# | RESEARCH ARTICLE 

# Barriers to Women in Academia: The Case of Moroccan University Female Professors 

Dr. Meryem Rostom<br>Assistant Professor, Faculty of Legal, Economic and Social Sciences, Department of Languages, Hassan II University, CasablancaMorocco<br>Corresponding Author: Dr. Meryem Rostom, E-mail: meryemrostom@gmail.com


#### Abstract

| ABSTRACT This paper aims to enhance our understanding of the challenges women in academia face in their pursuit of research, with a particular focus on the Moroccan context. Using in-depth interviews with female Moroccan university teachers, we explore personal narratives to highlight the perceived barriers to women's academic advancement. The results showed that family related factors and financial constraints were the most commonly mentioned obstacles that hinder women's aspiration and/or time to conduct scientific research and attend international conferences and academic workshops. Implications of these findings suggest creating a gender-friendly work environment and providing specific incentives that could help female academics in their quest for research.


## | KEYWORDS

Moroccan women researchers, scientific research, gender, barriers

## | ARTICLE INFORMATION

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## 1. Introduction

One of the most important aspects of the development in the field of teaching could undoubtedly be said to be scientific research; together, they form the stone of academic activities. Because information has now become more valuable than ever before, it has become necessary for teachers to carry out scientific research to identify and question particular problems, seek to determine possible solutions and produce new knowledge. In fact, research, whether it is undergraduate or postgraduate, fosters critical thinking skills; it helps to renew approaches and methodologies and make innovations that are eventually disseminated and shared with other academics. However, in spite of the growing importance that has been attached to research, Morocco is ranked sixth in Africa in terms of scientific production according to the Centre National de recherche scientifique et Technique (CNRST). Women, in particular, are less likely to conduct research in comparison to men. This raises a concern about the different factors that are associated with women's scholarly achievement. While there have been many studies of women and gendered academic careers, these studies mostly focused on the Western context and developed countries (Beddoes \& Pawley, 2014; Cervia \& Biancheri, 2017; Mason \& Goulden, 2004; Walsh \& Turnbull, 2016; Wolfinger et al., 2009). A limited number of studies, however, have been found in non-western contexts such as Morocco.

## 2. Scientific research

Scientific research is indeed a variety of actions taken by a person or a group of people who wish to undertake some investigation in order to gain understanding and produce new knowledge or improved insights. In addition to traditional or non-traditional classroom instruction, invigilation, exam corrections, theses supervision, and serving on thesis committees, conducting research is also one of the primary responsibilities for any faculty position. Through academic research, academics can deepen and/ or update the knowledge acquired during their career years; their engagement in research is believed to improve the educational system. Besides that, teachers' research output is an essential criterion for eligibility for promotion to a higher rank. Moroccan university

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teachers are promoted from assistant professor (PESA) to associate professor (P.H), and then to professor of higher education (P.E.S); in the official Gazette of August 2023 (Official bulletin of the Kingdom of Morocco), the assistant professor has been recently replaced by 'university lecturer' and Associate professors to 'University lecturer habilitated'. To qualify for each rank, university teachers have to defend their promotion dossier consisting of their scholarly contributions and accomplishments, a statement describing their teaching practices and philosophy, and a research statement before a committee of senior faculty who evaluate the case. It is worth-noting that this promotion in ranks is, in turn, associated with salary increments.

In addition, institutional ranking in higher education has become very common both at national and worldwide levels. This ranking is mostly based on the scholarly output of the institution; in other words, on the extent to which teachers and students are involved in research activities (conferences, workshops, seminars and/ or study days) and produce new knowledge in the form of academic papers published in indexed journals, magazines, reference books or handbooks.

Research laboratories play an important role in the dissemination of knowledge and experience by bringing undergraduate students, postgraduate students and postdoctoral researchers together and allowing them to experience research through networking with other researchers and field-experts during conferences, projects and/ or training programs. These laboratories are, in fact, research units that provide information and support to academics and help them locate funding agencies, apply for grants and manage their sponsored projects.

## 3. Neo-patriarchy

In the Arab world in general and Morocco in particular, men and women approach their daily lives quite differently by virtue of the fact that men and women are biologically different. This difference produces different gender-linked behavioural attributes and interests that deeply affect lifestyle patterns and social and occupational roles, which, in turn, results in psychological and social consequences (West and Zimmerman, 1987).

Historically, and especially in the Arab world, women's input has been quite missing compared to men's; their contributions in academic, artistic, social, and/or cultural areas have been very rare. This system has resulted in a situation in which men have enjoyed a privileged position and preferential treatment not only in society but within the family as well, where men have been awarded an eminent status as «heads of the households», hence their exemption or release from the burden of performing family tasks and women's continued responsibility for household chores and childcare. Currently, patriarchy in its various forms is felt to be "modernized"; that is to say, patriarchy is perpetuated in new ways today. In the context of the Arab world, where rapid economic progress is being observed, one can talk about neo-patriarchy, a theoretical perspective developed by Sharabi (1988) that refers to a situation where patriarchy meets modernity. According to Sharabi (1988), becoming a modern society is a psychological condition that consists of experiencing structural changes in terms of politics and economy without breaking its patriarchal roots. When such a socio-political concept is applied to Moroccan society, it becomes evident that although the government and other social organizations have stressed women's social, legal and political emancipation, their role or identity within the "private sphere" remains embedded in tradition and greatly affects their educational or professional advancement. Men's dominance remains, however, highly valued both within the household and in the outside world. This is achieved by an implicit consensus based on embedded gender norms internalized through the process of socialization.

A large-scale analysis of gender disparities in research output and impact finds that while the number of female researchers has increased over the past 20 years, female researchers publish fewer papers on average than men and are less likely to collaborate internationally. Results of a substantial body of work-family studies have suggested that the observed difference in research productivity between women and men is not related to women's lower motivation, incompetence or poor self-esteem as scientists and researchers but rather to their family demands compared to men (Greenhaus et al., 2003). This is further confirmed by many reports that noted little difference between papers published by men and women in impact as measured by citations and downloads.

## 4. The study

This study used a purposive sampling method in the selection of participants. Since the researcher has put limited criteria for the sample, the snowball sampling technique was the primary method employed to identify the respondents who meet the criteria for selection. Access was sought via personal contact, professional networks and snowballing. It is true that snowball sampling has certain limitations in that the researcher, for instance, does not have much control over the sampling method since the final selection begins with a convenience group, which tends to be likely composed of participants who are already known to the researcher; yet, the strategy can still be a useful one as it serves to increase the number of participants quickly and with little planning. In addition, this technique is also a cost-efficient method since the process of recruiting respondents saves not only time but finances as well.

Data was collected through semi-structured, in-depth, face-to-face interviews with 32 female university teachers from different departments and institutions of higher education in the cities of Casablanca, Mohammedia, Meknes, Settat, Berrechid, El-jadida,
khouribga and Beni mellal. Nineteen were assistant professors (PESA or university lecturer), and twelve were associate professors (PH or university lecturer habilitated). In order to control for the age of the children, analysis was restricted to assistant and associate professors who, we assume, have generally younger children than their senior colleagues who are older. The interviewing data collection technique is indeed considered an appropriate approach commonly used in qualitative research. The respondents were asked a series of open-ended questions that focused on their work, family responsibilities, academic career in Morocco, and, specifically, factors influencing female university professors' research performance and advancement. The aim was to gain information in an unstructured way.

The results of the open-ended questions were transcribed and coded to facilitate analysis. Some compelling responses and/or vivid excerpts are presented in verbatim quotations in order to convey exactly what the respondents said while explaining certain questions. Accordingly, thematic analysis was thought to be the most appropriate for studies that seek to discover issues using interpretations (Marks and Yardley, 2004). Participants' responses were therefore interpreted using a thematic framework; in other words, the survey data were closely analyzed for recurrent and comparable topics, opinions or concepts with the aim of finding connections and were grouped into categories based on their similarities. After identifying interrelations, a road map of issues emerged from which we could build a conceptual coherence that confirmed our hypotheses and communicated the essence of the research.

## 5. Findings and discussion

To be eligible for the study, our respondents had to be currently married and have at least two pre-school or school-aged children. Thirty-two female university teachers participated in the study; their ages ranged from 27 to 46 years old. Since the objective of this study is to explore the work-life balance, the age restriction aims to select women with competing responsibilities as it is generally accepted that simply being a mother adds more demands and expectations (Tingey et al. 1996). As they were all either assistant or associate professors, their average working hours ranged from 10 to 14 hours a week.

Findings demonstrated different significant factors that influence female university professors' research performance and scholarly output. Equipped with interpretive lenses, we present these factors with a pragmatic analysis:

### 5.1 Family demands

Although teaching, especially at the university level, is considered by many as a family-friendly career that enables women to play their dual roles as professionals and mothers as it provides reduced working hours and a more favorable work schedule than other professions, it appears that female academics are striving to balance work, research and family life. Contrary to popular belief, the teaching profession is one of the most demanding jobs in terms of time, effort and extra home assignments.

The following pie chart displays high tensions between research productivity and family responsibilities, as reported by most of the respondents.

# Repondents' reports on the tensions between research productivity and family responsibilities 



Most importantly, women's family demands usually interfere with work. When such an inter-role conflict happens, women are likely to prioritize family. Their expectations concerning their position in the family make them constantly and unconsciously try to prove to themselves and to others that they are capable of fulfilling their responsibility as a homemaker, i.e. their duty of being an "available" wife and mother. They tend to invest a greater amount of time and more effort than the spouse to fulfill family demands.

As a result, their commitment to family appears to limit their ability to achieve their desire and/ or effort for career advancement. This was made clear from the following statement by a 37-year-old finance teacher.


#### Abstract

I had to attend an international conference in Poland in 2018. My research proposal was accepted; I started working on my presentation. I bought the flight ticket; hopefully, it wasn't very expensive. I had to cancel everything 3 days earlier when my husband learned on short notice that he had to leave on a business trip. I didn't have enough time to get things in order ahead of time. I couldn't think of any reliable person to take care for my children when both my husband and I are away. My mother died, my parents-in-law are out of town, and the kids were not on holiday. In brief, we came to the decision that I was the one who had the possibility to cancel my trip.


In fact, due to greater household and child bearing or child rearing responsibilities, female academics are likely to reduce the time and energy for the research activities and publications necessary for academic advancement. Child-rearing, for example, poses a tremendous challenge for academics as it is time-consuming and might affect the time for research (Beddoes \& Pawley, 2014; Walsh \& Turnbull, 2016). One of the respondents suggested that the COVID-19 lockdown has further increased the household and child-rearing demands of women in particular, which resulted in decreased time available to devote to research. In her words:

> My husband and I are both university teachers. Like all other teachers, we worked from home during the lockdown. We normally engage the services of a housekeeper on a part-time basis. However, she had also to be confined and could no longer come. Therefore, as I was home all day, all chores fell on me, and I felt that the workload increased as we were all home day and night. I carried out the triple shift of work- housework and home-schooling. I could barely take some time for recording my courses and putting them on Moodle (the application). My husband, however, was able to finish a book chapter as well as two other articles during the same period (laughs).

This situation in which women, especially those with young dependents, had to choose between sacrificing time for the family and sacrificing research and career advancement might explain why men consistently outperform women in academic publishing. In fact, many journal editors reported an increase in submissions from male authors during the lockdown in comparison to submissions from females during the same period. It is worth mentioning that female researchers' impact ${ }^{1}$ has always been lower than men's due to lower output (Symonds et al., 2006). Here again, the differences between women's and men's research productivity, which is partly due to the gender inequalities related to spouses' household labor arrangements and parenthood responsibilities, come to widen the gender gap.

Many women may prefer the success of their families to their personal achievements. Mothers who choose to favor family life do not generally advance in their careers, and those who choose to give precedence to their careers are seen as selfish women who lack identification with their family role. These stereotypes will certainly be hard to break as long as womanhood and motherhood are confused with values and moral integrity; it is, in fact, this dichotomy that discourages women from overcoming obstacles and fully pursuing their professional dreams.

### 5.2 Masculine Culture

One of the themes that have been frequently mentioned in the interviews by our respondents is the persistence of masculine organizational culture. This masculine culture was described as separating women and power. In the Moroccan university setting, top academic positions are allocated almost exclusively to men. In their narratives, female academics have given many examples of gendered power in their institutions as well as the prejudice they have faced when they aspire to higher academic ranks, like heads of departments or directors of research laboratories.
.....I once applied for headship of the department of private law; until now, I still don't know
exactly the reason why I was discarded. I just want to add that only male colleagues have held that position so far. So go figure!

Besides, because university tasks are both teaching and scientific research, research laboratories have become fundamental components of the University. Their general aim is to serve the educational and research needs of undergraduate and postgraduate programs in different fields of expertise. They accomplish research and development objectives, carry out studies and research

[^0]work, and participate in the acquisition of knowledge and the dissemination of the information and results obtained. The example given below by one of the respondents shows clear gender-specific favouritism.

> With a colleague of mine (a woman), we applied to the dean requesting the formation of a research group; we prepared a very comprehensive proposal, assessed the needs, identified clear objectives, the number of researchers; in short, it was a good application procedure. We were told, however, that funds had already been distributed a few months earlier and that we had to wait for the next budget. To our surprise, we came to know a couple of days later that one teacher from the same department had just had his application approved.

It seems, therefore, that the approval of setting up a research laboratory creates an unfair situation for women since funding policies do not always give grants based on merits. In the example above, it is clearly biased in favour of men. An egalitarian funding framework, if adopted, is likely to distribute funds more equally among laboratories, thereby benefiting all research groups and encouraging talented academic researchers, irrespective of being a man or a woman.

### 5.3 Research funding

Attending academic conferences has always been perceived as an indicator of professional activity and development as they reflect teachers' commitment to the teaching practice and interest in research. Teachers are likely to gain experience when they take part in conferences and share them in-progress or finished research. When conferences are beyond national borders, researchers network with other academics all over the world. However, participation in conferences and other academic-based networking represents a substantial investment of effort and time and, more importantly, involves money, especially if it is self-funded. Research funding is an important reason why university teachers do not regularly engage in research. In particular, funding received in the early stage of the career significantly contributes to research excellence. It is worth-noting that the government is the major research funding body in most countries. When asked about their perceived satisfaction with the institutional research funding, all participants rated their degree of satisfaction as being very low. For example, a professor of law reported problems with grant availabilities in Morocco. She put:

Funding of universities generally and funding research in particular is still poor in Morocco. I have never received anything for the research works that I have carried out so far. I take from my salary to pay for publication, conference participation, flights and accommodation. For example, the charges incurred to publish in an indexed international journal range from $200 \$$ to $400 \$$ per paper. This is very discouraging for professors to go into research. There are many teachers in each institution, and we are not benefiting equally from the funding opportunities.

In addition, while research funding is considered to be essential for academic career success, our findings revealed some gender disparities in grant submission (Boyle et al., 2015). A 47-year-old female Sociology professor maintained:

> .....I have once applied for a grant, but I was very disappointed when I was awarded a much smaller amount than my male colleague in the same department. Women in general are left behind, especially novice researchers who have just started their career as university teachers.

Despite growing attention to gender disparities in higher education, the acquisition of research grant support between male and female faculty remains inequitable. With this inequity, it would be hard to retain female scholars in the academic pipeline.

To date, relatively little is known about gender parity or disparity in research funding. It is worth-noting, however, that gender diversity in funded research can enhance scientific innovation and teamwork and lead to excellence in research (Witteman et al., 2019b).

### 5.4 Mobility across national borders

It is argued, as mentioned earlier, that researchers' mobility (national or international) is an important part of research; mobility is relevant to the dynamics of knowledge dissemination and academic performance. Highly qualified people are found to be the most mobile population group worldwide. A number of mobility events can be offered throughout a researcher's career. By taking part in international collaborations or by working in other countries, researchers are likely to gain skills and experience. "Mobility is an essential precondition for the cross-fertilisation of scientific ideas and know-how. Scientists moving between different sites of knowledge production exchange ideas and know-how and learn about new techniques, devices and principles » (Gibbons et al. 1997). However, researchers' decisions to move internationally, particularly in the long term, involve a range of personal and professional factors. For women, pregnancies and motherhood, for example, directly affect the career opportunities and progression they are offered. The example below from a woman whose children have now grown up clearly illustrates what Waldfogel (2007) describes as "penalties of motherhood".

I had the opportunity to participate in a foreign program in the US in 2009; it was the Fullbright Scholar-in-residence (SIR). It was expected to last for six months (one semester). I was excited to go there. I had to be hosted by an American higher education institution where I was expected to teach Mediterranean cultures and societies. My husband was to join me for two months. Towards the end of January, I found out I was pregnant; so, of course, I cancelled everything since my husband and I thought it was unsafe to be alone in a foreign country for an extended period while pregnant.

Although a normal pregnancy without any complications is not considered a disability, there always exist worries and fears throughout pregnancy, which make women face different forms of penalties and costs. In addition to pregnancy, the age of the child is also likely to reduce women's career progression. In other words, the younger the age of the child/children, the greater the relative disadvantage for the working woman to sustain and fully develop their career in comparison to their male colleagues. This penalty involving child-bearing and child-rearing does not exist for men since most studies which have investigated spouses' childcare division so far have never found it equitably shared. It is, therefore, reasonable to believe that the impact of motherhood and the factors associated with it also affect women's research work and academic and/or scientific input to a great extent.

### 5.5 Marginalization of research in humanities and social sciences

Based on the interviews conducted with the female academics in the sample, we noticed that women in the humanities ${ }^{2}$ and social sciences ${ }^{3}$ had published fewer articles than others in other disciplines like engineering, management sciences, economy and law. Most of them claimed they received no funding for publishing their articles. According to the latest evaluation report established by the INE-CSEFRS (The National Body of the Higher Council for Education, Training and Scientific Research) about scientific research in Morocco from 1988 to 2017, the research output in the humanities and social sciences has not changed throughout the three decades probably due to an uneven distribution of research funding across different disciplines. A French literature professor, who declared having already received support for editing her doctoral thesis after many years working towards it, stated that arts and humanities are still seen, to her regret, as being less useful to society than other disciplines. In her words:

Once, while talking with a colleague from the faculty of science, he clearly tried to convince me that research in humanities does not generate innovation contrary to research in science and technology. He even added that we do not need funding for our research because this can just be done in libraries.

On the other hand, female researchers in engineering and information technology reported having already received some publication bonuses. Two other female teachers from the IT department in a higher school of technology declared they got quite reasonable funds for the organization of a scientific event.

Although the assumption that researchers in the humanities and social sciences tend to undertake more desk than empirical research is based on an unfair prejudice, we believe that this stereotype, further intensified by financial crises, is likely to lead universities to examine research funding grants on the basis of those kinds of research that are most "useful" and "meaningful". In a context where short-term profit is more desirable, research in arts and humanities tends to lose out in favor of research in science, technology, engineering and medicine 'STEM'. Efforts need, therefore, to be made to ensure that the role and societal contribution of these disciplines are understood by researchers as well as by policymakers. Research laboratory directors, for example, can also be in a position to put clear eligibility criteria and practical measurements of excellence for research in order to improve the quality of research outputs and show that humanities and social sciences are differently, and not less, useful.

## 6. Conclusion

It is commonly agreed that becoming actively involved in research requires resources and a supportive environment; the absence of these two variables particularly affects female researchers' career progression, particularly when they are further intensified by gender values that are still maintained in traditional non-egalitarian gendered environments. Different programs can, indeed, help empower women academics to do well in research, including the increase in resource allocation and funding opportunities as well as adequate institutional support. Although prior research has found that male researchers are cited more often than female researchers, we believe that citation indexing is not a reliable measure of scholarly output as it simply emphasizes quantity. Peer review is thought to be a better way of measuring the quality of research papers deemed to be more significant than their quantity.

[^1]Despite the above-mentioned findings, the present study presents some shortcomings that can be overcome in future research. The first limitation, like most qualitative studies on gender issues, is the small sample size, which might affect the generalizability of the findings to the largest population of female academics. In addition, having interviewed the respondents at one point in time cannot display the progress, if any, in narrowing the gap between women and men in academia. Further research using a longitudinal design with a larger sample size is, therefore, needed to capture a more multifaceted picture of women's barriers in academia at different life and career stages.

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[^0]:    ${ }^{1}$ A term coined by Eugene Garfield that is associated with citation as an indicator of the influence of a research study.

[^1]:    ${ }^{2}$ Examples of these disciplines are Literature, History, Philosophy, Ancient and Modern Arts.
    ${ }^{3}$ Social sciences cover a wide field of subjects such as History, Philosophy, Psychology, Demography, Anthropology, Sociology, Political Sciences, Governance, Cultural studies and Media Studies.

