

The Hidden Cost of Flexibility: A Factorial Survey Experiment on Job Promotion

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Submitted July 2018; revised February 2019; accepted October 2019

Abstract

This article analyses the role of gender, parenthood, and work flexibility measures and the mediating role of stereotypes on the likelihood of achieving an internal promotion in Spain. We hypothesize that employers favour fathers over mothers and disfavour flexible workers (flexibility stigma) because they are perceived, respectively, as less competent and less committed. We also hypothesize that employers reflect their gender values in the selection process. These hypotheses are tested using data from a survey experiment in which 71 supervisors from private companies evaluate 426 short vignettes describing six different candidates for promotion into positions that require decision-making and team supervision skills. Several candidate characteristics are experimentally manipulated, while others such as skills and experience in the company are kept constant to minimize the risk of statistical discrimination. Contrary to our expectations, fathers are not preferred in promotion, as they are not perceived as being more competent than mothers. However, we find that flexibility leads to lower promotion scores, partly due to its association with a lack of commitment. Although the statutory right to reduce working hours for care reasons seems a major social achievement, this experiment shows that mothers may be indirectly penalized, as they are the main users of this policy.

Introduction

This study explores whether equally qualified men and women are given equal consideration for internal promotions to intermediate supervisory positions in Spain. We pose three main research questions. First, we want to know whether motherhood is still a barrier to promotion. The prevalence of gender stereotypes makes us expect that mothers experience lower rates of internal promotion, as they tend to be perceived as less competent than fathers and employees without children (Cuddy,

Fiske and Glick, 2004; Benard and Correll, 2010). Second, we want to know whether there is a ‘flexibility stigma’ for workers who reduce their working hours or telework some days from home. Based on human capital and gendered culture theories, we expect that flexible workers have lower rates of internal promotion, regardless of gender, as they may be perceived as less committed than employees who work longer hours (Coltrane *et al.*, 2013). Third, we want to know whether recruiters’ gender values bias their internal promotion decisions. We

expect that those with more traditional values favour applicants who fit expected gender stereotypes.

The study of internal mobility represents a major scientific challenge. Observational data on internal promotions—which include other relevant variables such as performance, skills or professional ambitions—are seldom available. In this context, field experiments emerge as the best alternative. In this study, we use a factorial survey methodology to detect employers' biases in the selection process. This methodology consists of creating 'vignettes' that describe hypothetical candidates who, in the context of our study, are applying for an internal promotion to an intermediate managerial position. Candidates are briefly described in these vignettes, which differ in five main dimensions (sex, parental status, working hours per week, telework, and experience working in a team), while other relevant characteristics such as marital status, age, skills, and experience in the company are fixed for all of the candidates. The vignettes are presented as an online survey for supervisors in medium-to-large Spanish companies. These companies are selected based on their meritocratic practices in selection processes. We contacted 354 recruiters and Human Resources (HR) professionals by email between March and July 2017, and the study finally relied on 71 responders (supervisors) and a sample of 426 vignettes.

Our study makes a number of important empirical contributions to our understanding of internal mobility and selection processes. First, we simultaneously assess the mediating effect of stereotypes associated with gender, parenthood, and the adoption of flexibility measures on internal mobility. This is particularly relevant in the current context, in which policymakers encourage new parents to use flexibility measures at their workplace without really knowing the consequences for future promotion opportunities. Second, we test discrimination against mothers after controlling for their working arrangements (i.e. hours of work, flexible work) and how these arrangements influence future opportunities of promotion which, to the best of our knowledge, has seldom been incorporated into experimental designs (Cuddy, Fiske and Glick, 2004; Correll, Benard and Paik, 2007; Benard and Correll, 2010). Third, to identify stereotype-based discrimination, we design the study to ensure low ambiguity concerning applicants' qualifications and performance, which minimizes the role of statistical discrimination (i.e. discrimination that happens when employers rely on their beliefs about social groups rather than on information about individuals). In other words, we focus on the discrimination that emerges when the applicant violates expected gender stereotypes such as a young mother working long hours. Fourth, in contrast with most

experimental studies, which recruit undergraduate students to respond to the surveys, we use a sample of real supervisors who are responsible for promoting employees in their companies. To the best of our knowledge, this study is the first attempt to analyze promotion processes based on the data collected from real professionals in the Spanish labour market. Fifth, we assess promotion to intermediate supervisory positions rather than to top managerial levels. Medium rank positions have received relatively less academic or social attention. Yet, accessing an internal promotion within one's company may be an important source of personal fulfilment and economic improvement for a large portion of the employed population.

Our results do not support the general hypothesis of gender discrimination in promotion due to stereotype-based discrimination, nor do they find a motherhood penalty in promotion. Instead, we find a 'flexibility stigma' suggesting that, irrespective of gender, employees using flexibility measures have lower opportunities for career advancement. These results are based on a sample of qualified candidates applying to intermediate positions and cannot be generalized to top supervisory positions, which may involve stronger gender stereotypes.

Getting a Promotion: Gender, Parenthood, and Work Flexibility

In this study, we explore the role of gender, parenthood, and flexibility on the probability of being recommended for an internal promotion and the mediating effect of stereotypes. Gender is a relevant characteristic in these selection processes, as it carries cultural beliefs about women's and men's differences in competence, job performance, and rewards (deserved salaries), which can influence employers' decisions about promotion (Auspurg, Iacovou and Nicoletti, 2017). The stereotypical notion of women as naturally nurturing may lead to discrimination, if this trait is considered to be incompatible with the traits needed for a particular job. This may explain why women, and mothers in particular, have been traditionally associated with lower salaries, lower labour force participation, and lower chances of career advancement (Merluzzi and Dobrev, 2015; Oesch, Lipps and McDonald, 2017). Merluzzi and Dobrev (2015), for instance, show that professional women in the initial stages of their career are negatively rewarded in terms of the salaries, whether associated with internal or external mobility, due to employers' gender stereotypes. Specifically, women's job mobility across firms is used to validate employers' belief that women have weaker

labour force commitment than men, whereas this same external mobility is positively rewarded for men.

However, the reasons for the 'gender penalty' in internal mobility are not yet clear. Women outnumber men in higher education in most Western countries, but they are strongly underrepresented in supervisory positions (Dämmrich and Blossfeld, 2017). Few studies have considered whether the gender gap in managerial positions is driven by personal choices consciously made by women who disregard opportunities for internal progression within the firm or by employer bias; more importantly, the role of motherhood in this gender gap is largely ignored. Although there is clear evidence that mothers (but not fathers) overwhelmingly adapt their job conditions upon the arrival of children, there is also evidence that women in general and mothers more particularly are subject to stereotypes (Cuddy, Fiske and Glick, 2004; Benard and Correll, 2010; Pedulla, 2014), which may lead to discrimination in the labour market.

Field experiments provide an ideal framework for addressing the above-mentioned problems of self-selection and employers' selection bias due to different expectations for women's and men's productivity. Discrimination emerges when there is a 'differential or unequal treatment of the members of some group or category on the basis of their group membership rather than on the basis of their individual qualities' (Levin and Levin, 1982: p. 51). This unequal treatment is rooted in statistical discrimination, which emerges when employers use the observable characteristics of individuals as a proxy for otherwise unobservable characteristics. In a scenario where an employer has imperfect information about an individual's productivity, the employer may substitute group averages or stereotypes. In contrast, when information about applicants' skills and productivity is provided, i.e. when there is low performance ambiguity, employers' bias in the selection processes may be motivated by other reasons such as irrational distaste for certain groups of the population (Ewens, Tomlin and Wang, 2014) or by normative discrimination (Benard and Correll, 2010), which occurs when employers penalize candidates who do not fit within expected gender stereotypes, such as a man without children using flexibility measures or a woman applying for a managerial position in masculine-type jobs.

Parenthood is another mark that may influence decisions about promotion. Studies have revealed that fatherhood is associated with higher earnings, although this varies with country (Cooke, 2014) and individual characteristics (Hodges and Budig, 2010). However, the extent to which mothers are discriminated against relative to fathers is unclear, as some experimental studies have not

found any evidence of preferential treatment of fathers in hiring (Albert, Escot and Fernández-Cornejo, 2011; Bygren, Erlandsson and Gähler, 2017) or mobility (Benard and Correll, 2010). Cuddy, Fiske and Glick (2004) argue that when men become fathers, they gain perceived warmth while maintaining perceived competence, but when women become mothers, they gain perceived warmth but lose perceived competence. Therefore, parenthood seems to have different consequences for mothers' and fathers' career prospects. As previously discussed, Benard and Correll (2010) show that even when mothers prove to be competent and committed, the mechanisms that penalize their promotion change but do not disappear. Successful working mothers are considered by other women to be less likable, which Benard and Correll interpret as normative discrimination.

The notion that individuals may be differently perceived along a continuum of competence and warmth/likability comes from the stereotype content model (SCM) theory, developed by Fiske et al. (2002). This theory has been extensively applied in studies of gender discrimination in the labour market that test the mediating effect of stereotypes on individuals' attainments (Cuddy, Fiske and Glick, 2004; Benard and Correll, 2010; Pedulla, 2014). According to the SCM, there are two central dimensions of social perception used to judge in-groups and out-groups: warmth and competence. Furthermore, gender stereotypes have a double dimension as descriptive (i.e. the socially shared expectations about how women are or what they do) and prescriptive (i.e. the socially shared expectations about how women ought to be or what they ought to do) stereotypes. Studies have revealed that when individuals behave against these stereotypes or social norms, they may be sanctioned (Connell, 1995).

It is against the prescriptive stereotype for mothers to show a high level of competence and commitment to paid work. Therefore, such women are perceived as less warm and more hostile than other women in the same firm (Fiske et al. 2002); accordingly, they are denied job-related rewards (Benard and Correll, 2010). Benard and Correll (2010) conducted a laboratory study with the goal of detecting discrimination against mothers; specifically, they conducted a field experiment in which participants evaluated a pair of job applications for a mid-level marketing job. The study manipulated applicant sex category (male or female), parental status (parent or nonparent), and level of ambiguity of past workplace performance. The authors did not detect discrimination against mothers in promotion but found that the female participants (hypothetical recruiters) in their study were less likely to recommend highly

successful mothers for promotion, not because they were perceived as less competent, but because they were perceived as interpersonally deficient or, in other words, as behaving against prescriptive gender stereotypes.

Studies based on the SCM point to several findings that are very relevant to understanding mothers' real opportunities in the labour market (Fiske *et al.*, 2002; Cuddy, Fiske and Glick, 2004). First, competence and warmth, for most social groups, have high negative correlations, i.e. groups scoring high on 'warmth' are at the same time perceived as low in 'competence', as is the case of housewives or mothers. However, highly successful mothers tend to be perceived as competent but not as warm or likable as highly successful fathers (Benard and Correll, 2010). Second, as competence and commitment determine the likelihood of being hired or promoted, most mothers have lower chances to access a job or gain a promotion (Correll, Benard and Paik, 2007).

As previously argued, in the framework of a field experiment, researchers can minimize the effect of statistical discrimination by providing a description of unambiguously highly performing candidates. In this context, it is possible to test whether employers' bias in promotion is related to normative discrimination. Thus, based on SCM theory, our first hypothesis predicts the following:

H1: Mothers in general are less likely than fathers and childless women to be considered for a promotion to an intermediate supervisory position, as they are considered to be less competent, although warmer (motherhood/fatherhood hypothesis).

Likewise, we expect that fathers, compared with childless men, have increased promotion opportunities, as fatherhood will add perceived warmth to their perceived competence. We also expect that respondents will rate candidates differently according to their gender attitudes, as they will use different prescriptive stereotypes. Thus, our second hypothesis predicts the following:

H2: Supervisors' gender attitudes will moderate the effect of discrimination in promotion processes. In particular, respondents with more traditional gender attitudes will favour fathers over mothers for promotion, because they consider fathers to be primary providers and mothers to be primary carers (employers' gender bias hypothesis).

Finally, the literature indicates that employees using work flexible measures send different signals to employers. Although this is a popular practice for balancing family and paid work in Europe, it is rare in countries such as the United States, where the notion of the 'ideal

worker' is strongly institutionalized (Acker, 1990; Williams, 2000) and employees fear negative consequences in the workplace (Williams, Blair-Loy and Berdahl, 2013). Employers expect workers to be fully committed and productive regardless of their family responsibilities. In contrast, part-time, temporary work, and a spell of unemployment tend to be associated with the 'mummy track' (Pedulla, 2016), or a worker who does not live up to the ideal worker standard. These labour market characteristics signal unobservable negative qualities that are interpreted as low commitment to work.

Empirical evidence has found support for the 'flexibility stigma' hypothesis, but its interaction with gender is not yet clear. Coltrane *et al.* (2013) find that men who are unemployed or reduce work hours for family reasons, opting for the 'daddy track', earn significantly less than others with similar individual characteristics. They also find that both women and men suffer earnings penalties due to flexible work trajectories. However, according to other authors, men suffer a double penalty when using flexibility measures, as they deviate from both the ideal worker and ideal man norms (Rudman and Mescher, 2013). As suggested by these authors, men who request flexibility measures, such as family leave, are subject to gender stereotypes; they are perceived as being weak, having feminine traits and lacking in agentic masculine traits such as ambition. These men are also subject to a *poor worker stigma* (e.g. considered more likely to be absent than most employees).

The main mechanism behind the discrimination against 'flexible employees' is the perception that these employees are less committed to their work, the organization, or their clients. Passive face time, or time spent being visible to other workmates at the office, has been found to be associated with perceptions of 'commitment', 'dedication', and 'responsibility' in vignette and qualitative studies (Elsbach, Cable and Sherman, 2010). This stereotype is also strongly gendered. There is clear evidence that, *ceteris paribus*, mothers are not only perceived as less competent but also less committed to their work than men and childless women (Correll, Benard and Paik, 2007; Benard and Correll, 2010). It is still an open question whether this stereotype is attributed to women ultimately because they are mothers or because they adopt flexibility measures. Thus, we propose to test a third hypothesis:

H3: The longer an employee works and the less he or she teleworks the greater his/her opportunities are for a promotion, irrespective of gender, because they are considered to be more committed to work (the flexibility stigma hypothesis).

Spain represents an interesting setting to analyze the effect of gender, parenthood, and flexibility measures on promotions. Despite the major increase in female employment, gender differences in employment rates remain significant (69 per cent for men versus 57 per cent for women in the third trimester of 2017 for people aged 16–64, according to the Spanish Labour Force Survey) and women remain underrepresented in managerial positions (37 per cent according to data for 2014, EUROSTAT 2017). Furthermore, the split-shift schedule (a long workday, which extends beyond 6 p.m., due to a long lunch break) is very common in Spain (Gracia and Kalmijn, 2016). Many parents use the statutory reduced schedule¹ to cope with these family-unfriendly schedules. The users of the reduced schedule are overwhelmingly women: around 26 per cent of mothers who have at least one child under age 8 have used it, compared with only 4.1 per cent of fathers (Labour Force Survey 2010, special module on work–life balance). Long work hours are undoubtedly one of the main obstacles to mothers' progress in their careers or maintain their jobs.

Methodology

Vignette Design

Our survey-based experimental design (a vignette study) exposes respondents (supervisors) to a reality-inspired treatment (personal level characteristics and adoption of flexibility measures) in which they rate fictitious situations² (potential candidates for a promotion). The core part of the questionnaire consists of the description of six fictitious candidates, who differ along five dimensions (sex, parental status, working hours per week, telework, and experience working in a team; see Table 1). The variable 'experience working in a team' is a control variable aimed at creating coherence with the first question of the cover story, which concerns competence for a job holding responsibility (see Questionnaire, Appendix 1). The rest of the dimensions is our main independent variables. For each dimension, we set levels that are realistic

within the Spanish context. For example, in the case of work hours, three levels represent the statutory workweek in Spain (40 hours), a 1-hour reduction per day (35 hours), which is a legal right for people with care responsibilities,³ and 1 hour of overtime per day (45 hours). In addition, all of the candidates are aged 37, married, have been in the company for 3 years, graduated from the same university in economics, and held a master's degree from a foreign country. By fixing the age of candidates at 37, we wanted to avoid the effect of discrimination based on age as studies have suggested that workers over 37 are exposed to significant age discrimination in Spain (Albert, Escot and Fernández-Cornejo, 2011).⁴ The candidates' characteristics are kept constant in the professional profiles of the candidates, which contain information relevant to the potential promotion (skills, experience in the company) and personal traits (marital status, age). An extended version of the methodology, the data used in this study, and the Stata do-file to completely replicate this study are presented in the [Supplementary Data](#).

Vignette Universe

The candidates' vignette universe was generated by crossing all of the possible combinations (Cartesian product) of the vignette dimensions' categories to ensure orthogonality across the factors. We designed an experimental setup of 48 possible vignettes ($2 \times 2 \times 2 \times 3 \times 2$). Although a 16-vignette sample would have provided a 100 per cent d-efficiency, given the number of dimensions and levels, we took a whole vignette universe of 48 candidates. (All of the vignettes represent plausible candidates.) The 48 vignettes were randomly allocated to eight different questionnaire versions (decks). A minimum of five respondents assessed each deck, meaning that at least 240 'vignette people' were rated. Each respondent assessed six candidates, which was considered a reasonable number to avoid the fatigue effect. We used the SAS macro '%mktblock' to ensure a randomized distribution of the whole vignette universe over the eight

Table 1. Vignette dimensions and universe of candidates

#	Dimension	Level
1	Sex	Male/female (different names assigned—see Supplementary Data)
2	Children	Childless/2 children
3	Working hours per week	35/40/45 hours a week
4	Teleworking situation	Always works at the company/2 teleworking days
5	Experience in teamwork	An average amount of/extensive experience in teamwork This variable, not included in our hypotheses, aimed to introduce greater variability among candidates and a potentially relevant professional skill of the candidate

decks. As such, we attained maximum statistical efficiency. By distributing the different questionnaires as evenly as possible (a similar number of respondents was assigned to each questionnaire), we ensured that the correlations between dimensions were close to 0 and not significant (see [Tables A1 and A2](#) in [Appendix 2](#)).

Survey Administration

The vignettes were assessed by supervisors of at least one other employee (i.e. professionals potentially responsible for promotions) in medium-to-large companies (i.e. companies with 30 or more employees⁵). We contacted supervisors through the human resources departments of companies that were randomly selected from sectors with a different sex composition.⁶ That the respondents were real professionals working in diverse companies in the Spanish labour market increases the external validity of our study compared with factorial surveys using samples of MBA students or similar groups, even if our sample was not representative of all companies. We used a cover story to hide the real purpose of the experiment (and thus minimize selection or desirability bias) and increase participants' commitment to the task. They were told that they were evaluating real candidates on behalf of a prestigious Spanish university, which was interested in studying the career mobility of former MBA students. To further improve participation rates, the participants were also told that the task would take no more than 10 minutes and that on completing the online survey, self-administered by Qualtrics, they could participate in a raffle for five personalized packs valued at 210 euros each (see [Appendix 1](#) for complete questionnaires).⁷ Between March and July 2017, 82 women and men with supervisory responsibilities in their company completed the online survey.⁸ The final sample excluded 11 questionnaires that had no variation in the dependent variables (promotion recommendation and perception of competence, warmth, and commitment to work). Therefore, the final valid sample size was 71 questionnaires. These included real professionals working in 50 companies, which represent a

response rate of 14 per cent of all companies contacted by email (354). This response rate may seem low, but it was attained by a project assistant writing to HR departments on behalf of a prestigious Spanish university, with the university as the sole reference. Our assistant had to convince HR officers to engage at least one supervisor in their company in responding the survey.

Questionnaire Content

The following scenario was presented to respondents (see [Figure 1](#) and [Appendix 1](#)).

As shown in previous studies ([Gaucher, Friesen and Kay, 2011](#)), the language used in job offers can generate a gender bias in applications. To avoid a masculine bias in the description of a job that required taking *responsibility*, and based on a classical typology of leadership styles ([Duehr and Bono, 2006](#)), we included two variables considering *agentive* or *task-oriented* ('decisive', 'with analytical ability') and two variables considering *communal* or *relationship-oriented* ('attends to the needs of the team', 'will have to develop a good relationship with customers'). The former is often associated with masculine traits, whereas the latter is usually considered female features. In addition, we signalled that the person to be selected could be a 'she' or a 'he'. The participants were asked to answer two kinds of questions. First, they were asked to make a decision on a candidate to possibly recommend for the job. Second, they were asked the extent to which they perceived the candidates as *warm*, *competent*, and *committed to work*, the three relevant personal traits for our hypotheses. (The order in which these attributes were presented was randomized.) All of the questions were answered on a scale from 1 to 5. The following description is an example of how the candidates were presented in the questionnaire (see [Figure 2](#)).

At the end of the questionnaire, the participants were asked to provide some information about themselves. Two of the questions aimed at capturing information on whether the participant supported an egalitarian or traditional gender ideology. The respondents were asked to

Suppose that in your company a job vacancy is open and you are responsible for selecting the most suitable candidate. A number of internal candidates have been selected, all of whom have the proper experience and educational background. The person finally selected will assume greater responsibility and will be compensated with a 30% wage increase. The rest of the job conditions will be set once the candidate is selected. This is the job description: *The candidate will coordinate a team of 10 to 20 people. We are looking for a decisive person with analytical ability who attends to the needs of the team. She or he will have to develop good relationships with customers.*

Figure 1. Sample vignette: description of the job for internal promotion

José Antonio Hernández, 37 years old, married with *no children*. He has an average amount of *experience working in a team*. He usually *works 35 hours* per week from the *company office*.

Figure 2. Sample vignette with five dimensions

provide their level of agreement with the following two statements: ‘I usually prefer to work under the supervision of a man’ and ‘All in all, family life suffers when the woman has a full-time job’. (The latter statement is drawn from the 2012 edition of the International Social Survey Programme.) Other questions concerned gender, age, number of children, job name, approximate number of employees at the office, gender composition of their department, and other departments (human resources, etc.).

Analytical Strategy

As every supervisor evaluated six candidates, multilevel analysis (linear random-intercept models) is the most appropriate technique for analyzing the data (Auspurg, Thomas and Sauer, 2017). As the vignettes were evaluated by the same individual, they may have correlated error terms. If this factor is not considered, the assumption of the independence of the observations is violated, and standard errors are underestimated, statistical contrasts are unreliable, and researchers may identify effects that are in fact spurious as causal (Type I error).

We analyze the results of the factorial survey in three steps. First, to test Hypotheses 1 and 3, we assert the different probabilities to be highly scored for a promotion. Second, we examine if the perceptions of the candidates as ‘committed’, ‘competent’, and ‘warm’ can explain the differences in the promotion scores. Finally, we test whether gender attitudes at the supervisor level affect the likelihood for promotion (Hypothesis 2). The four dependent variables are as follows: (i) the scores for promotion recommendations, (ii) the perceived commitment of the candidate, (iii) the perceived competence of the candidate, and (iv) the perceived warmth of the candidate.

The intraclass correlation coefficient (ICC) for the empty models is 28 per cent in the analyses that use promotion as the dependent variable, indicating a relatively low variability across employers’ evaluation of candidates. The ICC reaches 33, 47, and 60 per cent in the analyses of commitment, competence, and warmth, respectively.

Results

In this section, we discuss the tests of the following three main hypotheses: (i) the motherhood penalty, (ii) the employers’ bias in promotion, and (iii) the flexibility

stigma. For the first hypothesis, the multivariate analyses (Table 2, Model 1, and Figure 4.1) suggest that mothers are significantly more likely to receive higher promotion scores than childless people of both genders. Mothers also score higher than fathers in promotion rates. Although this last result is not statistically significant, it is close to significance (coefficient = -0.148 ; P -value = 0.113). Moreover, fathers are significantly more likely to receive higher scores than childless men. We ran an equivalent analysis to Model 1 using father as the reference category (results available upon request), and the difference between fathers and childless men is statistically significant (coefficient childless men = -0.177 ; P -value = 0.058). Thus, according to our results, the hypothesis on *motherhood/fatherhood* is partly rejected. Contrary to our expectation, mothers are not penalized in applications for intermediate managerial positions, rather they receive a premium. As expected, fathers receive a premium compared with childless men but not compared with mothers. In addition, in general, childless people suffer a penalty, because they receive lower scores for a promotion.⁹ Thus, we find a motherhood premium and a fatherhood premium, probably because in our low ambiguity scenario, mothers are considered highly successful candidates and no normative discrimination appears related to their deviant pattern with respect to prescriptive stereotypes.

What are the mechanisms behind the ‘motherhood premium’? In Model 2, Table 2, we introduce perceived commitment to work, competence, and warmth as independent variables. The premium for mothers is still statistically significant compared with childless people, although the gap is reduced. The coefficients relative to committed and competent are strongly significant. In contrast, the coefficient ‘warm’ is not significant. When commitment and competence are introduced separately (results available upon request), the variable that best explains the differences in promotion for the different types of families is the perceived competence of the candidate. Model 5, in which competence is the dependent variable, corroborates this finding. Childless women and, above all, childless men are perceived as less competent than mothers. In sum, the gap for promotion between people with children and without children is partly driven by the latter being perceived as less competent. In Model 4, we perform an analysis using commitment as the dependent variable. The results show that,

Table 2. Regression on vignette dimensions (multilevel linear random-intercept models) to test ratings for being promoted and candidates' perceived commitment, competence, and warmth

Variables	M1		M2		M3		M4		M5		M6	
	Promotion		Promotion		Promotion		Commitment		Competence		Warmth	
Family type												
Mother (ref.)												
Father	-0.148 (0.113)		-0.110 (0.136)		-0.228 (0.163)		-0.078 (0.356)		-0.032 (0.663)		-0.004 (0.950)	
Childless woman	-0.206** (0.028)		-0.161** (0.031)		-0.497*** (0.002)		0.063 (0.452)		-0.154** (0.037)		-0.147** (0.016)	
Childless man	-0.327*** (0.000)		-0.162** (0.025)		-0.291* (0.082)		-0.163** (0.045)		-0.234*** (0.001)		-0.095 (0.107)	
Telework	-0.193*** (0.003)		-0.210*** (0.000)		-0.190*** (0.003)		-0.053 (0.365)		0.078 (0.125)		0.057 (0.175)	
Hours worked												
45 (ref.)												
35	-0.430*** (0.000)		-0.139* (0.054)		-0.577*** (0.000)		-0.775*** (0.000)		-0.019 (0.763)		0.074 (0.153)	
40	-0.003 (0.966)		0.053 (0.418)		-0.119 (0.458)		-0.325*** (0.000)		0.140** (0.025)		0.077 (0.137)	
Interactions family type–hours worked												
Father–35 hours					0.159 (0.483)							
Father–40 hours					0.099 (0.670)							
Childless woman–35 hours					0.513** (0.033)							
Childless woman–40 hours					0.390* (0.099)							
Childless man–35 hours					-0.064 (0.793)							
Childless man–40 hours					-0.022 (0.927)							
Committed to work												
Competent					0.369*** (0.000)							
Warm					0.425*** (0.000)							
Constant	4.559*** (0.000)		1.226*** (0.001)		4.627*** (0.000)		4.234*** (0.000)		3.724*** (0.000)		3.483*** (0.000)	
var(_cons)	0.155		0.090		0.161		0.184		0.216		0.296	
var(Residual)	0.444		0.279		0.433		0.358		0.276		0.188	
Observations	426		426		426		426		426		426	
Number of groups	71		71		71		71		71		71	

Note: P-value in parentheses.

*** $P < 0.01$, ** $P < 0.05$, * $P < 0.1$.

All of the models are controlled for the following respondents' characteristics: sex, age, children/no children, sector of the firm in which they work (masculinized, feminized, or mixed), and whether they work in a human resources department.

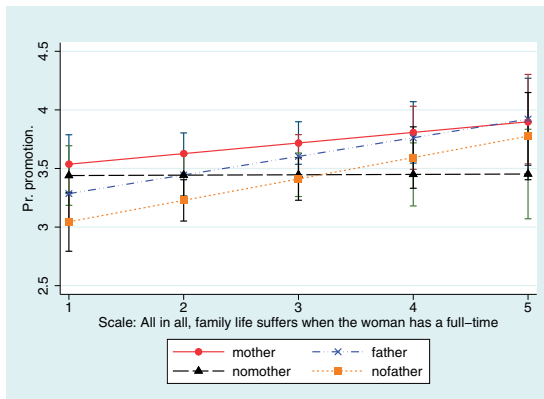


Figure 3. Predictive margins for the likelihood of being promoted. Interaction type of family of the vignette person*traditional values of recruiter.

in addition to being perceived as less competent, childless men are perceived as less committed than mothers. There are no statistically significant differences in the perceived commitment of mothers and of the other categories.¹⁰

We believe that a signalling effect may influence people with children: they are seen as more competent because they demonstrate that they are able to face the challenges of simultaneously raising children and maintaining a satisfactory work performance and this is especially true in the case of mothers. Childless men may be sending an additional negative signal. They are not only perceived as less competent but also perceived as less committed to holding a managerial position.

The *employers' gender ideology bias hypothesis* predicts that supervisors moderate the risk of discrimination in promotion processes. In particular, the hypothesis suggests that respondents with a more traditional gender ideology favour fathers over mothers for promotion due to prescriptive stereotypes that consider fathers as primary providers and mothers as primary carers. Table 3 presents the results of a model with promotion as the dependent variable and with the interaction between the respondents' degree of traditionalism and the type of family as the independent variables. The degree of traditionalism is measured as the agreement with the following statement: 'All in all, family life suffers when women have a full-time job'.¹¹ As shown by the interaction effects of a traditional gender attitude and the candidates' family form, a traditional gender attitude changes the promotion scores in favour of both fathers and childless men compared with mothers, but the differences are not statistically significant (Figure 3). Thus, we reject the *employers' gender bias hypothesis*.

Table 3. Regression on vignette dimensions (multilevel linear random-intercept models) to test the mediating role of recruiter's gender values in ratings for being promoted

Type of family	
Mother (ref. Model 1)	
Father	-0.319 (0.132)
Childless woman	-0.010 (0.963)
Childless man	-0.584*** (0.004)
Traditional ideology	0.090 (0.173)
Interactions	
Mother-traditional	
Father-traditional	0.068 (0.375)
Childless woman-traditional	-0.087 (0.259)
Childless man-traditional	0.092 (0.214)
Constant	3.446*** (0.000)
var(_cons)	0.184
var(Residual)	0.495
Observations	426
Number of groups	71

Note: P-value in parentheses.

*** $P < 0.01$, ** $P < 0.05$, * $P < 0.1$.

Finally, we test the *flexibility stigma hypothesis*. We expect that the use of flexibility measures, such as telework and reduced hours, sends the signal that these employees violate the ideal worker norm, which expects them to be 'always there' for the company. Therefore, flexible workers are subject to a flexibility stigma. Our results are consistent with this hypothesis, as candidates receive statistically significant lower ratings for promotion if they telework 2 days a week than if they work from the office (coefficient = -0.193). The candidates who work 35 hours per week receive even lower scores than those who work 40 and 45 hours (see Table 2, Model 1, coefficient 35 hours = -0.430, and Figure 4.2).

The results remain stable for telework even when commitment and competence are introduced (see Table 2, Model 2). In contrast, the penalty for those who work 35 hours is still significant but much lower (coefficient = -0.139 compared with -0.430 in Model 1). This decrease in promotion opportunity for flexible workers is mediated by perceived commitment (separate models for commitment and competence as independent variables are available upon request). The result is corroborated in Model 4, in which perceived commitment is the dependent variable. Those who work 35 hours are perceived as much less committed (-0.775 points in a scale from 1 to 5) than people who work 45 hours. However, working 35 hours does not imply a penalty in perceived competence compared with those who work 45 hours. To sum up, the flexibility penalty (with respect to hours worked) is partly mediated by perceived

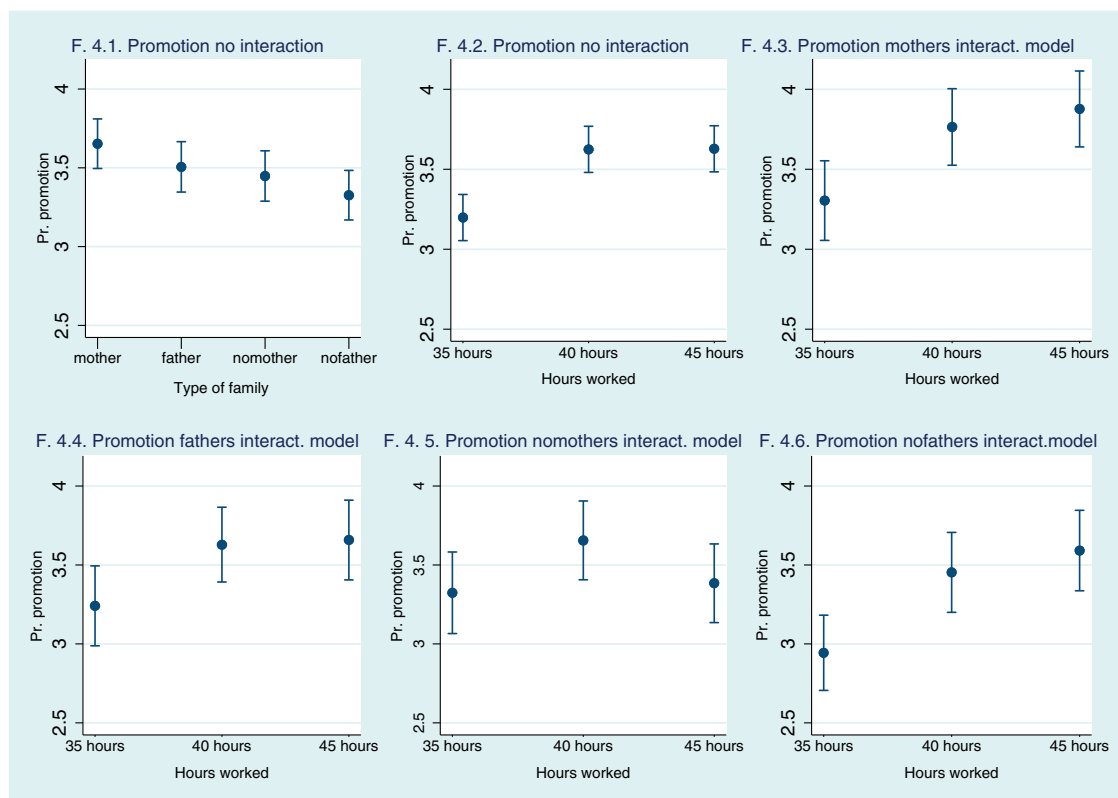


Figure 4. Predictive margins for the likelihood of being promoted. No interaction (Model 1, Table 2) and interaction type of family*hours worked (Model 3, Table 2).

commitment, as predicted by the *flexibility stigma hypothesis*.

In line with previous work (Acker, 2006), our results show that candidates are penalized in terms of promotion if they do not follow the ideal worker norm of working full-time or long hours from the company office. Thus, the current use of flexibility measures seems to be unfavourable for promotion. This is the case, even when it was stated in the scenario that ‘the person finally selected will assume a higher responsibility and will be compensated with a 30 per cent wage increase. The rest of the job conditions will be set once the candidate is selected’. The sampled supervisors penalized employees who made use of time or spatial flexibility.

Thus, we know that individuals who work 35 hours are less likely to be promoted. The question is whether these effects remain if we run an interaction between hours worked and type of family. Coefficients in Table 2, Model 3 (see also Figure 4.3–4.6), show that the flexibility stigma works in the same way for almost all types of family situations: mothers, fathers, and childless men who work 35 hours are penalized. The

interactions also show that the motherhood premium works for *available* mothers, but those mothers who work 35 hours are penalized relative to mothers working 40 or 45 hours.

That working less than 40 hours per week creates a flexibility stigma in our sample may explain why standard descriptive and statistical models have found that mothers are penalized for promotion. The motherhood penalty may not be the consequence of gender stereotypes, at least not for highly successful mothers such as those in our study. In other words, women are not directly penalized through stereotyping for their motherhood status but are indirectly penalized if motherhood leads them to deviate from the ideal worker norm of working 40–45 hours per week from the company office. According to our results, only mothers who follow the *mummy track* are penalized.

Discussion and Conclusions

We conducted an online experiment with 71 supervisors who were considered potential decision-makers on

internal promotion in their companies, and we asked them to rate 426 vignette candidates. The supervisors worked in 50 medium- and large-sized companies (with at least 30 employees) in sectors with different gender ratios. The objective of the vignette study was to understand why women are underrepresented in supervisory positions of intermediate rank and to identify the possible micro mechanisms underlying these trends.

Compared with other studies, which have focused on specific sectors or recruited students as respondents, this study made a great effort to convince real supervisors, through their company's human resources departments, to participate in a factorial survey. These supervisors were told to imagine a similar setting for promotion in their companies, which increases the external validity of the study. However, this decision to some extent conditioned the design. We were required to use short vignettes with a limited number of candidates to avoid fatigue. To prevent incorrect responses or disruption to the experiment, we kept the respondents' cognitive efforts low. We varied only five dimensions of the vignette candidates: sex, children, working hours per week, teleworking, and experience working in a team. We provided additional information that was assumed to be necessary for promotion as constant traits of all of the candidates: high educational credentials, 3-year work experience, and capability. In addition, all of the candidates in the vignette were aged 37 and married. We designed the study so there was low ambiguity concerning applicants' qualifications and performance. Consequently, we reduced the role of statistical discrimination as a possible causal mechanism for the promotion scores. In addition, we presented a set of equally willing candidates, from which supervisors were required to choose. In this way, we removed the possibility that lower female rates in managerial occupations might be the outcome of self-selection against promotion.

Our promotion scenario enabled us to disentangle the factors that are usually endogenous, such as mothers making more work adaptations than fathers to cope with work–family balance. As such, we tested whether the lower presence of mothers in supervisory occupations was related to the flexibility stigma in promotion processes or to discrimination against mothers based on their violation of prescriptive gender stereotypes. The design tested for different stereotypical perceptions with respect to commitment and the gendered traits (competence and warmth) of men versus women, childless people versus fathers and mothers, and 'flexible employees' versus 'ideal workers'.

We did not find a motherhood penalty based on prescriptive gendered stereotypes, but rather a general motherhood premium. However, the mother candidates belonged, by design, to a positively selected group of employees: they had followed a 'daddy track', thus violating prescriptive gender stereotypes and achieving the same work experience as men, on average. They had acquired the necessary experience for promotion, while coping with the obstacles of limited work–life balance policies in Spain. Most probably, the respondents assumed that most of the professional mothers managed to make a career thanks to external help from family members, domestic help, or their male partners. Moreover, contrary to the assumption of the motherhood penalty hypothesis, the skills informally acquired through parenting (i.e. flexible or 'allocentric' thinking) may be perceived as valuable skills in the workplace (Rimbau-Gilabert, Miyar-Cruz and Lopez-de Pedro, 2009). Thus, it could be argued that if mothers can balance their work and family life without losing opportunities to acquire further experience at work, they are considered as good or slightly better candidates for a promotion than fathers. Other recent experimental studies have found that social support for gendered traditional roles (housewives versus breadwinners) is nowadays more nuanced than it was decades ago and that support for working mothers varies significantly depending on a woman's particular circumstances (Jacobs and Gerson, 2016).

With respect to the flexibility stigma, we found that working 35 hours per week penalized candidates through its significant positive relation with perceptions of low commitment. Teleworking was also an obstacle to a promotion. Mothers who behaved like men, working 40–45 hours per week from the company office, received the highest promotion scores. Yet, this is a situation that most mothers cannot achieve in the Spanish labour market. According to the Spanish Labour Force Survey, in 2017, 39.8 per cent of salaried women in the private sector worked 35 hours or less per week, compared with only 12 per cent of men.¹² Thus, the motherhood penalty found in the labour market might be explained as the outcome of a flexibility stigma attached to part-time workers or to those who benefit from the statutory reduced schedule.

The study is not without limitations, which further research could overcome. First, it may be that promotion dynamics differ by sectors. We found some sector differences, but the vignette design cannot guarantee the statistical significance of these differences. Second, we cannot rule out the possibility that statistical

discrimination has affected the evaluation of childless women to some extent. Third, telework as a barrier for promotion has to be better understood, as teleworkers were not perceived as significantly less committed or competent than other employees.

In terms of policy recommendations, we advocate for measures enabling work–life balance for all employees that do not create a gender bias in their implementation. At the moment, mothers over-proportionally work part-time or reduce their work hours. To overcome this stigma, the ‘long hours culture’ (Allard, Haas and Hwang, 2007) could be replaced by a family-friendly 35-hour workweek in all sectors and for all employees. Caring activities and a healthy lifestyle require time, and thus, time is an important factor in work–life balance. Reducing work–family conflicts would also have multiple advantages for companies, as it has been shown to reduce absenteeism and rotation and increase productivity (Rimbau-Gilabert, Miyar-Cruz and Lopez-de Pedro, 2009). The statutory right to reduce working hours for care reasons has been a major social achievement in Western societies. However, this experiment shows that the use of some flexibility measures may limit the career prospects of qualified workers and may disproportionately penalize mothers, as they are the main users of these practices.

Notes

- 1 Like several other Western countries, Spain recognizes the right to reduce work hours to take care of children or other dependents. Since the original regulations were enacted in 1980, this policy has gradually expanded in scope. Nowadays, all people in direct charge of at least one child under 12 years old can apply for the reduced schedule. Although the wage is proportionally reduced, social security benefits are not totally prorated.
- 2 As in most experimental designs, our study focuses on internal validity rather than external validity, despite having asked supervisors in real companies to rank the vignettes. The survey sample was not designed to be representative; the three sectors were selected with the aim of increasing the heterogeneity of the respondents. We cannot, therefore, conclude that our results are representative of the whole Spanish labour market. However, we have tried to minimize any possible selection bias by hiding the real purpose of the study with a cover story. Only one of the participating companies had received a Gender Equality Certificate, so the companies were not self-selected. The number of abandoned questionnaires (i.e. people who refused to answer once the questions were read) was residual.
- 3 See footnote 1. Also, employees may be considered to be working 35 hours per week if they have a part-time contract, a freelance relationship or an individualized and/or informal arrangement with the employer.
- 4 At the same time, the possibility of statistical discrimination due to the uncertainty over whether the vignette women would become mothers for the first time in the future is not high, because in 87 per cent of first births in 2017 the mother was aged 37 or less, which means that only 13 per cent of first-time mothers were older than our vignette women. Yet, we cannot rule out the possibility that some respondents see women without children as at risk of becoming mothers and following a ‘mummy track’.
- 5 We wanted each of the selected companies to have a human resources department, as this made them more likely to have formal human resources policies. As reported by the respondents, the average number of people working in each respondent’s company office was 598.
- 6 The three sectors (defined by the two-digit classification of the NACE) were selected on the following three relevant variables: feminization or masculinization of the workforce (more than 60 per cent of women or men, respectively), relative access of women to managerial positions (ratio of women in managerial positions to total proportion of women in the sector), and relative importance in Spain in terms of people employed in this sector. The dataset and Stata syntax are available at [Supplementary Data](#). Among the 50 companies in the final sample, 20 (33 questionnaires) companies belonged to the male-dominated sector (computer programming/consultancy), 17 (19 questionnaires) companies belonged to the female-dominated sector (retail trade), and 13 (19 questionnaires) companies belonged to the mixed one (advertising/market research).
- 7 The participants were encouraged to respond with no interruptions, and the online survey did not allow respondents to go backwards in the questionnaire, except for reading the description of the scenario twice.
- 8 A database containing all of the companies that fulfilled these requirements was acquired through a commercial company. The companies were initially contacted, in no specific order, by phone and

usually through the human resources department, which was asked to provide the contact details of the potential respondents according to our target (people in charge of supervising at least one other person). An individualized link was subsequently sent to these supervisors to ensure that the prerequisites of the sample were maintained.

- 9 A sensitivity check of the results was conducted to see if the results vary for the different economic sectors and if female and male respondents rated candidates similarly. The results are similar in general, but some are driven by specific sectors. For instance, the comparatively low promotion scores for non-mothers are driven by the masculinized sector (computer programming/consultancy), and mixed one (advertising/market research), but were nonexistent in the feminized sector (retail). Yet, we cannot interpret these differences, because our experimental setup only guarantees statistical d-efficiency for the whole sample.
- 10 In the retail sector, non-mothers score higher in commitment than mothers, and in the other two sectors, there is a negative nonsignificant relationship that together drives the general result of nonsignificant differences between mothers and non-mothers. Again, for methodological reasons, we must be cautious when interpreting these differences between subsamples.
- 11 From the two items intended to capture a traditional gender attitude, we finally opted for this one, which presented a greater variability.
- 12 First three trimesters of 2017.

Supplementary Data

[Supplementary data](#) are available at *ESR* online.

Acknowledgements

The authors would like to thank the three anonymous referees for their helpful and constructive comments, the Barcelona MAR Health Park Consortium for reviewing the ethical aspects of this study, Amaya Sánchez for implementation of questionnaires with Qualtrics, and Marcos Lizano for his work in convincing the human resources departments of private companies to support the participation of supervisors in the factorial survey. This article also benefitted from discussion and comments from Dr Valentina Di Stasio.

Funding

The authors would also like to thank the Recercaixa2014 and Spanish Ministry of Economy and Competitiveness (projects

CSO2014-58754-P; and CSO2014-59927-R) which supported this research.

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Appendix 1: Questionnaire A

English version

Research on professional competencies

[Filter question]

Welcome to the online survey for the project ‘Professional Development of Master’s Degree Students in Spain’, coordinated by University [anonymized name] in [city name].

Before you start the survey, please indicate whether you hold a supervisory job in your company.

1. No, I don’t
2. Yes, I supervise 1–4 people
3. Yes, I supervise 5–9 people
4. Yes, I supervise 10 or more people

University [anonymized name] is interested in the professional careers of Master’s degree and MBA students. We would like to know your opinion, as a professional, regarding the best profiles for a job with supervisory responsibility. This study is being carried out with a random sample of Spanish companies.

Participating in the research will not take you more than 10 minutes. University [anonymized name] guarantees the confidentiality of all answers. You will be entered into a raffle for five personalized *Leisure Box* packs (worth €210 each), provided that you finish the whole survey.

Remember that there are no right or wrong answers. Please try to respond without interruptions. Thank you very much for taking part in this survey.

Please assess the following competencies according to their importance for a job involving responsibility on a scale where 0 = ‘not important at all’ and 5 = ‘very important’.

- Teamwork skills
- Creativity
- Goal-oriented work

Suppose that in your company a job vacancy is open and you are responsible for selecting the most suitable candidate. A number of internal candidates have been selected, all of whom have the proper experience and educational background. The person finally selected will assume greater responsibility and will be compensated with a 30 per cent wage increase. The rest of the job conditions will be set once the candidate is selected.

This is the job description:

The candidate will coordinate a team of 10 to 20 people. We are looking for a decisive person with analytical ability who attends to the needs of the team. She or he will have to develop good relationships with customers.

Please think about a similar job in your own company.

Now you will be shown six candidates. All of them hold an Economics degree from University [anonymized name], as well as a Master’s degree from a foreign university. They have been working for the company since 2014. Please assess how suitable they are for the job. At the end of the survey, you will be asked some questions about yourself.

Candidate 1

María del Carmen García, 37 years old, married with no children. She has extensive experience working in a team. She usually works for 45 hours a week and teleworks for 2 days a week.

On a 1–5 scale where 1 = ‘not likely at all’ and 5 = ‘very likely’, how likely would you be to recommend this person for the job?

Off the top of your head, how do you perceive this person in terms of the following three adjectives? Give your answer for each on a 1–5 scale, where 1 = ‘not very’ and 5 = ‘very’.

REMEMBER: María del Carmen García, 37 years old, married with no children. She has extensive experience working in a team. She usually works for 45 hours a week and teleworks 2 days a week.

- Competent
- Warm
- Committed to work

Candidate 2

Antonio Martín, 37 years old, married with two children. He has extensive experience working in a team. He usually works for 40 hours a week from the company office.

On a 1–5 scale where 1 = ‘not likely at all’ and 5 = ‘very likely’, how likely would you be to recommend this person for the job?

Off the top of your head, how do you perceive this person in terms of the following three adjectives? Give your answer for each on a 1–5 scale, where 1 = ‘not very’ and 5 = ‘very’.

REMEMBER: Antonio Martín, 37 years old, married with two children. He has extensive experience working in a team. He usually works for 40 hours a week from the company office.

- Warm
- Competent
- Committed to work

Candidate 3

Ana María González, 37 years old, married with two children. She has enough experience working in a team. She usually works for 40 hours a week from the company office.

On a 1–5 scale where 1 = ‘not likely at all’ and 5 = ‘very likely’, how likely would you be recommend this person for the job?

Off the top of your head, how do you perceive this person in terms of the following three adjectives? Give your answer for each on a 1–5 scale, where 1 = ‘not very’ and 5 = ‘very’.

REMEMBER: Ana María González, 37 years old, married with two children. She has enough experience working in a team. She usually works for 40 hours a week from the company office.

- Competent
- Committed to work
- Warm

Candidate 4

Mónica Fernández, 37 years old, married with two children. She has enough experience working in a team. She usually works for 45 hours a week and teleworks for 2 days a week.

On a 1–5 scale where 1 = ‘not likely at all’ and 5 = ‘very likely’, how likely would you be to recommend this person for the job?

Off the top of your head, how do you perceive this person in terms of the following three adjectives? Give your answer for each on a 1–5 scale, where 1 = ‘not very’ and 5 = ‘very’.

REMEMBER: Mónica Fernández, 37 years old, married with two children. She has enough experience working in a team. She usually works for 45 hours a week and teleworks for 2 days a week.

- Committed to work
- Warm
- Competent

Candidate 5

José Antonio Hernández, 37 years old, married with no children. He has enough experience working in a team. He usually works for 35 hours a week from the company office.

On a 1–5 scale where 1 = ‘not likely at all’ and 5 = ‘very likely’, how likely would you be to recommend this person for the job?

Off the top of your head, how do you perceive this person in terms of the following three adjectives? Give

your answer for each on a 1–5 scale, where 1 = ‘not very’ and 5 = ‘very’.

REMEMBER: José Antonio Hernández, 37 years old, married with no children. He has enough experience working in a team. He usually works 35 hours a week from the company office.

- Committed to work
- Warm
- Competent

Candidate 6

Javier Díaz, 37 years old, married with no children. He has extensive experience working in a team. He usually works 35 hours a week and teleworks 2 days a week.

On a 1–5 scale where 1 = ‘not likely at all’ and 5 = ‘very likely’, how likely it is that you would recommend this person for the job?

Off the top of your head, how do you perceive this person in terms of the following three adjectives? Give your answer for each on a 1–5 scale, where 1 = ‘not very’ and 5 = ‘very’.

REMEMBER: Javier Díaz, 37 years old, married with no children. He has extensive experience working in a team. He usually works for 35 hours a week and teleworks for 2 days a week.

- Warm
- Competent
- Committed to work

Now you will be shown a series of statements. Please indicate your level of agreement with each using a 1–5 scale where 1 = ‘I don’t agree at all’ and 5 = ‘I very much agree’.

- I usually prefer to work under the supervision of a man.
- All in all, family life suffers when the woman has a full-time job.

To finish, please answer these questions about yourself:

- What is your job title within your company (department manager, team supervisor, etc...)?
- How many people are employed at your headquarters?

In your department, would you say there are...

1. more female employees than male employees;
2. more male employees than female employees; or
3. more or less the same number of men and women?

Age:

1. 20–24
2. 25–29

3. 30–34
4. 35–39
5. 40–44
6. 45–49
7. 50–54
8. 55–59
9. 60–64
10. 65–70

Gender

1. Male
2. Female

Do you have any children?

1. Yes
2. No

End of survey

You have now finished the survey. Many thanks for your time!

We will contact you if you are one of the raffle winners. Good luck!

If you would like more information about the project, you can contact us by email at competencias@XXX.edu.

End of the survey [for those not supervising]

Thank you for your interest. However, we are searching for a different professional profile for our study.

If you would like more information about the project, you can contact us by email: competencias@XXX.edu.

Thank you for your participation.

Appendix 2

Table A1. Distribution of respondents by questionnaire model ('deck')

Number of questionnaire	Freq. of responses	Percent
1	9	12.7
2	8	11.3
3	9	12.7
4	8	11.3
5	8	11.3
6	8	11.3
7	9	12.7
8	12	16.9
Total	71	100

Table A2. Bivariate correlations

Dependent variables (candidates assessment)	Dimensions					Respondent/company level characteristics									
	Promotion	Competence	Warmth	Commitment	Female	Children	Working hours	Telework	Experience in teamwork	Works in Human Resources department	Age	Female	Has children	Traditional gender values	Feminization of department
Promotion	1.00														
Competence	0.54	1.00													
Warmth	0.31	0.55	1.00												
Commitment	0.59	0.54	0.30	1.00											
Female	0.09	0.04	-0.02	0.10	1.00										
Children	0.07	0.40	0.73	0.04	0.63	1.00									
Working hours	0.01	0.01	0.08	0.69	0.02	0.63	1.00								
Telework	0.21	0.02	-0.04	0.37	0.03	0.02	1.00								
Experience in team work	0.00	0.75	0.40	0.00	0.48	0.64	0.63	1.00							
Works in Human Resources department	-0.12	0.05	0.04	-0.02	0.00	-0.02	0.02	0.02	1.00						
Age	0.02	0.33	0.45	0.61	0.92	0.63	0.72	0.63	0.91	1.00					
Female	0.03	0.05	0.01	0.02	0.00	-0.02	-0.01	0.02	0.00	0.63	1.00				
Has children	0.50	0.33	0.84	0.69	0.92	0.63	0.91	0.63	0.00	0.00	0.00	1.00			
Traditional gender values	0.03	0.05	0.11	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00		
Feminization of department	0.53	0.30	0.03	0.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.02	0.49	1.00
Age	-0.14	-0.11	-0.09	-0.15	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.07	0.00	0.00	0.00
Female	0.00	0.02	0.06	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.13	0.00	0.00	0.00	0.00
Has children	-0.01	-0.01	-0.04	0.12	0.00	0.00	0.00	0.00	0.00	0.00	-0.33	1.00	0.00	0.00	0.00
Traditional gender values	0.89	0.81	0.41	0.10	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Feminization of department	0.05	0.06	0.03	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	-0.14	0.45	-0.26	0.00	0.00
Age	0.35	0.21	0.48	0.42	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Female	0.09	0.07	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	-0.11	-0.04	0.01	0.07	1.00
Has children	0.08	0.16	0.67	0.50	1.00	1.00	1.00	1.00	1.00	1.00	0.45	0.88	0.14	0.02	0.00
Traditional gender values	-0.08	-0.09	-0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00	-0.27	0.36	-0.11	-0.03	0.00
Feminization of department	0.09	0.06	0.05	0.63	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.02	0.49	1.00

Notes: In each cell, coefficients are in the first row and significance levels in the second one. The underline highlights orthogonality of dimensions (correlations close to 0 and nonsignificant). Shaded coefficients reflect correlations for pair of same dimensions.

Table A3. Demographic statistics (number of vignettes = 426; number of respondents = 71)

Variables	Per cent	Mean	Std. Dev.	Min	Max
Traditional 1 ^a		2.15	1.24	1	5
Traditional 2 ^b		2.44	1.28	1	5
Number of employees at his/her office		598	143	1	10,000
Gender of respondents					
Men	46.5				
Women	53.5				
Works in HR department	26.8				
Has children	59.1				
Sectors					
Masculinized sector	46.5				
Feminized sector	26.8				
Mixed sector	26.8				
Feminization of department					
More men	38.0				
More or less the same	5.6				
More women	56.3				
Age of respondents					
20–24	2.8				
25–29	5.6				
30–34	9.9				
35–39	22.5				
40–44	26.8				
45–49	12.7				
50–54	14.1				
55–59	4.2				
60–64	1.4				

^aTraditional 1: I usually prefer to have a man as a supervisor.

^bTraditional 2: All in all, family life suffers when the woman has full-time employment.