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Women in leadership positions in universities: Are they really Queen Bees?

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Purpose: The objective of this article is to assess the adherence to the traits of the Queen Bee phenomenon for women who hold leadership positions in Brazilian higher education institutions (HEIs) and to compare their responses with those of women without leadership positions and of men on the same dimensions.

Methodology: A total of 703 academics from 88 HEIs participated in the study. The data was analyzed using a statistical package to calculate descriptive and inferential statistics. For these, 2x2 ANOVA tests were performed to compare leader women vs. non-leader women and leader women vs. leader men.

Findings: The results indicate that leader women do not fit to all dimensions of the Queen Bee Phenomenon. They report high averages to commitment, agency traits, and personal sacrifices to career (*Male self-description*); and to meritocratic discourse. However, leader women assess their junior counterparts with higher averages to commitment and agency traits than women without leadership positions and leader men assess their junior counterparts. Women in leadership positions report superior identification with same gender colleagues and declare to be more supportive with affirmative policies for women's professional development than non-leader women and than leader men.

Originality: This study provides an empirical analysis of the Queen Bee Phenomenon to academic women in Brazilian HEIs and compares its dimensions to non-leader women and leader men. The analysis of a sexist culture enabled original results, as non-distancing of the self-group, even if leader women presented some QB traits.

Practical implications: This study reinforces that same gender conflict in the work environment is not a female characteristic and also promotes reflections on the influence of organizational culture, men hostility towards quotas, and gender stereotypes for female progression in the academic context.

Keywords: Gender; Higher Education Institutions; Queen Bee Phenomenon; Leadership; Academic career; Female career

Introduction

Science is a field with strong male representativeness, from which women were, for many years, excluded. They were engaged in activities with less social prestige and were considered incapable of contributing to the development of scientific knowledge (Lino and

Mayorga, 2016). The Matilda effect points out that women were under-represented in scientific contributions, often being assigned to assistant positions or having their findings signed-off by men (Knobloch-Westervick *et al.*, 2013). Even today, women scientists constantly face the barriers of historical masculinization in order to be professionally recognized and to ascend the career ladder (Faniko *et al.*, 2021).

Besides the Matilda effect, the scientific field comprises other metaphors, such as the leaky pipeline effect. It points that the high female participation seen in early scientific career positions is not sustained to the highest positions of the profession (Alper and Gibbons, 1993). The scarce number of women in leading positions in universities has been empirically evidenced in the Netherlands (e.g. Ellemers *et al.*, 2004), France (e.g. Deschamp, 2018), Italy (e.g. Marini and Meschitti, 2018), United Kingdom (e.g. Fotaki, 2013), Australia (e.g. Probert, 2005), Switzerland (e.g. Faniko *et al.*, 2021) and the United States (e.g. Shen, 2013). These studies denounce the absence of gender parity at the highest administrative and scientific levels, in addition to wage differences in all areas.

First cited by Staines, Travis, and Jayaratne (1974), the Queen Bee Phenomenon (QBP) suggests that women who hold positions of responsibility may adopt behaviors that hinder the career growth of other women. Despite the media constantly using derogatory terms to refer to female QBs, Faniko *et al.* (2021) and Derks *et al.* (2011a) emphasize that hostile behavior towards other women is not unanimous, nor can it be presented as biological characteristics oriented to female competition. Such behaviors are consequences of experiences of gender discrimination faced in male-dominated organizations (Derks *et al.*, 2016) and as such the scientific field can be classified (Faniko *et al.*, 2021). The male predominance in science may favor the emergence of the queen bee phenomenon among women who hold leadership positions in universities. So, the present study aims to assess the adherence to the traits of the Queen Bee Phenomenon for women who hold leadership positions in Brazilian higher education institutions (HEIs), and to compare their responses with those of women without leadership positions and of leader men on the same dimensions.

Thus, this paper seeks to contribute to the studies about QBP in academia and to problematize if the characteristics of QBP are also present between men in leadership positions. This is done so whilst considering the criticisms made towards women in leadership positions that present agency traits (Eagly and Carli, 2007), the prominence of

competitiveness among women (Sheppard and Aquino, 2017), and the rarity of research investigating whether behaviors related to the QBP occur among men (Faniko *et al.*, 2016). The presumption that women and men are different homogenous groups is questionable (Mensi-Klarbach, 2014). So, the fulfillment of this objective allows us to test whether the characteristics of the QBP, criticized when associated with women, are also present among men who occupy positions of responsibility.

Due to the parity of the Brazilian workforce (IBGE, 2021), it is suggested that the country is beginning to manage gender issues more properly (Vasconcelos, 2016). Otherwise, Brazilian culture is marked by structural machismo (Vasconcelos, 2016), which directly impacts the organizational culture and the ways relationships are established in organizations. The gender studies based on metaphors generally focus on samples from the USA and Europe (Grangeiro *et al.*, 2021). Thus, we believe that a different culture can bring insightful results and contribute to the studies in the Queen Bee Phenomenon.

Specifically about female academic careers in Brazil, although statistical data indicates an increase in the level of education, and in the number of enrollments in graduate programs and master's degrees by women in the recent decades (CNPq, 2016), it cannot be said that women have overcome the adversities related to a scientific career. The underrepresentation of women in science can be identified in the male dominance of committees and working groups of the Brazilian Council of Technological and Scientific Development (CNPq) (Barros and Mourão, 2020); in the Coordination for the Improvement of Higher Education Personnel (Capes); in the low percentage of women scientists that receive productivity grants, in the low number of women in prestigious positions—even in fields dominated by women—and in the supremacy of male figures in awards, offices, and scientific events (Barros and Mourão, 2020). Given the sexist Brazilian culture, the male-dominated scientific landscape, and the female scientific career being represented by the leaky pipeline; we thus argue that the proposed research is relevant to QBP studies and gender studies.

Literature Review: The Queen Bee phenomenon in universities

In predominantly male and competitive environments, such as HEIs, QB behavior arises as a response to negative experiences of gender discrimination, and as a strategy for

achieving leadership positions (Faniko *et al.*, 2021; Ellemers *et al.*, 2004). The QBP suggests that professionally successful women also express criticism to their colleagues in subordinate positions or in the early stages of their careers (Ellemers *et al.*, 2004).

Studies at universities in the Netherlands and Italy (Ellemers *et al.*, 2004), France (Grangeiro and Esnard, 2021), and Switzerland (Faniko *et al.*, 2021) confirm the presence of the phenomenon in academic contexts, especially in areas with male predominance, with prestige, and with higher salaries—identified by the acronym STEM (science, technology, engineering, mathematics). Although research on the QBP has gained traction in Europe, few Brazilian studies explore this. A search was conducted in the Scopus, Web of Science, Index Psi, LILACS, PubMed, Scielo, Spell, and Google Scholar databases. Only two papers on the phenomenon in the Brazilian context were found (e.g. Arvate *et al.*, 2018; Miltersteiner *et al.*, 2020), but neither of the two studies were conducted in HEIs. We consider the HEIs relevant contexts to be investigated once the academic environment reflects prominent topics in society, such as the gender issue. Yet, professors have an important impact on the way students will deal with these issues in their careers and in how they will establish their relationships in the work environment in the near future. Investigating gender in the higher education context has implications for gender equality and diversity in society at large, once universities play an important role in social change (Rosa and Clavero, 2022).

The QBP cannot be reduced to a natural competition between women who wish to guarantee their privileged status. The traits that comprise the QBP, rather than being natural, are consequences of the discrimination experienced. Thus, the scientific literature points to three characteristic traits of the Queen Bee metaphor: masculine self-description, psychological distancing from other women, and legitimization of the hierarchy of gender, developed in this literature review section.

Masculine self description

The first QB trait highlights that commitment to career, agency traits, and personal sacrifices comprise the masculine self-description dimension of the Queen Bee Phenomenon. Women who manage to reach high positions in masculine organizations have high scores of commitment and agency traits, as observed in the studies with women who work in the police service (Derks *et al.*, 2011a,b), in managerial works (Faniko *et al.*, 2016), and also among

women who work in academia (Ellemers *et al.*, 2004). In the Canadian engineering sector, some women arrived to describe themselves as non-girls as they presented more agency traits than community traits (Harvey and Tremblay, 2020).

Women in leadership positions adopt more masculine postures to approximate the characteristics related to men's leadership style (Derks *et al.*, 2016), since these characteristics provide more status and power in organizations (Derks *et al.*, 2011a). Successful women who manifest QB traits also report making important sacrifices for the benefit of their careers, which they state does not occur with their colleagues who are in lower positions or at the beginning of the career (Faniko *et al.*, 2017b; Ellemers *et al.*, 2004). The sacrifices refer to private life choices, such as marriage and having children, but they also refer to the effort women have to make in the work landscape (Faniko *et al.*, 2017b). Women have to present greater performance to achieve similar outcomes than men in leadership positions. The necessity of working harder to prove competence is present in different contexts of work, science (Ellemers *et al.*, 2004); managerial positions (Faniko *et al.*, 2017a); and the engineering sector (Harvey and Tremblay, 2020). Also, in command positions, women face less favorable conditions and receive less resources than men (Faniko *et al.*, 2017a). Congruent with this dimension of the Queen Bee phenomenon, we propose *H1: Women in leadership positions declare to have greater male traits than women without leadership positions and than leader men.*

Psychological distancing from other women

The second trait highlights that QB women identify themselves with colleagues who are at the same hierarchical level or who have a similar professional path while distancing themselves from women who are at the beginning of their careers, or who have not had as much success in their careers (Faniko *et al.*, 2016). Thus, QB women not only describe themselves as more committed and masculine but also see themselves as different from their peers who make stereotypically feminine choices or favor family and personal factors over career (Derks *et al.*, 2016).

Both the physical and psychological distancing between different subgroups of women, and the low identification between these subgroups, can be explained in two ways. The distancing behavior of women with their colleagues at the beginning of their careers is

seen as an individual strategy to face gender barriers (Derks *et al.*, 2016) and to reach positions of leadership. However, these results do not suggest that the conflict between men is less frequent since competitiveness emerges as a characteristic of those who aspire to career advancement in general, as men in leadership positions also distance themselves from colleagues at the beginning of their career (Faniko *et al.*, 2016).

Another possible explanation for the distance between women is offered by Shepard and Aquino (2017). The authors point out that competitive women threaten other women more than competitive men threaten other men. This is because women are often considered tokens in positions predominantly held by men. The fact that men have greater professional opportunities within these spaces, while women are often the only representatives of their gender, makes the competition between women more fierce. Congruent with this dimension of the Queen Bee phenomenon, we propose the following hypothesis:

H2A: Academic women in leadership positions report they are more distant from their same gender colleagues than academic women without leadership positions declare distancing themselves from same gender colleagues;

H2B: Academic women in leadership positions report they are more distant from their same gender colleagues than academic men in leadership positions declare distancing themselves from same gender colleagues.

Legitimization of the hierarchy of gender

The third trait concerns the legitimization of the hierarchy of gender, which is identified by three types of behavior. The first one is the denial of gender discrimination. To bring attention to discrimination highlights gender and activate negative beliefs about femininity. Moreover, it is threatening to accept the gender disadvantage regardless of your individual achievements and the personal sacrifices you are willing to make (Ellemers, 2018). Not recognizing the gender discrimination offers women who aspire to command positions the hope of achieving their goals. The deny of gender discrimination occurs, for example, when women judge recruitment processes as fair, even when there are clear evidence of gender bias (Stroebe *et al.*, 2009).

The second behavior is the adherence to meritocracy discourse, which highlights hard work, and dedication as variables that determine the achievement of success (Weber and

Giuffre, 2019). Thus, meritocracy emerges in modern universities under the disguise of academic excellence, where merit standards are built by academics who benefit themselves and their peers by applying this mechanism (Van den Brink and Benschop, 2011). Still, the meritocracy belief takes women to believe that when they do not succeed in achieving higher positions, they are responsible for it, which reduces the perception of the discrimination directed to them.

The third behavior refers to little or no support at all to affirmative policies aimed at women (Faniko *et al.*, 2016). Gender quotas intend to increase female representation in top positions of the organizations. However, when women benefit from gender quotas they may be stigmatized as incompetent, harming women's careers (Faniko *et al.*, 2017a). A recent study pointed that senior women were against gender quotas that favor women at the bottom of the organizational hierarchy or themselves, nevertheless, they supported gender quotas to senior women (Faniko *et al.*, 2017b; Derks *et al.*, 2016). Congruent with this dimension of the Queen Bee phenomenon, we propose the *H3: Female academics, occupying leadership positions, declare to legitimize gender hierarchy more than women without leadership positions and than leader men.*

Methodology

Sample

The data was collected exclusively online, between the months of February and April 2020, from a link created on the Survey Monkey platform, and shared through institutional emails and WhatsApp by female and male academics working in HEIs in Brazil. Once we do not have access to academic's e-mail groups of all Brazilian universities, we have searched their e-mail addresses on the HEIs' official websites, which characterizes our sampling type as a non-probabilistic convenience one. Only the answers of the participants who accepted and signed the free and informed consent form, which ensures compliance with the ethical criteria of research in applied social sciences and the anonymity of the answers, were considered.

The choice to examine academics and HEIs was made due to historical gender inequality, and the persistence of gender barriers in the Brazilian academic context (Barros

and Mourão, 2020). Approximately 8,000 e-mails were sent to university professors, but the researchers gathered 1,016 replies, 703 of which were complete.

Thus, 703 senior academic professionals and technicians from 88 public and private HEIs, from 23 Brazilian states participated in the study. The sample had 29.6% (n=208) of men and 70.4% (n=495) of women. The participants had an average age of 44 years, and 10 years of professional activity. The areas that were most represented in the sample were applied social sciences (19.7%), health (16.5%), human sciences (16%), and pure sciences (10.9%). Approximately 28% (n=193) of the respondents currently hold leadership positions, 72% (n=510) have held or presently hold administrative responsibilities, and 78% (n=548) have held or presently hold scientific research responsibilities.

Material

Based on the literature review and on the understanding of the three main characteristics of the QBP, adaptations of career engagement scales (Ellemers *et al.*, 1998), male description (Scott and Brown, 2006), and personal sacrifices (Faniko *et al.*, 2017b) were used to understand the male self-description characteristic. In addition to self-evaluation, horizontal (colleagues at the same organizational level) and descending (professionals at the lower level) evaluations were requested. The second characteristic was analyzed based on these descending evaluations and on the scale of identification with different subgroups of women (Faniko *et al.*, 2016). The third characteristic, legitimization of gender hierarchy, was evaluated by means of discrimination denial scales (Derks *et al.*, 2011b), adherence to meritocratic principles (Davey *et al.*, 1999), and support for quotas (Faniko *et al.*, 2012). The participants also answered demographic (age, gender, state, education) and occupational (area of activity, place of work, position of responsibility) questions.

The authors translated and adapted the scales for the Brazilian context. Reverse translation was then undertaken by a professional English language teacher, where few differences were identified between the reverse translation and the original scale items. Subsequently, a pre-test was performed with four university professors, in order to verify any errors or non-understanding in the items, which indicated the need for small adaptations. Finally, a seven-point Likert scale was used, ranging from 1 (I totally disagree) to 7 (I totally

agree).

Findings

The data was analyzed using the statistical package SPSS (version 25) in order to calculate descriptive and inferential statistics. For these, we conducted 2x2 ANOVA tests with participant's gender (men vs. women) and ensure leadership position (yes vs. no), considering significant p values <0.05 and basing the procedures on specialized literature (Field, 2013). Whether or not the characteristics of the QBP are present among women who occupy positions of responsibility was tested and compared to the extent to which these characteristics are more present among women leaders than among women non-leaders (presented in Table I); and among women leaders and men leaders (presented in Table II).

Table I
Differences between women in or out leadership position

		Women				
		Leader	No leader	df = 1.190		
		Mean (SD)	Mean (SD)	F	P	n ²
Male self-description	Commitment self-evaluation	5.67(.77)	5.63(.8)	.223	.637	0
	Male traits	6.06(.53)	5.77(.67)	18.7 ₃	.000	.037
	Personal sacrifices	4.06(1.32)	3.89(1.30)	1.56	.212	.003
Self-group Distancing	Descending assessment - Commitment	5.43(.94)	5.34(1.05)	.85	.357	.002
	Descending assessment - Masculinity	5.3(1.00)	5.21(.98)	.85	.357	.002
	Identification with same gender colleagues at the top of the hierarchy	5.24(.89)	4.99(.82)	7.71	.006	.001
Legitimization of the hierarchy of gender	Support for quota	4.79(1.61)	4.45(1.76)	3.61	.005	.007
	Meritocracy	5.69(.83)	5.5(.92)	3.45	.004	.008

Note: Table elaborated by the researchers

Table II
Differences between women and men in or out leadership position

		Occupy leadership positions		
		Man	Women	df = 1.190

		Mean(SD)	Mean(SD)	F	P	n ²
Male self-description	Commitment self-evaluation	5.47(0.90)	5.67(0.77)	2.658	.105	.014
	Male traits	5.94(.56)	6.06(.53)	1.890	.171	.01
	Personal sacrifices	3.55(1.09)	4.06(1.32)	6.94	.009	.035
Self-group Distancing	Descending assessment - Commitment	5.12(.77)	5.43(.94)	5.364	.022	.027
	Descending assessment - Masculinity	4.84(.94)	5.3(1.00)	9.068	.003	.046
	Identification with same gender colleagues at the top of the hierarchy	5.24(.89)	4.34(.72)	19.612	.000	.094
Legitimization of the hierarchy of gender	Support for quota	3.86(1.72)	4.79(1.61)	13.345	.000	.066
	Meritocracy	5.32(.92)	5.69(.83)	7.887	.005	.040

Note: Table elaborated by the researchers

Male self-description (Testing Hypothesis 1)

The ANOVAS tests identified that women who occupy leadership positions describe themselves as more committed ($M = 5.67$, $SD = 0.77$; $M = 5.63$, $SD = 0.8$), $F(.223)$, $p = .637$, $n^2 = 0.00$, with more male traits ($M = 6.06$, $SD = 0.53$; $M = 5.77$, $SD = 0.67$), $F(18.73)$, $p = .000$, $n^2 = 0.37$, and making more sacrifices ($M = 4.06$, $SD = 1.32$; $M = 3.89$, $SD = 1.3$), $F(1.56)$, $p = .212$, $n^2 = 0.003$, than women without leadership position.

Comparing women in leadership positions to men in the same positions, the first present greater averages to commitment ($M_{women} = 5.67$, $SD = 0.77$; $M_{men} = 5.47$, $SD = 0.90$), $F(2.658)$, $p = .105$, $n^2 = 0.014$, to male traits ($M_{women} = 6.06$, $SD = 0.53$; $M_{men} = 5.94$, $SD = 0.56$), $F(1.890)$, $p = .171$, $n^2 = 0.01$, and sacrifices ($M_{women} = 4.06$, $SD = 1.32$; $M_{men} = 3.55$, $SD = 1.09$), $F(6.94)$, $p = .009$, $n^2 = 0.035$ than men.

Even if women in leadership positions presented greater averages for commitment, male traits, and to personal sacrifices than women without leadership positions and than leader men, it is not possible to confirm hypothesis 1. The differences between the groups' averages are not significant, except for the male traits difference between women with and without leadership positions and for the personal sacrifice difference between leader women and leader men. Nevertheless, 2x2 Anova tests revealed important results. Women in leadership positions declared to have more agency traits than women without leadership positions ($p < 0.001$); and men in leadership positions declared to have more agency traits than men without leadership positions ($p = 0.005$). Based on these results, we can assume that agency

traits are more associated with leadership positions than with gender. Furthermore, whether among the group of leaders ($p=0.009$) or non-leaders ($p=0.017$), women reported making more sacrifices than men to develop their careers.

Self-group distancing (Testing Hypothesis 2A and 2B)

Self-group distancing was assessed in two ways: analyzing how junior workers commitment and masculinity are described; and testing identification with different subgroups. Although women who occupy leadership positions describe junior women as more committed, ($M_{commitment} = 5.43$, $SD = 0.94$), $F(.85)$, $p = .357$, $n^2 = 0.002$, and evaluate them as more masculine ($M_{male\ traits} = 5.3$, $SD = 1.0$), $F(.85)$, $p = .357$, $n^2 = 0.002$, than women without leadership position do ($M_{commitment} = 5.34$, $SD = 1.05$; $M_{male\ traits} = 5.21$, $SD = 0.98$), the results do not present significant differences between the groups' averages. In the tests for identification with same gender colleagues at the bottom of the hierarchy, women in leadership positions present greater average to identification with same gender colleagues ($M = 5.54$, $SD = 0.97$), $F(7.148)$, $p = .008$, $n^2 = 0.001$, than women without leadership positions ($M = 4.99$, $SD = 0.82$). So, hypothesis H2A was partially rejected.

When compared to men in leadership position, women in the same positions describe junior women as more committed ($M = 5.439$, $SD = 0.94$), $F(5.364)$, $p = .022$, $n^2 = 0.027$, and more masculine ($M = 5.3$, $SD = 1.0$), $F(9.068)$, $p = .003$, $n^2 = 0.046$, than men do ($M_{commitment} = 5.12$, $SD = 0.77$; $M_{male\ traits} = 4.84$, $SD = 0.94$). The tests showed that women in leadership positions, feel more similar to their same gender colleagues at the bottom of the hierarchy ($M = 5.54$, $SD = 0.97$), $F(40.452)$, $p = 0.000$, $n^2 = 0.094$, when compared to men in the same position ($M = 4.59$, $SD = 0.96$). Hence hypothesis 2B was rejected.

Legitimization of the gender hierarchy (Testing Hypothesis 3)

Women in leadership positions demonstrated a higher average of supporting actions of affirmative policies than women without leadership positions, ($M = 4.79$, $SD = 1.61$; $M = 4.45$, $SD = 1.76$), $F(3.61)$, $p = 0.05$, $n^2 = 0.007$. In turn, women in leadership positions are more adherent to meritocratic discourses than women without leadership positions, ($M = 5.69$, $SD = .83$; $M = 5.5$, $SD = .92$), $F(3.45)$, $p = 0.04$, $n^2 = 0.008$.

Women in leadership positions demonstrated a higher average of supporting actions of affirmative policies than men in the same positions, ($M_{women} = 4.79$, $SD = 1.61$; $M_{men} = 3.86$, $SD = 1.72$), $F (13.345)$, $p = 0.000$, $n^2 = 0.066$. Also, women in leadership positions are more adherent to meritocratic discourses than men in the same positions, ($M_{women} = 5.69$, $SD = .83$; $M_{men} = 5.32$, $SD = .92$), $F (7.887)$, $p = 0.005$, $n^2 = 0.040$. Women presented greater averages for supporting actions of affirmative policies than women without leadership positions and the leader men. However, they presented lower averages for adherence to meritocratic discourses than no leader women and than leader men. Hence, hypothesis 3 was rejected in the point of view of supporting affirmative policies, but it was confirmed concerning adherence to meritocratic discourses.

Discussion

The characteristics of the sample of this study are similar to those of Ellemers (2004), in which women in academia are less likely to be married than their male counterparts. The lower percentage in the number of women with children can be understood as a break in the socially imposed gender stereotype that women are born to be mothers (Williams, 2005). It can also be a consequence of the sacrifices made in their personal lives, favoring a professional career (Ellemers, 2012), since having a child reduces the scientific productivity of women (Mairesse and Pezzoni, 2015).

However, despite the fact that women marry less often and have fewer children than the men in this study sample, only 9% of them have a salary of more than 15 times the minimum wage, as opposed to 13.9% of men. It is common to establish an association between the obligations of taking care of a house and children and the lower salaries received by women (Barros and Mourão, 2020; Vasconcelos, 2016). However, even women who do not have children are targets of gender prejudices and neglected in career progression because a woman's image is closely linked to motherhood (Williams, 2005). Among the male respondents, 19.7% of them stated that they work more than 55 hours per week, and 30.3% of them are currently in a temporary civil servant or management position. As for the women, 14.9% of them stated that they work more than 55 hours per week, and 26.1% are in a temporary civil servant or management position. In the examined sample, men work longer hours, earn higher monthly incomes, and more commonly reach decision-making positions.

Male self-description. The first hypothesis concerned the comparison between groups of women leaders vs. women without leadership positions and women leaders vs. men leaders in relation to how they assess themselves regarding commitment, agency traits and sacrifices. Women in temporary civil servant positions in Brazilian HEIs evaluate themselves as more committed, with a greater amount of agency traits, and making more personal sacrifices than women who do not occupy these positions, and than men in leadership positions. However, the differences between the groups' averages are not significant, except for the difference between women with and without leadership positions regarding the agency traits and the difference between women and men in leadership positions regarding personal sacrifices.

The women's leadership male traits indicate that leadership positions are still less accessible to women with community traits, forcing them to adopt more masculine traits before and during occupying these positions. Van Veelen and Derks (2021) identified that women in the early stages of their career described themselves with more community traits while declaring agency traits as standard for academic success. The female academics who advance towards the top of the organizational hierarchy (Van Veelen and Derks, 2021) or who aspire to leadership positions (Derks *et al.*, 2016) go through changes in their self-concepts and acquire agency traits along the journey to reach these positions.

Analyzing the Saudi public organizational culture, Abalkhail (2020) assumes that the fear of weakness of women who work in leadership positions influences them to adopt masculine behavior and distance themselves from women who perform gender roles expectations. Thus, gender diversity should not focus on the numerical representativeness of women and men at different stages of their academic careers, but rather on initiatives that modify the predominantly male organizational culture, making it more inclusive (Faniko *et al.*, 2021), and also valuing and rewarding community behaviors (Van Veelen and Derks, 2021). Since just having women in responsibility posts while continuing to endorse and communicate gender expectations does not favor diversity, but imposes confrontation between women.

The greater commitment presented by women may be the result of the need for greater efforts to be well evaluated in work contexts, since professional academics tend to hire, guide, propose better salaries, and judge males as more engaged candidates (Moss-

Racusin *et al.*, 2012). Even with similar performance to men, women in academia do not enjoy the same privileges as men, needing to adjust to male academic culture in order to progress professionally, and are more likely to give up their careers (Faniko *et al.*, 2021). The predominantly male organizational structure intensifies competition among women and hinders the building of collective ties and mutual support between them (Sheppard and Aquino, 2017). However, this female competition is commonly problematized and seen as negative, unlike male competition that is naturalized and rarely investigated with concern or perceived as a symptom of dysfunction.

Self-group distancing. The hypotheses 2A and 2B dealt with the comparison between groups of women leaders vs. women without leadership position and women leaders vs. men leaders in terms of how they assess their junior counterparts regarding commitment and agency traits; and identification with same gender colleagues. The feature of the QBP which states that women who ascend in the organizational hierarchy have a more critical attitude towards their subordinates and junior same gender colleagues (Ellemers *et al.*, 2004), in this study, was observed with greater strength among men in leadership positions, indicating that criticism of subordinates of the same gender is not peculiar to women. It was observed that the evaluations that women in leadership positions make of their subordinates, regarding commitment and agency traits present greater values than the evaluations made by women without leadership positions and by men in leadership positions of their junior counterparts.

Concerning identification with same gender colleagues, the results pointed out bigger averages to leader women compared to women without leadership posts and with men leaders. The great identification the women leaders have with their colleagues subordinates could be explained by cultural characteristics of the sample analyzed. Brazilian culture is marked by sexism (Vasconcelos, 2016) which explains that women have obligations linked to their gendered roles no matter the exigencies of their professional roles. Thus leader women, as no leader ones, have to manage their houses, take care of their children as they had no professional role. So Women in leadership positions identify themselves with subordinate women once both of them ensure tasks of the gendered role.

Faniko *et al.* (2016) also identified that men in leadership positions also distance themselves from their counterparts who are at the beginning of their careers, therefore, the possibility of identifying competitiveness responses among men cannot be excluded.

However, male conflicts or competition becomes an opportunity for professionals to exhibit their mastery, allowing them to obey the prescriptions of male stereotypes (Sheppard and Aquino, 2017) and does not violate the prescriptions of the male gender role (Sheppard and Aquino, 2013). In this way, gender role prescriptions impose a double pressure on senior women, in which they are expected to engage in interpersonal relationships and to help other women, while they need to work hard to be recognized for their performance and capabilities (Abalkhail, 2020).

Meanwhile, the characteristics attributed to QB women make them susceptible to harsh criticism, since they are identified as violators of the stereotypes that describe women as more affectionate and protective, especially with each other, due to their lower status in relation to men. Nonetheless, conflicts or competitiveness among men do not violate the prescriptions of the male gender role (Sheppard and Aquino, 2013).

Legitimization of the gender hierarchy. The third hypothesis covered the comparison between groups of women leaders vs. women without leadership position and women leaders vs. men leaders about the degree they declare to support affirmative policies that promote women's careers and the extent they report to adhere to meritocratic discourse. Ellemers et al. (2012) declare that token women tend to reproduce or support the status quo that keeps men in leadership positions. It happens once women leaders who value diversity can be seen as selfish managers who target their own demographic group and they could be penalized for defending the egalitarian environment (Hekman et al., 2017).

It was identified that the average for women in leadership positions for the support for quotas variable is higher than the averages presented by women who do not occupy leadership positions and that of men in leadership positions. However, these women declared to have strong adherence to meritocratic discourse, more than women who do not occupy leadership positions and more than men in leadership positions.

Thus, although women in leadership positions do not legitimize gender hierarchy being contrary to policies that favor the development of women, they do so by producing and reproducing the idea that strong dedication to work and excellence in their performance are sufficient for professional ascent (van den Brink and Benschop, 2011). Thus, this belief in meritocratic principles, even in the face of obvious flaws, preserves current academic practices that value and reward the agency traits and the sacrifices made (Derks *et al.*, 2018).

In this sense, women who wish to achieve high positions in their academic careers are constrained in the daily life of their professional practices to ponder, and often renounce behaviors and choices of stereotypically feminine lives (Faniko *et al.*, 2021).

Conclusion

Women in leadership positions in Brazilian HEIs do not fit all dimensions of the Queen Bee Phenomenon. Although they describe themselves as more masculine, more committed, have reported more personal sacrifices to develop their careers, and are more adherent to the meritocratic discourse, all these features together can be understood as a strategy to achieve resources and organizational positions that are less accessible to them in male organizational cultures. However, even in the face of the privileges, men in leadership positions evaluated themselves as more committed and with more agency traits than their male colleagues in their early careers or that are not in strategic positions. Nonetheless, these relationships are naturalized and perceived in the university environment to be a functional conflict of the job.

When only the conflict between women is problematized and stigmatized, it contributes to the belief that women have difficulties in supporting themselves and coexisting, which directly impacts the hiring and promotion processes between them. Organizations need to be aware of the negative burden attributed to competitiveness among women, and of the amnesty offered to men who compete with each other, since both make it difficult to identify gender bias, as well as contributing to the maintenance of gender inequalities.

The present study contributes to the development of knowledge about the QBP, since it proposes an analysis of a Brazilian sample and presents data that puts to the test the strongest criticisms about the phenomenon - in this case, the negative perception that women of professional success acquire by imposing barriers to the growth of other women. This study reinforces that competitiveness is a common characteristic among the respondents who occupy leadership positions, regardless of their gender (Faniko *et al.* 2016). However, competitiveness among women draws more attention because it is a less expected behavior among women, even if it is the norm when aspiring to career progression. Further, another theoretical implication consists in enriching the studies on QBP, bringing new results, from

the analysis of a culture strongly marked by sexism and therefore different from contexts analyzed previously. Contrary to what the literature on QBP assumes, the leader women analyzed do not distance themselves from the group to which they belong, so we endorse the need for further studies on self-group distancing in sexist cultures (Van Veelen et al., 2020).

However, the sample analyzed preserves characteristics that bring it closer to the QB label, such as meritocracy. So diversity managers in HEI should be aware of the strength of meritocratic discourse, as despite the appearance of gender neutrality, the merit system is masculinist (Rosa and Clavero, 2022; Derks et al., 2018) and threaten equality policies applied at university. Results also show men's hostility toward gender quotas. It is worrying once men, just as women, are responsible for diversity and negatively impacted by gender inequality in organizations and in society. Presenting the challenge for the development of gender equality in organizations is a practical implication of this study. Considering our findings, equality policies at Brazilian universities should focus on raise men's awareness of the equality benefits; be vigilant about the meritocratic criteria that are at stake in the career advancement of women, once meritocracy is a value strongly present in academic context, and it favors male career progression.

The research agenda on gender and labor is huge and varied, but possible outcomes from this study would be to investigate the QBP in different professional categories; deepen issues related to the adherence to meritocratic discourse for academics; examine how institutional characteristics (e.g. the university's length of existence, the macro-region of the university, the number of women in pro-rector positions) can influence the emergence of the QBP; apply other methodological strategies to understanding the phenomenon; and analyze whether men who hold leadership positions in traditionally female areas also adopt behaviors that hinder the career growth of other men.

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