

Women leadership barriers in healthcare, academia and business

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Women
leadership
barriers

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Abstract

Purpose – The purpose of this paper is to map the barriers to women leadership across healthcare, academia and business, and identify barriers prevalence across sectors. A barriers thematic map, with quantitative logic, and a prevalence chart have been developed, with the aim to uncover inequalities and provide orientation to develop inclusion and equal opportunity strategies within different work environments.

Design/methodology/approach – A systematic literature review method was adopted across five electronic databases. Rigorous inclusion/exclusion criteria were applied to select relevant publications, followed by critical appraisal of the eligible articles. The geographical target was Europe, with a publication time range spanning the period from 2000 to 2015. Certain specialized international studies were also examined. The key themes were identified using summative content analysis and the findings were analyzed using qualitative meta-summary method to formulate hypotheses for subsequent research.

Findings – In total, 26 barriers were identified across the aforementioned sectors. A high degree of barriers commonalities was identified, with some striking differences between the prevalence of barriers across sectors.

Research limitations/implications – The results of this study may need further validation using statistical methodology given the knowledge base gaps regarding the range of barriers and the differences in their prevalence. Bias and interpretation in reporting anchored in different theoretical frameworks ought to be further examined. Additional variables such as ambiguously stated barriers, sector overlap, women's own choices, cultural and educational background and analysis in the context of the economic crisis, ensuing austerity and migratory pressure, are also worth exploring.

Practical implications – Women's notable and persisting underrepresentation in top leading positions across sectors reflects a critical drawback in terms of organizational and societal progress particularly regarding inclusion and balanced decision making. Practice-related blind spots may need to be further examined and addressed through specific policies.

Originality/value – The comparative nature of barriers to women leadership across three sectors allows the reader to contrast the differences in gender inequalities and to comprehend inclusion challenges in healthcare, academia and business. The authors draw attention to varying degrees of barriers prevalence

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that have been understudied and deserve to be further explored. This gap in knowledge extends to policy, thus, highlighting the need to address the gender equality and inclusion challenges in a context-specific manner across work environments.

Keywords Gender, Healthcare, Business, Equal opportunities, Academia, Women leadership barriers

Paper type Research paper

Introduction

Women's participation in the workforce has steadily grown over the last 20 years reaching 63.5 percent across the European Union (EU-28) (Eurostat Statistics Explained, 2015). However, women are underrepresented in top leadership positions, with less than 16.6 percent achieving board-level positions (European Commission, 2013). A structural weakness identified by the EC is that employment rates across Member States are still significantly lower than in other parts of the world, with only 63 percent of women in work compared to 76 percent of men (European Commission, 2010). The European Parliament (EP) (2015) stated that gender mainstreaming constitutes an essential factor for the achievement of a sustainable and inclusive society. The European Institute for Gender Equality (2015) argues that twenty-first century needs for smart, sustainable and inclusive growth require higher gender equality scores. The United Nations (UN) included gender equality and the empowerment of women in the sustainable development goals (Goal No. 5) for the 2030 Agenda, on the grounds that gender inequality adversely impacts upon development outcomes for the society as a whole (World Health Organization (WHO), 2015). The World Economic Forum (2014) quantifies the magnitude of gender-based disparities holding them responsible for undermining the long-term competitiveness of the global economy. Gender equality has also been identified as a precondition for the full enjoyment of human rights by women, with unequal treatment and discrimination of women representing a gross and frequent violation of basic human rights (EP, 2015; WHO, 2015; World Economic Forum, 2014).

Subsequently, the new framework for gender equality and the empowerment of women (European Commission, 2015a) has been developed with indicators around specific pillars including economic and social empowerment, strengthening voice and participation and shifting institutional culture, whereas a comprehensive approach on gender equality and inclusion barriers is still required to ensure the gender equality challenge is met with success.

Thus, the Global Gender Gap Report (World Economic Forum, 2014) and EU Progress Report (European Commission (EC), 2012) examine existing barriers in relation to women leadership such as work/life balance, gender bias, stereotypes, lack of confidence and equal access to opportunities. In addition, the Kulik (2015) described in depth such career hindering factors including non-friendly corporate environment, glass ceiling[1], lack of mentoring, lack of adequate networking and appropriate societal culture. These reports evidence that gender inequalities have not yet been explored in the same depth across key sectors such as healthcare, academia and business.

Although there is a sound body of literature exploring the barriers encountered by women leaders and aspiring women leaders, there is hardly any evidence related to the comprehensive evaluation of barriers to gender equality, inclusion and their potential prevalence across these three sectors. These sectors are of critical importance, particularly bearing in mind their impact on global economy.

Therefore, the authors undertook a systematic literature review, summative content analysis and meta-summary methodology on barriers to women leadership in healthcare, academia and business, aiming to conduct a comprehensive barriers mapping. Mapping resulted in the construction of a barriers thematic map (BTM) with quantitative logic and a prevalence chart to showcase the varying degrees of barriers prevalence across three sectors: healthcare, academia and business.

Background

Considered separately, each of the sectors in question has its characteristics and complexity, which add to the body of barriers encountered by women in their quest for advancement toward leadership roles.

Healthcare

Women leaders in healthcare remain significantly underrepresented in top leadership positions, even though they represent the vast majority of the specialized healthcare workforce (Bismark *et al.*, 2015; Fontenot, 2012; Hopkins *et al.*, 2006; Hoss *et al.*, 2011; Lantz, 2008). Out of the global healthcare workforce, 75 percent are women, but only 38 percent hold top positions (Just Actions, 2015). In the healthcare provision sector, women leaders represent only 18 percent of hospital CEOs and 14 percent of members of boards of directors (Hauser, 2014), whereas when examining clinical leadership we find that only 15.9 percent have reached top-level positions (Newman, 2011). Fjeldsted (2013) argues that although women doctors bring excellent qualities and results into medical services, yet the talent pipeline of women medical and clinical leadership needs to be further enhanced and supported (Hauser, 2014; Newman, 2011). The main barriers held responsible for gender equality in this sector include the triple burden of domestic, clinical and leadership roles, which result in higher burnout rates, poor career management (Sexton *et al.*, 2014), gender-related stereotypes, unequal career opportunities and gender-related pay gap (Newman, 2011).

Academia

Similar factors affect women leaders in top academic positions, with a range of academic office held by women ranging from 11 to 40 percent (European Commission, 2015b), with significant variation in the proportion of women in top leading positions across countries and institutions. Whereas women represent 59 percent of the graduate pool within the EU-28, the percentage drops to 18 percent when it comes to the pool of academics holding full professorship at universities (EP, 2015). The Netherlands Organization for Scientific Research (2013, p. 5) states that less than 15 percent of full professors in the country are women and this percentage gets lower when examining the inflow at the level of assistant professors. Existing literature (Madsen, 2010; McTavish and Miller, 2009; Young, 2004), addressing the gender-related imbalance on higher academic echelons, argues that career advancement via the academic pipeline has been marked as slow due to unconscious, gender-related biases resulting in women marginalization and devaluation (Carnes *et al.*, 2008). In addition, male-friendly organizational practices with gender inequality (McTavish and Miller, 2009), compounded by the lack of development of leadership skills (Acker, 2010; Kodama and Dugan, 2013; Madsen, 2010), have been identified as a key contributing factor to an increased rate of gender disparities within academic settings.

Business

There is ample evidence documenting the gender-related leadership profile in the business arena. The Global Gender Parity Group, a multi-stakeholder community of business leaders within the World Economic Forum (2014), states that gender equality is a business imperative; the G7 Report 2015 (p. 58) concurs, echoing conclusions and highlighting the same priority. Even though gender gaps progressively narrow, women still represent a minority on corporate boards. The Gender Equality Index, a composite indicator in the area of power, reaches an average 16 percent in the EU-28 for 2012 (The Gender Equality Index Report, 2015, p. 57). Despite the fact that women account for approximately 59 percent of tertiary education graduates, their proportion in top-level business decision making is limited, with only an average of 13.7 percent of board seats and only 3.4 percent of chairs

or presidency being held by women among the largest publicly listed companies in the EU (EC, 2012, p. 12). Male predominance in boardrooms is a global reality in companies in the USA, with women representation in the boards of the largest companies reaching only 15.7 percent, while in Australia this percentage is pushed further down to 10.9 percent, and in Canada to only 10.3 percent (EC, 2012, p. 12, Figure 5).

The 2012 EU Progress Report acknowledges a positive increasing trend, albeit at a non-satisfactory pace, since to ensure competitiveness in the EU, a more balanced representation of women is required to contribute to an overall enhanced economic performance, upgraded corporate governance and effectiveness, leading to better use of the talent pool. Patel (2013) suggests that the development of women leadership has a strong business value in terms of strengthening the economy with an estimated, women-generated income of around \$18 trillion globally in 2014, an amount double the combined gross domestic product of China and India (as reported by Silverstein and Sayre, 2009 in "The Female Economy", p. 48). A report recently published by the McKinsey Global Institute (2015) claims that by 2025 increased gender parity may contribute \$28 trillion to global economic growth. Such a trend and growth would not only improve aspects related to corporate performance, but also substantially contribute to women creating their own wealth.

Theoretical and conceptual considerations

Researchers adopted the Article 3c of the Istanbul Convention (Council of Europe, 2011) stating that "Gender shall mean the socially constructed roles, behaviors, activities and attributes that a given society considers appropriate for women and men" in contrast to "sex" referring to genetic and biological characteristics defining humans as male or female (UN Women Training Centre, 2016). The researchers recognized the nature of knowledge is non-objective and understanding of the issues of gender through multiple subjective realities formed into working definition (Teddlie and Tashakkori, 2003). The adoption of a definition of gender mainstreaming from the UN, therefore, being adequate to support the review "the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels" (Economic and Social Council of the UN (UN ECOSOC, 1997). This definition constitutes a basis for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and societal spheres, so that women and men benefit equally and inequality is not perpetuated since "the ultimate goal is to achieve gender equality" (UN ECOSOC, 1997).

For the purposes of this study, the authors adopted the operational definitions related to the three investigated sectors from the United Nations' International Standard Industrial Classification of All Economic Activities (2008). Healthcare is described as "generally consisting of hospital activities, medical and dental practice activities" and "other human health activities" (p. 252); academia as the setting for the "provision of tertiary education" (p. 249) and business is understood as "enterprise determined by the added value generated by its constituent units" (p. 31); the business added value feature is adopted to avoid confusion with potential overlap of healthcare and academia activities.

Methods

Using a multi-methods approach to validate the findings (Guba and Lincoln, 1994), a systematic literature review method was used to "summarize the body of knowledge on a particular topic" (Aveyard, 2014, p. 48) and to provide a comprehensive overview of existing evidence. The protocol for the search and extraction was supported by a further multi-methods approach to analysis that validated the findings (Guba and Lincoln, 1994) to develop a BTM across the explored sectors.

Rigorous search criteria were used (see below Selection criteria section) to retrieve and select, critically appraise and synthesize the relevant articles included. The main aim of this process was to address the effort of developing a BTM with quantitative logic and a prevalence chart. The findings of the search were further analyzed using summative content analysis. Two researchers, SK and KC, conducted the literature review over a period of nine months (October 2015 to June 2016) and in two parts. During the first part, research was focused on women leadership in healthcare, academia and business, and during the second part on women leadership and barriers in healthcare, academia and business. In the second part the researchers mapped the prevalence of each barrier across targeted sectors by calculating the times each barrier was reported upon to design and populate a quantitative thematic map.

The first part is a traditional systematic review process utilizing Cochrane protocols[2] as presented in the following PRISMA[3] study flow diagram (Moher *et al.*, 2009) summarizing the search strategy (Figure 1). The second part followed the qualitative meta-summary method with quantitative logic calculating the effects of each barrier on the basis of its frequency (Sandelowski *et al.*, 2007). Meta-summary is a particular approach that can be used to integrate qualitative findings from several studies. It is often performed when the qualitative findings to be included in the research study are evaluated by the researchers to be in the form of “summaries” of qualitative findings as synthesized data as described by Sandelowski and Barroso (2003). In this study, the findings are judged to be “summaries” of qualitative data; hence, the meta-summary method was deemed appropriate.

Search strategy

The review question developed was – “What are the barriers to women leadership across healthcare, academia and business?” – this question being used to identify common and different barriers to women leadership. Five electronic databases (Google Scholar, PubMed/Medline, Cochrane Library, Web of Science and Emerald) and ten websites of key organizations (European Commission – Directorate General for Justice, European Institute for Gender Equality, European Parliament, G7 Germany: The Schloss Elmau Summit, Standing Committee of European Doctors, The World Bank, Just Actions Organization, Commonwealth Secretariat’s Report, McKinsley Global Institute and The Netherlands Organization for Scientific Research) were searched. The database search used various combinations of keywords: “women leadership,” “barriers,” “complexities,” “interactions,” “healthcare,” “academia” and “business.” The term “barriers to women leadership” was often used interchangeably with “complexities” or “interactions.” For the purpose of this study, the term “barriers” to women leadership was used with the meaning of a “concrete wall, visible or invisible” (Eagly and Carli, 2007), toward top leading positions. Gray literature[4] was searched for nine months using snowballing techniques (Streeton *et al.*, 2004), including websites and reports from agencies and organizations specialized in each domain.

Selection criteria

Articles were eligible for inclusion/exclusion based on the following rigorous criteria: published between 2000 and 2015; papers published previously to this period were considered old and of no interest to this study; published in English; a title and an abstract were included; research studies, reviews or reports. All identified articles were initially assessed based on their title and abstract. A second screening was performed for final eligibility by retrieving the full text. The geographical spectrum of the search was Europe-wide along with some specialized international studies.

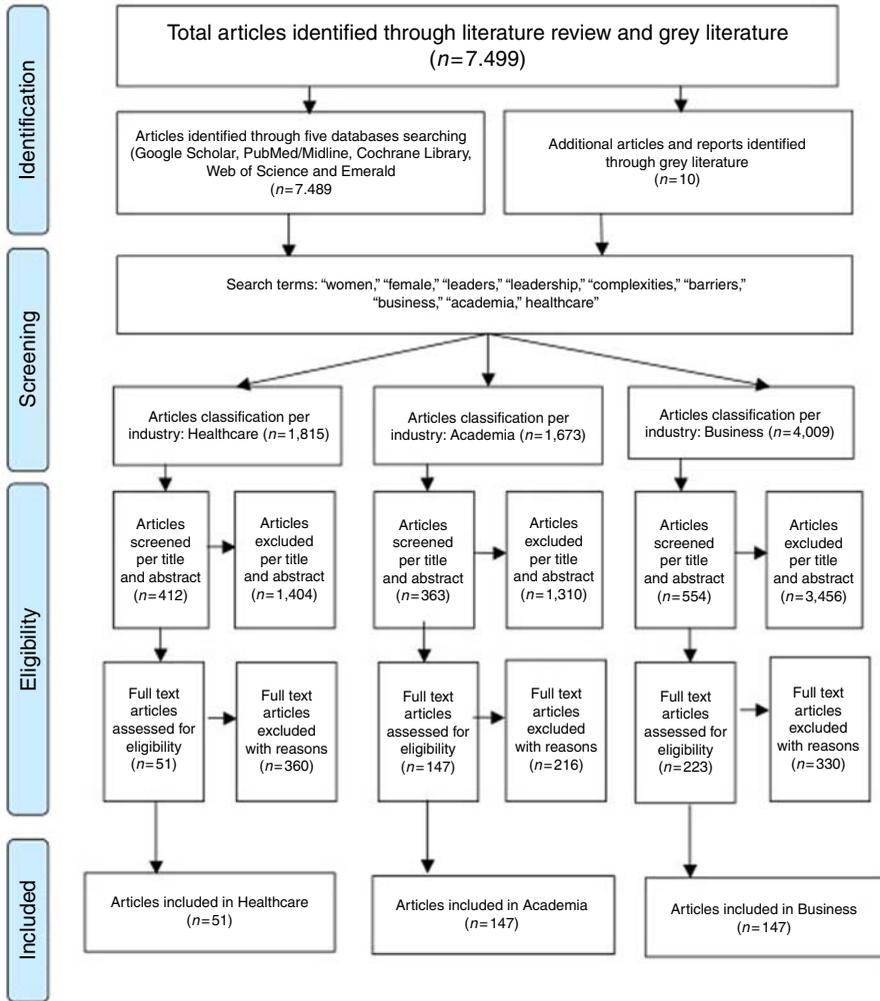


Figure 1. PRISMA flow diagram indicating articles' selection for systematic review of barriers to women leadership in healthcare, academia and business

Note: For more information, visit www.prisma-statement.org

Exclusion criteria: articles were related to women leadership in politics, military, police and religion; and not representing original research and/or reporting thereof, these being papers in which authors were reviewing or representing a direct reference to a book or book chapters.

Data analysis

The qualitative meta-summary method, including extraction and grouping of findings into thematic content categories, was adopted in order to produce a thematic map with quantitative logic. It is important to note that, in most cases, reporting was done in a manner that necessitated a process of "ungrouping" the data across sectors and themes. Therefore, this approach was deemed the most appropriate given the data were often indiscriminately presented in a large body literature related to researched three

different sectors. Additionally, data were scanned in reverse to match thematic tags across sectors, to ensure themes per sector had not been missed, given this more general character of reporting or the terminological heterogeneity of reporting. The thematic map with quantitative logic was used to calculate the frequency of effect size for each thematic content category findings as a validity indicator and to help determine which topics were most relevant for formulating hypotheses for subsequent research (Sandelowski *et al.*, 2007). Also, differences were found on conclusions regarding key themes, given the complexity of the topic and the different background of researchers examining this topic. For example, some studies argue that the lack of “role model” barrier is a key drawback in women leadership advancement, whereas other studies support the fact that “role model” affects women leadership disproportionately (Fletcher, 2007; Ridgeway, 2001). The researchers selected and synthesized such findings to elicit deeper nuanced understanding regarding the topic of interest.

Findings

Two researchers, SK and KC, conducted the search independently and compared their findings. A total of 7,499 articles were retrieved including ten reports were also retrieved through gray literature search. After excluding the non-eligible articles based on their title and abstract, a total of 1,329 articles were screened and approved on the basis of title and abstract. The large volume of articles not classified as eligible referred to barriers in an indirect and/or unclear manner in relation to the objectives of this study. Articles were classified per sector: 412 were eligible for a second screening for the healthcare sector, 363 articles for the academia, and 554 articles for the business sector. Following further abstract screening, and after duplicate removal, 51 articles were selected as eligible for full text retrieval and screening for the healthcare sector, 147 articles for the academic sector and 223 articles for the business sector.

The final eligible articles were further grouped and analyzed per sector with 26 barrier themes reported/identified and/or listed in the reviewed articles. The same two researchers were coding texts in an extraction frame in Excel spreadsheets searching for prevailing barriers and subsequently registering where every barrier was clearly recorded with information as reported per article, and including author(s), publication date and journal. When the term “gender” was interchangeably used with the term “sex” (e.g. “sex bias” and “gender bias”), article eligibility was assessed on the basis of the article’s approach to gender, i.e. whether it considered gender to be a socially constructed characteristic (UN Women Training Centre, 2016). The researchers compared their interpretations on an ongoing basis. Disagreements were resolved by discussing interpretations until reaching consensus (Bowling, 2014). The barriers were assigned to sectors according to the visual representation of Table I. In total, 26 barrier categories were identified: 22 in the healthcare sector, 21 in the academic sector and 25 in the business sector.

The frequency to which a given barrier was mentioned in the articles was calculated and summarized; a BTM with quantitative logic was produced in order to calculate the effect sizes of each barrier per sector based on its frequency. The prevalence of each barrier was then calculated. The higher the frequency of a particular barrier, the greater its frequency was considered to be (Barnett-Page and Thomas, 2009).

Results

The name given to each barrier, out of the 26 identified, was generated from the articles reviewed by the researchers; they used the term selected as a “theme” identified for the purpose of the study. The themes identified are mapped below (Table I). The themes were

Barriers	Healthcare	Academia	Business
1. Age ^a	-	-	✓
2. Lack of career advancement opportunities ^b	✓	✓	✓
3. Culture ^c	✓	✓	✓
4. Family (espousal) support ^d	✓	✓	✓
5. Gender bias (discrimination) ^e	✓	✓	✓
6. Gender gap ^f	✓	✓	✓
7. Gender pay gap ^g	✓	✓	✓
8. Glass ceiling ^h	✓	✓	✓
9. Glass cliff ^f	✓	✓	✓
10. Isolation ⁱ	✓	✓	✓
11. Lack of executive sponsor ^k	-	-	✓
12. Lack of flexible working environment ^l	✓	✓	✓
13. Lack of confidence ^m	✓	✓	✓
14. Lack of mentoring ⁿ	✓	✓	✓
15. Lack of networking ^o	✓	✓	✓
16. Leadership skills ^p	✓	✓	✓
17. Personal health ^q	✓	✓	✓
18. Queen bee syndrome ^r	✓	-	-
19. Race discrimination ^s	✓	✓	✓
20. Lack of role model ^t	✓	-	-
21. Sexual harassment ^u	✓	✓	✓
22. Lack of social support ^v	✓	✓	✓
23. Stereotypes (male dominated culture, negative organization environment) ^w	✓	✓	✓
24. Limited succession planning ^x	-	-	✓
25. Tokenism ^y	-	✓	✓
26. Work/life balance ^z	✓	✓	✓

Notes: ^a“Significant gender difference [...] and career barrier” (Pfister and Radtke, 2009). ^b“Unequal access to research positions, funding, publishing and academic awards and are also affected by rigid criteria for promotion and recognition and luck of funding or suitable policies to support them” report on women’s careers in science, universities and glass ceiling encountered (European Parliament (EP), 2015, p. 6). ^c“Cultural and institutional barriers that generate direct or indirect discrimination against women in scientific careers and decision making” report on women’s careers in science, universities and glass ceiling encountered (European Parliament (EP), 2015, p. 7). ^d“Sources of support cited included partners, other family members, and childcare” (Bismark *et al.*, 2015, p. 6). ^e“Societies often perceive some professions as being made for male and some for female” report on women’s careers in science, universities and glass ceiling encountered (European Parliament (EP), 2015, p. 14). ^f“Women are under-represented at higher hierarchical levels, even in sectors where they represent a majority” report on women’s careers in science, universities and glass ceiling encountered (European Parliament (EP), 2015, p. 13). ^g“Unequal pay for equal work [...] or work of equal value” report on women’s careers in science, universities and glass ceiling encountered (European Parliament (EP), 2015, p. 15). ^h“Invisible barriers based on prejudice that limit the advancement of women to higher positions in their career paths” report on women’s careers in science, universities and glass ceiling encountered (European Parliament (EP), 2015, p. 13). ⁱ“Female leaders [...] are more often assigned to risky, precarious positions, with few material and social resources” (Ellemers, 2014, p. 50). ^j“predominance of ‘old boys clubs’, inflexible corporate cultures and male dominated leadership teams that do not support or enable women to move into comparable leadership roles” (O’Neill and Boyle, 2011, p. 3). ^k“lack of executive sponsorship to have had diversity training and specific capabilities to effectively mentor women executives” (O’Neill and Boyle, 2011, p. 3). ^l“Many taken-for-granted organizational features reflect men’s lives and situations, making difficult for women to get on and stay” (Ely *et al.*, 2011, p. 12). ^m“Self-doubt, [...] underestimating personal capabilities” (Bismark *et al.*, 2015, p. 4). ⁿ“Limited access to capable mentors” (Elmuti *et al.*, 2009, p. 171). ^o“informal networks can shape career trajectories by regulating access to jobs; channeling the flow of information and referrals; creating influence and reputation; supplying emotional support, feedback, political advice and protection” (Ely *et al.*, 2011, p. 13). ^p“Leadership programs [...] to address the particular challenges women face when transitioning to more senior leadership roles” (Ely *et al.*, 2011, p. 16). ^q“devalue and marginalize women and issues associated with women, such as their health” (Carnes *et al.*, 2008). ^r“the reluctance of successful females to support other women” (Ellemers, 2014, p. 50). ^s“Underrepresented groups [...] found themselves at a competitive disadvantage” (Lightfoote *et al.*, 2014, p. 3). ^t“The historical and contemporary achievements of women in science and technology, entrepreneurship, and decision making positions” report on women’s careers in science, universities and glass ceiling encountered (European Parliament (EP), 2015, p. 8). ^u“an unwelcome behavior of sexual nature [...] that if allowed to continue could create a hostile work environment for the recipient” (www.un.org/womenwatch/osagi/pdf/whatish.odf). ^v“Resistance in culture of female leadership [...] (non) adoption of new cultures and social norms” (Elmuti *et al.*, 2009, p. 5). ^w“habitual privileging of stereotyped ‘maleness’ as the only credible context for leadership, created a heavily-gendered work environment” (Bismark *et al.*, 2015, p. 5). ^x“actions are lacking such as succession plans that focus on a concrete plan for development of women for these (top echelons) positions” (McDonagh *et al.*, 2014, p. 4). ^y“one woman or two women (a few tokens) to at least three women (directors) (consistent minority) (Torchia *et al.*, 2011, p. 299). ^z“The need to successfully reconcile professional and family obligations” report on women’s careers in science, universities and glass ceiling encountered (European Parliament (EP), 2015, p. 9)

Table I.
Barriers thematic map (BTM) to women leadership in the healthcare, academic and business sectors

then grouped per sector, and then checked against the body of literature. In total, 22 barriers were identified in the healthcare sector, 21 barriers in the academic sector and 25 in the business sector (Table I).

Researchers calculated the frequency of each barrier, namely, the number of times a given barrier was mentioned in the literature explored, and produced the BTM based on quantitative logic (Table II). Quantitative findings of varying degrees of barrier prevalence are presented both on arithmetical and percentage forms to facilitate interpretation, ensure accuracy and lend validity.

To provide a full overview of the high degree of barriers commonalities and varying prevalence to women leadership across sectors, a chart was developed (Figure 2).

The prevailing barriers identified across the healthcare, academic and business sectors were gender gap (12-12-11 percent), lack of career opportunities advancement (12-10-7 percent), stereotypes (10-8-12 percent), work/life balance (9-10-10 percent), lack of mentoring (10-11-6 percent) and lack of flexible working environment (7-10-6 percent). Of the 26 identified barriers, four appear in two sectors interchangeably (lack of role models in healthcare/academic sectors, sexual harassment in healthcare/business sectors, tokenism and isolation in academic/business sectors), three barriers are encountered only in the business sector (age, lack of executive sponsor and limited succession planning), whereas the “queen bee syndrome” barrier emerges only in the healthcare sector.

Women leadership barriers	Arithmetical frequency			Percentage prevalence		
	Healthcare	Academia	Business	Healthcare (%)	Academia (%)	Business (%)
Gender gap	38	97	117	12	12	10
Lack of career advancement opportunities	40	85	82	12	10	7
Stereotypes	33	70	134	10	8	12
Work/life balance	28	82	109	9	10	10
Lack of mentoring	32	87	72	10	11	6
Lack of flexible working environment	24	80	71	7	10	6
Gender bias	18	57	87	5	7	8
Lack of confidence	23	39	35	7	5	3
Leadership skills	16	41	39	5	5	3
Lack of networking	16	28	29	5	3	3
Glass ceiling	10	17	52	3	2	5
Glass cliff	12	14	27	4	2	2
Culture	5	25	68	2	3	6
Gender pay gap	4	30	42	1	4	4
Race discrimination	3	15	57	1	2	5
Lack of social support	7	23	44	2	3	4
Personal health	8	11	13	2	1	1
Family (spousal) support	4	13	12	1	2	1
Lack of role models	2	5	0	1	1	0
Sexual harassment	2	0	1	1	0	0
Queen bee syndrome	3	0	0	1	0	0
Tokenism	0	4	7	0	0	1
Age	0	0	6	0	0	1
Isolation	0	2	10	0	0	1
Lack of executive sponsor	0	0	2	0	0	0
Limited succession planning	0	0	2	0	0	0
Total	328	825	1,118			

Table II. Barriers thematic map (BTM) with quantitative logic (arithmetical and percentage prevalence) to women leadership in healthcare, academia and business based on the systematic literature review findings

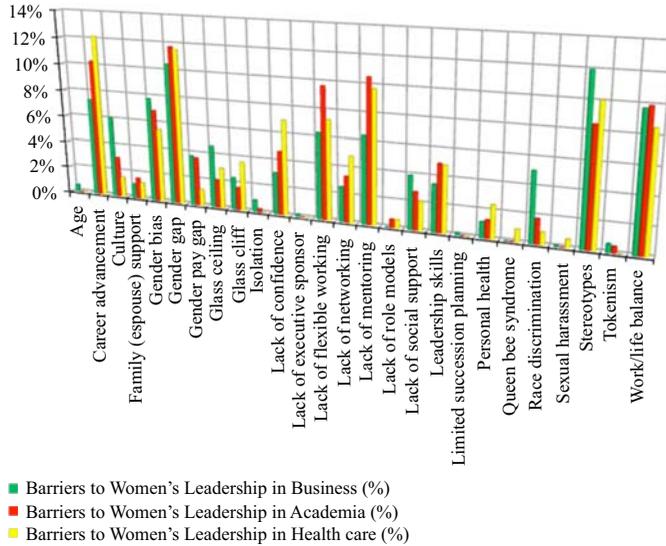


Figure 2. Barriers prevalence to women leadership in the healthcare, academic and business sectors as resulted from the selected articles

Irregularities are present in prevalence across barriers, since no barrier corresponds to the same prevalence degree across three sectors. The high prevalence a barrier shows in one sector does is not reflected in the other two. For example, stereotypes are the most important barrier in the business sector (12 percent), whereas gender gap and lack of career advancement are the most important barriers in the healthcare sector (12 percent), notably, gender gap has equivalent prevalence in the academic sector (12 percent) closely followed by lack of mentoring (11 percent).

The prevalence fluctuations of barriers with high prevalence across the healthcare, academic and business sectors is presented below in more detail (Figure 3).

Similar heterogeneity is present for barriers with medium prevalence across the healthcare, academic and business sectors. For example, lack of confidence (7-5-2 percent), glass ceiling (3-2-5 percent) and race discrimination (1-2-5 percent) (Figure 4). Heterogeneity

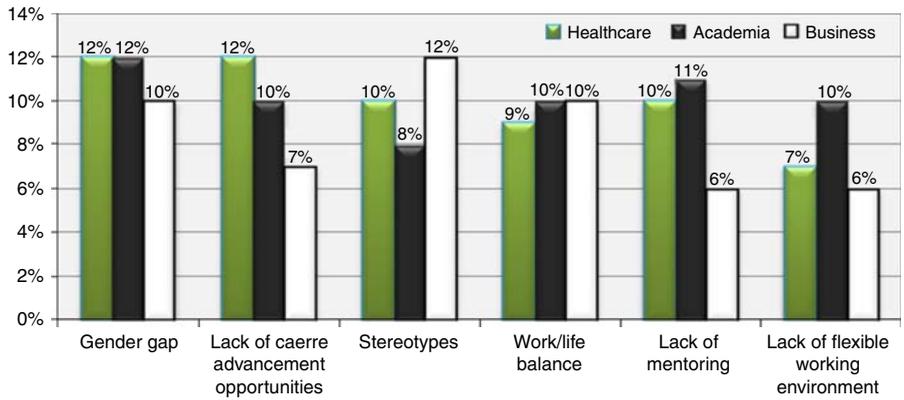
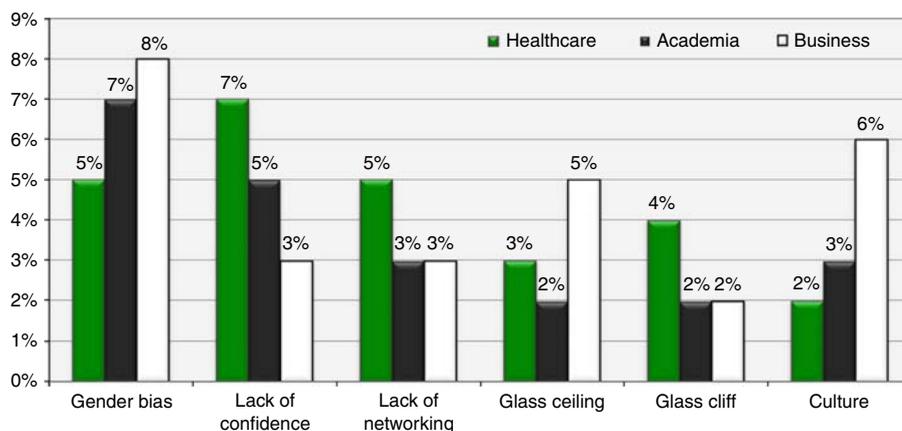


Figure 3. Differences in barriers with high prevalence^a across sectors

Note: ^aThose presenting with (greater than equal sign) 12-8 percent prevalence at least in one sector



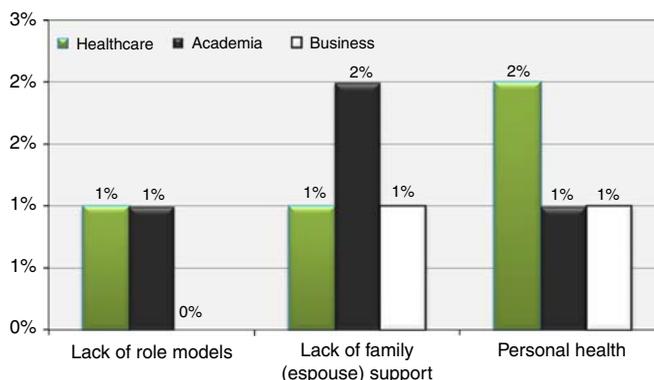
Note: ^aThose presenting with (greater than equal sign) 7-3 percent prevalence at least in one sector

Figure 4. Differences in barriers with medium prevalence^a across sectors

is also present for barriers with low prevalence, as, for example, the lack of role models (1-1-0 percent), lack of family (spousal) support (1-2-1 percent) and personal health (2-1-1 percent) (Figure 5).

Discussion

A long list of barriers to women leadership was present across all three sectors. The number of barriers in the healthcare sector marginally outnumbered that of barriers in the academic sector with 22 and 21 barriers, respectively, whereas the business sector exceeded the other two sectors with 25 barriers. The researchers consider this difference to be substantial enough to surmise that the business sector presents the greatest challenges of these three in terms of fostering gender equality and inclusion. Literature has dealt extensively with the majority of the barriers hindering gender equality and inclusion, but there are certain that have remained outside the sphere of detailed study and reporting, and, consequently, there is lack of initiatives to effectively address them. In the context of identifying commonalities, and when considering the frequency as the number of times a barrier is



Note: ^aThose presenting with (greater than equal sign) 2-0 percent prevalence at least in one sector

Figure 5. Differences in barriers with low prevalence^a across sectors

addressed by literature and examining the varying degree of prevalence, no common barrier across sectors has been identified with the same degree of prevalence across the examined sectors. For example, “stereotypes” is a common prevailing barrier across sectors, but with varying prevalence of 10-8-12 percent, respectively, in healthcare, academia and business. The identified varying prevalence implies that each sector is governed by its own rules and needs in respect of women leadership. It is, nevertheless, important to note that labor relations and the contractual framework are important for establishing the context under which organizational culture develops. Further result elaboration may benefit from correlating such factors to presence and prevalence of barriers per sector. Therefore, albeit all sectors are characterized by gender disparities, the gender equality challenge has to be addressed in a context-specific manner, ideally, on the basis of sector-by-sector case study analysis and may, even, benefit from a closer examination at regional level, particularly, in relation to primary data collection.

A concrete example on barriers commonalities with some striking differences is that of the six prevailing barriers identified across explored sectors. Thematically, prevailing barriers are the same (gender gap; lack of career advancement opportunities, stereotypes, work/life balance, lack of mentoring and lack of flexible working environment) but their ranking order varies across sectors implying the contextual nature of barriers prevalence (Figure 3).

Study findings on high prevalence of “culture” in business sector align with Ely *et al.* (2011) assertion that strong resistance to women leadership in top positions is being fed to a certain extent by a culturally driven competition between men and women leaders. The “cultural tightness” expressed in multi-faceted non-egalitarian practices[5] (Toh and Leonardelli, 2012) along with sociocultural constraints considered as weaknesses to motivate leverage to women leadership (Schuh *et al.*, 2014) may well be considered to be the source resulting in the detected barriers prevalence. The considerable prevalence of “gender bias,” “glass ceiling,” “gender pay gap,” “lack of networking” and “lack of social support” reaffirming Eagly and Chin’s (2010) argument on preconceptions and men stereotyping, which, either operating at unconscious level or not, leave women leaders facing a double standard in the labor market. Surprisingly enough, the lack of self-confidence barrier in healthcare indicates that sound scientific background might not be sufficient to climb the leadership ladder unless combined with development of leadership skills. The gender pay gap holds the same medium prevalence in both business and academia, but is reported as very low in the healthcare sector.

Drawn upon these findings, the researchers argue that literature accurately reports the women’s inequality and inequity state across sectors with varying degrees of barriers prevalence; the findings reflect difficult working settings, ill-equipped to fostering women leadership potential. The BTM to women leadership illustrates a comprehensive barriers list and their prevalence across the healthcare, academic and business sectors showing the differences in gender equality and inclusion challenges across them.

Conclusions

The findings of this systematic literature review produced a BTM to women leadership in healthcare, academia and business with varying degrees of barriers prevalence. The BTM uncovered the differences in gender inequalities and inclusion across sectors drawing attention to understudied barriers prevalence. This gap in knowledge extends to policy, thus, highlighting the need to address the gender equality and inclusion challenges differently in a context-specific manner across work environments. Those practice-related blind spots may need to be further researched and supported by specific policies.

Limitations and future research

Our study highlighted the knowledge gap to appropriately address the gender equality and inclusion challenges across different work environments and in a context-specific manner.

The researchers applied the summative content analysis method to their introductory analysis and qualitative meta-summary method to formulate hypotheses for subsequent research; however, the quantitative findings and the varying degree of barriers prevalence may need further testing and validation through the application of rigorous statistical methodology given the knowledge base gaps regarding the range of barriers and the differences in their prevalence. Bias and interpretation in reporting anchored in different theoretical frameworks ought to be further examined. Additional variables such as ambiguously stated barriers, sector overlap, women's own choices, cultural and educational background, analysis in the context of the economic crisis, ensuing austerity and migratory pressure are also worth exploring.

Barriers to women leadership across sectors have been addressed evenly, however, sectors are not similar and neither is the need for leadership capacity building. The leadership capacity in each sector has been assumed and this is a pre-existing backdrop to the study and potential contextual barriers to women's equal opportunities. For example, the work/life balance barrier in healthcare emerges in a different working context than in academia or in business. In other words, it is the result of different conditions and has different significance although it may reported upon or examined under the prism of one terminological label (e.g. rotated working hours in healthcare vs unstable working hours in academia vs long working hours in business).

Reporting comes from different disciplines and for different reasons with heavy reporting bias and interpretation anchored in different theoretical frameworks. Subsequently, further research may be required to examine in detail the overall impediments toward creating environments that foster gender equality and diversity; qualitative research may explore all stakeholder perspectives, including those of human resources personnel, recruiters, policy makers and, of course, of women themselves. Organizational settings greatly vary across jurisdictions, as do cultural and social norms, e.g. age, social status, marital status, childbirth, working experience and career inflection points; there is no stratification for this and/or bias isolation in the reporting; therefore, a stringent application of statistical methodology and an extraction framework to see where measurements reported are done, what is the legal setting, labor agreements, etc. may be needed.

Implications emerged from economic and migration crisis may also been explored as barriers to gender equality.

Operational definitions of healthcare, academia and business sectors have been adopted aiming to clearly describe each sector's activities; yet, sectors may overlap, e.g. healthcare encompasses business and academia, and academia encompasses healthcare, and business encompasses academia. Future research may be needed to address intersections amongst sectors in terms of gender equality and inclusion challenges.

Research may also explore own choices in women's underrepresentation in leadership positions, although they cannot be examined in isolation from broader organizational, societal and cultural context and constraints.

Transgender persons and gender equality challenges they face were not within the scope of this study, even though deemed to be explored.

Implications

Women's notable and persisting underrepresentation in top leading positions may be considered a critical drawback toward organizational, societal and cultural progress in terms of inclusion and balanced decision making. Gender stereotypes in leadership and

particularly in terms of equal opportunities, gender-related corporate culture, inflexibility in workplaces structures and inadequacies in social policies, as well as gender roles in family responsibilities and the social acceptance are deeply rooted constraints which may foster the “ambition gap.” In other words, the perceived tendency for women to choose family before or over work or to step away from a career opportunity (Schwanke, 2013). The more competitive, inflexible and less policy-protected the work setting is, the more the scales tilt women deciding not to take advantage of leadership opportunities or being steered toward choosing to be family/children free. Double standards in domestic roles reinforce also gender inequalities with social and organizational implications. Domestic responsibilities and organizational cultures impact differently upon women and men leaders when it comes to claiming leadership positions (Hoyt, 2010). Women face multiple challenges and may, therefore, not be able to counter such an effect at personal cost, as a man may have the luxury to do. However, not all news is bad, since gender stereotypes are the product of dynamic relationships between individuals, their interactions, constructions and interpretations; they cannot have an absolute character and are subject and, therefore, amenable to change over time (Montero, 2002).

Women’s pronounced inequality in top leading positions constitutes a misdiagnosed problem that people with good intentions have misread, partially at causal, but mostly at corrective and preventive levels. It appears that the problem has been somewhat understood, but remains unresolved. Despite the fact that a growing number of organizations and institutions attempt to address the problem by establishing policies, strategies and initiatives, reality is far removed from the goal set. The identified 26 barriers and their varying prevalence per sector may uncover dialectics on unexplored practical implications and on developing specific policy making.

Notes

1. “Invisible barriers based on prejudice that limit the advancement of women to higher positions in their career paths” (European Parliament (EP), 2015, p. 13).
2. The Cochrane protocol is a plan or set of steps to be followed in a study. A protocol for a systematic review should describe the rationale for the review; the objectives; and the methods that will be used to locate, select and critically appraise studies, and to collect and analyze data from the included studies (<http://community.cochrane.org/organizational-info/resources/faqs#who-is-cochrane>).
3. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (www.prisma-statement.org).
4. The Fourth International Conference on Grey Literature (GL ‘99) in Washington, DC, in October 1999 defined gray literature as follows: “That which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers” (www.greylit.org/about).
5. Egalitarian = believing in or based on the principle that all people are equal and deserve equal rights and opportunities (<https://en.oxforddictionaries.com/definition/egalitarian>).

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