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Women in academia: an analysis through a scoping review

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Changes in higher education, such as the performance measures in research, neoliberalism, the feminist movement, and the COVID-19 pandemic, have challenged women in academia. The incorporation of women in academia is a relatively recent phenomenon. It was only in the middle of the last century that the presence of women in higher education was systematically increasing; however, this increase in women's participation in Education has not eliminated gender gaps and inequalities. This article shows the results of a scoping review of the scientific literature, which aimed to identify what has been written about women's experiences in academia during the last decade and determine the knowledge gaps. To this end, three databases, Web of Science, Scopus, and Google Scholar, were reviewed for the literature search. As a result, 533 articles were obtained; however, after applying the exclusion criteria, 129 scientific papers were analyzed. The thematic analysis identified five central themes in the last 10 years (difficulties experienced by women academics in their careers; the underrepresentation of women academics; the impact of neoliberalism on the careers of women academics; the facilitating factors in the careers of women academics; and the effect of COVID-19 pandemic on the careers of women academics). Finally, these categories and subcategories shape the challenges women academics face in higher Education and are analyzed and discussed. In conclusion, more than a third of the articles reviewed reflect on the difficulties experienced by female academics in their careers for the decade; however, during the last few years, it is possible to identify articles that address the challenges intensified in the context of the COVID-19 pandemic. As of 2018, articles addressing neoliberalism's effects on female academics' careers have increased. To a lesser extent, articles addressing aspects that facilitate the development of women's academic careers are also found. Thus, there is an essential reflection on the challenges and difficulties faced by women academics during their careers.

KEYWORDS

women academic, higher education, academia, scoping review, gender

Introduction

Although in higher education, there are substantial advances in women's (students and professors) access ([Consejo Nacional de Educación, 2021](#)). Globally, female students outnumber their male peers in the humanities, arts, social sciences, and medicine; however, low numbers of women persist in science, technology, engineering, and mathematics (STEM) ([Bothwell et al., 2022](#)). There is slow progress in the gap between men and women, especially in Education and Health ([Ministerio CTCI de Chile, 2022](#)). Higher education institutions have differences in the

gender composition of their academic hierarchies, with women under-represented in top positions (Ronksley-Pavia et al., 2023). Indeed, the percentage of women academics in senior university positions reaches only 36%, including full professors, deans, and university leaders (Bothwell et al., 2022). So is vertical segregation, with an absence of female representation in decision-making spaces, likewise boards and hiring committees (Morley, 2014; Diogo et al., 2021). This gender imbalance in higher education constitutes a global problem that no country has solved (Diezmann and Grieshaber, 2019).

The possible causes and effects of gender inequality in different fields, including higher education, have been widely studied in the literature (Cooper, 2018). Given the multidimensional nature of this inequality, it is expected to find, in the university context, several factors that impact the eventual promotion and advancement of the female academic career. Among these factors is the neoliberal perspective adopted by the academy, where competition and productivity take precedence (Hodgins and Mannix-McNamara, 2021). In general terms, neoliberalism is a theory that states that the best way to promote people's well-being is through individual freedoms and entrepreneurial abilities in a context that emphasizes private property rights, free markets, and free trade, with the state merely safeguarding such practices by providing an institutional framework (Harvey, 2005).

Neoliberalized higher education can be defined as the university governance model combining free market and intensive management control practices (New Public Management) aimed at increasing competition and production (Lorenz, 2012). Higher education has adapted well to neoliberalism by emphasizing achievement and its measurement (Tight, 2019). This perspective has led institutions to judge the academic body not only by their publications but also based on the amount and status of funding they obtain for their research (Macfarlane and Burg, 2019). This predominance of the valuation of research work in the logic of the prestige economy (Aiston et al., 2020) has influenced the conception of the quality of academic work to be more associated with research than teaching (Kandiko Howson et al., 2018).

Although this perspective is presented as gender-neutral, i.e., the belief that an organization is free of gender bias, discrimination, and stereotypes, does not consider the cultural and structural barriers that limit opportunities for individuals based on their gender (Acker, 1990). Organizations are inherently gendered, and the criteria used to evaluate male and female academics often favor a masculine and highly productive profile (research top performers) expected to be constantly maintained and always available to respond to work requirements (Thwaites and Pressland, 2017). The gender-neutral perspective contributes to the persistence of gender gaps (Kwiek and Roszka, 2022), despite efforts to implement different policies and programs to remedy the situation (Lipton, 2020). As Acker (2012) mentions, organizational work rules are intended to generate a gender-neutral environment, but organizations are not. Academia continues to be a space characterized by inequalities, evident at the intersection of academic work and personal life (McKenzie, 2022).

Recently, the study of female leadership and the factors contributing to women's empowerment in higher education has increased (Tight, 2012; Maheshwari, 2021), as well as the volume of publications on female academic careers. Nevertheless, in terms of systematic and scoping reviews, there are few studies, an issue that is

echoed in other fields of studies related to higher education (Kuzhabekova et al., 2015).

In a preliminary search, systematic reviews on women's careers in academia considering specific aspects were found the following works: Rosa (2022) systematizes studies dealing with work-life balance; Mula-Flacón et al. (2021) focuses on research that accounts for the impact of neoliberalism on the professional identity of women academics; and Maheshwari (2021) describes women's leadership in higher Education considering the last 20 years. This search did not find any reviews that would allow us to visualize women in academia as an emerging phenomenon and provide a more complex picture of the issues revealed by the research on women's careers in higher education institutions. According to Munn et al. (2018), the scoping review as a tool allows us to identify characteristics and concepts, i.e., to map the evidence to have an overview, rather than answering a specific question as with systematic reviews, but rather with an emphasis on identifying knowledge gaps.

Indeed, through this technique, we aim to search for evidence, in this case, in the field of higher education. The present study adopts a scoping review analytic approach because of its relevance and applicability in exploring emerging phenomena (Arksey and O'Malley, 2005; Levac et al., 2010). This technique focuses on determining the scope and coverage of the literature on a specific topic and providing an overview of the content (Munn et al., 2018).

In the case of our study, the scoping review allows us to investigate the scientific literature that has focused on academic women in higher education, a field that has received little attention so far (Pedraja-Rejas et al., 2022). Our purpose is to provide relevant information that contributes to the understanding and consolidation of this field of study by exploring the existing literature on women's experiences in academia and, in turn, identifying existing knowledge gaps.

In doing so, our study seeks to fill a gap in the research and provide a comprehensive view of the experiences of women academics over the past decade. By examining the existing literature in detail, we aim to provide a more comprehensive and up-to-date understanding of this topic, which is crucial for addressing challenges, generating more focused reviews, and promoting gender equality in academia.

Methods

Following the methodological recommendations of Arksey and O'Malley (2005) and Levac et al. (2010) for conducting scoping reviews, the present study addressed the following research questions:

1. What has been written in the scientific literature about women's experiences in academia?
2. What are the main topics that have been addressed?
3. Over the decade, are there different trends in research topics on women in academia?

These three questions seek to provide a more holistic view of how the situation of women in academia, the problems and challenges faced by this group, and how it has been considered in scientific articles. This analysis also provides a critical look at research in this area.

Search strategy

First, three databases were used: Web of Science (WoS), Scopus, and Google Scholar. These databases were selected because of the characteristics they offer. WoS and Scopus are multidisciplinary databases containing a wide range of high-impact research (Pranckutė, 2021). However, both databases require a subscription to access their content. Using Google Scholar, we sought to complement our search and ensure broader coverage. This online search platform is known for its open access and the dissemination of many academic studies (Dávalos-Sotelo, 2015). By employing these two search strategies, we ensured that we covered the most relevant and prestigious studies and those available from other platforms. In this way, we obtained a more complete and encompassing perspective of the existing literature on the research topic. It should be noted that the first search was conducted in February 2022 by combining keywords that could capture the relevant literature (i.e., “women faculty,” “academic women,” “female academic,” “female faculty,” “higher education,” “university,” “college,” “gender”).

The keywords aim to search for scientific articles in English and Spanish that have addressed the situation of women in academia to explain their challenges, difficulties, and experiences. For this reason, we restricted the search to women’s experiences in academia. “Gender diversity,” which refers to people whose gender identities do not match the sex assigned at birth (Rubin et al., 2020) and who may go beyond the binary male/female construct, is not part of the focus of this research.

Second, the search was repeated in July 2022 in the WoS database to incorporate recently emerging literature related to the main theme.

Inclusion/exclusion criteria in the selection of studies

The inclusion and exclusion criteria were adjusted according to the objective of this review to ensure continuity in the article selection process. The records had to meet the following requirements to be included:

(a) It must be peer-reviewed studies; (b) focus on women working in academia, either as professors or in a board position (i.e., studies that addressed women as students in higher education and graduate school were excluded); (c) the research focus must be on higher education (i.e., records examining the phenomenon in the context of higher education were included); (d) Be written in English or Spanish (including articles in English and Spanish in the literature reviews ensures a broad view of the scientific literature since much of it is published in English. In addition, it is crucial to consider articles in Spanish to cover different perspectives of what has been written in Ibero-America, especially if the researchers are skilled in both languages because, in Latin America, we speak Spanish. We wanted to include what has been written in this region and Spain); (e) Be within the covered years; the present review only considered articles published during the last 10 years (i.e., We include articles published since 2012); (f) studies with methodological variety (studies that employ different methodologies, either qualitative, quantitative, or both); (g) finally, it must be a scientific article that reports empirical results (i.e., conference papers; systematic reviews; meta-analyses; book chapters; theses; and bibliographic studies were excluded).

Extraction and selection of data

The database search resulted in a total of 600 articles, which were organized in an initial form with the following information: (1) author; (2) year of publication; (3) title; (4) abstract; (5) research topic; (6) objective of the study; (7) method. To check the adequacy of the data, each author carefully reviewed the studies and classified them as potentially included (1) or excluded (0) according to the agreed criteria. Once the duplicates were eliminated, the titles, keywords, and abstract were revised, which resulted in the retention of 180 articles. The second review considered the complete text; 129 studies published between 2012 and 2022 were retained. This process, which followed PRISMA recommendations and its extension for scoping reviews (Tricco et al., 2018), is described in Figure 1.

Data analysis and management

The management of references throughout the review was carried out with EndNote X9. The 129 selected articles were analyzed through a thematic analysis following the guidelines of Saldaña (2021) further to emphasize the discussion of results and their conclusions. This method was selected because it contributes to the purpose of this research to identify the themes written about women in academia. The thematic analysis was carried out in the following steps (Braun and Clarke, 2023): Familiarization with the data from reading the articles; Coding the data; Developing initial themes; Revising and developing initial themes; Refining; Defining and stating themes; Writing analyses. The reading was guided by what has been written about women’s academics in higher education. In this sense, five main themes were identified, which classify the topics that have been addressed about women’s careers in academia (Figure 2).

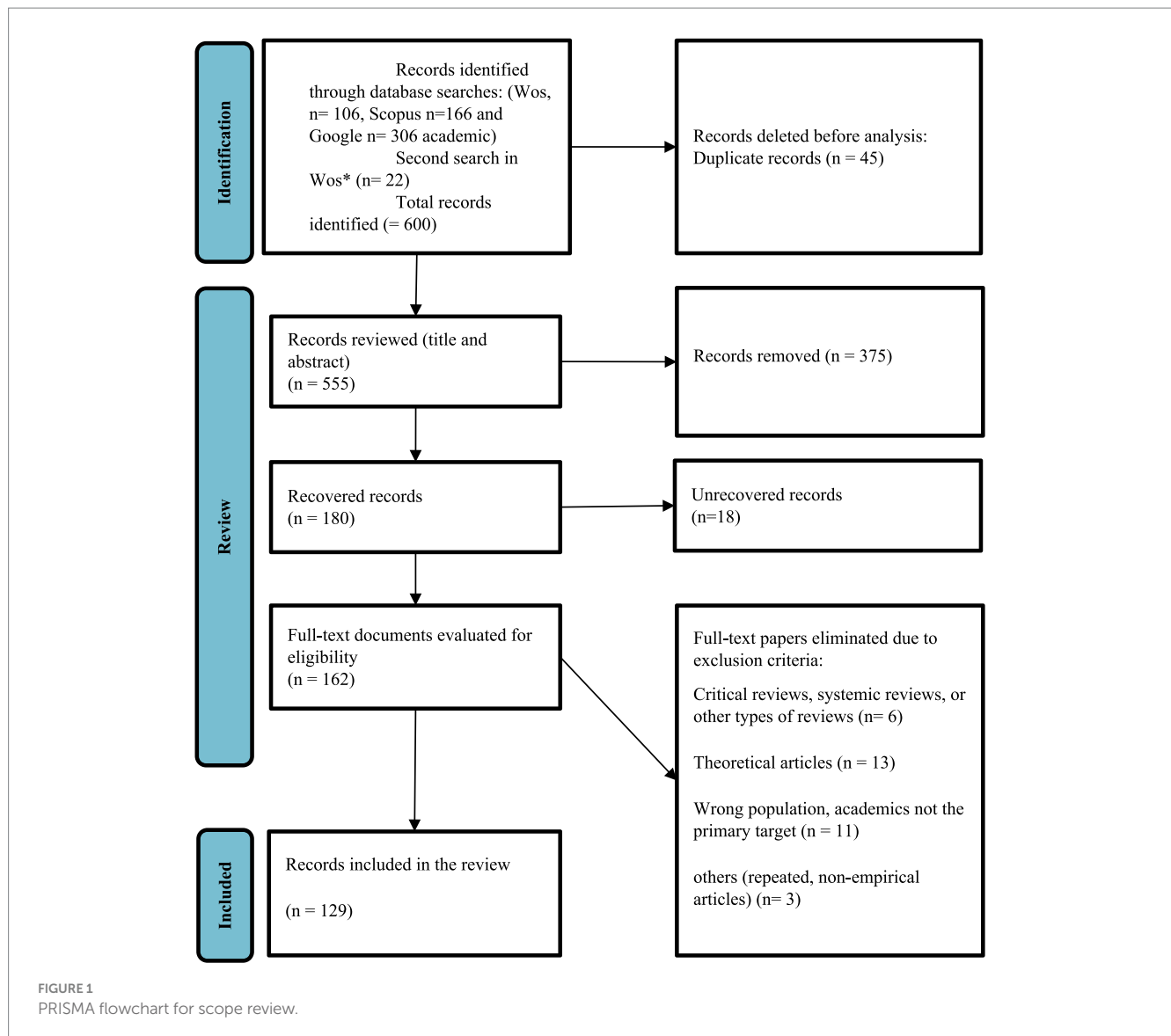
Results

The following section presents the results of the analysis ($n = 129$) in descriptive (i.e., characteristics of the studies) and thematic analysis.

Table 1 shows the main descriptive characteristics of the studies included in the review. The number of articles has been increasing in the years covered, with a concentration in the years 2020–2022 corresponding to more than 50% of the total number of records. Regarding the methods used, most studies are qualitative (e.g., interviews, focus groups, discourse analysis, and case studies). We can deduce that the predominance in the use of qualitative methodologies coincides with a trend in recent decades that uses qualitative methods to show women’s issues (Hesse-Biber, 2011), i.e., it rescues people’s subjective experiences and how they attribute meaning to their own lives within a specific cultural context (Leavy and Harris, 2018). Using qualitative methodology also highlights the women’s point of view in analyzing their situation, as in intersectionality research (Haynes et al., 2023).

Thematic content analysis

In the thematic content analysis (Saldaña, 2021; Braun and Clarke, 2023), five thematic categories were identified: underrepresentation of



female academics, difficulties in academic trajectories, facilitating factors of female academics' courses, the impact of neoliberalism on academic careers, and impact of the COVID19 pandemic on an academic career. Each category presents subcategories that account for different factors influencing women's career development (Figure 2).

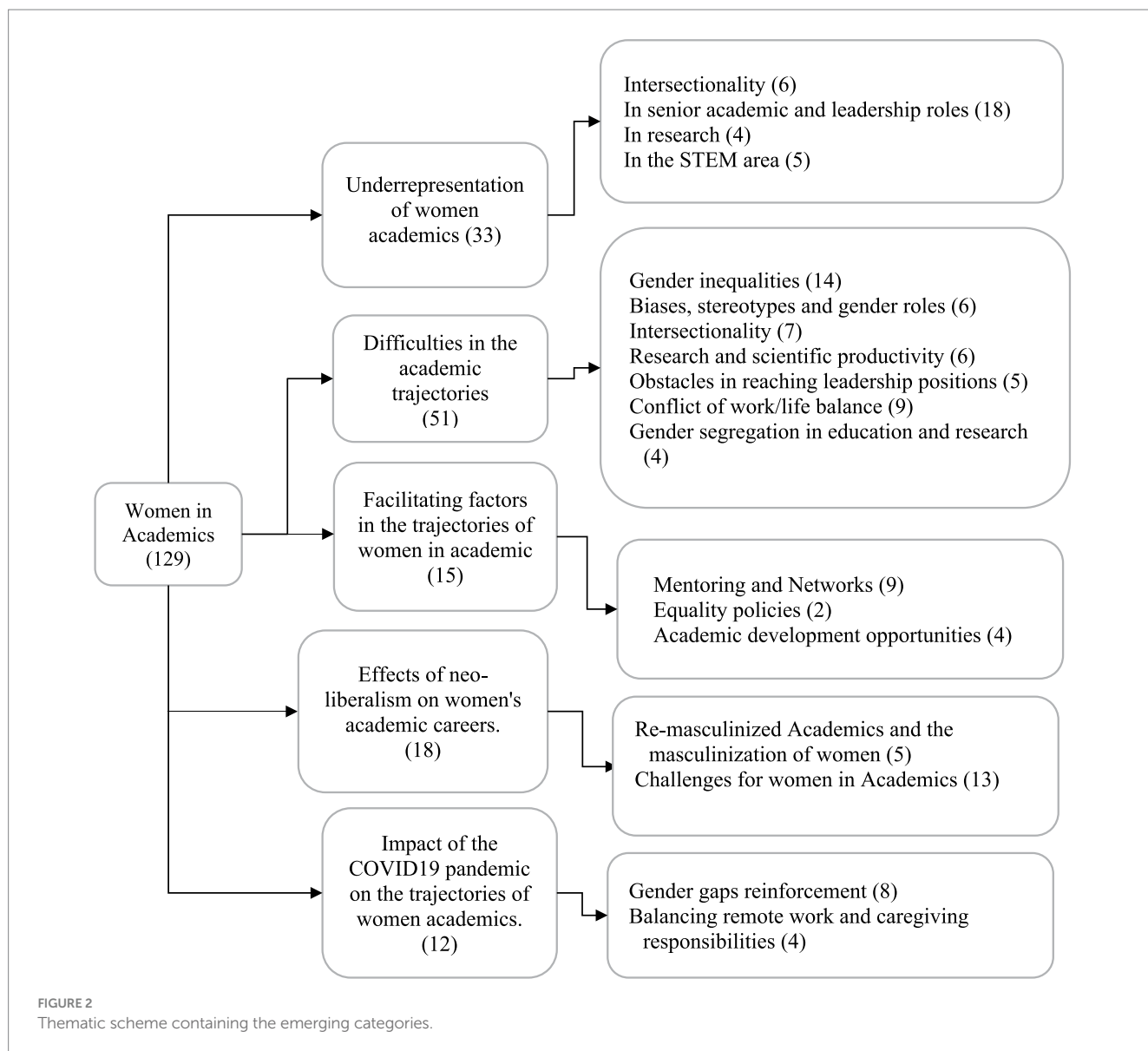
Thematic category 1: underrepresentation of women academics

A total of 33 articles in the review addressed the underrepresentation of women in academia. This category is based on four subcategories: Intersectionality, underrepresentation in high-level academic and leadership positions, participation in research, and the STEM area.

The first subcategory, the intersectionality of women belonging to minority groups (six articles), reveals that the relationship between gender and ethnicity influences the academic career advancement of women of color. The research by Thomas (2019) reports on the

perceived inequity of African American female teachers. Respondents described how their experience as African American or black female professors in academia affects their decisions and outcomes. They feel the need to justify their presence in academia and thus take on more workload and experience more pressure and stress than their peers. Sang (2018) informs the lived experiences of women academics from ethnic minorities who feel marginalized in academia. In addition, ethnic minority feminist women reported the absence of their experiences in broader feminist discourse. Both papers highlight the impact of race, ethnicity, and gender on the identity of female faculty in the academy.

Regarding women's participation in senior academic hierarchy and academic leadership positions, 18 studies described low involvement and, at the same time, showed transversality of this situation in university contexts (Mabokela and Mlambo, 2015; Leberman et al., 2016; Maxwell et al., 2019). The underrepresentation of women in academia is accentuated when analyzing the place that women have in leadership positions and decision-making spaces (Aiston, 2014; Morley, 2014; Suğur and Cangöz, 2016; Parker et al., 2018; Semela et al., 2020). This gap remains despite the



implementation of gender equity policies, as shown by Igiebor (2021).

The analyzed literature reveals that the underrepresentation of women is observed in the same way in scientific production (four articles), as measured by number of publications in peer-reviewed journal, citation count, and number of citations, competitive research funding. In this area, disparities between men and women are regarded in publication rates (Aiston and Yang, 2017) and participation in scientific review processes (Willis et al., 2021). This situation could be explained by the marginalization of women academics in science and industry (Tartari and Salter, 2015).

The underrepresentation of women academics in STEM is referred to in the literature as horizontal segregation (O'Connor, 2020). The works of Smith et al. (2017), Hutchins and Kovach (2019), Casad et al. (2021), and Verdugo-Castro et al. (2021) analyze the underrepresentation of female academics as researchers in STEM fields. In this area, Lendák-Kabók (2021) shows that gender stereotypes influence women's decisions regarding their academic careers and withdrawal from STEM

areas, reflected in the underrepresentation documented in other studies and contexts.

Thematic category 2: difficulties in academic careers

A total of 51 articles addressed the difficulties experienced by women in their academic careers, many of them linked to the structure of the academic world (Aiston and Jung, 2015). Among these difficulties, those related to gender inequalities are identified (14 articles), expressed in different areas. In terms of salary, women earn, on average less than their male counterparts and have fragmented work experience (De Angelis and Grüning, 2020; Samper-Gras et al., 2021). Regarding leadership and management positions, women occupy undervalued positions (Peterson, 2016) that tend to be highly demanding in terms of time and management.

Similarly, gender prejudices and stereotypes are barriers women encounter in academia. The studies analyzed showed that cultural

TABLE 1 The descriptive statistics of the articles/records are included.

Variables		N	(%)
Year of publication	2012	1	0.8
	2013	5	4.1
	2014	5	4.1
	2015	6	4.9
	2016	9	7.4
	2017	12	9.8
	2018	12	9.8
	2019	15	12.3
	2020	18	14
	2021	25	20.5
	2022 (July)	21	16.3
	Methods	Qualitative	108
Quantitative		11	8.5
Mix methods		10	7.8

stereotypes related to gender roles affect the academic career of women (Afiouni, 2014; Rogus-Pulia et al., 2018), influencing educational development spaces such for example, leadership positions in highly masculinized faculties (Dengate et al., 2021). Added to this barrier are those linked to intersectionality. In effect, the migratory status of women is presented as a factor when advancing in their academic careers (Sang et al., 2013; Hollis, 2022). Similarly, the current economy of prestige that governs universities is presented as an indisputable barrier to women’s careers (Kandiko Howson et al., 2018).

On the other hand, research reveals difficulties in achieving a work-family balance between personal life and academic work, along with a lack of time, which translates into complex scenarios that women academics must overcome to develop their careers. This situation occurs in different contexts: Rhoads and Gu (2012) address it in China, Toffoletti and Starr (2016) in Australia, and Vithanage and Arachchige (2020) in Sri Lankan universities, revealing the transversality of this problem.

Finally, another difficulty founded in the trajectories of female academics is reaching leadership positions. Indeed, there is persistence at the international level of the so-called “glass ceiling” that prevents women from accessing leadership positions (Muberekwa and Nkomo, 2016; Abalkhail, 2019; Chacha, 2021). This situation demonstrates the need to generate strategies that support women from a cultural perspective.

Thematic category 3: facilitating factors in academic careers

There is a predominance of articles that address the difficulties contributing to women’s disadvantaged situation in academia. Also, we found papers that identify actions that facilitate and support women in developing their careers. The following steps are gender equity policies, academic development opportunities, and mentoring or networks.

Among the factors that favor the advancement of women in academic career are mentoring, where there is the figure of the mentor who inspires and advises professional development (Ali and Coate, 2013; Duran-Bellonch and Ion, 2013; Hassan et al., 2017; Argyle and Mendelberg, 2020; Leenders et al., 2020; Bhatti and Ali, 2021). Mentoring programs for women have a transformative effect, as they are part of an intervention to achieve gender equity and recognize gender inequalities as a structural issue. It also promotes collaboration and empowers mentors and mentees to become agents of change concerning gender norms and work practices (Leenders et al., 2020). Peer mentoring is critical to the success of women leaders in universities, helping them to challenge male dominance in these spaces (Bhatti and Ali, 2021). Likewise, mentoring, role modeling, and collaborative conversations build team cohesion (Lorenzetti et al., 2022). On the other hand, the literature also highlights professional networks—also called relational capital—in the development of an academic career and the achievement of more equitable professional development opportunities (Cabezas et al., 2014; Hill and Wheat, 2017; Bhatti and Ali, 2021; Lorenzetti et al., 2022).

Another factor that supports the development of female academics is the presence of gender equity-oriented policies in universities. Highlight the importance of pay equity policies and using audits as a strategic tool to reduce gender inequalities (Currie and Hill, 2013) and some procedures that guarantee all the rights of women academics and safeguard their scientific participation at different levels of academia (Albashir and Areiqat, 2021).

Likewise, in the articles reviewed, opportunities for academic development emerge as another factor that facilitates women’s academic careers in universities (Barnard et al., 2021). The work of Blithe and Elliott (2020) neatly summarizes the characteristics that create opportunities for women’s academic career development: research on gender inequality, implementation of mentoring, communication, training, research support, and hiring policies. Thus, the capacity for agency, mentoring, resilience, and control over their lives are critical factors in addressing the academic career difficulties identified by women, as demonstrated by Ramadan (2022) study. Finally, Subbaye and Vithal (2017) argue that there is a need to go beyond considering only research as a meaningful activity in academic evaluations to encourage the development of women’s careers in academia and facilitate women’s access to senior positions within universities.

Thematic category 4: impact of neoliberalism on women’s academic careers

Another recurring theme in the articles reviewed was the impact of neoliberalism on women’s careers. Although academia already has a masculine character due to the nature of its work. The neoliberal productivity and performance criteria are remasculinization of the academia and masculinization of women (Lipton, 2015, 2017a,b). In this context, female academics experience the contradiction of “empowered women” but also “different” and “subordinate” to the re-masculinized institution (Lipton, 2020).

The impact of neoliberalism increases the challenges women face. Those who enter academia do so at a personal cost (Göktürk and Tülübaş, 2021). Neoliberal academia has repercussions on the

women's sphere, where childlessness is consistent with the responsibilizing imperatives of neoliberal academic culture (Reuter, 2018). Furthermore, the neoliberal nature of academia affects women entering academia, particularly early in their careers (Caretta et al., 2018), and has resulted in a casualization of women's academic work (Stringer et al., 2018; Ivancheva et al., 2019).

The literature focusing on female trajectories reveals that the neoliberal agenda has affected all areas of academic development: research and productivity (Acker and Wagner, 2019) and research funding (Grant and Elizabeth, 2015), among others. It stands out in the field of gender equality policies, where the contradictions faced by gender equality programs in the neoliberal context are observed (Tzanakou and Pearce, 2019). For example, Chen and Hsieh (2019) show that the horizontal and vertical division of academic labor, as well as roles, organizational practices, rewards, and promotions, are linked to gender, hindering women's more significant achievements and participation in leadership spaces.

Thematic category 5: impact of the COVID-19 pandemic on the trajectories of female academics

Starting in 2020, the outbreak of the COVID-19 pandemic generated concern about what was happening to women academics in confinement. We found 12 studies about the COVID-19 pandemic. In the first instance are articles that analyze the problem of reconciling distance working with childcare and homework (Nash and Churchill, 2020; Walters et al., 2021; Davis et al., 2022) which affected the productivity and well-being of female academics. The health crisis has also increased the research deficit among female researchers (Brown et al., 2022).

Furthermore, several articles have been identified addressing the impact of the COVID-19 pandemic on the increase in gender inequalities, especially in early-career female academics (Górska et al., 2021; Spencer et al., 2021). In this context, the discussion about the opportunity to correct the systemic disadvantages underpinned by the ideal worker's image and that disadvantaged women in academia were lost in the pandemic (Constantinescu and Pozsar, 2022). The pandemic, in addition to intensifying inequalities, disregarded the institutional commitments defined in pursuing gender equity. Indeed, institutions expected the same academic outcomes without additional support (Clark et al., 2022; Walters et al., 2022).

Discussion

The scoping review results show various heterogeneous evidence and knowledge about the research topic (Tricco et al., 2018). Indeed, the five thematic categories identified serve this purpose.

The results of this scoping review allowed us to identify what has been studied women's experiences in academia over the last 10 years. A descriptive analysis of the 129 articles selected for the study evidences an increase in empirical work that is interested in the trajectory of women, mainly in the last 4 years (2019–2022). The number of articles is likely to continue to increase given the growing concern about gender inequalities in today's societies, as shown by OECD (2017) report "The Pursuit of Gender Equality: An Uphill Battle."

The thematic analysis showed that 39% of the studies focus on the difficulties female academics face in their careers' development. Interestingly, most articles about women academics refer to obstacles and drawbacks or the negative impact of structural factors such as neoliberalism. These difficulties are related in the first instance to the gender inequalities that persist in academia (Steinþórsdóttir et al., 2020), as is the presence of different gender roles produced and reproduced by social structures, influencing both men and women (Risman, 2004). These difficulties are further intensified when discussing women belonging to ethnic groups or minorities. Therefore, the intersectional perspective is critical to unveil racial disparities in ethnically diverse faculty members' tenure and promotion outcomes (Carter and Craig, 2022). The analysis reveals that gender inequality continues to be a barrier in the trajectory of women and that despite the existence of policies and programs, these have not been sufficient to reduce the gap. Consequently, although women have steadily increased their participation in higher education and academia, gender gaps and obstacles persist in developing their academic careers.

Gender inequalities are reflected in the underrepresentation of women academics in university leadership and decision-making positions (35% of articles). Indeed, emphasis is placed on the absence of women's leadership in academia. From this it has examined the difficulties they face in terms of gender stereotypes and cultural impediments to accessing senior positions, leading to their underrepresentation in leadership positions (Pedraja-Rejas et al., 2021). There is an unequal distribution between men and women in academia (Nygaard et al., 2022), which is mainly observed in high hierarchies (full professors) and university management positions (Mousa, 2022). The articles show how higher education institutions are organized hierarchically, with men in senior positions, high hierarchies (vertical segregation), and a higher concentration of men in areas of higher qualification and strategic relevance in higher education institutions (O'Connor, 2020).

Similarly, the academic trajectory of women is affected by neoliberalism. Since the 1980s, the neoliberal economic discourse has delineated agendas in government and Education (Marginson, 2013). In recent years, there has been an increase in articles reviewing the impact of neoliberalism on women's academic careers. The discourse about neoliberalism is focused on achievement and measurement (Tight, 2019) and how it has permeated higher education institutions (Caretta et al., 2018), making them more aggressive and competitive (Morley and Crossouard, 2016). The same neoliberal project changes the workforce and highlights the image of the ideal worker (Lester and Sallee, 2017), which influences a masculine view of work that harms women's careers. A significant number of studies (12) analyzing the consequences of the COVID-19 pandemic on the careers of women academics since 2020. These articles analyzing the situation of women academics during the pandemic show the intensification of difficulties. The dissolution of boundaries between domestic and academic workspaces due to mass confinements and telecommuting was problematic for women. Indeed, as O'Connor (2020) points out, women academics in higher education appear to have the same rights and privileges as their male peers in an environment that purports to be gender-neutral. Nevertheless, as Hupkau and Ruiz-Valenzuela (2022) pointed out, family and home life fall on women, affecting their professional careers. Even more so when women continue, globally, as the main ones responsible for domestic and care activities (O'Connor, 2020).

Likewise, articles analyzed the facilitating factors of women's academic trajectories. In this regard, the importance of gender equity policies in supporting women's academic careers is highlighted. Therefore, universities not only need gender policies, but also institutional policies and instruments are required to have a gender perspective (Massawe and Sife, 2020). Similarly, articles (9 in total) highlighted the importance of mentoring and networks in women's academic careers. Fowler (2017) remarks that academic staff should be trained in mentoring as part of their professional development, including the relationships between mentoring roles and research, teaching, and service. Heffernan (2021), in turn, states that networks are critical to developing successful career paths, as they provide opportunities for employment, publication, and conferences.

Limitations and future lines of research

The present study provides relevant information about how women have been conceptualized in the academy over the past 10 years. Some limitations are transversal to all the studies included. On the one hand, the review was restricted to works published in English and Spanish, which could imply a loss of relevant information in another language. Similarly, the review excluded studies published before 2012, which means another loss of information. On the other hand, the predominance of qualitative studies reviewed limited the possibilities of obtaining data that would allow us to investigate the characteristics of each group or sample involved (e.g., age of the interviewees, data collection instruments, and scores obtained).

The aim of this scoping review was intended to identify what has been written about women in academia, thus excluding publications on men and gender diversities in academia.

Finally, these limitations, the results presented in this scoping review can be considered a guide for future studies since it integrates different results that account for the multifactorial nature of the trajectory of women in academia and makes visible the need to delve deeper into this topic.

Conclusion

The results of the study suggest five thematic categories on which the scientific literature on women in academia has focused, i.e., underrepresentation of women in academics, difficulties in their careers, facilitating factors, the impact of neoliberalism, and the effects of the COVID-19 pandemic. The studies of the last 10 years analyzed highlight the numerous challenges women face in the development of their careers in academia (prejudice and stereotypes, intersectionality, underrepresentation in leadership positions and the most prestigious academic hierarchies, work-family reconciliation conflicts, and gender segregation). The challenges and difficulties experienced by women in academia were accentuated during the Covid 19 pandemic.

Likewise, in the articles reviewed of last 4 years, a growing body of research has been conducted on the factors that tarnish women's academic careers. Most of these studies focused on the difficulties women face in their careers (e.g., gender inequality, prejudice and stereotypes, intersectionality, scientific productivity, leadership positions, work-family balance, and gender segregation).

Some identified articles examine the factors that facilitate women's academic profession, such as gender equality policies, opportunities

for academic development, i.e., postgraduate studies, internships, and the presence of mentors and academic networks that guide and accompany women in important career decisions. Following these findings, those who are part of the university communities must have clarity regarding the multiple challenges to achieve gender equity.

In conclusion, the most common theme in the articles reviewed refers to the difficulties faced by women academics in their careers and the negative impact of neoliberalism. However, there is a knowledge gap on the factors that facilitate and contribute to the successful academic careers of female faculty. Future research addressing the situation of women in academia could therefore focus on crucial factors for success in academic careers or address institutional experiences that can contribute to the development of women in higher education system.

Author contributions

CA-G contributed to the conceptualization and writing of the article's first draft, literature review, thematic content analysis of the papers, and discussion of results and conclusions. GS-P contributed to the extraction of articles, methodology, construction of the database, review of publications, and elaboration of the prism model. LP-R collaborated in revising the initial categories model and editing the article's final version. JS collaborated in reviewing the consistency and writing of the whole article and the discussion and conclusions. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/feduc.2023.1137866/full#supplementary-material>

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