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ARTICLE

Leader-follower gender and job satisfaction: A two-wave study from Europe

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Abstract

Purpose – This paper studies leadership behavior in relation to leader gender, gender congruence, and their relationships with employee job satisfaction over time.

Theoretical framework – Drawing on the perspective of gender stereotypes and the role congruity framework, this study examines how communal stereotypes socially attributed to females can compromise their assessment as competent leaders.

Design/methodology/approach – Two sets of data from the European Working Conditions Survey were studied. Mean comparisons and multivariate regression analyses were carried out on samples of 25,649 at Time 1 and 26,047 at Time 2.

Findings – The main findings show different leadership behaviors between male and female leaders. Contrary to expectations, females displayed more of both instrumental- and relationship-oriented behaviors, and this difference has increased over time. However, fewer differences are observed in instrumental-oriented behaviors. The results also suggest that employees' gender affects how some leadership behaviors are perceived. Finally, no gender differences were found in job satisfaction, as the behaviors studied positively relate to it.

Practical & social implications of research – From a practical perspective, fostering a diverse array of leadership behaviors is important for enhancing employee job satisfaction within organizations. Female leaders are increasingly viewed positively in the workplace.

Originality/value – Female leaders show a more versatile set of leadership behaviors compared to their male counterparts. Differences in relationship-oriented behaviors persist, and the gender of the employee is important in perceiving which behaviors male or female leaders engage in more.

Keywords: Leadership behaviors, Gender stereotypes, Longitudinal studies, Job satisfaction, Europe.

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1 Introduction

While strides have been made in narrowing the gender gap within the workplace, it remains imperative to persist in efforts toward its complete eradication. Extensive research substantiates the enduring disparity between male and female representation in managerial roles (Koenig et al., 2011; Humbert et al., 2019). To mitigate this gap, the concept of the "business case for women," first introduced in the 1990s, underscores the correlation between diversity and organizational performance. It posits that enterprises adept at fostering and managing diverse workforces tend to outperform competitors with less diverse teams (Dezsö & Ross, 2012). Consequently, human resource strategies have increasingly focused on promoting gender diversity, with initiatives aimed at hiring and promoting women into leadership positions (Hesketh & Fleetwood, 2006).

Several theoretical approaches have been applied in order to study gender and leadership, such as personality (Judge et al., 2004) or even genetics (Chaturvedi et al., 2012), but the perspective of socially constructed gender stereotypes or role congruity (Eagly & Carli, 2003a) is the most widely applied (Cuadrado et al., 2015; Hentschel et al., 2019). Gender stereotypes may explain the inequalities between male and female employees in key job dimensions, such as the wage gap and lower representation in managerial positions (Gati & Perez, 2014). Statistical data from the European Union confirm the disparity in managerial positions, where women reach only 33% compared to 67% for men (Eurostat, 2019). Even within traditionally feminized professions, men earn higher salaries and are overrepresented in managerial roles (Christie-Mizell, 2006). Recent data from the European Institute for Gender Equality (2023) confirm this situation, revealing that women occupy only 30% of decision-making positions in the political, economic, and social domains. Despite notable advancements, the gender gap remains a prevalent issue, emphasizing the continued need for concerted actions to rectify gender imbalances within leadership domains. Regrettably, gender stereotypes persist, resulting in different descriptions of men and women that often align with traditional gender roles (Haines et al., 2016).

Accordingly, and as the role congruity approach posits (Koenig & Eagly, 2014), female leadership behaviors are usually assessed based on stereotypically feminine communal traits (e.g., caring, nurturing, helping, supporting). Thus, women are expected to display a more person-centered leadership style compared to their male counterparts, who show agentic traits, resulting in a task-centered style (Hentschel et al., 2017). Traditionally, leadership has been associated with masculine traits, resulting in female leaders who display stereotypically feminine attributes often being considered unsuitable for leadership roles. Some studies have found that although female managers were as effective as their male counterparts in influencing the quality outcomes of their employees, females received poorer assessments than their male counterparts on leadership skills (Watson & Hoffman, 2004). Female managers were also considered less likable than male leaders. When females adopt masculine attitudes, they are also evaluated unfavorably because they are acting outside of their gender stereotypical role (Rudman & Phelan, 2010). From this perspective, female leaders face a lose-lose dilemma. Additionally, gender congruence between leader and employee could also influence perceptions of positive leadership through gender-role congruence and gender similarity (Tourigny et al., 2017).

As Western economies shift from manufacturing to services, stereotypically female attributes are becoming more important to boost cooperation, communication, support, and empowerment within organizations (Rhee & Sigler, 2014). Existing literature on this subject reports that women use more relationship-oriented leadership styles compared to male leaders (Gardiner & Tiggemann, 1999) and are rated as significantly more effective than men, particularly in business and educational organizations in mid- and upper-level positions (Paustian-Underdahl et al., 2014). In addition, although from the perspective of gender stereotypes, male managers may be assessed as more capable compared to their female counterparts (Rhee & Sigler, 2014), other findings report that when the manager is a male, women tend to attribute poor performance appraisals due to gender bias (Ni & Huo, 2018).

Based on the above, this paper aims to explore gender differences in leadership behaviors linked to agentic (male) and communal (female) stereotypical traits and their impact on employee job satisfaction in similar versus dissimilar gender leader-employee interactions. Data were provided by the European Foundation for the Improvement of Living and Working Conditions and were gathered in two different years (Eurofound, 2013, 2016). These two waves of the study allow us to compare large subsamples of employees and managers by gender across Europe.

This study aims to investigate the perceived leadership roles of male and female managers among European employees, exploring potential differences based on time and gender congruence. In addition, to ensure the robustness of our findings, we analyze various sociodemographic variables (age, educational level), including business size and contract conditions. Our research contributes to the field by offering insights into the current landscape in Europe, where concerted efforts are underway to increase female representation in top managerial positions. We also explore the evolving gender stereotypes within the workplace and assess the level of job satisfaction of European workers in relation to their managers and leaders.

2 Theoretical background

2.1 Leadership, gender, and job satisfaction

Today, from a theoretical perspective, several leadership models are used simultaneously: transactional, transformational (Podsakoff et al., 1996), servant (Graham, 1991), ethical (Brown & Treviño, 2006), or authentic (Luthans & Avolio, 2003). From an applied perspective, organizations need their leaders to carry out certain actions to achieve their goals through their motivated employees.

The literature on gender and leadership posits that male and female managers tend to exercise leadership differently because of different socialization experiences (Eagly et al., 2003). Empirical research has found that gender differences exist in the use of leadership strategies such as transformational and transactional leadership (e.g., Eaglyet al., 2003). Other studies have also reported that women are better than men at developing and maintaining cohesion in their teams (Mamadou, 2019).

The present study analyzes seven well-known leadership behaviors from the fifth and sixth European Working Conditions Surveys (Eurofound 2013, Eurofound 2016), which have been categorized into two dimensions: instrumental- and relationship-oriented, which are related to the agentic and communal gender stereotypes (Koenig et al., 2011). In addition, this categorization has previously been used to compare leadership and gender (Koenig et al., 2011; Van Emmerik et al., 2010). Instrumental behavior encompasses the agentic characteristics, comprising five behaviors such as time control or instrumental support, whereas relationship-oriented behavior (communal characteristics) includes respect from the manager and personal support.

Job satisfaction stands out as a focal point of work attitudes research, featuring in approximately 70% of scholarly papers on the subject since 1950 (Judge et al., 2017). This foundational aspect of employment reflects employees' positive perceptions of their work content and overall work environment, encompassing various important job facets such as compensation, social support, and training (Weiss, 2002). According to Eurostat (2019), the average job satisfaction level of European employees was 7.1 in the first dataset period and increased slightly to 7.2 in subsequent observations. Job satisfaction often serves as a key indicator of organizational efficacy, offering insights into the effectiveness of key processes such as management and leadership.

Gender plays an important role in explaining job satisfaction, as research has identified differences in the satisfaction levels of various job characteristics between male and female employees (Carleton & Clain, 2012). Disparities in tenure, full-time status, income, and hours worked have been noted, potentially stemming from differences in how individuals of different genders construct their job experiences and the possibility that women may have lower expectations in the workplace (Clark, 1996). Studies by Mumford and Smith (2015), De Neve and Ward (2017), and Wright and Cropanzano (2004) have all demonstrated gender-based variations in job satisfaction, attributing these results to the aforementioned reasons.

Leadership behaviors also significantly impact job satisfaction. For instance, perceptions of autonomy in the workplace, exemplified by effective time control, tend to positively influence job satisfaction (Fried & Ferris, 1987). Brown and Treviño (2006) emphasize the importance of leaders showing respect, while other scholars highlight communication and recognition as essential leadership behaviors that positively correlate with employee job satisfaction (Atwater & Waldman, 2007). A more recent meta-analysis by Cakmak et al. (2015), which included 318 studies, confirms the moderate effect of leadership on job satisfaction. The leadership behaviors under study, which include elements of transformational leadership (Dumdum et al., 2002) and newer positive styles such as ethical or authentic leadership (Gardner et al., 2021; Saha et al., 2020), are considered influential in fostering employee job satisfaction.

Research on leadership and gender has studied how leadership is influenced by self-categorization

and social identity processes (Ellemers et al., 2004), as gender can be understood as a categorization for social identity (e.g., Karelaia & Guillén, 2014). Accordingly, several differences can be observed between male and female leadership linked to their social stereotypes (role congruity theory) (Eagly & Karau, 2002), implying that even women with excellent leadership skills will be judged less competent as leaders because leadership roles are traditionally associated with masculine attributes (Glass & Cook, 2016). Accordingly, existing research has found that female leaders tend to exhibit more relational-oriented (communal) behaviors, whereas males show more instrumental-oriented (agentic) behaviors (Koenig et al., 2011). Van Emmerik et al. (2010) also analyzed male and female leadership based on two similar dimensions called initiating structure (instrumental-oriented or agentic) and consideration (relationship-oriented or communal), which are also associated with role congruity, and found that when there are more female leaders, the leadership style is consistent with consideration. Koenig et al. (2011) found that leadership stereotypes have decreased over the last few years, particularly among female employees, but acknowledged that leadership comprises more male characteristics than female ones. More recent studies also reported that women's self-reports of masculinity increased significantly from 1974 to 2012, whereas men's scores remained constant over the same period (Eklund et al., 2017). Cuadrado et al. (2015) confirmed that stereotypically male characteristics were more important than female ones for managerial jobs, and these characteristics were more often attributed to male managers than to their female counterparts.

Another line of research suggests that contemporary organizations need more collaborative or relationship-oriented behaviors, which are more in line with the feminine social stereotype (Eagly & Carli, 2003a, 2003b). Similarly, other studies support the idea that men's styles tend to be autocratic and directive, while women adopt democratic and participative styles (Eagly et al., 2003). Female leaders also score higher on charisma, inspiration, and contingent rewards, which are characteristics of transformational and transactional leadership (Koenig et al., 2011).

> Hypothesis 1: Female and male managers will engage in different leadership behaviors, with female leaders engaging in more relationship-oriented behaviors and male leaders engaging in more instrumental-oriented behaviors (H1a). However, fewer differences will be observed at Time 2 (sixth wave) compared to Time 1 (fifth wave) (H1b).
>
> Hypothesis 2: All of the leadership behaviors under study will be positively related to job satisfaction, regardless of the gender of the leader and the time period in which the data were collected.

2.2 Gender congruence and job satisfaction

Similarity-attraction (Byrne et al., 1971) and social identity (Tajfel & Turner, 2004) theories argue that individuals with similar characteristics are more likely to experience a social connection. Thus, gender similarities between leader and employee may facilitate positive interactions between them, which in turn could increase their job satisfaction.

Specifically, four approaches can be applied to explain the relationships between gender congruence and job satisfaction. First, based on the role and the lack of fit theories (Heilman, 2012), leadership behaviors and female social roles are in conflict, such that female leaders will be rated lower, while their male counterparts will be rated higher. Consequently, employees of male leaders, both male and female, will perceive higher job satisfaction. Second, from the "happy worker" theory (Wright & Cropanzano, 2004), it can be inferred that female employees will show higher levels of job satisfaction despite the gender of their leaders, since women tend to be more satisfied with their jobs even after controlling for individual and job characteristics due to lower job expectations (De Neve & Ward, 2017). Based on these theories, female employees will report higher levels of job satisfaction independently of their leaders' gender (Matijaš et al., 2018). Third, some leadership behaviors will influence males and females similarly and contribute to high levels of job satisfaction independently of the leaders' gender. Collins et al. (2014) found that agentic-oriented dimensions, such as respect, influence both genders equally. Similarly, Van Gils et al. (2018) confirmed that the respectful leadership style of women was effective for both female and male employees. Lastly, Brenner et al. (1989) found that women's preference for male leadership had eroded over time, while men's view remained stable (i.e., preference for a male leader) (Preko, 2012). Accordingly, several studies argue that the gender of both leaders and employees influences employees' perceptions of leadership effectiveness and

job satisfaction, such that women employees tend to rate their female leaders higher, whereas men rate their male leaders higher (Stoker et al., 2012).

These findings may indicate that women's preferences are evolving toward a female leadership style. Some support for this idea can be found in the leader-member exchange model (LMX) (Yammarino et al., 2005). This model posits that leaders differ in the way they treat their employees through different types of exchange. As mentioned earlier, similarity-attraction theory (Byrne et al., 1971) suggests that female leaders of female employees (or male leaders of male employees) could easily establish positive leader-employee exchanges that, in turn, could help develop satisfactory attitudes toward the job. Several studies (e.g., Ioannidou et al., 2016; Schyns & Croon, 2006) have found a positive relationship between leader-member exchanges and employee job satisfaction. In addition, miscommunication and communication barriers based on gender differences could negatively influence LMX and clarify why employees are more satisfied with leaders of the same gender (Jackson et al., 2014).

Existing research has yielded mixed findings regarding the impact of gender congruence on managerial relationships and job satisfaction. While some studies have failed to confirm the aforementioned effects, suggesting that gender incongruence might even yield positive outcomes (Pedersen & Nielsen, 2016; Schieman & McMullen, 2008), others have highlighted important nuances. For instance, female employees under male managers reported lower levels of stress compared to those under female managers, with male managers also rating female employees more favorably than their female counterparts (Cooper & Cartwright, 1997). Conversely, alternative studies have emphasized the importance of gender congruence between managers and employees in determining job satisfaction (Grissom et al., 2012).

Although the results are not clear, from this last approach, we hypothesize that:

Hypothesis 3: At both times, female and male employees will assess leadership behaviors differently depending on their gender congruence with their managers, in line with leadership gender stereotypes.

Hypothesis 4: Based on positive LMX, male employees will report higher levels of job satisfaction when they are managed by a man (H4a), whereas female employees will report higher levels of job satisfaction when they are managed by a woman (H4b), at both time points.

3 Materials and methods

The raw data used in the present study come from the European Working Conditions Survey (hereafter EWCS) (Eurofound, 2013, 2016). The samples used in the EWCS are representative of employees of legal working age living in the countries surveyed. The surveys were conducted face-to-face in participants' homes and each took around 45 minutes to complete. At both times, the survey provided an overview of working conditions in Europe. The data included are the most recent available from 2010 and 2015, with a final sample size of 25,649 observations for 2010 and 26,047 for 2015.

Eurofound provided a detailed explanation, of the methodology applied to ensure that the samples were representative of the European countries, including general information, sampling, coding, weighting, and quality assurance. Data from 2010 can be accessed on the Fifth European Working Conditions Survey (EWCS) website (Eurofound, 2013). Similarly, the Sixth EWCS (Eurofound, 2016) has its own website, and in this case there is also a specific one dedicated to the methodology.

The measured variables, both sociodemographic and behavioral (leadership, satisfaction), from the fifth and sixth EWCS (Eurofound, 2013, 2016) are listed in Table 1. Question identifiers were taken from the SPSS "variables view" files.

Item definitions and descriptive statistics of the variables are shown in Table 2. Data were analyzed using SPSS v17 software (see Appendix A - Supplementary Data). Data from the two rounds were analyzed independently, resulting in two sets of analyses. Means and regression indices from the two rounds were then compared. Variables preceded by "n" (5th round) or "N" (6th round) were recoded. As Table 2 shows, the variables under study were grouped into seven categories: individual factors (I), contract conditions (CC), business size (BS), leadership-related variables (L), job satisfaction (JS), and gender. The vector of individual demographic variables (I) includes gender, age, and educational level. Specifically, educational level is captured by the following categories: early school, primary, lower secondary, upper secondary, post-secondary, short-cycle tertiary, bachelor, master, and doctorate. Gender is introduced as a dummy variable that indicates if the employee is a man or a woman, while age is introduced as a continuous variable. Contract duration and salary changes are included as contract conditions (CC), with contract duration also

Table 1
EWCS 2010/2015

EWCS2010 (Eurofound, 2013)	EWCS2015 (Eurofound, 2016)
hh2a. Gender	Q2a Gender
hh2b. Age	Q2b Age
Age squared	Age squared
ef1 Educational level completed	ISED Q106 Educational level completed
q14b Salary change	Q18b Salary change
q7 Contract duration	Q12 Contract duration
q11Business size	Q16b Business size
nq51f. Select the response that best describes your work situation - You can take a break whenever you want	NQ61f - Can you take a break whenever you want?
nq51c. Select the response that best describes your work situation - You are consulted before objectives are set for your work	NQ61c - Are you consulted before objectives are set for your work?
nq51d. Select the response that best describes your work situation - You are involved in improving the work organization or processes of your department or organization	NQ61d - Are you involved in improving the work organization or processes of your department or organization?
nq51i. Select the response that best describes your work situation - You are able to apply your own ideas to your work	NQ61i - Are you able to apply your own ideas to your work?
q58b. In general, your immediate manager / supervisor - Respects you as a person	Q63a - Your immediate boss… - Respects you as a person
nq58a. In general, your immediate manager / supervisor - Provides you with feedback on your work	NQ63e - Your immediate boss… - Provides useful feedback on your work
nq58e. In general, your immediate manager / supervisor - Encourages you to participate and provides help and support	NQ61b - Does your manager help and support you?
q59. Is your immediate boss a man or a woman?	Q62 - Is your immediate boss a man or a woman?
nq76. On the whole, are you very satisfied, satisfied, not very satisfied, or not at all satisfied with the working conditions in your main paid job?	NQ88 - On the whole, are you very satisfied, satisfied, not very satisfied, or not at all satisfied with the working conditions in your main paid job?

measured by dummy variables. The size of the business is considered since working in a small or large company can influence job satisfaction. In this context, workplace size is represented by a categorical variable with four categories: 1 worker, 2 to 9 workers, 10 to 249 workers, and 250 or more workers.

To achieve the objectives of this research, two types of analyses were conducted. First, a test of differences between means (*t*-test) by boss gender (Table 3) and combined boss gender and employees' gender (Table 4) was carried out for each leadership behavior. The independent samples *t*-test was used to compare the means of the two rounds and to verify whether their results were significantly different from each other.

Second, as Table 2 shows, the item scales are both ordinal and continuous, so ordinary least squares (OLS) regressions were carried out to analyze the predictive power of the leadership behaviors under study over job satisfaction, estimating the following equation:

$$JS_{ijk} = \alpha + \boldsymbol{\beta}_0' \boldsymbol{I}_i + \boldsymbol{\beta}_1' \boldsymbol{CD}_{ij} + \boldsymbol{\beta}_2' \boldsymbol{OC}_j + \boldsymbol{\beta}_3' \boldsymbol{L}_k + \gamma_k + \varepsilon_{ijk} \quad (1)$$

where i denotes the individual in job j in country k and γ_k are country dummies. Countries differ on many dimensions that may affect job satisfaction. The country-specific constants absorb the impact of these potentially important omitted variables.

Equation 1 can be estimated using ordinary least squares (OLS) or, given the ordinal nature of the dependent variable, using either ordered probit or logit models. Previous studies using both approaches have found no qualitative differences between the results of the two approaches (see, e.g., Angrist & Pischke, 2009). Accordingly, the present study carried out OLS analyses because their coefficients can be readily interpreted as partial marginal effects (i.e., each coefficient represents the expected change in the dependent variable associated with a one-unit change in the corresponding independent variable, holding the other variables constant).

Table 2
Summary statistics

	5th round		6th round	
	Mean	**SD**	**Mean**	**SD**
Job satisfaction (1=not at all satisfied to 4=very satisfied)	3.06	0.69	3.08	0.69
Boss gender				
(male=1; female=2)	0.71	0.45	0.66	0.47
Individual characteristics (I)				
Gender (reference group: female = 0; male = 1)	0.55	0.50	0.51	0.5
Age (years old)	40.83	12.08	42.72	12.44
Age squared	1,813.17	1,014.21	1,886.71	1,016.28
Educational level completed (reference group: no education=0; Primary=2 to Advanced tertiary=9)				
Early school/no education	0.01	0.07	0.01	0,08
Primary	0.04	0.20	0.03	0,18
Lower secondary	0.27	0.44	0.15	0.35
Upper secondary	0.35	0.48	0.41	0.49
Post-secondary	0.05	0.22	0.09	0.28
Early tertiary	0.27	0.44	0.21	0.40
Advanced tertiary	0.01	0.12	0.11	0.31
Contract conditions (CC)				
Salary change (0-2)				
Decreased	0.16	0.36	0.13	0.35
No change	0.56	0.50	0.30	0.47
Increased	0.26	0.44	0.59	0.49
Contract duration (unlimited duration=1)				
Unlimited duration	0.65	0.48	0.77	0.42
Limited duration	0.10	0.30	0.13	0.34
Temporary employment agency	0.01	0.10	0.01	0.12
Apprenticeship	0.01	0.09	0.01	0.11
No contract	0.04	0.19	0.06	0.23
Other	0.01	0.10	0.01	0.11
Business size (BS) (1=1; 2=2 to 9; 3=10 to 249; 4=over 250)				
Self-employed	0.11	0.31	0.11	0.31
From 2 to 9 employees	0.29	0.46	0.23	0.42
From 10 to 249 employees	0.44	0.50	0.35	0.48
More than 250 employees	0.12	0.32	0.31	0.46
Leadership (L)				
Relationship oriented				
Boss's respect for employees: "*Your boss respects you as a person*" (0= no; 1=yes)	0.95	0.22	0.89	0.31
Personal support: "*Your boss helps and supports you*" (1= strongly disagree to 5 = strongly agree)	3.49	1.42	3.62	1.22
Instrumentally oriented				
Feedback: "*Your boss provides useful feedback on your work*" (0=no; 1=yes)	0.75	0.43	0.70	0.46
Participation: "*You are consulted before objectives are set for your work*" (1= never to 5 = always)	4.02	0.75	3.13	1.45
Time control: "*You can take a break whenever you want*" (1= never to 5 = always)	3.23	1.46	3.24	1.41
Involvement: "*You are involved in improving the work organization or processes*" (1= never to 5 = always)	2.74	1.87	3.28	1.45
Influence: "*You can influence decisions that are important for your work*" (1= never to 5 = always)	3.06	1.38	3.29	1.34

Table 3
Mean differences by boss gender

	By boss gender (a)									
	5th round					6th round				
	M_1 women as bosses	M_2 men as bosses	M_1 - M_2	t-stat		M_1 women as bosses	M_2 men as bosses	M_1 - M_2	t-stat	
Relationships oriented										
Boss' respect for employees	0.950	0.950	0.000	-0.174		0.902	0.891	0.011	2.924	***
	(0.216)	(0.215)	(0.300)	(0.862)		(0.297)	(0.311)	(0.004)	(0.000)	
Personal support	3.625	3.535	0.090	5.156	***	3.724	3.599	0.126	8.594	***
	(-1.334)	(-1.306)	(0.017)	(0.000)		(1.214)	(1.429)	(0.015)	(0.000)	
Instrumentally oriented										
Feedback	0.780	0.750	0.026	4.653	***	0.737	0.689	0.048	8.847	***
	(0.416)	(0.432)	(0.006)	(0.000)		(0.441)	(0.463)	(0.005)	(0.000)	
Participation	2.983	2.913	0.070	3.215	**	3.088	3.039	0.048	2.783	***
	(-1.667)	(-1.606)	(0.022)	(0.001)		(1.430)	(1.416)	(0.017)	(0.000)	
Time control	2.879	3.079	-0.200	-10.469	***	2.987	3.137	-0.149	-8.860	***
	(1.469)	(1.418)	(0.019)	(0.000)		(1.312)	(1.412)	(0.016)	(0.203)	
Involvement	2.983	2.917	0.065	3.214	**	3.180	3.100	0.075	4.342	***
	(-1.581)	(-1.530)	(0.020)	(0.001)		(1.412)	(1.412)	(0.017)	(0.303)	
Influence	2.834	2.796	0.038	2.230	**	3.087	3.084	0.003	0.209	
	(1.287)	(1.293)	(0.017)	(0.026)		(1.275)	(1.287)	(0.015)	(0.000)	

Note: standard errors in parentheses; ** p< .05; *** p< .001 in all tables.

4 Results

To analyze gender differences, several subsamples were compared. First, data from the fifth and sixth waves were examined, focusing on employees managed by male or female leaders. The analyses conducted can be found in Appendices B, C, D, and E – Supplementary Data – SPSS code and results).

As Table 3 shows, significant differences in favor of female leaders were found in all leadership behaviors in the fifth (Time 1) and sixth (Time 2) waves, except for *time control* in both periods, where men obtained a higher score than women, and *influence* in the sixth wave. Based on these results, hypothesis H1a can be partially accepted, since female leaders not only show relationship-oriented behaviors, but also instrumental-oriented ones, except for *time control*.

Significant differences between female and male leaders increased from 2010 to 2015 for *feedback* and *personal support*. However, significant differences decreased in the case of *participation, time control,* and *influence*, which were not significant at Time 2. Specifically, gender differences in relationship-oriented behaviors increased between Time 1 and Time 2, while there was no clear pattern for instrumental-oriented behaviors. Based on these data, hypothesis H1b must be partially rejected, indicating that differences between male and female leaders' relationship-oriented behaviors increased from Time 1 to Time 2. Furthermore, *participation*, *time control*, and *influence* reduced their differences between male and female leaders, although only *influence* lost its significance from Time 1 to Time 2.

Table 4 presents the comparison focusing on observations where the leader was male, comparing the subsamples of female employees versus male employees at Time 1 and Time 2. Similarly, it compares the subsamples of female employees versus male employees at Time 1 and Time 2 in cases where the leader was female.

When the results are analyzed by gender (i.e., congruence or not between leader and employee), some differences arise. In general, there are significant differences among these four categories for most leadership behaviors between Time 1 and Time 2. With regard to relationship-oriented behaviors, *personal support* maintains its differences for female employees, who perceive more personal support from their leaders independently of their gender. At Time 1, male employees perceived more instrumental-oriented behaviors, regardless of their leader's gender. However, these differences diminished by Time 2. As shown in Table 4, at Time 1, when the leader is

Table 4
Mean differences by boss and employees' gender

	Boss is a man (b)										Boss is a woman (c)									
	5th round					6th round					5th round					6th round				
	M_1 women as employees	M_2 men as employees	M_1 - M_2	t-stat		M_1 women as employees	M_2 men as employees	M_1 - M_2	t-stat		M_1 women as employees	M_2 men as employees	M_1 - M_2	t-stat		M_1 women as employees	M_2 men as employees	M_1 - M_2	t-stat	
Relationships oriented																				
Boss' respect for employees	0.952	0.950	0.002	0.761		0.898	0.888	0.010	2.202	***	0.955	0.950	0.005	0.855		0.900	0.907	-0.007	-1.059	
	(0.212)	(0.217)	(0.003)	(0.447)		(0.303)	(0.316)	(0.004)	(0.000)		(0.214)	(0.224)	(0.006)	(0.392)		(0.299)	(0.290)	(0.007)	(0.037)	
Personal support	3.570	3.516	0.054	2.767	**	3.724	3.591	0.020	1.119	***	3.639	3.577	0.061	1.708	*	3.740	3.673	0.067	2.412	**
	(-1.316)	(-1.301)	(0.019)	(0.006)		(1.237)	(1.200)	(0.018)	(0.000)		(-1.327)	(-1.356)	(0.036)	(0.088)		(1.188)	(1.209)	(0.028)	(0.016)	
Instrumentally oriented																				
Feedback	0.730	0.760	-0.033	-5.076	***	0.694	0.686	0.008	1.235		0.780	0.781	-0.001	-0.070		0.743	0.715	0.028	2.712	***
	(0.444)	(0.425)	(0.007)	(0.000)		(0.461)	(0.464)	(0.007)	(0.013)		(0.416)	(0.416)	(0.011)	(0.944)		(0.437)	(0.452)	(0.010)	(0.000)	
Participation	2.813	2.966	-0.153	-6.343	***	2.989	3.069	-0.079	-3.782	***	2.911	3.231	0.319	7.444	***	3.079	3.119	-0.041	-1.209	
	(1.653)	(1.578)	(0.024)	(0.000)		(1.451)	(1.395)	(0.021)	(0.000)		(1.684)	(1.583)	(0.043)	(0.000)		(1.430)	(1.429)	(0.034)	(0.227)	
Time control	2.996	3.123	-0.128	-6.098	***	3.060	3.183	-0.123	-6.039	***	2.794	3.171	-0.377	-9.668	***	2.899	3.279	-0.380	-11.639	***
	(1.437)	(1.407)	(0.021)	(0.000)		(1.320)	(1.211)	(0.020)	(0.022)		(1.456)	(1.480)	(0.039)	(0.000)		(1.284)	(1.410)	(0.033)	(0.000)	
Involvement	2.863	2.946	-0.082	-3.592	***	3.090	3.110	-0.024	-1.154		2.917	3.211	-0.294	-7.150	***	3.140	3.300	-0.158	-4.77	***
	(-1.568)	(-1.509)	(0.023)	(0.000)		(1.430)	(1.401)	(0.021)	(0.022)		(1.590)	(1.526)	(0.041)	(0.000)		(1.414)	(1.399)	(0.033)	(0.000)	
Influence	2.742	2.824	-0.082	-4.295	***	3.044	3.108	-0.064	-3.392	**	2.780	3.020	-0.240	-6.755	***	3.054	3.197	-0.143	-4.813	***
	(1.295)	(1.291)	(0.019)	(0.000)		(1.307)	(1.274)	(0.019)	(0.032)		(1.265)	(1.346)	(0.036)	(0.000)		(1.278)	(1.261)	(0.030)	(0.000)	

male, male employees obtain significant higher mean scores compared to female employees (e.g., *participation*). At Time 2, when the leader is male, the mean differences between male and female employees for *feedback* and *involvement* are not significant. In the case of female leaders, at Time 1, all instrumental-oriented behaviors except *feedback* score higher when the employee is a male (e.g., *participation* and *time control*). However, at Time 2, the mean differences for *feedback* are higher for female employees and the difference for *participation* disappears.

Over time, there has been a reduction in employees' perceptions of instrumental behaviors when the leader is male, while the trend is less clear when the leader is female. Of particular interest is the shift in perceptions regarding *feedback* experiences. Initially, male employees perceived more feedback when led by a male leader, but by Time 2, the means were not significantly different. Conversely, with female leaders, there was no difference in means at Time 1, but by Time 2, female employees perceived significantly more feedback. Based on these observations, hypothesis H3 regarding gender congruence and the differential assessment of leadership behaviors is not supported.

To analyze the relationships between gender, control variables, leadership behaviors, and job satisfaction, two regression analyses were carried out, one for each time (Tables 5 to 8). The main objective was to test the relationships of these differences with employee job satisfaction and how these relationships have evolved over time.

Table 5 presents the analyses of leadership behaviors and job satisfaction as a whole. Models (a) and (b) include control variables (i.e., gender, age, etc.) at Time 1 and Time 2. As mentioned, these control variables (age, business size, education) are included in our analyses because they are widely recognized in the previous literature as significant factors in explaining job satisfaction (e.g., Clark, 1996; Clark & Oswald, 1996; Oswald, 2002; Mumford & Smith, 2014; De Neve & Ward, 2017; Wright & Cropanzano, 2004). Specifically, age has a curvilinear relationship with job satisfaction, with younger and older employees being the least satisfied. At Time 2 and in companies with more than 250 employees, female employees led by male leaders (Table 7, model k) are significantly less satisfied with their jobs. With regard to education (Table 5, model (a)), the advanced tertiary level was negatively related to job satisfaction at Time 1, whereas it was positively related at Time 2. Contract duration also showed differences. At Time 2, workers with unlimited duration contracts reported lower job satisfaction regardless of the gender of the manager (Table 6, models (f) and (h)). The situation was similar in the case of limited duration contracts and apprentices. However, employees with temporary employment agency contracts showed higher levels of job satisfaction. It can also be noted that the negative impact of a salary reduction on job satisfaction is much higher than the positive impact of an increase.

Models (c) and (d) show the results after including the leadership variables (Table 5). Leadership behaviors increase the variance explained in job satisfaction from 8.6% to 20.7% at Time 1 and from 5% to 23.3% at Time 2. Specifically, the findings show a positive and significant relationship between job satisfaction and all of these variables except *feedback* at Time 1 and *involvement* at Time 2. These results point to a positive relationship between the leadership behaviors under study, particularly the relationship-oriented ones, and employee job satisfaction.

Table 6 presents the results analyzed by gender congruence between leaders and employees. Models (e) and (f) show the estimations for male leaders at Time 1 (2010) and Time 2 (2015). Similarly, models (g) and (h) show the data for female leaders. In all of these models, age and gender are related to job satisfaction in the same way as in the results above (e.g., *age squared*). Unexpectedly, although a *salary increase* has a positive impact on both male and female employees when the leader is male, it has no significant impact when the leader is female at either time.

At Time 2, regardless of the leader's gender, all of the leadership behaviors analyzed have significant positive relationships with job satisfaction. Based on these data, hypothesis H2 can be accepted.

Tables 7 and 8 show the results by leader and employees' gender. In line with the results above, over time, the relationships between leadership behaviors and job satisfaction are similar for all categories of leader and employees' gender. Nevertheless, it is worth mentioning the differences between *contract duration* and job satisfaction at Time 2 between male leaders and female employees and female leaders and female employees. An *unlimited duration contract* does not have a significant relationship when the leader is male and the employee is female, whereas when both are female, the relationship is significant and negative. At Time 2, for *limited duration*, *temporary employment agency contract*, and *apprenticeship*, the results are similar regardless of gender congruence. The estimates

Table 5
Job satisfaction and leadership

Dependent variable is Job Satisfaction								
Individual characteristics (I)	**(a) 5th control variables**		**(b) 6th control variables**		**(c) 5th control variables and leadership**		**(d) 6th control variables and leadership**	
Gender (reference group: female)	-0.007	***	-0.018	**	-0.037	***	-0.031	***
	(0.007)		(0.008)		(0.008)		(0.008)	
Age	-0.146	***	-0.512	***	-0.271	***	-0.320	***
	(0.002)		(0.002)		(0.002)		(0.002)	
Age squared	0.161	***	0.503	***	0.260	***	0.301	***
	(0.000)		(0.000)		(0.000)		(0.000)	
Educational level completed								
Primary	0.022	**	0.044	***	0.026	**	0.027	**
	(0.048)		(0.056)		(0.058)		(0.059)	
Lower secondary	0.026		0.113	***	0.004		0.045	
	(0.039)		(0.052)		(0.048)		(0.056)	
Upper secondary	-0.025	*	0.174	***	-0.019		0.059	
	(0.042)		(0.052)		(0.051)		(0.055)	
Post-secondary	-0.058	**	0.093	***	-0.052		0.029	
	(0.039)		(0.053)		(0.048)		(0.056)	
Early tertiary	-0.070	**	0.196	***	-0.020		0.080	**
	(0.039)		(0.052)		(0.048)		(0.055)	
Advanced tertiary	-0.071	***	0.153	***	-0.030	**	0.052	**
	(0.043)		(0.053)		(0.053)		(0.056)	
Contract conditions (CC)								
Salary change								
Decreased	-0.114	***	-0.087	***	-0.073	***	-0.060	***
	(0.011)		(0.014)		(0.013)		(0.013)	
Increased	0.045	***	0.059	***	0.020	**	0.023	***
	(0.009)		(0.009)		(0.009)		(0.009)	
Contract duration								
Unlimited duration	-0.080	***	-0.049	***	-0.005		-0.021	***
	(0.011)		(0.013)		(0.030)		(0.012)	
Limited duration	-0.080	***	-0.052	***	-0.021		-0.027	***
	(0.015)		(0.036)		(0.032)		(0.035)	
Temporary employment agency	-0.031	***	0.020	**	-0.005		0.024	***
	(0.036)		(0.039)		(0.044)		(0.036)	
Apprenticeship	-0.040	***	-0.071	***	-0.019	**	-0.034	***
	(0.040)		(0.020)		(0.048)		(0.022)	
No	-0.063	***	-0.018	**	-0.029	**	-0.012	**
	(0.021)		(0.038)		(0.035)		(0.037)	
Business size (BS)								
From 2 to 9 employees	0.029	***	-0.019		-0.001		0.010	
	(0.012)		(0.024)		(0.018)		(0.032)	
From 10 to 249 employees	-0.035	***	-0.095	***	-0.029	**	-0.002	
	(0.013)		(0.024)		(0.017)		(0.032)	
More than 250 employees	-0.041	***	-0.096	***	-0.037	***	0.004	
	(0.016)		(0.025)		(0.020)		(0.032)	
Leadership (L)								
Relationships oriented								
Boss' respect for employees					0.174	***	0.138	***
					(0.018)		(0.014)	
Personal support					0.160	***	0.162	***
					(0.003)		(0.004)	

Table 5
Continued...

Dependent variable is Job Satisfaction								
Individual characteristics (I)	**(a) 5th control variables**		**(b) 6th control variables**		**(c) 5th control variables and leadership**		**(d) 6th control variables and leadership**	
Instrumentally oriented								
Feedback					0.001		0.093	***
					(0.010)		(0.010)	
Participation					0.045	***	0.098	***
					(0.003)		(0.003)	
Time control					0.088	***	0.063	***
					(0.003)		(0.003)	
Involvement					0.036	***	0.052	
					(0.003)		(0.003)	
Influence					0.097	***	0.102	***
					(0.004)		(0.004)	
F	73.794		36.889		128.692		151.057	
(p-value)	0.000		0.000		0.000		0.000	
Adjusted R-squared	0.086		0.052		0.207		0.233	
Number of observations	34,909		28,526		25,967		25,210	
Country Controls	Yes		Yes		Yes		Yes	

Table 6
Job satisfaction and leadership by boss gender

Dependent variable is Job Satisfaction								
Individual characteristics (I)	**(e) 5th male boss**		**(f) 6th male boss**		**(g) 5th female boss**		**(h) 6th 2016 female boss**	
Gender (reference group: female)	-0.026	***	-0.031	***	-0.019	*	-0.030	**
	(0.009)		(0.010)		(0.017)		(0,016)	
Age	-0.272	***	-0.251	***	-0.296	***	-0.458	***
	(0.003)		(0.003)		(0.004)		(0.004)	
Age squared	0.262	***	0.230	***	0.280	***	0.444	***
	(0.000)		(0.000)		(0.000)		(0.000)	
Educational level completed								
Primary	0.022	**	0.025		-0.016		0.032	
	(0.068)		(0.066)		(0.105)		(0.128)	
Lower secondary	-0.034		0.023		0.117	*	0.096	
	(0.056)		(0.062)		(0.094)		(0.121)	
Upper secondary	-0.038	**	0.027		0.080		0.128	
	(0.059)		(0.062)		(0.094)		(0.120)	
Post-secondary	-0.101	**	0.025		0.041		0.045	
	(0.056)		(0.063)		(0.098)		(0.121)	
Early tertiary	-0.062		0.069	*	0.123	*	0.112	
	(0.057)		(0.062)		(0.094)		(0.120)	
Advanced tertiary	-0.040	**	0.046		0.033	*	0.075	
	(0.061)		(0.063)		(0.110)		(0.121)	

Table 6
Continued...

Dependent variable is Job Satisfaction								
Individual characteristics (I)	**(e) 5th male boss**		**(f) 6th male boss**		**(g) 5th female boss**		**(h) 6th 2016 female boss**	
Contract conditions (CC)								
Salary change								
Decreased	-0.072	***	-0.060	***	-0.072	***	-0.058	***
	(0.015)		(0.016)		(0.025)		(0.023)	
Increased	0.025	***	0.023	**	0.004		0.016	
	(0.011)		(0.010)		(0.017)		(0.015)	
Contract duration								
Unlimited duration	-0.005		-0.021	**	-0.025		-0.020	**
	(0.036)		(0.015)		(0.057)		(0.021)	
Limited duration	-0.013		-0.027	***	-0.051	*	-0.029	**
	(0.038)		(0.042)		(0.060)		(0.063)	
Temporary employment agency contract	-0.009		0.022	**	-0.004		0.028	**
	(0.054)		(0.048)		(0.080)		(0.057)	
Apprenticeship	-0.024	**	-0.029	***	-0.015		-0.041	***
	(0.057)		(0.027)		(0.088)		(0.040)	
No contract	-0.047	***	-0.008		0.004		-0.022	**
	(0.041)		(0.045)		(0.067)		(0.065)	
Business size (BS)								
From 2 to 9 employees	0.023		-0.012		0.000		0.038	
	(0.022)		(0.050)		(0.032)		(0.045)	
From 10 to 249 employees	-0.004		-0.023		-0.013		0.019	
	(0.022)		(0.050)		(0.031)		(0.044)	
More than 250 employees	-0.010		-0.013		-0.057	**	0.017	
	(0.024)		(0.050)		(0.036)		(0.045)	
Leadership (L)								
Relationships oriented								
Boss' respect for employees	0.192	***	0.156	***	0.150	***	0.102	***
	(0.021)		(0.016)		(0.035)		(0.025)	
Personal support	0.174	***	0.158	***	0.155	***	0.168	***
	(0.004)		(0.005)		(0.006)		(0.007)	
Instrumentally oriented								
Feedback	0.011		0.092	***	-0.015		0.096	***
	(0.011)		(0.011)		(0.019)		(0.018)	
Participation	0.047	***	0.102	***	0.041	**	0.091	***
	(0.004)		(0.004)		(0.005)		(0.006)	
Time control	0.079	***	0.065	***	0.106	***	0.054	***
	(0.003)		(0.004)		(0.005)		(0.005)	
Involvement	0.032		0.029	***	0.043	**	0.037	***
	(0.004)		(0.003)		(0.006)		(0.006)	
Influence	0.095	***	0.105	***	0.086	***	0.095	***
	(0.004)		(0.004)		(0.007)		(0.006)	
F	97.228		110.558		36.856		43.509	
(p-value)	0.000		0.000		0.000		0.000	
Adjusted R-squared	0.217		0.250		0.206		0.204	
Number of observations	18,360		16,766		7,347		8,477	
Country Controls	Yes		Yes		Yes		Yes	

Table 7
Job satisfaction and leadership by boss and employees' gender (I)

	Dependent variable is Job Satisfaction							
Individual characteristics (I)	**(i) 5th male boss, male employees**		**(j) 6th male boss, male employees**		**(k) 5th male boss, female employees**		**(l) 6th male boss, female employees**	
Age	-0.355	***	-0.327	***	-0.115		-0.132	*
	(0.003)		(0.003)		(0.005)		(0.005)	
Age squared	0.332	***	0.293	***	0.125		0.127	*
	(0.000)		(0.000)		(0.000)		(0.000)	
Educational level completed								
Primary	-0.045	**	0.030		-0.028		0.020	
	(0.069)		(0.082)		(0.126)		(0.115)	
Lower secondary	-0.085	*	0.005		-0.017		0.073	
	(0.064)		(0.077)		(0.118)		(0.106)	
Upper secondary	-0.101	**	0.027		-0.100		0.050	
	(0.064)		(0.077)		(0.117)		(0.105)	
Post-secondary	-0.033		0.013		-0.048		0.055	
	(0.068)		(0.078)		(0.121)		(0.107)	
Early tertiary	-0.029		0.070		-0.039		0.085	
	(0.064)		(0.077)		(0.117)		(0.105)	
Advanced tertiary	0.039	**	0.049		-0.013		0.053	
	(0.079)		(0.079)		(0.139)		(0.107)	
Contract conditions (CC)								
Salary change								
Decreased	-0.076	***	-0.047	***	-0.063	***	-0.080	***
	(0.018)		(0.021)		(0.026)		(0.027)	
Increased	0.031	***	0.031	**	0.015		0.006	
	(0.013)		(0.013)		(0.018)		(0.018)	
Contract duration								
Unlimited duration	-0.048	*	-0.037	***	0.065	*	0.005	
	(0.045)		(0.019)		(0.059)		(0.024)	
Limited duration	-0.059	**	-0.029	**	0.061	**	-0.022	**
	(0.048)		(0.050)		(0.062)		(0.076)	
Temporary employment agency	-0.014		0.019	**	-0.005		0.030	**
	(0.066)		(0.055)		(0.093)		(0.093)	
Apprenticeship	-0.015		-0.021	**	-0.030	**	-0.040	**
	(0.073)		(0.033)		(0.091)		(0.046)	
No contract	-0.065	***	-0.003		-0.019		-0.017	
	(0.052)		(0.063)		(0.068)		(0.065)	
Business size (BS)								
From 2 to 9 employees	0.019		0.045		0.031		-0.038	
	(0.028)		(0.083)		(0.037)		(0.065)	
From 10 to 249 employees	-0.006		0.053		0.004		-0.054	
	(0.027)		(0.082)		(0.036)		(0.065)	
More than 250 employees	-0.010		0.079		-0.009		-0.074	*
	(0.030)		(0.083)		(0.041)		(0.065)	
Leadership (L)								
Relationships oriented								
Boss' respect for employees	0.193	***	0.161	***	0.191	***	0.150	***
	(0.026)		(0.020)		(0.038)		(0.028)	
Personal support	0.168	***	0.147	***	0.187	***	0.180	***
	(0.005)		(0.006)		(0.007)		(0.008)	

Note. All values are standardized regression coefficients; standard errors in parentheses; * p< .1; ** p< .05; *** p< .001.

Table 7
Continued...

Dependent variable is Job Satisfaction								
Individual characteristics (I)	**(i) 5th male boss, male employees**		**(j) 6th male boss, male employees**		**(k) 5th male boss, female employees**		**(l) 6th male boss, female employees**	
Instrumentally oriented								
Feedback	0.014		0.097	***	0.006		0.079	***
	(0.014)		(0.014)		(0.019)		(0.020)	
Participation	0.049	***	0.108	***	0.048	**	0.091	***
	(0.004)		(0.005)		(0.006)		(0.007)	
Time control	0.074	***	0.058	***	0.081	***	0.070	***
	(0.004)		(0.005)		(0.006)		(0.006)	
Involvement	0.043	***	0.036	***	0.013		0.010	
	(0.005)		(0.005)		(0.007)		(0.007)	
Influence	0.093		0.110	***	0.099	***	0.098	***
	(0.005)		(0.006)		(0.007)		(0.008)	
F	69.099		71.841		33.026		43.315	
(p-value)	0.000		0.000		0.000		0.000	
Adjusted R-squared	0.229		0.250		0.206		0.258	
Number of observations	11,956		10,641		6,404		6,091	
Country Controls	Yes		Yes		Yes		Yes	

Note. All values are standardized regression coefficients; standard errors in parentheses; * p< .1; ** p< .05; *** p< .001.

Table 8
Job satisfaction and leadership by boss and employees' gender (II)

Dependent variable is Job Satisfaction								
Individual characteristics (I)	**(m) 5th female boss, male employees**		**(n) 6th female boss, male employees**		**(o) 5th female boss, female employees**		**(p) 6th female boss, female employees**	
Age	-0.058		-0.697	***	-0.353	***	-0.344	***
	(0.008)		(0.008)		(0.005)		(0.005)	
Age squared	0.125		0.691	***	0.308	***	0.332	***
	(0.000)		(0.000)		(0.000)		(0.000)	
Educational level completed								
Primary	-0.033		-0.014		-0.014		0.050	
	(0.264)		(0.277)		(0.116)		(0.145)	
Lower secondary	0.203		0.094		0.106		0.100	
	(0.219)		(0.253)		(0.104)		(0.138)	
Upper secondary	0.178		0.158		0.068		0.127	
	(0.218)		(0.251)		(0.104)		(0.137)	
Post-secondary	0.085		-0.004		0.031		0.066	
	(0.230)		(0.252)		(0.108)		(0.138)	
Early tertiary	0.216		0.113		0.108		0.121	
	(0.218)		(0.250)		(0.104)		(0.137)	
Advanced tertiary	0.051		0.090		0.037		0.076	
	(0.237)		(0.252)		(0.127)		(0.139)	
Contract conditions (CC)								
Salary change								
Decreased	-0.065	**	-0.026		-0.077	***	-0.068	***
	(0.052)		(0.051)		(0.028)		(0.026)	
Increased	-0.001		0.058	**	0.008		0.002	
	(0.036)		(0.033)		(0.019)		(0.017)	

Note. All values are standardized regression coefficients; standard errors in parentheses; * p< .1; ** p< .05; *** p< .001.

Table 8
Continued...

Dependent variable is Job Satisfaction								
Individual characteristics (I)	**(m) 5th female boss, male employees**		**(n) 6th female boss, male employees**		**(o) 5th female boss, female employees**		**(p) 6th female boss, female employees**	
Contract duration								
Unlimited duration	-0.196	**	0.027		0.032		-0.034	**
	(0.137)		(0.045)		(0.063)		(0.023)	
Limited duration	-0.172	**	-0.031		-0.012		-0.025	**
	(0.144)		(0.146)		(0.066)		(0.070)	
Temporary employment agency	-0.072	*	0.038	*	0.013		0.023	*
	(0.165)		(0.104)		(0.095)		(0.069)	
Apprenticeship	-0.066	**	-0.031		-0.002		-0.049	***
	(0.185)		(0.084)		(0.101)		(0.046)	
No contract	-0.064		-0.011		0.025		-0.027	**
	(0.157)		(0.194)		(0.074)		(0.069)	
Business size (BS)								
From 2 to 9 employees	0.137	**	-0.057		-0.025		0.061	**
	(0.081)		(0.135)		(0.035)		(0.048)	
From 10 to 249 employees	0.081		-0.026		-0.026		0.020	
	(0.078)		(0.132)		(0.034)		(0.048)	
More than 250 employees	-0.031		-0.010		-0.049		0.014	
	(0.084)		(0.132)		(0.040)		(0.048)	
Leadership (L)								
Relationships oriented								
Boss' respect for employees	0.171	***	0.128	***	0.140	***	0.089	***
	(0.073)		(0.055)		(0.040)		(0.029)	
Personal support	0.122	***	0.200	***	0.162	***	0.157	***
	(0.013)		(0.015)		(0.007)		(0.008)	
Instrumentally oriented								
Feedback	0.046	*	0.066	**	-0.033	*	0.109	***
	(0.041)		(0.036)		(0.021)		(0.020)	
Participation	0.106	***	0.055	**	0.027	*	0.099	***
	(0.012)		(0.013)		(0.006)		(0.006)	
Time control	0.109	***	0.011		0.101	***	0.068	***
	(0.011)		(0.011)		(0.006)		(0.006)	
Involvement	0.030		0.024		0.049	**	0.042	**
	(0.015)		(0.015)		(0.007)		(0.007)	
Influence	0.040		0.130	***	0.095	***	0.083	***
	(0.015)		(0.015)		(0.008)		(0.007)	
F	9.12		13.453		30.538		32.782	
(p-value)								
Adjusted R-squared	0.204		0.236		0.212		0.197	
Number of observations	1,649		2,018		5,698		6,459	
Country Controls	Yes		Yes		Yes		Yes	

Note. All values are standardized regression coefficients; standard errors in parentheses; * p< .1; ** p< .05; *** p< .001.

of relationship-oriented behaviors are similarly related to job satisfaction regardless of gender congruence and time. The only differences found are related to *involvement* at both times: when the leader is male and the employees are female, this leadership behavior does not have a significant relationship with job satisfaction. When the leader is female and the employees are male, *involvement* at both times does not have a significant relationship with job satisfaction. In addition, when the leader is female and the employees are male, *time control* at Time 2 does

not have a significant relationship with job satisfaction, unlike the other combinations.

The amount of variance explained of job satisfaction by the four combinations is similar, accounting for around 20%. This value varies from the highest when the leader is male and the employees are female at Time 2 (25.8%) to the lowest when both the leader and the employees are female at Time 2 (19.7%). Based on these results, hypotheses H4a and H4b should be rejected.

5 Discussion

As women are still underrepresented in leadership positions, the main aim of this study was threefold: to compare the changes between the fifth (Time 1) and sixth (Time 2) European Working Conditions Surveys in (1) gender differences and their relationships with leadership behaviors, and (2) to determine whether gender congruence relates to employee job satisfaction. In addition, (3) the relationships between gender, age, salary, and type of contract were described. An important value of this study is that it is longitudinal and comprises a very large and random sample from the European Union. As far as we know, this type of work has never been undertaken.

With regard to the first objective, the results underscore that employees perceived female managers as more versatile in their leadership behaviors than their male counterparts. Female leaders showed not only relationship-oriented but also instrumental-oriented behaviors, with the exception of time control. This result is consistent with the study conducted by Zenger and Folkman (2020), in which women outperformed their male counterparts in 13 out of 16 leadership dimensions, both instrumental (e.g., strives for results, makes decisions) and relationship-oriented (e.g., builds relationships, collaboration and teamwork).

In addition, the differences between relationship-oriented behaviors and gender increased over time, only decreasing for two instrumental behaviors (participation and time control). This finding may be of potential interest as it suggests that the focus may not necessarily need to be on the convergence of both leadership styles (Hughes & Seta, 2003), but rather on the notion that each gender can maintain its own distinctiveness and still be effective.

From a gender congruence perspective, the results also showed that female employees perceived their leaders, both male and female, as engaging in more relationship-oriented behaviors, whereas male employees perceived female leaders as engaging in more instrumental-oriented ones. This result may indicate that employees expect leadership behaviors that are consistent with the stereotype associated with the gender of their leaders. Similarly, when the leader is a man, the differences between male and female employees in some instrumental-oriented behaviors (e.g., involvement) decreased from Time 1 to Time 2. These changes could be explained in light of the intergroup contact theory (Pettigrew et al., 2011), which confirms that intergroup contact reduces gender prejudice by reducing anxiety and increasing empathy. Thus, female leaders appear to be beginning to overcome some of the limitations imposed on their role by being perceived as able to engage in instrumental-oriented leadership behaviors.

Regarding the second objective, in general, leadership behaviors were positively related to job satisfaction. For example, feedback was more relevant at Time 2, and as feedback is considered as a key job characteristic with motivational power (Hackman, 2006), this result could indicate that feedback might take some time to be recognized as useful information for improving job satisfaction. These results also point to the positive relationships between most (6 out of 7) of the leadership behaviors under study and employee job satisfaction at Time 1 and Time 2, which contribute to explaining 12.1% at Time 1 and 18.1% at Time 2 of this positive job attitude.

With regard to the sociodemographic characteristics, these results confirmed that age has a curvilinear relationship with job satisfaction (Oswald, 2002). Another important finding worth mentioning is the high negative impact of a salary reduction on job satisfaction, as the conservation of resources theory (Hobfoll et al., 2018) states.

Like any other research paper, the present paper is limited by the cross-sectional and correlational nature of the data, which prevents the estimation of causal effects. Moreover, although we were able to control for a wide range of variables, mitigating concerns of omitted variable bias, a methodological concern was the potential endogeneity between job satisfaction and the independent variables.

Even though the present study compared data from two different years, additional research on gender and leadership would benefit from the use of panel data, but these surveys do not allow for this kind of longitudinal study. Future studies should continue this one in order to determine to what extent gender congruence is still a relevant condition when studying leadership, since

recent studies report that gender congruence can be exacerbated for women leaders after leadership training interventions (Fjendbo et al., 2022). As mentioned, the data are sourced from the fifth and sixth rounds of the EWCS. Eurofound has announced that the initial results and data from the most recent EWCS will be accessible in 2025. Future research should include a comparative analysis incorporating this new dataset.

Our findings indicate that gender stereotypes continue to influence employees' perceptions of their leaders' behaviors. Interestingly, female leaders are perceived as more versatile and capable of excelling. Consequently, from an applied standpoint, organizations should strive to increase the representation of female leaders, as they demonstrate proficiency across a broader spectrum of leadership behaviors. Furthermore, our analysis reveals that these behaviors are positively correlated with job satisfaction, irrespective of the leader's gender.

6 Conclusion

Even though women are still underrepresented in managerial positions, female leaders demonstrate a more versatile repertoire of leadership behaviors compared to their male counterparts. However, the gender of employees still plays a role in determining which behaviors are more commonly perceived in their male or female leaders. In addition, the majority of leadership behaviors examined show a positive relationship with job satisfaction, irrespective of gender congruence. Consequently, fostering a diverse array of leadership behaviors is important for enhancing employee job satisfaction within organizations. While differences persist in relationship-oriented behaviors, notable similarities are observed in certain instrumental-oriented behaviors.

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Supplementary Material

Appendix A. Dataset.
Appendix B. Descriptive statistics.
Appendix C. Descriptive statistics.
Appendix D. 2015 Regression Results.
Appendix E. 2010 Regression Results.
Supplementary material to this article can be found online at https://doi.org/10.7910/DVN/MPJ13E

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