (Eagly & Carli, 2003; Eagly, Makhijani, & Klonsky, 1995; Vecchio, 2002), which is a key determinant of leader effectiveness. However, when women leaders act in ways that are considered prototypical of leaders, they face negative consequences (Brescoll, 2012; Brescoll & Uhlmann, 2008; Rudman, 1998; Rudman, Moss-Racusin, Phelan, & Nauts, 2012). For example, when women clearly demonstrate competence in masculine leadership positions, they are liked less and allocated fewer rewards (e.g., special career opportunities and higher salaries; Heilman, Wallen, Fuchs & Tamkins, 2004). Similarly, women CEOs are rated as less suitable for leadership positions than identical men CEOs when they talk more often than average (Brescoll, 2012). Thus, it seems time to switch focus from the leaders themselves
given the controversial nature of “fix the women” type approaches and their likelihood of
being counterproductive, resulting in penalties and backlash towards women leaders who
demonstrate such masculine or agentic behaviors (Brescoll, 2012; Brescoll & Uhlmann, 2008;
Rudman, 1998; Rudman et al., 2012).

Similarly, the benchmarking process of leader categorization theory describes a
general tendency to perceive greater leadership qualities in potential male leaders than in
potential female leaders (Lord & Hall, 2003), which is supported by evidence of employees’
gendered managerial ratings. For example, when asked about general gender-related
preferences, more Americans consistently prefer a male boss to a female boss (Gallup, 2014;
Pew Research Center, 2014). Somewhat smaller effects also emerge when employees are
asked about their current managers (Elsesser & Lever, 2011). However, given the lack of
women in leadership (Catalyst, 2015; State Secretary for Economic Affairs, 2012), workers
likely have a lack of experience with women leaders compared to men leaders from which to
construct or shape their preferences. Furthermore, despite calls in the literature (e.g., Lewin,
1947) including leadership studies in particular (e.g., Liden & Antonakis, 2009; Lowe &
Gardner, 2000), little work addresses the context that shapes these gendered preferences and
perceptions of leaders. Thus, it might be more effective to promote and study “fix the game”
type approaches instead, namely, the contexts within which leaders exert their influence. Such
an approach might act as a “nudge” in the right direction for gender equity in leadership (e.g.,
Bohnet, van Geen, & Bazerman, in press).

In the following, we present relevant literature pertaining to gender and leadership
with a focus on the context within which leadership is enacted, that is, teams. We define and
describe leader and group prototypicality according to the role congruity theory (Eagly &
Karau, 2002) and the social identity model of organizational leadership (van Knippenberg &
Hogg, 2003), summarizing the relevant empirical literature and building up to the key

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A notable exception is the recent meta-analysis by Paustian-Underdahl, Walker, and Woehr (2014), who collected and analyzed several contextual moderators of the effect of gender on responses to leaders derived from the role congruity theory (Eagly & Karau, 2002).
question we aim to test, which draws on complementary findings from the two frameworks. Specifically, can the local gender context restore gender equity in responses to leadership? Finally, we outline the contextual effects of team gender demography on followers, including its relevance for managers, women leaders, employees, and organizations.

Literature Review and Hypotheses

Leadership as a Group Process

Leadership is defined by its context, as a leader cannot exist without followers. Specifically, leadership is “a process of social influence through which an individual enlists and mobilizes the aid of others in the attainment of a collective goal” (Chemers, 2001, p. 376). If the essence of leadership is to influence others, then only through examining leaders’ influence on followers may we observe leadership effectiveness. Yet, followers are most often nested within teams, and this contextual element of leadership has potent implications for responses to leadership via followers’ group identity. Indeed, individual followers’ self-conceptions extend beyond the self to the collective level of self-construal or social identity to include groups (Ashforth & Mael, 1989; Tajfel & Turner, 1986). So if leadership is enacted within group settings and in the context of shared group membership, then a key factor not to be overlooked is that “leaders not only lead groups of people, but are also themselves members of these groups” (van Knippenberg & Hogg, 2003; p. 244). Thus, leadership effectiveness is significantly influenced by, or even depends on, follower group social identity (van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004).

The word “identity” comes from the Latin root “idem,” which means “same.” Tajfel’s (1972) concept of social identity explains how individuals conceptualize themselves as sharing the same (or different) group membership with others. According to Tajfel (1972), a social identity refers to “the individual’s knowledge that he/she belongs to certain social groups together with some emotional and value significance to him/her of this group membership” (p. 292). This conception of social identity highlights the intergroup context, as
groups only exist in relation to other groups. Therefore, groups’ descriptive and evaluative properties, indeed their entire meaning, are derived in relation to other groups (e.g., women versus men). But defining group boundaries requires social comparison and categorization. Thus, to explain the cognitive dimension of social identity, we turn to self-categorization theory (Turner, 1985; Turner et al., 1987).

People are quick to categorize the self and others into groups, be it ingroups or outgroups, which are cognitively represented by prototypes (Turner, 1985; Turner et al., 1987). Derived from cognitive psychology (Rosch, 1978), prototypes are “fuzzy sets of attributes that define and prescribe attitudes, feelings, and behaviors that characterize one group and distinguish it from other groups” (Hogg, 2001; p. 187). More simply defined, prototypes are a “set of characteristics possessed by most category members” (Cronshaw & Lord, 1987; p. 97). This activation and application of social category information occurs extremely quickly, for example, within 150ms on average for gender (Ito & Urland, 2003). This almost automatic categorization allows individuals to simplify judgments, conserve cognitive capacity, and ultimately navigate a complex social environment more easily (Macrae, Milne, & Bodenhausen, 1994). Comparable to stereotypes, prototypes serve as mental heuristics that are retrieved in relevant situations to guide perception, self-conception, and eventual action (Cronshaw & Lord, 1987; Hogg, 2001). However, prototypes also involve a contextual element, which allows them to be responsive to and adapted for specific social contexts or group norms (Hogg, Fielding, Johnson, Masser, Russell, & Svennson, 2006; Hogg, Hains, & Mason, 1998). Indeed, group prototypes are inherently context-based according to theory (Hogg, 2001; van Knippenberg & Hogg, 2003).

The Current Study

Gender is the social identity of interest in the current study (i.e., leader gender and group gender), and we use two core theoretical frameworks to derive our hypotheses. The first theory is role congruity theory (Eagly & Karau, 2002). This theory is based on gender role
theory, which explains that historical distributions of men and women into breadwinner and homemaker roles (respectively) have produced societal gender norms as well as actual differences in behavior (Eagly, 1987). Because people infer correspondence between peoples’ acts and their inner dispositions, women and men are expected to have attitudes and skills congruent with their traditional roles, which create stereotypes that foster gendered responses to leadership and leadership selection (Eagly & Karau, 2002). Meta-analytic results bolster this assertion, indicating men are perceived as more prototypical leaders and are evaluated more favorably than women (Eagly et al., 1992), gendered responses to leadership that vary according to certain contextual moderators, but are generally as strong now as in the 1960s (Paustian-Underdahl, Walker, & Woehr, 2014). Thus, we predict:

*Hypothesis 1:* Leader gender predicts leader prototypicality such that followers rate women leaders as less prototypical than men leaders.

The second theory is the social identity model of organizational leadership (van Knippenberg & Hogg, 2003), which argues that the group context within which leadership is enacted influences followers’ responses to leadership beyond individual leader’s characteristics. Specifically, leaders are more effective in mobilizing and influencing followers as the leader’s identity more closely reflects that of the team or group (Hogg, 2001). This theory is based on previous social identity and social influence theories (e.g., Ashforth & Mael, 1989; Hogg & Abrams, 1988; Tajfel & Turner, 1986), which posit that groups are a critical source of social influence and information used for prototype benchmarking. A wealth of evidence supports this proposition, as research examining leader group prototypicality has reported consistently positive effects on leadership effectiveness since the earliest tests of the social identity analysis of leadership in the 1990s (see van Knippenberg, 2011).

Our key theoretical proposition is derived from results dovetailing from role congruity (Eagly & Karau, 2002) and social role theory (Eagly, 1987) research, which is also in line with this proposition by the social identity theorists (Hogg, 2001; van Knippenberg & Hogg,
2003). Specifically, meta-analytic results indicate negative consequences for women’s leadership ratings and effectiveness are more pronounced when leadership is particularly masculine or occurs in numerically male-dominated roles (Eagly et al., 1995; Eagly et al., 1992). More recent meta-analytic results also provide specific evidence of moderation by the leadership context. For example, women are rated as less effective leaders in male-dominated organizations and with proportionally more male raters (Paustian-Underdahl et al., 2014).

Similarly, the percentage of men in an occupation enhances the male-female gap in performance and rewards (Joshi, Son, & Roh, 2015). Because leadership roles are currently and historically male-skewed (e.g., Catalyst, 2015; Eagly & Karau, 2002; State Secretary for Economic Affairs, 2012), leader gender and its effects on leadership outcomes are especially pronounced in these settings, making it a prime point of intervention. Thus, we propose that the immediate social relational context of team gender may reduce or even override more general leader prototypes to improve followers’ responses to female leaders as the team gender demography transforms from male majority to gender-balanced. In other words, with more women in a team, a woman leader should be perceived as more representative of the group, and thus, is also a more effective leader.

According to role congruity theory, the incongruity between gender stereotypes and the attributes deemed necessary for leadership results in less favorable evaluations of women leaders and potential leaders (Eagly & Karau, 2002). Thus, leader gender predicts leadership effectiveness via leader prototypicality. In other words, men leaders are more effective than women leaders because they are viewed as more prototypical leaders.

According to the social identity model of organizational leadership (Hogg, 2001; van Knippenberg & Hogg, 2003), individual leader characteristics are less influential than the leaders’ more general representativeness of the group as defined by group characteristics.

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14 Although Paustian-Underdahl et al. (2014) examined two moderators of particular relevance to the current study (e.g., gender demography of the organizations and raters), they did not analyze the moderating effect of the more local team gender context or group gender demography.
(e.g., physical or objective characteristics such as sex or gender as well as subjective characteristics such as attitudes; Giessner, van Knippenberg, van Ginkel, & Sleebos, 2013, Study 1; Hains, Hogg, & Duck, 1997; Monzani, Hernandez Bark, van Dick, & Peiro, 2014, van Knippenberg & van Knippenberg, 2005). So by manipulating team gender demography, we alter the local group prototypes pertaining to gender. Thus, we predict:

**Hypothesis 2**: Team gender demography moderates the relation between leader gender and leader prototypicality such that women leaders are rated as less prototypical than men leaders, an effect that is larger in male majority teams than in gender-balanced teams.

Finally, although there is ample evidence to guide our predictions for followers’ responses to leaders according to group identity or gender demography, it is unclear if only the followers’ perceptions of leaders change or if the leaders’ conceptions of themselves as leaders also change. Thus, we also assess leaders’ self-reported perceptions of themselves as leaders before and after they leader their teams. This exploratory analysis provides insight as to whether our effects might be partially attributable to leaders’ own conceptions of themselves as leaders, which could alter their leadership behavior. However, this analysis chiefly serves as a robustness check given that we expect changes in followers’ responses to leaders are driven by group-based prototype processes within the team, as described above.

**Methods**

**Sample and Procedure**

We conducted a randomized field experiment preempted by a pilot study among teams of students from economics, business, and informatics at a large university in Western Europe. Followers were incoming first year students, while leaders were more experienced senior students. Followers were recruited from an orientation event on the first day of the semester. Leaders applied, were selected, and then trained for two days in a course on leadership and organization in teams. The present research describes two separate waves of data collection (i.e., a pilot study and a main study) from the same context. Thus, the setting and recruitment for the two studies are identical, only one year apart.
Data were collected via pencil and paper surveys provided in person. Surveys were administered in the participants’ native language of German with items forward- and back-translated into English. Surveys were completed after team members spent approximately 6 hours with their teams and leaders, including several leader-organized orientation events and a competitive task on which all teams were ranked. Key procedural differences between the pilot study and the main study include randomization and experimenter intervention. Specifically, only in the main study did we randomly assign followers and leaders to teams (conditional on gender) and manipulate the group gender demography as 20% (male majority) or 50% (gender-balanced) women in the team.

Of note, we examine the effects of team gender demography until a mixed level of approximately 50% women. Although it might seem logical that men leaders experience a disadvantage after this point (i.e., in teams with majority women), recent meta-analytic evidence suggests the effect of gender demography on leader ratings beyond the gender-balanced point is unclear (Paustian-Underdahl et al., 2014). We also aim to maintain generalizability to modern, masculine-typed workplaces (e.g., management and finance) whose upper limit of team gender demography is often balanced-gender, which represents a human resource constraint. Finally, we seek to restore equity in responses to leadership, not establish a female advantage, which might be expected in female-majority teams based on social identity theory of organizational leadership (van Knippenberg & Hogg, 2003).

**Measures**

We used a multi-method and multi-source approach. All perceptual measures had 6-point response scales (1 = does not apply at all to 6 = totally & completely applies). Objective data of leader and follower gender (man = 0, woman = 1) were collected via self-report from leaders and followers. We manipulated leaders’ group prototypicality via team gender demography, but followers’ ratings of leader prototypicality were measured via survey.
Leadership satisfaction. As part of a larger survey on commitment and belonging, we assessed leadership satisfaction with a single item, “I am satisfied with my mentor.” Although single item measures are not typically ideal, other single item measures of satisfaction have been shown to be efficient measures that are highly correlated with multiple item scales (e.g., job satisfaction; Nagy, 2002; Wanous, Reichers, & Hudy, 1997).

Leader prototypicality. We assessed followers’ perceptions of their leader’s embodiment of a prototypical leader with 3 items (Cronshaw & Lord, 1987). These 3 items have also been used to assess perceptions of leadership in a Swiss setting with high reliability ($\alpha = .92$; Antonakis, Fenley, & Liechti, 2011). Items included if the leader is a typical leader, exhibits the behavior of a leader, and fits one’s image of a leader ($\alpha = .90$).

We also assessed leaders’ self-ratings of leader prototypicality at two separate occasions. The first assessment was one month before the orientation event just after two full days of leadership and organization training when the leaders were unaware of their teams’ gender composition. The second assessment was just after the orientation event during which leaders spent an average of 6 hours with their teams and thus were aware of their teams’ gender composition; however, leaders remained unaware that the experimenters manipulated their teams’ gender demography or that it was of key interest to our study. We used the same 3 items as above (Antonakis et al., 2011; Cronshaw & Lord, 1987), but adapted for leaders’ self-ratings ($\alpha$s = .84 to .89).

Group prototypicality. Unlike existing measures that typically assess followers’ perceptions of leaders’ group prototypicality (e.g., van Knippenberg & van Knippenberg, 2005), we manipulated leaders’ actual representativeness of teams in terms of gender. We randomly determined team gender demography as male majority (20% women) or gender-balanced (50% women). Specifically, men leaders are more prototypical of male majority groups than women leaders. However, men and women leaders are similarly prototypical of gender-balanced groups.
Our manipulations were strategically chosen to mirror current (i.e., 20% of women in leadership; State Secretary for Economic Affairs, 2012) and equal (i.e., balanced representation) group gender compositions. Furthermore, team gender compositions of 20% to 50% are also feasible in modern workplaces given that women have composed at least half of college degree earners for several decades (Perry, 2013). Leaders also reported the actual number of men and women followers in their teams as a manipulation check. Thus, we collected both dichotomous and continuous measures of team gender demography.

Plan of Analyses

Our theoretical model predicts group-level effects (i.e., leader gender and team gender demography) on individual outcomes (i.e., perceptions of leader prototypicality). As a next step, we calculated descriptive statistics, correlations, and linear mixed effects models using R software program. We also conducted a series of mixed ANOVA models to examine leaders’ ratings of their own leader prototypicality over time.

Results

Pilot Study

We examined a total of 570 followers. Team size ranged from 7 to 28 (\(M = 17.94, SD = 4.01\)). Team share of women ranged from 12.50% to 71.40%, with an average of 38.43% female (\(SD = 15.71\)). Slightly more than half of our leaders were men (59.70%).

Given the nested nature of our data, we calculated a multi-level regression model with random intercepts. After controlling for team size, follower gender, and discipline, there was a null effect of leader gender, \(b = -.342, p = .027\), and team gender demography on ratings of satisfaction with the leader, \(b = .001, p = .619\). These null effects were not qualified by a significant joint effect between leader gender and team gender demography, \(b = .006, p = .123\), although it trended in the expected direction (see Figure 1). Specifically, there was a wide margin between satisfaction ratings of men and women leaders in male majority teams, however, this male advantage was eliminated in more gender-balanced teams.
The descriptive statistics and correlations are displayed in Table 1. From a total of 503 followers, 43 were eliminated due to missing data (i.e., our outcome) for a remaining 460 participants (31.4% female). Group size of our 35 teams ranged from 7 to 27 ($M = 15.11$, $SD = 4.24$). Team share of women ranged from 0% to 63%, with an average of 31.50% women ($SD = 16.12$%). Team proportions of women were randomly assigned as male majority (20%) or balanced (50%). However, there was slight variation in the actual representation of the proportion of women in each group (e.g., no-shows or newcomers who had not signed up for the event). Thus, we conducted two manipulation checks. Leader reports ($N = 33$) indicated that balanced groups ($M = 41.14$, $SD = 11.08$) comprised significantly more women than the male majority groups ($M = 16.49$, $SD = 10.16$), $F(1, 458) = 577.74$, $p < .001$, $\eta^2 = .558$. Aggregated follower reports mirror these estimates for balanced groups and male majority groups. In light of this evidence, our manipulations remain valid and sound.

From a total of 35 leaders, 44.90% were men and 55.10% were women. Leaders were randomly assigned to teams, conditional on gender.
Leader prototypicality. As expected, descriptive results suggest that men leaders ($M = 4.85, SD = 0.33$) were rated as more prototypical than women leaders ($M = 4.66, SD = 0.43$), Cohen’s $d = 0.48$. Thus, Hypothesis 1 is supported.

We analyzed the properties of follower-rated leader prototypicality. The average $r_{wg}$ was .78 and the ICC(1) and ICC(2) was .15 and .69, respectively. Furthermore, our model with random slopes provided a significantly better fit, $\chi^2(1) = 33.971, p < .001$. Thus, multi-level analysis is theoretically and statistically justified.

Our linear mixed effects model indicated no significant main effects of leader gender, $b = -.089, p = .346$, or team gender demography on leader prototypicality, $b = -.001, p = .061$. However, as expected, these null effects were qualified by a significant joint effect of leader gender and team gender demography, $b = .041, p = .021$ (see Figure 2). Thus, Hypothesis 2 is supported. Of note, there were no 2- or 3-way interaction effects with follower gender ($ps > .445$), indicating that our key interaction of interest was not moderated by rater gender. Thus, these group-level effects exert a similar influence on male and female students.
Regarding leaders’ self-ratings of leader prototypicality, we ran a series of mixed ANOVAs using within- (Time 1, Time 2) and between-subjects variables (leader gender: male or female; team gender demography: male majority or gender-balanced). We found no significant main or interaction effects apart from a significant increase in self-rated leader prototypicality from Time 1 ($M = 4.20$, $SD = 0.81$) to Time 2 ($M = 4.62$, $SD = 0.76$; $F(1, 29)$ $= 5.519$, $p = .026$, $\eta^2 = .160$).\(^{15}\) Thus, we have no evidence that men leaders considered themselves more prototypical than women leaders or that leaders of male majority groups perceived themselves as more prototypical than leaders of gender-balanced groups, either before or after leading their teams. Instead, it seems that our leaders had similar initial conceptions of themselves as leaders. Furthermore, leaders’ self-rated leader prototypicality increased with leadership experience in a similar manner for men and women leaders as well as for leaders of male majority and gender-balanced teams.

\(^{15}\) Complete results are available from the first author upon request.
Discussion

We proposed that local group gender prototypes trump societal gender-related leadership prototypes. Our research confirms this idea and suggests that the nature of this effect depends on the share of women in the team. In line with previous research (Eagly & Karau, 2002; Koenig et al., 2011), men were perceived as more prototypical leaders than women. This occurred despite our leaders having the same leadership training and reporting no differences in their initial self-conceptions as leaders. However, we go one step further, drawing from the social identity theory of organizational leadership (van Knippenberg & Hogg, 2003) to show that this discrepancy in leader perceptions is eliminated in gender-balanced teams. We clarify a potential mechanism contributing to these team-level effects and explain the process through which leader gender affects leadership prototypicality, with a moderator to delineate the boundary conditions of this effect. Thus, we find strong and consistent support for the social identity model of leadership (Hogg, 2001; van Knippenberg & Hogg, 2003) and document evidence of a boundary condition (or contextual moderator) for the role congruity theory (Eagly & Karau, 2002) such that the local gender context trumps leader gender, restoring gender equality in responses to leaders.

Theoretical Implications

In this research, we aimed to bridge classic work on gender and leadership roles (Eagly & Karau, 2002) with leadership and group prototypes research (Hogg, 2001; van Knippenberg & Hogg, 2003) to make four theoretical contributions. First, the proposition that local group prototypes trump broader societal leadership prototypes has been theorized (Hogg, 2001; van Knippenberg, 2011) and is in-line with other leadership theories (e.g., leadership categorization theory; Lord, Foti, & DeVader, 1984; Lord & Hall, 2003), but to our knowledge, has not been empirically tested to date. Thus, we provide empirical support for this proposition in the specific case of gender, delineating the mechanism for and the boundary conditions of this effect.
Second, leadership theory has largely discussed this proposition pertaining to social identity in general. However, we chose to examine the specific identity of gender given that women in leadership is a topic of modern significance in research and the practice due to the persistent and pervasive glass ceiling (Catalyst, 2015; Morrison et al., 1994). Furthermore, there are extraordinary costs invested in leadership training programs despite a lack of evidence of transfer (Baldwin & Ford, 1988; Burke & Day, 1986; Burke & Hutchins, 2007) and backlash (Brescoll, 2012; Brescoll & Uhlmann, 2008; Rudman, 1998; Rudman et al., 2012) ensuing from “fix the women” approaches. Thus, we developed a theoretically-based solution to improve the lack of female representation in leadership and break the glass ceiling (Morrison et al., 1994), but without cost or backlash. We also find no significant detriment to male leaders incurred by our intervention. Indeed, even in gender-balanced groups, men leaders are similarly prototypical of the group as women leaders according to our findings and the social identity theory of leadership (Hogg, 2001; van Knippenberg & Hogg, 2003).

Third, our study provides further insights about prototypicality benchmarking. Researchers to date have mostly manipulated leader prototypicality as defined by leaders’ values, styles, or beliefs (e.g., Giessner et al., 2013, Study 1; Hains et al., 1997; Monzani et al., 2014, van Knippenberg & van Knippenberg, 2005). Yet our prototypicality intervention involved a visible, surface-level characteristic: gender. In addition, previous studies manipulated prototypicality using fabricated feedback about leaders’ prototypicality as group members (e.g., Giessner et al., 2013, Study 1; Hains, et al., 1997; Monzani et al., 2014, van Knippenberg & van Knippenberg, 2005), while others experimentally manipulated prototypicality using actors and video stimuli (e.g., Cronshaw & Lord, 1987). However, we intervene in actual teams with real-life leaders to manipulate team gender compositions and measure the leaders’ resultant prototypicality. Thus, although gender is often readily apparent and is one of the strongest, most reliable bases for categorizing people (Fiske, Haslam, &
Fiske, 1991), it is notable that we achieved robust results without manipulating deep-level characteristics.

Finally, previous studies of leader or group prototypicality examined individuals who were ostensibly in groups or anticipated group interaction, but they were tested quickly and completely alone (Hains, et al., 1997; Hogg, Haines & Mason, 1998; Hogg et al., 2006; Monzani et al., 2014), in virtual teams or with virtual leaders (Giessner et al., 2013, Study 1; van Knippenberg & van Knippenberg, 2005). Thus, it is notable that these studies documented such effects, which speaks to the power of group prototypes. However, our findings might be more generalizable given that our followers were nested in actual groups and interacted with real-life followers and leaders for several hours. Indeed, King and colleagues (2013) endorse natural field experiments such as our main study as a gold standard for empirical reasons and increased generalizability—especially when examining sensitive organizational topics such as gender bias or discrimination.

**Practical Implications**

Our findings also offer implications for practice, for example, in guiding team formation and leader assignments. Teams are becoming more gender diverse as increasingly more women enter traditionally male-dominated fields (e.g., financial managers; Bureau of Labor Statistics, 2014). But despite their representation at lower levels, women remain a glaring minority in leadership positions (e.g., only 4.4% of CEOs are women; Catalyst, 2014). According to our findings, such demographic changes at the lower level may also benefit women leaders in ways that have been overlooked to date, but only if teams are designed with gender in mind. Specifically, an effort should be made to evenly allocate women employees across teams, not bunched together in clusters. In light of our findings and in line with previous research on tokenism and critical mass theory (e.g., Kanter, 1977; Konrad, Kramer, & Erkut, 2008; Sekaquaptewa & Thompson, 2003), it seems the tipping point for equity in responses to leaders occurs with approximately 30-40% women in the team. These results
also dovetail with recent meta-analytic evidence that women have a leadership advantage in settings comprising 42.5% or more women employees (Paustian-Underdahl et al., 2014).

Practitioners can also use our findings to inform their interpretations of leader evaluations. For example, a woman from a majority male team may provide similarly negative performance feedback about a woman supervisor as her male teammates. This effect would not only be unexpected according to relational demography perspectives (Tsui, Egan, & O'Reilly, 1992; Tsui & O'Reilly, 1989), but it may be interpreted in line with problematization of female same-sex interactions in organizations (see Sheppard & Aquino, 2014) and hurt the case for increasing women in the workforce. Thus, the potential influence of the team gender context on evaluations such as performance reviews or 360-degree feedback should not be overlooked.

For women leaders, it also seems plausible that more female representation at the team level may buffer competent women leaders from strategic rejection (Parks-Stamm, Heilman & Hearns, 2008). This would occur if women leaders are perceived as more prototypical and exemplary of their group members in more gender balanced teams, rather than as competition or threats. Having more balanced shares of women in teams is also likely to have real, positive implications for early career women as well as women leaders. For example, women in teams with more balanced shares of women and men may not only be more satisfied with leaders as we found in our pilot study, but these women may also be less likely to turnover (Elvira & Cohen, 2001). Consequently, this could ultimately reduce costs and human resource losses for organizations.

**Strengths, Limitations, and Future Research**

Our study is methodologically rigorous. We avoid the threat of common method variance (Podsakoff, MacKenzie, Lee & Podsakoff, 2003) or rather measurement error (Spector, 2006), by using data collected from different sources (e.g., followers and leaders), including objective data (e.g., team member gender, team share of women, and leader
gender), and collected at different times (e.g., before and after the orientation event). Thus, endogeneity is not a threat to our study and we can make a causal claim based on our findings (see Antonakis, Bendahan, Jacquart, & Lalive, 2010). Specifically, leader gender predicts leader prototypicality, depending on team gender demography.

However, as with any study, our research has its limitations. For example, leaders had no evaluative or disciplinary influence on followers, which may be more representative of more modern, flatter hierarchies (e.g., project managers, peer leadership or peer mentoring). In addition, by design we created teams with low or balanced proportions of women. Although having a few or balanced shares of women allows us to maintain generalizability to typical work groups, we were unable to draw conclusions about groups that were all male or all female. Finally, our research was conducted in a university setting in Western Europe. Thus, our conclusions are bound by the cultural context within which we have undertaken our research. Yet, this does not necessarily limit the generalizability of our results, as considerable evidence indicates group prototypicality (van Knippenberg, 2011) as well as leader and gender prototypes (Koenig et al., 2011; Schein, 2001) are generally consistent across countries (e.g., the United States, Germany, Spain, and the United Kingdom; Hernandez Bark, Escartin, & van Dick, 2014) and management contexts.

Conclusions

Simply filling lower-level positions with women is insufficient to restore gender equity in leadership, and we unequivocally agree that more women leaders are necessary and beneficial for society and organizations on both ethical and business grounds. Nevertheless, our results highlight potential benefits of recent demographic changes and increasing numbers of women even at the lower level for team members, women leaders, and potentially organizations—but only if teams are designed with women leaders in mind. Indeed, if the leadership game is rigged in favor of men, women face a double-bind of backlash regardless
of their ability or performance. However, there is hope of restoring gender equality in leadership if we fix the game—not the dame.
Chapter 6

Final Remarks

Aristotle’s (384-322) three types of wisdom: episteme, techné, & phronesis

In the previous chapters, I described the episteme (theory or the “why”) and the techné (production or the “how”), hence, now is the time to discuss the phronesis (practical wisdom or the “what”). In the following, I first review the quality of evidence garnered from the research presented in this dissertation (Chapters 3-5). Then, I summarize the overarching theoretical and practical implications, including an evidence-based intervention plan to increase the proportion of women specifically in professorships positions. To close, I briefly review the takeaway messages and reaffirm the core goal of this dissertation.

Review & Critique of the Evidence

First and foremost, this dissertation is not comprised of cross-sectional data. Instead, it includes experimental intervention and randomized assignment to groups (Chapters 3-5) and time-lagged data collection as aligned with theoretical expectations (Chapter 4). In light of these design features, paired with the overwhelmingly supported hypotheses, I can claim directionality of effects based on more than theory alone.

Secondly, although the use of single-source data (as in Chapters 3-4) often raises concerns of common method bias (Podsakoff et al., 2003), common method bias cannot account for some types of interactions (see Siemsen et al., 2010). Indeed, I found significant, sizeable interactions in both Chapters 3 and 4. Furthermore, the key constructs I examined in these chapters are perceptual in nature, and thus, are best captured by self-report.

Third, I found sizeable effects across each of the studies in this dissertation (Cohen’s $d$ range = .25 to 1.04). These effects also replicated across studies (Chapters 3-5) and across

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16This chapter is written exclusively and entirely by Jamie Lee Gloor.
outcomes of positive and negative valence (Chapter 4). A Cohen’s $d$ of .45, which is the approximate median effect size across studies, means that 67% of one group reported values above the mean of the other group (see Figure 6.1).\footnote{Source: http://Rpsychologist.com/d3/cohend/}

Finally, the participants examined in Chapters 3-4 were sampled from diverse groups of highly-skilled European, American, and Australian employees from multiple language-regions and organizations, bolstering the generalizability of our results. Yet, a related point and potential criticism of Chapter 5 might be its reliance on student samples. However, randomized field experiments are considered the “gold standard” in making causal claims (see Antonakis et al., 2010); such designs are also nearly impossible to conduct within companies given the organizational and ethical constraints. Hence, student samples have pronounced advantages in this case. Summarizing, in light of the experimental and/or time-lagged designs and the size and consistency of results, I can claim causality based on more than theory.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure6.1.png}
\caption{Visualization of the effect size; figure created with Magnusson’s (2014)\footnote{Source: http://Rpsychologist.com/d3/cohend/} tool}
\end{figure}

\textbf{Theoretical Implications}

An overarching theme of this dissertation is the importance of context. Of greatest concern for the glass ceiling is that maternal leave policies are changing the current employment context for women. Counterintuitively, it seems that policies that are intended to
assist women’s economic participation via mandated, paid maternity leave and job security might instead be increasing employer or coworker skepticism towards young women (Konrad & Cannings, 1990; 1997)—even those who do not yet have children. This contributes to existing patterns of gender inequality given that childless men do not face the same risk perceptions (Chapter 3), and these impending expectations of childbearing result in negative downstream consequences for young childless women (Chapter 4).

Future research could take advantage of naturally occurring instrumental variable designs such as federal policy changes to more clearly measure and assess the role of policy (see Antonakis et al., 2010). A pair of economists has examined this at the macro-level (i.e., Fernández-Kranz & Rodriguez-Planas, 2014; Thomas, 2015), yet the micro-level processes operating within decision-makers or in everyday experiences with coworkers remain unclear.

Furthermore, the team context is a key point of intervention for leadership equality (Chapter 5), as leaders are also members of their teams (Hogg, 2011; van Knippenberg & Hogg, 2003). Intervention at the team-level also circumvents the backlash and social stigma often experienced by women leaders who display masculine or agentic behaviors that are prototypical of leaders (e.g., Brescoll, 2012; Brescoll & Uhlmann, 2008; Rudman, 1998; Rudman et al., 2012). This is because the leaders have not been altered, simply the context within which leaders are viewed.

This implication might also entail enormous time- and cost-savings for individuals and organizations that invest in leadership development programs. Some estimates suggest the annual spending reaches $14 billion in the U.S. alone (Loew & O’Leonard, 2012). Yet despite their dear costs, leader-centric trainings and interventions are have no guarantee of transfer to employment settings (Baldwin & Ford, 1988; Burke & Day, 1986; Burke & Hutchins, 2007). Thus, this simple rearrangement of existing human resources (in most cases) can improve responses to leadership, saving leader time engaged in training and organizational expense.
For more specific, evidence-based theoretical implications directly derived from each research project, see the discussion sections of Chapters 3-5.

**Practical Implications**

Given the persistent, pervasive gender gap and snail’s pace progress using the current methods (Equality and Human Rights Commission, 2008; Guelpa, 2015), an overarching take away message is that something drastic has to change if we wish to actually see change in the proportions of women in the upper echelons. Although it seems logical, simply emphasizing excellence or meritocracy is insufficient and ineffective in restoring gender equality given that emphasizing performance produces the most bias against women (Castilla & Benard, 2010). Furthermore, although explicit sexism and bias have decreased in recent decades, this is no direct indication that actual sexism or bias have reduced; it simply makes modern sexism and discrimination all the more pernicious and undetectable (Cortina, 2008; Joshi et al., 2015; Swim et al., 1995). Thus, in the following, I detail evidence-based steps for making progress towards gender equality and equity.

Interventions in the area of gender often include implicit bias training. Although well-intended, such training may be insufficient or ineffective given the entrenched nature of gender stereotypes in daily life (see Moss-Racusin et al., 2014). Alternatively, quotas make significant, speedy progress in increasing female representation, but they may be too political to implement (Guelpa, 2015; Reuters, 2014). Quotas also tend to create repercussion towards the women hired under such schemes (Heilman, Block, & Statatos, 1997). Thus, I suggest instead a powerful but subtle intervention derived from behavioral economics for swift and effective change without the political impediments or backlash: nudges.

“Nudges” are minimally invasive, low-cost choice architecture strategies derived from behavioral economics (Thaler & Sunstein, 2008). Nudges are conceptually nested somewhere between information and intervention. Specifically, decision-making nudges retain all possible choices while simply altering the framing or defaults in which these decisions are
made. Nudges diminish the influence of decision-making inefficiencies (e.g., hyperbolic discounting, short-sidedness, self-serving or gender biases) in support of long-term change. A common example is employers’ automatic drafting of a portion of employees’ paychecks directly into retirement savings. Employees can always opt-out, but a nudge such as this increases retirement savings exponentially, which is in employees’ personal best interest as well as society’s best interests in the long-term (Thaler & Sunstein, 2008).

Indeed, nudges reduce the potential influence of decision-making inefficiencies in favor of alternatives in the decision-makers’ and/or the collective’s best interest. Nudges have been shown to be as effective (if not more so) than instruction, legislation, and enforcement in domains such as retirement savings and organ donation (Thaler & Sunstein, 2008), including their recent demonstration as an effective tool to combat gender bias in hiring (Bohnet, Bazerman, & Van Geen, in press). Thus, guided by results from Chapters 3-5 of this dissertation, paired with my colleagues and my in-depth analysis of the university personnel pipeline of assistant professorships (Gloor, Feierabend, & Mehr, 2015),18 I recommend three specific nudges for implementation at different stages of the academic career (see Figure 6.2).

Figure 6.2. Nudge interventions and corresponding career phase

The first nudge pertains to annual meetings. According to our own survey of early career academics in Switzerland, women report more career insecurity, less of a concrete career plan, lower chances of promotion to the next level, and lower chances of achieving an

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18For more information, see http://www.business.uzh.ch/de/professorships/hrm/research/thirdpartyfundedprojects/professorship.html.
eventual professorship compared with men already at the Ph.D. and post-doc levels (Gloor, Feierabend, & Mehr, 2015). Furthermore, only 43.4% of these young scholars had annual meetings. Thus, I propose an annual meeting nudge by making a yearly meeting the default. That is, professors would have yearly meetings with each student and post-doc, including women, to discuss concrete career progress and goals (unless the young scholar opts out). This is also consistent with a recent Swiss study, which also recommended employee-specific approaches to career management (Gerber, Wittekind, Grote, & Staffelbach, 2009).

The second nudge targets the hiring and selection process. In our analysis of assistant professor applications, we found that in 54 of 96 cases, there were no women listed as one of the top three candidates for a position (Gloor, Feierabend, & Mehr, 2015). Perhaps logical, this statistic was the strongest predictor of hiring a woman for a professorship position. Experimental evidence dovetails with these findings, showing that discrimination occurs even with equally qualified women and men, in Switzerland, and at the assistant professor level (Study 2, Gloor & Okimoto, under review). Thus, I suggest two nudges.

The first nudge pertains to selection processes and is derived from Bohnet and colleagues (in press). It requires that women’s applications be evaluated with men’s instead of individually. This may be difficult to realize, however, given that search committees are composed of multiple members who must review many applications. The second nudge falls short of a gender quota, but it remains a specific goal for selection processes: at least one woman should be represented among the top three candidates for each position. Although potentially problematic for disciplines that may struggle to recruit qualified female candidates (e.g., engineering), our descriptive data indicate women are represented in the applicant pool for nearly every post. Thus, locating at least one qualified woman is feasible in most cases.

The third and final nudge targets parental policy at the organizational level. In our exit survey study of assistant professor positions (Gloor, Feierabend, & Mehr, 2015) as well as in our maybe baby experiments (Gloor & Okimoto, under review), we find that impending
childhood is ever-present in the minds of gatekeepers and coworkers, potentially placing an asymmetrical risk on childless women compared to men (Chapters 3-4). Thus, I propose a policy nudge such that it is standard not only for new mothers, but also new fathers to take parental leave. This change would come at no additional cost to the University of Zurich (for example), because women are already offered two weeks beyond federal requirements (i.e., 16 total weeks); this would be a simple reallocation of these extra weeks to fathers instead.

This may be tricky at the outset both politically and legally, perhaps especially female employees who might react adversely to the sense of having lost two weeks of leave, yet such an initiative is in line with best practices for gender equality and work-life initiatives (LERU, 2012). Indeed, this would be top-down, systematic, and transparent. Such a redistribution of leave, transforming maternal leave into parental leave would not eliminate hiring risk for potential mothers (Gloor & Okimoto, under review), but it offers a step in the right direction. As a default, it would also avoid potential barriers of organizational culture, for example, those that would discourage men from taking leave (e.g., Rudman & Mescher, 2013). After all, equality entails equal opportunity for women in the workplace and men in the household. For more specific, evidence-based practical implications directly derived from each research project, see the discussion sections of Chapters 3-5.

**Future Research**

The wealth of theory and empirical results detailed thus far pertain to women and mothers, gender and parental biases. However, intersectionality was originally a critical race theory (Crenshaw, 1989), and selective incivility theory was derived to explain modern discrimination towards multiple, devalued groups (e.g., racial minorities or older workers; Cortina, 2008; Cortina et al., 2013). Indeed, gender gaps in leadership, pay, and workplace harassment are even wider for racial minorities in the U.S. (Altonji & Blank, 1999; Berdahl & Moore, 2006). Although Switzerland does not share the same racial history as the U.S., a suitable comparison group might be immigrants or non-native citizens. Empirical findings
using a nationally representative Swiss sample support this idea (e.g., Krings et al., 2014). Thus, future research might benefit from examining the ideas presented in this dissertation in for other devalued social groups. For more specific suggestions for future research derived from each research project, see the discussion sections of Chapters 3-5.

**Benefits to Society**

Thus far, I have largely focused on benefits for women, teams, managers, and organizations; however, there are much broader implications of gender equality. Building on the discussion of parental policy within organizations, for example, there is also potential for change at the societal level. For example, leaders in this field offer parental leave available to mothers and fathers, oftentimes with special leave packages granted to mothers only if fathers also take leave (e.g., Norway and Sweden; Rønsen & Kitterød, 2015; Swedish Social Insurance Inspectorate, 2012). In Sweden for example, take-it-or-leave-it parental leave nearly doubled the number of fathers taking leave while simultaneously decreasing mothers’ leave by 26 days (Swedish Social Insurance Inspectorate, 2012). A take-it-or-leave-it policy would be ideal for Switzerland, as it would likely reduce some of the “maybe baby” risk associated with young childless women (Chapter 3-4). Importantly, OECD economists have also recommended such a policy for Switzerland (Dutu, 2014). There is also public support for such policies in Switzerland, as both sexes overwhelmingly agree that men should also be entitled to paternity leave (Kelso, Cahn, & Miller, 2012). Thus, a take-it-or-leave-it parental leave policy has support and entails more parity than the current maternal-leave-only policy, also benefitting fathers and young children who could then spend more time together.

Progress towards gender parity in employment also engenders more efficient use of our labor supply as well as long-term economic benefits. Swiss women are as well educated as their male counterparts, yet the price paid for female labor falls below the comparable rates for men (Dutu, 2014). In Switzerland, approximately 84% of working-age adults are employed, but twice as many women than men work part-time positions (OECD, 2016).
Concurrently, there is also a projected long-term labor shortage (see Dutu, 2014), a prognosis that was not ameliorated by recent legislation limiting the number of foreigners who can enter Switzerland. Thus, Swiss mothers and young women—those in whom the government has invested significant funds to educate—may be an untapped resource to avoid labor shortages and foster continued economic growth (OECD, 2004). Indeed, global gender parity represents a powerful potential contribution to the global economy, with a recent McKinsey & company (2015) report conservatively estimating that women’s more equitable economic participation could reap as much as $12 trillion in annual GDP in only a decade.

**Conclusions**

In this dissertation, I presented converging evidence of a new form of modern workplace discrimination, drawing on multiple methods to assess responses from multiple actors. I outlined the “maybe baby” problem in context, namely, the blurring lines between mothers and childless women due to impending childbirth and future career interruption, which influences their hiring risk (Chapter 4) and results in downstream career consequences for childless women (Chapter 5). Additionally, I also proposed and tested a theory-based solution, namely, gender equality at the team-level to restore gender equity in responses to leaders (Chapter 6). In light of these findings, I proposed several specific implications for theory, practice, and future research so that the path to gender equality does not maintain its present snail’s pace of progress. After all, it is not a trade-off or just a “women’s issue”: by supporting women in their educational, employment, and economic endeavors, we all win.

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19 For more information, see http://www.masseneinwanderung.ch/. 
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Demographic category membership and leadership in small groups: A social identity


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Appendix A

Chapter 4: Study 2 Civility Vignettes

Scenario 1
Your team has just finished a project and received good reviews from your supervisor. As is typical after finishing big projects, your team gathers to celebrate at a nearby restaurant. Another colleague, Jennifer/John, walks by the gathering as it is near her/his desk. Jennifer/John contributed a minor role to the project, but was not yet invited. As the group walks toward the elevator, you say...

Scenario 2
It’s very busy for you and your team right now as it is nearing the end of the financial year. You are waiting on a final report by the end of the day from your colleague, Jennifer/John, who is also working on similar assignments with several other teams. When you pass by Jennifer/John in the hallway, you say...

Scenario 3
Your company just instituted new presentation standards and formatting regulations. You and your colleague, Jennifer/John, are working together on one of these presentations. Jennifer/John sends it to you for informal review, but it contains several small errors. When you see her/him in the copy room, you say...
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