

## **Examining Gender Effects on Leadership among Future Managers: Comparing Hofstede's Masculine vs. Feminine Countries**

### **Étude des effets du genre sur le leadership chez les managers de demain : une comparaison entre pays masculins et féminins selon Hofstede**

### **Estudio de los efectos del género en el liderazgo de futuros managers: una comparación entre países masculinos y femeninos según Hofstede**

Kais Gannouni and Lovanirina Ramboarison-Lalao

Volume 23, Special Issue, 2019

URI: <https://id.erudit.org/iderudit/1068534ar>

DOI: <https://doi.org/10.7202/1068534ar>

[See table of contents](#)

Publisher(s)

HEC Montréal  
Université Paris Dauphine

ISSN

1206-1697 (print)

1918-9222 (digital)

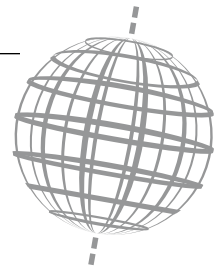
[Explore this journal](#)

Cite this article

Gannouni, K. & Ramboarison-Lalao, L. (2019). Examining Gender Effects on Leadership among Future Managers: Comparing Hofstede's Masculine vs. Feminine Countries. *Management international / International Management / Gestión Internacional*, 23, 42–51. <https://doi.org/10.7202/1068534ar>

Article abstract

This article examines biological gender and gender-role identity effects on self-perceived leadership among 371 future managers, and compares cultural differences linked to Hofstede's masculine versus feminine countries of origin. The results showed no significant differences in leadership between males and females. For males, masculinity and femininity both correlate with leadership. This is not the case for females. In masculine-cultured countries, masculinity is significantly higher for males, and the results showed a significant correlation between masculinity and leadership. Conversely, in feminine-cultured countries, femininity is higher for females, with a significant correlation between femininity and leadership. Implications of our results are discussed.



# Examining Gender Effects on Leadership among Future Managers: Comparing Hofstede's Masculine vs. Feminine Countries\*

## Étude des effets du genre sur le leadership chez les managers de demain : une comparaison entre pays masculins et féminins selon Hofstede

## Estudio de los efectos del género en el liderazgo de futuros managers: una comparación entre países masculinos y femeninos según Hofstede

KAIS GANNOUNI

Faculty of Economics and Business Administration-Imam  
Muhammad Ibn Saud Islamic University (Riyadh – KSA)

LOVANIRINA RAMBOARISON-LALAO

EM Strasbourg Business School of the University of Strasbourg,  
HuMaNiS EA 7308 Research Lab (Strasbourg, France)

### ABSTRACT

This article examines biological gender and gender-role identity effects on self-perceived leadership among 371 future managers, and compares cultural differences linked to Hofstede's masculine versus feminine countries of origin. The results showed no significant differences in leadership between males and females. For males, masculinity and femininity both correlate with leadership. This is not the case for females. In masculine-cultured countries, masculinity is significantly higher for males, and the results showed a significant correlation between masculinity and leadership. Conversely, in feminine-cultured countries, femininity is higher for females, with a significant correlation between femininity and leadership. Implications of our results are discussed.

**Keywords:** Masculinity, femininity, leadership, gender, stereotypes

### RÉSUMÉ

Cet article examine les effets du sexe et du genre sur le leadership, auprès de 371 futurs managers. Il n'y a pas de différence significative de leadership entre les hommes et les femmes. Pour les hommes mais pas pour les femmes, la masculinité et la féminité sont corrélées au leadership. Dans les pays masculins, la masculinité est plus élevée chez les hommes avec une corrélation significative entre la masculinité et le leadership. À l'inverse, dans les pays féminins, la féminité est plus élevée chez les femmes avec une corrélation significative entre féminité et leadership. Les implications des résultats sont discutées.

**Mots-Clés :** Masculinité, féminité, leadership, genre, stéréotypes

### RESUMEN

Este artículo examina el efecto de las diferencias de sexo y de género en el liderazgo autopercebido entre 371 futuros gerentes. Los resultados no revelaron diferencias significativas de liderazgo entre hombres y mujeres. Para los hombres, pero no para las mujeres, la masculinidad y la feminidad se correlacionan con el liderazgo. En los países masculinos, la masculinidad fue significativamente mayor en los hombres y los resultados mostraron una correlación significativa entre la masculinidad y el liderazgo. En los países femeninos, la feminidad fue mayor en las mujeres y se encontró una correlación significativa entre feminidad y liderazgo. Los resultados se discuten.

**Palabras Clave:** Masculinidad, feminidad, liderazgo, género, estereotipos

Women are proportionally better educated than men with regard to the population as a whole, the workforce and postgraduates (OECD, 2015), especially in many western countries, *ceteris paribus*. However, women represent only 4.6% of Fortune 500 CEOs (Catalyst, 2014a), 13.7% of European Union board seats (European Commission, 2012) and 20% of ministers globally (Inter-Parliamentary Union, 2013), knowing that their presence on boards of Fortune 500 companies is assumed to improve corporate performance of these firms (Catalyst, 2007). Dang and Nguyen (2016) have demonstrated that board gender diversity can positively affect a firm's performance in top French SBF-120 companies while Moulin and Point (2012) noted that several determinants (individual, organizational, political, etc.)

account for the proportion of women in French SBF-120 companies which have to comply with the legal constraint of a 40% quota of women on their boards. Several factors can thus explain women limited access to higher decision-making positions linked to the glass ceiling phenomenon (Toué, 2014). Not surprisingly, many studies have addressed the issue of limited presence in elite leadership positions from different angles (see for instance Terjsen and Singh, 2008; Moulin and Point, 2012; Ponchut and Barth, 2012).

For Butler (1990), sex refers to the biological difference in maleness or femaleness while gender is a socially and culturally-constructed and maintained set of masculine versus feminine ideals and standards. While an extensive body of research have focused on the study of the aspect of sex/gender and leadership

\* Manuscrit évalué dans le cadre du dossier spécial faisant suite à la 6<sup>ème</sup> édition de la International Research Meeting in Business and Management; (IRMBAM-2015) tenu les 2-3 juillet à IPAG Business School Nice — France.

(e.g. Patel and Buiting, 2013; Paustian-Underdahl *et al.*, 2002) to explain the limited presence of women in managerial positions, the use of a three-layered approach of "gender construct" is lacking. Our research specifically contributes to fill this gap and examines gender effects on leadership among future managers, through the use of three dimensions:

- Biological gender related to the essentialist approach (sex: Male versus Female),
- Gender role identity related to the constructivist approach (gender role identity: Masculinity versus Femininity)
- Gender culture country (Hofstede Masculine country HMC versus Hofstede feminine country HFC).

Many studies have scrutinized the psychological nature of men and women and the role it plays in their access to top management positions. Some studies indicate that, due to their nature, women are less confident taking financial decisions (e.g. Bengtsson *et al.*, 2005), more risk averse (Byrnes *et al.*, 1999), have less optimistic projections and judgments (Guidice *et al.*, 2009) and are more emotional and impulsive, especially in negative situations (Harshman *et al.*, 1987). Given these characteristics, their leadership style is assumed to be completely different to that of men. Women's leadership style is considered as transformational and people-oriented, while men's leadership style is said to be transactional and business-oriented (Appelbaum, 2003).

However, this essentialist gendered differentiation of leadership styles and effectiveness has been rejected by many theories. In fact, some theories defend a gender-neutral vision of leadership (see Saint-Michel, 2010 for review), while others identify differences between males and females resulting from a more constructivist perspective linked to stereotypes and socialization (Eagly, 1987; Rosener, 1990). Notwithstanding gender-neutral studies which suggest there is no significant gender difference in leadership (e.g. Kolb, 1999; Vecchio, 2002), gender differences in leadership have frequently been attributed to certain cultural stereotypes (Shimanoff *et al.*, 1991; Oakley 2000; Dobbins *et al.*, 1986; Powell, 1993).

According to the Role Congruity Theory (RCT) by Eagly *et al.* (1999, 2002), leadership has long been considered a masculine restrictive domain. As a concept, it is culturally imbued with masculine values, attitudes and behaviors (Schein, 2001). To enter this domain and gain the cultural acceptance of their followers, women are obliged to acquire traditionally masculine agentic qualities such as confidence, aggressiveness, and competitiveness. This poses a real dilemma for women since they also have other qualities they need to comply with. They are expected to be affectionate, agreeable, and sensitive. Stepping outside of their communal qualities towards more agentic qualities creates a mismatch between what they do and what they are culturally expected to do, resulting in rejection. Thus, the failure of women as leaders is not due to psychological differences between women and men, but rather to such stereotypes and the role incongruity they find themselves in.

Women are actually caught in a crossfire. To be effective leaders, they need to show certain masculine qualities, but when they do, they are rejected because they are considered as 'square pegs in a round hole', outside of their traditionally accepted role. Kawakami *et al.* (2000) note, however, that culture is changing with regard to the principle of gender equality and

gender mainstreaming (Cornet, 2001). Women's presence, both in the workplace and in top management positions, is increasing. Moreover, the postmodern fast-changing environment has obliged companies to adopt flatter, more transversal organizations that encourage innovation, creativity and team-working. Responding to a call for more feminine leadership (Powell *et al.*, 2002), leadership styles are shifting from an assertive role to an affectionate and caring one. This has helped to free women from stereotypes, enabling them to be authentic at work rather than inciting them to be someone else. It also means they are better positioned to climb the career ladder toward leadership positions. In this vein, Paustian-Underdahl *et al.* (2014) identified some moderators between gender differences and perceptions of leadership effectiveness, such as type of organization, hierarchical level, and percentage of males.

To enrich the analysis beyond gender stereotypes (e.g. Powell *et al.*, 2002), this paper contributes to the debate by introducing a new country-level gender variable derived from Hofstede's framework (Hofstede, 1980; Moalla, 2016), namely, the gender dimension of the culture of potential managers' country of origin. Some are masculine-oriented countries while others are feminine-oriented countries (Hofstede, 1980, 2001; Taras *et al.*, 2010). In terms of national culture, masculinity is "the extent to which the dominant values in society are masculine, that is assertiveness, the acquisition of money and things" (Hofstede, 1980, p. 46), while femininity refers to a dominance of feminine values such as "friendly atmosphere, position security, physical conditions, cooperation" (Hofstede, 2001, p. 241). The idea is to ascertain whether there are differences between male and female perceptions of leadership in these countries. If this is the case, males living in a masculine country (Hofstede Masculine country HMC) are likely to embody masculine leadership attributes, while females living in feminine countries (Hofstede Feminine country HFC) are likely to embody feminine leadership attributes.

To investigate the relationship between gender and leadership through a three-dimensional approach to the construct gender, a study was made of Master in Management students from HMC and HFC countries. Two factors motivated this choice of sample population. First, while these management students are about to enter the job market, they have not as yet been exposed to the companies' internal influences. Studying them helps us to neutralize such influences and to determine whether the masculine or feminine perception of leadership begins before work. Second, HMC countries are considered to be masculine-dominated cultures, whilst HFC are considered to be feminine-dominated cultures (Hofstede Center, 2015). Contrasting the two cases sheds light on how societal culture intervenes in shaping masculine or feminine leadership perceptions among males and females.

This paper is original for at least five points. First, it addresses gender stereotypes of leadership. Second, it compares male and female perceptions. Third, it compares masculine and feminine countries with respect to Hofstede's framework, using therefore a three-layered conceptualization of gender. Fourth, it explores future company leaders' perceptions while they are still students and have not yet been influenced by dominant work-related cultural trends. Fifth, it conducts an on-the-ground survey, while most well-known studies examine the empirical database of preceding ones (e.g. Eager *et al.*, 2002; Koenig *et al.*, 2011; Paustian-Underdahl *et al.*, 2014; Taras *et al.*, 2010).

## Theories and Hypotheses

### LEADERSHIP AND BIOLOGICAL GENDER DIFFERENCES

Leadership is an evolving concept. Among the first and most renowned theories of leadership is that of Gardner leadership tasks (Gardner, 1990). Gardner (1990, p.1) defines leadership as “the process of persuasion or example by which an individual induces a group to pursue objectives held by the leader or shared by the leader and his or her followers.” He distinguishes nine main leadership tasks, namely, envisioning goals, affirming values, motivating, managing, achieving a workable unity, explaining, serving as a symbol, representing the group and renewing. House (1977) studied the main personal traits and characteristics behind leadership charisma. He suggested that leadership crystallizes eight main personal traits that individuals should embody to be charismatic, magnetic, and influential, which are goal communication, role modeling, personal image building, expression of high expectations of followers, and motivation for goal acceptance and achievement. Locke (1991) moved leadership from a static to a dynamic perspective. Locke’s (1991) focus was less on leadership tasks and personal traits than on the process individuals go through to develop their leadership, attract people and get them to work together to achieve collegial purposes. He defined leadership as “the process of inducing others to take action toward a common goal” (Locke, 1991, p. 3). Bass (2007) distinguished between two styles of leadership according to how they build and operate the process. The first is transactional leadership that places greater emphasis on results than on individuals. The second is transformational leadership which, on the contrary, puts the focus on individuals rather than results.

The debate on gender runs through all the aforementioned theories (Powell *et al.*, 2002; Schein, 1973, 1993; Schinar, 1975). To explore the reasons behind these differences, studies have largely addressed the biological differences between the two genders. It appears that male and female brains work differently, inducing different chemical, mechanical and emotional reactions (Cahill, 2006; Cunningham and Roberts, 2012). In other words, they react differently to the same stimuli, resulting in a completely different leadership style. With regard to decision-making, Bengtsson *et al.* (2005) found that females are less confident than males, especially in making financial decisions. Guidice *et al.* (2009) and Robinson *et al.* (2011) suggest that they have less optimistic projections of the future, expecting lower profitability than men, while Byrnes *et al.* (1999) consider them to be more risk averse. In terms of relationships, Harshman *et al.* (1987) and Appelbaum *et al.* (2012) found that women are more emotional, especially in negative situations when they are liable to be more impulsive than men (Cunningham, 2012). Hall and Matsumoto (2004), Hoffman *et al.* (2010) and Rizzolatti (2005), however, argue that women are better at reading people’s facial and emotional expressions than men. Consequently, they can be more adventurous and take more risks than men when dealing with people, adapting more easily to people’s needs, and winning them over to their point of view.

Hare *et al.* (1997) and Appelbaum *et al.* (2002) concluded that male and female leadership approaches are completely different. Male leadership approaches tend to be transactional, structured, autocratic, instruction-giving and business-oriented, whereas

female leadership approaches are transformational, considered, participative, socio-expressive, and people-oriented. Helgesen (1990) and Stanford *et al.* (1995) argued that this is likely to be to women’s advantage as companies are currently moving towards more transversal communicative and synergized structures. Kouzes and Posner (1995, 2002) were among the first to design a leadership measurement scale based on five practices: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. In line with these studies, the following hypothesis is formulated.

H1. Male and female (Biological gender or sex) self-perception as leaders is different.

### CULTURAL STEREOTYPES AND GENDER

The essentialist view of male and female leadership difference is rejected by three paradigms: the think-manager think-male paradigm (Schein, 1973; 1993), the agency-communion paradigm (Powell *et al.*, 2002) and the masculinity-femininity paradigm (Schinar, 1975). All three put these differences down to cultural stereotypes.

The think-manager think-male paradigm (Schein, 1973) questioned individuals on leaders’ attributes on the one hand and on male and female traits on the other. When both were analyzed, correlations were found between leaders’ attributes and male traits, but not female ones. This suggests that even females think of leadership as an exclusively male domain.

The agency-communion paradigm (Powell *et al.*, 2002) assessed managers’ perceptions of leadership effectiveness based on two stereotyped definitions of leadership. The first is agentic leadership, culturally related to masculine attributes, while the second is communal leadership, culturally related to feminine attributes. The findings from 348 undergraduate and part-time graduate business students indicate that although managerial stereotypes place less emphasis on masculine characteristics, a good manager is still perceived as predominantly masculine, implying that agentic leadership is considered to be more effective.

The masculinity-femininity paradigm (Schinar, 1975) also rated leadership attributes using a bipolar scale of masculinity-femininity. A significant correlation was found between masculinity and leadership.

Based on these paradigms, Eagly *et al.* (1999, 2002) built their Role Congruity Theory (RCT), extending Heilman’s (1983, 2001) lack-of-fit model to explain the negative effect of incongruity between an individual’s expected and actual role on his/her performance. According to Eagly *et al.* (1999, 2002), females are confronted with two kinds of cultural stereotype which hamper their efforts to prove themselves as effective leaders. The first stereotype is that leadership is culturally related to agentic attributes such as aggressiveness, competitiveness, task-orientation, assertiveness, calmness, and strength, all of which are considered as more masculine. The second stereotype is that females are culturally expected to play a communal role. They are expected to be affectionate, thoughtful, tender, altruistic, and people-oriented. When they step outside the stereotype to enact leadership roles, one of two things happens. Either they comply with the communion attributes and are consequently rejected upfront, or else they step outside of the agentic role and are also rejected for the incongruence between the traditional and expected role. In both cases they fail.

### BALANCING AGENCY AND COMMUNION: A CHALLENGING TASK FOR FEMALE LEADERS

According to Paustian-Underdahl *et al.* (2014), gendered leadership stereotypes are not fixed but are in fact shifting in favor of greater acceptance of the female leadership role. Several factors account for this. First, the demographic composition of companies is changing. There is an increasing number of women (e.g. women represented 33% of the US labor force in 1950 and 59.2% in 2012; US Department of labor, 2012). They are also more widely represented in executive management and higher leadership positions (e.g. in 1995, they represented only 8.7% of corporate officers of American's 500 largest companies compared to 19.2% in 2014; Catalyst, 2014b).

Second, business leadership itself is shifting from a transactional to a transformational style. This is due to the current, postmodern, fast-changing, complex and uncertain environment that is forcing companies to invest in their human resource potential by flattening structures, encouraging team-working and stimulating creativity. Fluid, interactive and cooperative relationships are the core of such organizational change, giving women more opportunities to express their emotional intelligence, unleash their talent in dealing with people, and thus climb the career ladder to higher leadership positions.

Apart from the affirmative action which imposes a legal quota of 40% women on the boards of top French SBF-120 companies in France, for instance, there are numerous other extrinsic variables explaining women's ascendance to leadership positions, acting as favorable winds to propel women forward. However, there is an additional intrinsic explanatory variable related to women's volition, namely, that women have not been passive but have actively helped to change the cultural process. They have learned to adapt and to better handle the incongruity between the agentic role expected from leaders and the communion role attributed to women. According to Kawakami *et al.* (2000), mindfulness and genuineness are key factors in this process. Women have understood that if they try to mindlessly emulate men's leadership style, they lose their genuineness, and become distressed and uncomfortable. The negative feelings that ensue are then transmitted throughout the company. However, when mindful, genuine, and truly themselves, they become charismatic and influential. This interesting conclusion puts the responsibility squarely on the women's shoulders. Even in a masculine-dominant culture filled with obstructive stereotypes of female leadership, women can succeed if they are mindful and genuine. The issue is one of self-perception. People see women leaders as they see themselves (Kawakami *et al.*, 2000). What about the female perception of leadership in a feminine country? Surely in a feminine-cultured country, female leadership is likely to be accepted more easily.

Thus, the following hypotheses are formulated.

H2: Biological gender (male or female) moderates the effect of gender-role identity (masculinity and femininity) on leadership.

H3: A country's gender-dominant culture (Hofstede masculine country HMC versus Hofstede feminine country HFC) moderates the effect of male and female gender-role identity (masculinity and femininity) on leadership.

H4: Biological gender (male versus female) is congruent with gender-role identity (masculinity versus femininity) and with the country's gender-dominant culture (Hofstede masculine country HMC versus Hofstede feminine country HFC). Thus, in masculine countries (HMC), males' masculinity is expected to be higher than male's femininity and vice versa.

## Method

### PARTICIPANTS

Since the idea is to use a three-layered conceptualization of gender (biological gender, gender-role identity, and country's gender-dominant culture) to explore male and female self-perceptions of leadership before they are influenced by dominant work-related, cultural stereotypes and trends, we focused on business school students from the researchers' network of academic institutions. The survey sample came from Hofstede masculine countries (HMC) and Hofstede feminine countries (HFC), assumed to have different national gender cultures. Thus, comparisons between the two are likely to be fruitful and insightful. The respondents originated from nineteen countries, seventeen of which were present in Hofstede's national country classification (Hofstede Center, 2015) <http://geert-hofstede.com/>, enabling us to classify them as HMC or HFC. In addition, management students from Tunisia and Madagascar, the researchers' countries of origin, were also included in the sample. We may note that Tunisia is assumed to be a masculine country (Ben Fadhel, 1992; Lassoued, 2008, p. 13), while Madagascar is considered as a feminine country (Ratsimbazafy, 2016, p.61).

In total, 371 management students responded to the survey, as shown in the table below.

**TABLE 1**  
**Composition of the sample**

Characteristics	Participants N = 371.
Age	< 23 years: n=236 + 23 years: n=135
Sex (biological gender)	Women: n=228 Men: n=140
Fields in management studies	Finance/accountancy: n=89 Marketing: n=68 General Management: n=144 HRM: n=43 Entrepreneurship: n=27
Hofstede masculine countries of origin	n=84: South Africa, Poland, Germany, Greece, Belgium, Italy, Nigeria, Kenya, Hungary, UK, Tunisia.
Hofstede feminine countries of origin	n=287: France, Portugal, Finland, Senegal, Bulgaria, Serbia, Spain, Madagascar.

### PROCEDURE AND MEASURES

This paper explores the cultural gender-role identity effect (masculinity and femininity) on male and female perceptions of leadership by contrasting masculine- with feminine dominant culture countries. The aim is to ascertain whether leadership is still culturally stereotyped as an exclusively masculine domain

among males and females in both Hofstede masculine and feminine countries (HMC and HFC), or whether things have changed, at least in the feminine countries (HFC), shifting towards a more feminine conception of leadership. To this end, a questionnaire was administered to collect the respondents' perceptions of leadership and masculinity and femininity constructs in order to identify the possible correlations likely to appear between students' self-perception as leaders, and their male or female masculinity or femininity based on Hofstede's masculine or feminine country of origin.

There are millions of HMC and HFC management students. According to Rea & Parker (1997), an appropriate sample size for such a number, with a confidence level of 95%, is 383 observations. An online survey was therefore conducted, using a convenient sampling method to reach this number and overcome distance, accessibility, and time obstacles. The questionnaire link was sent to Master in Management students from business schools belonging to the researchers' academic institutions network. The final number of respondents was 371, which is acceptable compared to the number of 348 undergraduate and part-time graduate business students used by Powell *et al.* (2002) in a similar study.

Data analysis followed three steps. First, an Exploratory Factors Analysis (EFA) was performed regarding leadership, masculinity and femininity constructs to measure their reliability and validity using SPSS. Second, an Independent-Sample T Test using SPSS was applied to compare these constructs in HMC and HFC males and females, and to test hypothesis H1. Third, a Confirmatory Factors Analysis (CFA) using Amos was conducted to measure the correlations between concepts and to test hypotheses H2, H3 and H4.

A Likert scale of items ranging from 1 = strongly disagree to 5 = strongly agree was used to measure the study's main constructs, namely leadership, masculinity, and femininity.

## LEADERSHIP

Kouzes & Posner (2002) S-LPI 30-item scale was used to measure leadership. As the idea is to measure the students' perceptions of themselves as leaders, only the self-version of the scale (not the observed one) was used. The EFA results showed that, contrary to Kouzes & Posner's (2002) findings, leadership is a one-dimensional construct formed of seven items ( $\alpha = .72$ ). The CFA results showed that all eight items merged into one factor ( $\chi^2 = 19.529$ ;  $df = 9$ ;  $NFI = .945$ ;  $CFI = .969$ ;  $RMSEA = .056$ ), suggesting a one-dimensional construct.

## MASCULINITY VS. FEMININITY

Spence *et al.*'s (1978) 24-item bipolar Personal Attributes Questionnaire was used to measure masculinity and femininity. The PAQ assesses masculinity and femininity in terms of respondents' self-perceived possession of self-assertive or instrumental traits traditionally associated with masculinity, and interpersonal or expressive traits associated with femininity (Spence *et al.*, 2001). The EFA showed that masculinity ( $\alpha = .66$ ) and femininity ( $\alpha = .76$ ) were one-dimensional constructs, each composed of five items. This result was later supported by the CFA fit indexes for masculinity ( $\chi^2 = 3.651$ ;  $df = 1$ ;  $NFI = .985$ ;  $CFI = .989$ ;  $RMSEA = .085$ ) and for femininity ( $\chi^2 = 14.326$ ;  $df = 5$ ;  $NFI = .964$ ;  $CFI = .976$ ;  $RMSEA = .071$ ).

## DESCRIPTIVE STATISTICS

Table 2 presents the reliability coefficients and correlations of all of the constructs. Leadership is significantly correlated with Masculinity ( $r = .15$ ,  $p < .01$ ) and Femininity ( $r = .18$ ,  $p < .01$ ) which supports partially some of the study hypotheses.

TABLE 2 Correlations (N = 371).			
	1	2	3
1. Masculinity	<b>.72</b>		
2. Femininity	.23 <sup>a</sup>	<b>.76</b>	
3. Leadership	.15 <sup>a</sup>	.18 <sup>a</sup>	<b>.66</b>

Internal reliabilities (coefficient alphas) for the overall constructs are given in bold on the diagonal. <sup>a</sup> correlation is significant at the 0.01 level (2-tailed).

## CONFIRMATORY FACTOR ANALYSIS

The CFA was performed for three different models to test the distinctiveness of leadership, masculinity and femininity constructs. The idea is to measure the level of significance of these models where the constructs are merged. The first model articulated the three hypothesized factors. It provided an acceptable level of goodness of fit ( $\chi^2 = 156.060$ ;  $df = 86$ ;  $NFI = .865$ ;  $CFI = .933$ ;  $RMSEA = .047$ ). The second model was composed of two factors where masculinity and femininity were merged into a one-dimensional construct. The third model was a one-factor model where the three variables were merged into one. The results show that goodness of fit of the hypothesized three-factor model is better than the two-factor or the one-factor model (cf. table 3). With regard to the chi-square change statistics method (Bentler *et al.*, 1980), the hypothesized three-factor model therefore provides a better representation of the factor structure of items.

## Results

### HYPOTHESES TESTING

Our first results indicate that femininity ( $r = .16^*$ ,  $p = .012$ ) but not masculinity ( $r = .11$ ,  $p = 0.60$ ) is significantly correlated with leadership (see figure 1). This partially supports hypothesis H3, and suggests that an individual's femininity affects the perception of leadership. However, it does not indicate whether the countries' dominant culture interferes or not. Thus, an Independent-Sample T test using SPSS was conducted, using six levels of comparison drawing on the study's main constructs (leadership, masculinity and femininity): first, between Hofstede Masculine Country (HMC) and Hofstede Feminine Country (HFC) students with no distinction of gender; second, between male (M) and female (F) students with no distinction of country; third, between HMC male and female students, fourth between HFC male and female students; fifth between HMC and HFC males, and sixth between HMC and HFC females (See table 4).

The results from HFC managers show that leadership is significantly higher ( $F = -2.899$ ;  $p < .01$ ) compared to HMC managers, while masculinity is conversely significantly lower ( $F = 2.680$ ;  $p < .01$ ). Masculinity is significantly higher among males ( $F = 4.585$ ;  $p < .01$ ), while femininity is significantly higher among females ( $F = -2.706$ ;  $p < .01$ ). H4 is supported.

**TABLE 3**  
Comparison of measurement models

	df	$\chi^2$	$\Delta\chi^2(df)$	RMSEA	NFI	CFI	IFI
Hypothesized three-factor model	86	156.060		.047	.865	.933	.935
Model 1: two-factor model	88	340.811	184.751	.088	.705	.759	.763
Model 2: one-factor model	89	607.419	266.608	.125	.475	.507	.514

**TABLE 4**  
Means comparison

Means Comparison	1. HMC to HFC			2. Males to females		
	HMC	HFC	Test t	M	F	Test t
Leadership	-.299	.087	-2.899 <sup>a</sup>	-.053	.029	-.770
Masculinity	.262	-.076	2.680 <sup>a</sup>	.290	-.186	4.585 <sup>a</sup>
Femininity	.032	-.009	.343	-.175	.103	-2.706 <sup>a</sup>
	3. HMC males to HMC females			4. HFC males to HFC females		
	M	F	Test t	M	F	Test t
Leadership	-.020	-.587	2.401 <sup>b</sup>	-.067	.172	-1.996 <sup>b</sup>
Masculinity	.502	.025	2.144 <sup>b</sup>	.205	-.235	3.739 <sup>a</sup>
Femininity	-0.064	.130	-.895	-.219	.097	-2.685 <sup>a</sup>
	5. HMC males to HFC males			6. HMC females to HFC females		
	HMC	HFC	Test t	HMC	HFC	Test t
Leadership	-.020	-.067	.244	-.587	.172	-4.165 <sup>a</sup>
Masculinity	.502	.205	1.645	.025	-.235	1.490
Femininity	-.064	-.219	.899	.130	.097	.180

<sup>a</sup> Significant at .01 level; <sup>b</sup> Significant at .05 level

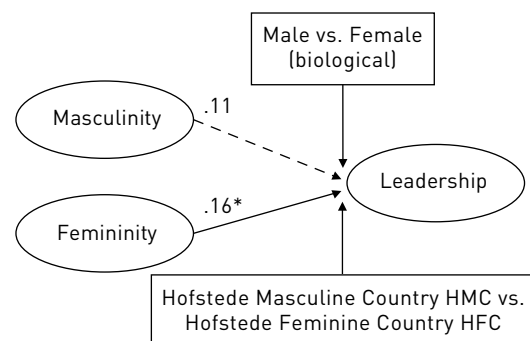
Comparing males with females, the results also show that in HMC, males' masculinity is significantly higher than females' masculinity ( $F=2.144$ ;  $p<.05$ ) but there is no significant difference between them in terms of femininity ( $F=.895$ ;  $p=.374$ ). Conversely, in HFC, females' femininity is significantly higher than males' femininity ( $F=-2.685$ ;  $p<.01$ ). In addition, males' masculinity is higher than females' masculinity ( $F=3.739$ ;  $p<.01$ ). These findings confirm H4.

With regard to male and female differences in terms of leadership, the results failed to show any significant differences for the overall sample of students ( $F=-.770$ ;  $p=.442$ ). If we only take this result into consideration, in line with the gender-neutral vision of leadership (Kolb, 1999), it doesn't support H1. However, in HMC, males' leadership is significantly higher than females' leadership ( $F=2.401$ ;  $p<.05$ ). This result validates H1 and supports the findings of Powell *et al.* (2002) who emphasized the superiority of agentic compared to communal leadership. In HFC, females' leadership is significantly higher than males' leadership ( $F=-1.996$ ;  $p<.05$ ), which supports H1 and H4.

Establishing a gender comparison between HMC and HFC in terms of leadership, the results show that there is no significant difference between HMC and HFC males' leadership ( $F=.244$ ;  $p=.808$ ). However, HFC females' leadership is significantly higher than HMC females' leadership ( $F=-4.165$ ;  $p<.01$ ), supporting hypothesis H1.

To test hypotheses H2 and H3, a CFA was performed for the hypothesized three-factor model using Amos. The model provided an acceptable level of goodness of fit ( $\chi^2 = 156.060$ ;  $df = 86$ ;  $NFI = .865$ ;  $CFI = .933$ ;  $RMSEA = .047$ ). For the overall sample (cf. figure 1), the results showed a significant relationship between femininity and leadership ( $\beta = 2.503$ ,  $p<.05$ ) but not between masculinity and leadership ( $\beta = 1.883$ ,  $p=.06$ ).

**FIGURE 1**  
Gender and leadership



Note:  $N=371$ , \*  $p < .05$ , \*\*  $p < .01$ .

When comparing male and female groups, the results differ. For males, there is a significant relationship between both masculinity and leadership ( $\beta = 2.170, p < .05$ ) and between femininity and leadership ( $\beta = 2.533, p < .05$ ). For females, there is no significant relationship between masculinity and leadership ( $\beta = .810, p = .418$ ) or between femininity and leadership ( $\beta = .874, p = .382$ ).

The findings also throw new light on the issue when we compare the HMC and HFC groups. For HMC, there is a significant relationship between masculinity and leadership ( $\beta = 2.089, p < .05$ ) but not between femininity and leadership ( $\beta = .249, p = .80$ ). For HFC, there is a significant relationship between femininity and leadership ( $\beta = 3.067, p < .01$ ) but not between masculinity and leadership ( $\beta = 1.086, p = .27$ ).

Thus, hypotheses H3 and H4 are supported.

## Discussion

This study explores the biological and cultural gender-role identity effects on leadership through a three-layered conceptualization of gender. First, it measures the differences between male and female perceptions of leadership. Second, it compares both males and females showing masculine attributes with those showing feminine attributes. Third, it contrasts all the preceding results in the two contexts of Hofstede masculine- and feminine-dominant cultured countries.

The results show no significant differences between male and female perceptions of leadership. Biological gender does not affect male or female perceptions of leadership. On the other hand, we found a positive correlation between masculinity and leadership and between femininity and leadership for males, but not for females. These results may be viewed in parallel with those of Eagly *et al.* (1999, 2002), Powell *et al.* (2002), Schein (1973, 1993) and Schinar (1975) who argued that leadership is culturally stereotyped as an exclusively masculine domain. Thus, leadership appears to be culturally but not biologically gendered.

After comparing males and females, additional insights appear. The results show that for males, both masculinity and femininity correlate with leadership. This is new compared to previous study results. It means that males no longer consider femininity as incongruent with leadership. These findings support Paustian-Underdahl *et al.*'s (2014) conclusions on new trends regarding cultural stereotypes of leadership and a gradual shift towards affective, thoughtful and transformational leadership due, among other things, to flatter organizational structures.

Surprisingly, there was the absence of correlation between femininity and leadership among females. Unlike males, it seems that females have not yet built a bridge between the communion role and leadership. Do they still need to show masculine traits and play agentic roles to become effective leaders? Why are females still subject to this stereotyping, even though it appears to have been overcome by males? Is it because, in highly masculine societies, things allowed for males are not necessarily allowed for females?

Comparing HMC with HFC helped us to answer these questions. In HFC, femininity is correlated with leadership, whereas masculinity is not. This means that the trend towards communal leadership could be a valuable asset in such feminine

countries, a factor that women should be aware of and take into consideration. It was no surprise to see a positive correlation between masculinity and leadership in HMC and a positive correlation between femininity and leadership in HFC, as expected in hypothesis H4.

Combining these conclusions, it appears that in addition to cultural stereotypes, other variables influence the women's perception of leadership. Kawakami *et al.* (2000) evoked one of these variables, namely mindfulness. By being mindful, behaving genuinely, and showing acceptance of their feminine or masculine attributes, females enhance their charisma and influence among their followers. Conversely, by being mindless, unnatural and affected, females' leadership is liable to be rejected. This means that cultural stereotypes of leadership may be partially caused by females' perception of themselves as well as males' perception of females. This can explain the gradual shift towards a feminine perception of leadership by men. The same is not true of women, even in feminine-cultured countries. Women still appear resistant to this change.

## THEORETICAL IMPLICATIONS

The aim of this paper was to study biological and cultural gender-role stereotypes with regard to the concept of leadership. Some previous study results were supported while others were rejected. The study found no difference between male and female perceptions of themselves as leaders and therefore rejected the hypothesis of biological gender effect on leadership. As many females as males consider themselves as leaders. However, when measuring the cultural gender effect using masculinity and femininity constructs, the results, in line with Eagly *et al.* (1999, 2002), Powell *et al.* (2002), (1973, 1993) and Schinar (1975), showed a positive correlation between masculinity and femininity. Leadership is still correlated with masculine attributes. Leaders need to show assertiveness, aggressiveness, and competitiveness to be accepted as a leader, but these requirements are not exhaustive and may also encompass some female attributes.

When comparing males and females with regard to the culture-based stereotype in both masculine- and female-dominant cultures to determine whether they associate leadership with masculinity or femininity, we came across a surprising finding. It appears that for males, both masculinity and femininity are associated with leadership, whereas for females, even in a feminine-dominant culture, this is not the case. Thus, it appears that males are less resistant to female leadership attributes than women themselves. However, one question remains unanswered: what delineates male acceptance of feminine leadership? Is it also gendered? In other words, do males accept feminine leadership styles (communion role) equally from male and female leaders with no distinction of sex, or do they only accept it from one category and not the other?

## PRACTICAL IMPLICATIONS

It is interesting to note that men show open acceptance of the feminine or communion role of leadership. Beyond the legal compliance with affirmative action measures designed<sup>1</sup> to break through the glass ceiling, firms need to consider and integrate

1. For example, the French law of 29th December 2009 imposes a quota of 40% of women on top French company boards.

this cultural change in their decision-making process. First, building teams around transformational leaders can be an asset in the organization of work. Many studies (Appelbaum, 2003) suggest that employees are more inspired by communicative, emphatic and well-considered leaders that they trust and can identify with. Women often tend to fit this profile. Promoting them to leadership positions thus appears crucial, especially with the increasing number of women at work.

Second, any cultural shift in an organization needs time to be successfully assimilated. Women's promotion to leadership positions should not simply be an exception. While men may be reluctant, women themselves may also experience such a change with a degree of fear, anxiety and doubt due to the strong resistance of masculine stereotyped leadership attributes. Helping them to be more relaxed in leadership positions, boosting their confidence and giving them time to prove themselves is the key to their success, allowing them, as Kawakami *et al.* (2000) suggested, to be mindful and to unleash their full potential.

### LIMITATIONS

Two limitations should be noted in this study: the representativeness of the sample size and the sampling method. The sample size was under 383 respondents, and although this size almost meets Rea and Parker's (1997) representativeness standards (Rea and Parker suggest that an appropriate sample size for a population of more than 100,000, with a confidence level of 95%, is 383 observations). This number would have been more appropriate. However, the overall sample was 371 individuals which is acceptable.

Second, a convenience sampling method was used. This resulted in a heterogeneous sample. Using a stratified sampling method would provide a more reliable comparison between two homogeneous categories, with biological gender on the one hand, and Hofstede's masculine and feminine country categories on the other. A homogeneous number of participants would have provided interesting and useful inter-continent and inter-country comparisons. These limitations are mainly due to the limited access to information. However, a large and comparable database on management students' perception of leadership from different HMC and HFC countries requires time and access to more qualitative resources from these business schools.

### Conclusion

Although women are equally, if not more educated than men, their access to leadership positions is relatively limited because of the glass-ceiling phenomenon. Leadership has been portrayed as a male domain and difficult for women to penetrate for a very long time. Different explanations have been given for this. Some scholars have alluded to the biological variations between males and females and how these shape their leadership style differently. Rejecting this idea, others have referred instead to the cultural stereotype inhibiting women's leadership potential. In their view, women are torn between two stereotypes: the agentic role attributed to leaders, which is based on masculine attributes such as assertiveness, aggressiveness, and competition, and the communion role attributed to women, based on feminine attributes such as affection, tenderness, and sensitivity. Women

need to embody the agentic role to be accepted as leaders, but when they try to do so, they are often rejected for being out of step with their traditional role. Things are changing however. First, women are more present in the workplace. Second, businesses are encouraging transformational leadership, based on more feminine attributes. These two factors, among others, have accelerated the ascendance of women to leading positions. Our results also support these latter assumptions.

We found no difference between males' and females' self-perception as leaders, thus rejecting the hypothesis of a biological difference effect on male and female perceptions of leadership. However, for the overall study sample, the results supported the relationship between masculinity and leadership. Digging deeper and comparing males and females in two different cultures (masculine-dominant cultures represented by HMC countries and feminine-dominant cultures represented by HFC), the results revealed something new compared to prior literature in this field. Men's perceptions of leadership are changing. Both masculinity and femininity were found to have a positive correlation with leadership for males. This means that men show greater acceptance of leadership with feminine attributes. Based on this conclusion, the first assumption is that women, who are more concerned than men by the negative impact of masculine stereotypes on leadership, would behave the same way. Surprisingly, the results pointed to the opposite. Even in feminine cultures, women still tend to associate leadership with solely masculine attributes. Their perception of leadership appears to have remained the same, while for men, it has changed.

This conclusion is interesting for businesses that want to promote transformational leadership among their employees. It appears that women especially need to be freed from gender stereotypes regarding leadership. Training, communication, and a motivating work environment are likely to raise women's self-confidence, give them more opportunities and propel them to higher positions.

One question remains unanswered in this study, however. Is the male acceptance of feminine

leadership attributes itself gendered? In other words, do men accept feminine leadership attributes from males but not females? This question is worth raising, since it can lay the foundations for new research avenues. Whatever the sex of the leader, we assume that an efficient leader would be an agile androgynous leader, who needs to adopt a 'yin and yang' situational approach (Mintzberg, 2002) by combining the communion and agentic role depending on the context.

### References

- APPELBAUM, Steven H; AUDET, Lynda; MILLER, Joanne C. (2003). "Gender and leadership? Leadership and gender? A journey through the landscape of theories", *Leadership & Organization Development Journal*, Vol. 24, N° 1, p. 43-51.
- BASS, Bernard M. (2007). "From Transactional to Transformational Leadership: Learning to Share the Vision" in R.P. Vecchio (edited by), *Leadership: Understanding the Dynamics of Power and Influence in Organizations* (2nd ed.), *Notre Dame, IN US, University of Notre Dame Press*, p. 302-317.

- BENGTSOON, Claes; PERSSON, Mats; WILLENHAG, Peter (2005). "Gender and Overconfidence", *Economics Letters*, Vol. 86, p. 199-203.
- BENTLER, Peter. M.; BONNET, DOUGLAS G. (1980). "Significance Tests and Goodness of Fit in the Analysis of Covariance Structure", *Psychological Bulletin*, Vol. 88, N° 3, p. 588-606.
- BEN FADHEL, Adnen. (1992). La dynamique séquentielle culture-gestion. Fondements theoriques et analyse empirique du cas tunisien, Thèse de Doctorat, Nice.
- BUTLER, Judith. (1990). *Gender Trouble*. Routledge Publishing, 256 p.
- BYRNES, James; MILLER, David C.; SCHAFER, William D. (1999). "Gender Differences in Risk Taking; A Meta Analysis", *Psychological Bulletin*, Vol. 125, N° 3, p. 367-383.
- CATALYST (2007). *The Bottom Line: Corporate Performance and Women's Representation on Boards*. <http://www.catalyst.org/>
- CATALYST (2014a). *Women CEOs of the S&P 500*. <http://www.catalyst.org/knowledge/women-ceos-sp-500>
- CATALYST (2014b). *Fortune 500 Women Board Directors*. [http://www.catalyst.org/system/files/2013\\_catalyst\\_census\\_fortune\\_500\\_women\\_board\\_director.pdf](http://www.catalyst.org/system/files/2013_catalyst_census_fortune_500_women_board_director.pdf)
- CORNET, Annie (2001). "Gender mainstreaming et approche différenciée selon les sexes : quels impacts pour la gestion?", *Management International*, Vol. 7, N° 1, p. 1-10.
- CUNNINGHAM, Jane; ROBERTS, Philippa (2012). *Inside Her Pretty Little Head; A New Theory of Motivation and Why It Matters for Marketing*. London: Marshall Cavendish Business.
- DANG, Rey; NGUYEN, Duc Khuong (2016). "Does Board Gender Diversity Make a Difference? New Evidence from Quantile Regression Analysis", *Management International*, Vol. 20, N° 2, p. 95-106.
- DOBBINS, Gregory H.; PLATZ, Stephanie J. (1986). "Sex differences in leadership: how real are they?", *Academy of Management Review*, Vol. 11, N° 1, p. 118-127.
- EAGLY, Alice H. (1987). *Sex differences in social behavior: A social-role interpretation*, Hillsdale, NJ: Erlbaum.
- EAGLY, Alice H.; JOHANNESSEN-SCHMIDT, Mary C. (2002). "The Leadership Styles of Women and Men", *Journal of Social Issues*, Vol. 57, N° 4, p. 781-797.
- EAGLY, Alice H.; SCZESNY, Sabine (2009). "Stereotypes about women, men, and leaders: Have times changed?" in M. Barreto, M. K. Ryan et M. T. Schmitt (edited by), *The glass ceiling in the 21st century: Understanding barriers to gender equality*, p. 21-47. Washington, DC: American Psychological Association. doi: 10.1037/11863-002
- EUROPEAN COMMISSION. (2012). *Women in Economic Decision-Making in the EU: Progress report*, [http://ec.europa.eu/justice/gender-equality/files/women-on-boards\\_en.pdf](http://ec.europa.eu/justice/gender-equality/files/women-on-boards_en.pdf)
- GARDNER, John W. (1990). *On Leadership*, New York, NY: The Free Press.
- GUIDICE, Rebecca; ALDER, Stoney G.; PHELAN, Steve E. (2009). "Competitive Bluffing: An Examination of a Common Practice and its Relationship with Performance", *Journal of Business Ethics*, Vol. 87, p. 535-553.
- HALL, Judith A.; MATSUMOTO, David. (2004). "Gender Differences in Judgments of Multiple Emotions from Facial Expressions." *Emotion*, Vol. 4, N° 2, p.201-206.
- HARE, Paul A.; KOENIGS, Robert J.; HARE, Sharon E. (1997). "Perceptions of observed and model values of male and female managers", *Journal of Organizational Behavior*, Vol. 18, p. 437-47.
- HARSHMAN, Richard A.; PAIVIO, Allan (1987). "Paradoxical Sex Differences in Self-Reported Imagery", *Canadian Journal of Psychology*, Vol. 41, p. 287-302.
- HEILMAN, Madeline E. (2001). "Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder", *Journal of Social Issues*, Vol. 57, p. 657-674.
- HELGESEN, Sally (1990). *The Female Advantage: Women's Ways of Leadership*. Doubleday, New York, NY.
- HOFFMAN, Holger; KESSLER, Henric; EPPEL, Tobias; RUKAVINA, Stefanie; TRAU, Harald C. (2010). "Expression Intensity, Gender, and Facial Emotion Recognition: Women Recognize Only Subtle Facial Emotions Better than Men", *Acta Psychologica*, Vol. 135, N° 3, p. 278-283.
- HOFSTEDE, Geert (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- HOFSTEDE, Geert (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). London, England: Sage.
- HOFSTEDE CENTER (2015). <http://geert-hofstede.com/>
- HOUSE, Robert J. (1977). "A 1976 theory of charismatic leadership". in J. G. Hunt and L. L. Larson (edited by), *Leadership: The cutting edge*. Carbondale, IL: Southern Illinois University Press, p. 189-204.
- INTER-PARLIAMENTARY UNION. (2013). *Women in National Parliaments*. <http://www.ipu.org/pdf/publications/WIP2013-e.pdf>
- KAWAKAMI, Christine; WHITE, Judith B.; LANGER, Ellen J. (2000). "Mindful and Masculine: Freeing Women Leaders from the Constraints of Gender Roles", *Journal of Social Issues*, Vol. 56, N° 1, p. 49-63.
- KOLB, Judith (1999). "The effect of gender role, attitude toward leadership, and self-confidence on leader emergence: implications for leadership development", *Human Resource Development Quarterly*, Vol. 10, N° 4, p. 305-320.
- KOUZES, James; POSNER, Barry (1995). *The leadership challenge: How to keep getting extraordinary things done in organizations*. San Francisco: Jossey-Bass.
- KOUZES, James; POSNER, Barry (2002). *The Leadership Challenge*. San Francisco: Jossey-Bass.
- LOCKE, Edwin A. (1991). *The Essence of Leadership: Four Keys to Leading Successfully*. New York, NY: Lexington Books.
- LESSOUED, Kais (2008). "L'adaptation culturelle du contrôle de gestion, cas de la Tunisie." HAL, <https://halshs.archives-ouvertes.fr/halshs-00525381>
- MINTZBERG, Henry (2002). "Le yin et le yang du management", *L'Expansion Management Review*, p. 54-59.
- MOALLA, Emna (2016). "Quelle mesure pour la culture nationale? Hofstede vs Schwartz vs Globe", *Management International*, Vol. 20, Numéro Spécial ATLAS-AFMI, p. 26-37.
- MOULIN, Yves; POINT, Sébastien (2012). "Les femmes dans les conseils d'administration du SBF 120 : qualités féminines ou affaires de famille?", *Revue de Gestion des Ressources Humaines*, Vol. 1, N° 83, p. 31-44.

- OAKLEY, Juliet G. (2000). "Gender-based barriers to senior management positions: understanding the scarcity of female CEOs", *Journal of Business Ethics*, Vol. 27, N° 4, p. 321-34.
- OECD (2015). "Education at a glance 2015". <https://www.oecd.org/gender/data>
- PATEL, Gita., BUITING, Sophie. (2013). "Gender differences in leadership styles and the Impact within corporate boards", The Commonwealth Secretariat, Social Transformation Programmes Division, p. 1-39.
- PAUSTIAN-UNDERDAHL, Samantha C.; WALKER, Lisa S.; Woehr, David J. (2014). "Gender and Perceptions of Leadership Effectiveness: A Meta-Analysis of Contextual Moderators", *Journal of Applied Psychology*, Vol. 99, N° 6, p. 1129-1145.
- POWELL, Gary N.; BUTTERFIELD, D. Anthony; Parent, Jane D. (2002). "Gender and Managerial Stereotypes: Have the Times Changed?", *Journal of Management*, Vol. 28, N° 2, p. 177-193.
- POWELL, Gary N. (1993). *Women and Men in Management*, 2nd ed., Sage, Newbury Park, CA.
- PONCHUT, Marine; BARTH, Isabelle (2012). "La place minorée des femmes dans les organisations. Exploration d'un facteur explicatif : la culture organisationnelle. Cas d'une entreprise de transport public", @GRH, Vol. 3, N° 4, p. 11-31.
- REA, Louis; PARKER, Richard (1997). *Designing and Conducting Survey Research – A Comprehensive Guide*, Jossey-Bass Publishers, San Francisco.
- RIZZOLATTI, Giacomo (2005). "The Mirror Neuron System and its Function in Humans", *Anatomy and Embryology*, Vol. 210, N° 1, p. 419-421.
- ROBINSON, Sherry; STUBBERUD, Hans A. (2011). "Gender Differences in Entrepreneurs' Perceived Problems, Profit and Plans." *International Journal of Entrepreneurship*, Vol. 15, p. 25-44.
- ROSENER, Judy B. (1990). "Ways women lead", *Harvard Business Review*, Vol. 68, p. 119-125.
- RATSIMBAZAFY, Claudine (2016). *Les aspects contingents de la gestion des ressources humaines – Le cas de Madagascar*, Editions Universitaires Européennes.
- SAINT-MICHEL, Sarah (2010). "L'impact du genre sur le style de leadership : l'importance d'introduire les traits de personnalité des leaders", *Revue Internationale de Psychosociologie*, Vol. XVI, N° 40, p. 181-203.
- SCHEIN, Virginia E. (1973). "The relationship between sex role stereotypes and requisite management characteristics". *Journal of Applied Psychology*, Vol. 57, p. 95-100.
- SCHEIN, Virginia E.; DAVIDSON, Marilyn J. (1993). "Think manager-think male: Managerial sex typing among U.K. business students". *Management Development Review*, Vol. 6, N° 3, p. 24-28.
- SCHEIN, Virginia E. (2001). "A Global Look at Psychological Barriers to Women's Progress in Management". *Journal of Social Issues*, Vol. 57, N° 4, 2001, p. 675-688.
- SHIMANOFF, Susan B.; JENKINS, Mercilee (1991). *Leadership and gender: challenging assumptions and recognizing resources*, in Cathcart, R.S. and Samovar, L.A. (edited by), *Small Group Communication: A Reader*, 6th ed., W.C. Brown, Dubuque, IA, p. 504-522.
- SHINAR, Eva H. (1975). "Sexual stereotypes of occupations". *Journal of Vocational Behavior*, Vol. 7, N° 1, p. 99-111.
- SPENCE, Janet T.; BUCKNER, Camille E. (2000). "Instrumental and expressive traits, trait stereotypes, and sexist attitudes", *Psychology of Women Quarterly*, Vol. 24, p. 44-62.
- SPENCE, Janet T.; HELMREICH, Robert L. (1978). *Masculinity and femininity: Their psychological dimensions, correlates, and antecedents*. Austin, TX: University of Texas Press.
- STANFORD, Jane H.; OATES, Barbara R.; FLORES, Delfina (1995). "Women's leadership styles: a heuristic analysis", *Women in Management Review*, Vol. 10, N° 2, p. 9-16.
- TARAS, Vas; KIRKMAN, Bradley L.; STEEL, Piers (2010). "Examining the Impact of Culture's Consequences: A Three-Decade, Multilevel, Meta-Analytic Review of Hofstede's Cultural Value Dimensions", *Journal of Applied Psychology*, Vol. 95, N° 3, p. 405-439.
- TERJESEN, Siri; SINGH, Val (2008). "Female presence on corporate boards: a multi-country study of environmental context", *Journal of Business Ethics*, Vol. 83, N° 1, p. 55-63.
- TOUE, Mamadou (2014) "Les déterminants individuels du plafond de verre : cas de la composition des instances de gouvernance des entreprises françaises cotées", *Management International*, Vol.18, N° 4, p. 48-67.
- U.S. DEPARTMENT OF LABOR. (2012). *Employment status of the civilian population by sex and age*. <http://www.bls.gov/news.release/empst.t01.htm>
- VECCHIO, Robert P. (2002). "Leadership and gender advantage", *Leadership Quarterly*, Vol. 13, p. 643-671.