ISSN: 2716-9189 E-ISSN: 2676-1750
Journal of Studies in Language, Culture, and Society (JSLCS). (08) 04, 2025. (PP. 175-198)
Received: 28/04/2025 Accepted: 11/12/2025 Published: 31/12/2025

INTRINSIC MOTIVATION AMIDST EXTRINSIC CHALLENGES: A SELF-DETERMINATION STUDY OF FEMALE ACADEMICS IN ALGERIAN HIGHER EDUCATION

Elkaina Hammache [1]
Centre for Applied Development Economics Research / Algeria
e.hammache@cread.dz

Abstract: This study investigates the motivational factors driving Algerian female university teachers to pursue academic careers. In recent years, an increasing number of women have entered the higher education sector, a trend that appears to be closely linked to evolving social and professional dynamics. The research focuses on three primary sources of motivation among these educators. A comprehensive literature review was conducted, drawing on established theories of motivation to frame the study. In this research, we adopt Self-Determination Theory (Deci & Ryan) as the foundational framework for examining the motivation of female higher education teachers. This theory offers a robust lens for understanding intrinsic motivation by emphasizing three basic psychological needs: autonomy, competence, and social relatedness. The empirical component involved a survey distributed across 67 higher education institutions in 17 wilayas, encompassing a sample of 434 female teachers. Through a mixed-methods approach combining a quantitative survey with qualitative analysis, this research reveals a nuanced, simultaneously encouraging and concerning portrait of the professional and motivational landscape faced by women in academia in Algeria. The findings clearly demonstrate that female academics are deeply motivated by intrinsic factors, in full alignment with our central hypothesis grounded in Deci and Ryan's Self-Determination Theory (SDT). Their professional commitment is anchored in the fulfillment of three fundamental psychological needs: for the Autonomy, They highly value their pedagogical and intellectual freedom, perceiving it as an essential pillar of their professional identity with average scores above 71%. for the Competence; They exhibit high levels of proficiency in teaching, research, and student supervision, coupled with a strong sense of efficacy and mastery with average scores above 80%. For the Relatedness, they experience a strong sense of belonging within a supportive academic community, where collegial relationships are frequently characterized by camaraderie and mutual recognition with average scores above 80%too. These foundational elements enable 80% of the participants to experience a genuine sense of professional fulfillment, despite persistently substandard institutional, material, and social working conditions. Nevertheless, this high level of intrinsic motivation must not be mistaken for unlimited resilience. It coexists with a stark lack of institutional recognition, inadequate working environments (e.g., absence of personal offices, overcrowded classrooms, unsanitary facilities, and safety concerns), perceived inequities in remuneration and benefits, and a gendered career gap: although women constitute the majority among associate professors, they remain significantly underrepresented among full professors and in leadership roles. This paradox, highly committed professionals operating within an unsupportive system, represents both a national asset and an urgent warning.

Keywords: *Intrinsic Motivation, Autonomy, Belonging, Competence, Gender Equity, Sustainable Development Goals*

How to cite the article :
Hammache , E. (2025). 10. Intrinsic Motivation Amidst Extrinsic Challenges: A Self-Determination Study of Female Academics in Algerian Higher Education . *Journal of Studies in Language, Culture, and Society (JSLCS)8*(4), pp. 175-198.

[1] **Corresponding author:** Hammache elkaina, **ORCID:** https://orcid.org/0009-0000-2626-1784

1. Introduction

For more than fifty years, the status and role of women in Algeria have undergone profound transformation. Spurred by evolving legal frameworks and a renewed commitment to women's rights, particularly following the political reforms of the 1990s.Algerian women have made significant strides in education, health, economic participation, and public life (Marnia, 1994; Amrane, 1995; UNDP Human Development Report, 2025). Central to this progress has been the strategic prioritization of girls' education, which has not only expanded access to schooling but also served as a powerful catalyst for women's social and professional advancement.

Nowhere is this more evident than in higher education. For over three decades, Algerian universities have been widely accessible to women, both as students and as academic staff. By 2019, women constituted nearly half (49.4%) of entry-level associate professors (Grade B), reflecting deep institutional inclusion at the base of the academic ladder. Yet this numerical parity masks persistent vertical segregation: women's representation declines markedly at each successive rank, falling to 36.6% among associate professors (Grade A) and to just 22.3% among full professors, the highest academic rank (see Table 1, Annex). While this marks an improvement from 2010,when only 17.7% of professors were women. The data reveal a consistent "leaky pipeline", suggesting that female academics encounter systemic barriers as they advance in their careers.

These disparities are especially striking given that Algeria's higher education sector operates within a civil service framework officially committed to egalitarian principles in recruitment, promotion, and remuneration. The persistence of gender gaps despite this formal equity points to informal, structural, or cultural obstacles, such as unequal recognition, work-life balance pressures, or limited access to research resources, that may undermine women's career trajectories and professional fulfilment.

In response, public authorities have intensified efforts since the late 2010s to strengthen the teaching and research professions. Key measures include statutory reforms, improved compensation schemes, targeted English language training (to B2/C1 levels) to enhance international engagement, and the allocation of over 9,000 housing units specifically for academics (Annex 4). Concurrently, the feminization rate of university teaching staff has risen steadily, reaching 44% in 2019, with a notable increase in women teaching at the master's level, from 31% in 2019 to 37% in 2023 (Tables 2–3, Annex). These trends signal a gradual but meaningful shift toward gender balance in academia.

Against this backdrop, understanding what motivates female university professors becomes not only timely but also essential. Motivation defined as "a set of energetic forces that originate both within and beyond the individual to initiate work-related behaviour and determine its form, direction, intensity, and duration" (Pinder, 1998) is a critical driver of pedagogical quality, research productivity, and institutional vitality. As Locke and Latham (2004) note, it stems from both internal aspirations and external conditions, making it highly sensitive to workplace environments and social contexts.

For female academics in Algeria, motivation may be shaped by a complex interplay of professional recognition, institutional support, gendered expectations (such as mental load or caregiving responsibilities), and access to opportunities for advancement. Their level of motivation directly influences teaching innovation, student engagement, and research output, yet it remains vulnerable to the very inequalities documented in promotion statistics. Conversely, sustained motivation can fuel resilience, counteract systemic barriers, and support long-term career success.

Despite its significance, research on the motivation of female higher education instructors remains scarce in North Africa, and virtually absent in the Algerian context. Investigating this topic not only addresses a critical gap in the literature but also aligns with global commitments under the United Nations Sustainable Development Goals, particularly SDG 5 (Gender Equality) and SDG 8 (Decent Work and Economic Growth). By illuminating the psychological and organizational factors that sustain or undermine female academics' engagement, this study aims to inform equitable policies, enhance institutional practices, and contribute to a more inclusive vision of academic excellence in Algeria and beyond.

1. Literature Review

The motivation of women teachers in higher education is a complex subject that tackles across several disciplines, including psychology, sociology, gender studies and education. Although there are not necessarily specific theories that focus exclusively on the motivation of female teachers in higher education, several conceptual frameworks and authors have addressed aspects related to this theme.

Firstly, there is the general theory of motivation applied to teaching; some classic theories of motivation can be applied to understand the specific dynamics of female teachers. For example, there is the theory of self-determination (Ryan, 2017) , which highlights three fundamental needs: autonomy, competence and social belonging. In the context of women teachers, this may explain how their motivation is influenced by their ability to exercise control over their work, to feel competent in their role, and to be supported by their peers and their institution.

Reinforcement theory (Skinner, 2008) argues that motivation is influenced by external rewards (e.g. promotions, recognition and punishments). Women teachers may be motivated or discouraged by institutional policies, such as career opportunities or pay disparities. There is also organisational commitment theory (Allen, 1997) ; this theory distinguishes three types of commitment (affective, ongoing and normative). It can be used to understand why some women remain committed to higher education despite gender-related challenges.

Secondly, in gender studies, women teachers are often confronted with specific obstacles linked to their gender, which influences their motivation. A distinction is drawn between feminism and gender studies, supported by (hooks, 1994) and (Judith Butler, 1990) , which explores how female teachers, particularly those from minority backgrounds, can be motivated by a desire to transform their educational environment and combat structural inequalities.

It can also help to understand how women teachers navigate between social expectations and their own ambition. There is also in gender studies, those dealing with Intersectionality argued by (Crenshaw, 1989) , which demonstrates how women's experiences are shaped by the intersection of multiple identities (gender, race, social class, etc.) This can be applied to understanding the specific motivations of women teachers from marginalised groups.

Thirdly, there are theories that deal with "Professional Dynamics and Organisational Culture". Academic institutions often have cultures that can influence the motivation of women teachers, such as that which deals with the glass ceiling through " (Loden, 1995) and Rosabeth Moss (Kanter, 1977)", which explores how patriarchal structures in universities can limit career opportunities for women, thus affecting their motivation. There is also work on Mental and Emotional Burden, by Susan A. (Basow, 1992) , which examines how women teachers can be overburdened by additional expectations, such as informal mentoring or emotional support for students, which can affect their motivation.

Fourthly, there are specific studies on women in higher education, with more recent research focusing specifically on women's experiences in the academy. For example, studies on Gender Bias in Higher Education such as (Valian, 1998) explore how implicit biases and gender stereotypes hinder women's progress in academic careers, affecting their motivation. There are also studies on institutional policies and their impact, such as that by (Ahmed, 2012) , who criticises institutional policies that claim to promote diversity but which, in reality, maintain structural inequalities. This may be relevant to understanding why some women teachers lose their motivation.

Fifthly, there are theories on positive perspectives and models of success. Some studies highlight the strategies that women teachers adopt to stay motivated despite obstacles, such as the one on "Female Leadership" by Sheryl Sandberg (Sandberg, 2013). Although criticised for its individualistic approach, this book encourages women to take initiative and overcome internal and external barriers, and the work on supportive communities by Angela Duckworth (Duckworth, 2016) , which highlights the importance of resilience and support networks in maintaining motivation.

Although there is no single framework for understanding the motivation of women teachers in higher education, the theories and authors mentioned above offer rich and complementary perspectives. This work highlights the importance of taking into account individual, institutional and societal factors in order to better understand and support these professionals.

In this research work, we opt to address the motivation of women teachers in higher education from the foundations of self-determination theory. Deci and Ryan's self-determination theory provides a solid framework for understanding the motivation of women teachers in higher education, highlighting intrinsic reasons such as the importance of autonomy, competence and social relationships. SDT was deliberately selected over alternative motivational frameworks (e.g., Expectancy-Value Theory or Maslow's Hierarchy) because it uniquely accounts for the interplay between personal agency and contextual support, especially in gendered institutional environments. Unlike theories that treat motivation as merely outcome-driven or hierarchical, SDT explicitly examines how social and structural conditions either nurture or thwart basic psychological needs, making it exceptionally well-suited to analyze the paradoxes faced by Algerian female academics.

This approach is based on the idea that three psychological needs must be met for an individual to be motivated and fulfilled:

- Autonomy refers to the need for the individual to perceive himself as the source of his own behaviour, to feel that he is acting on the basis of his own interests and values. When autonomous, individuals experience their behaviour as the product of their deep identity (self). Even when they have been influenced by others, they have integrated their elements, retained the initiative and remained in tune with their own values.

- Belonging is the need to feel connected to others, to care for others and have others care for you, to feel that you are accepted by other people and by your community. The feeling of belonging drives us to seek connection with others in order to be accepted as we are. This need for connection is not conditional on any particular expectation and does not seek any concrete result (marriage, joining the group); it responds to the psychological need to be in relationship and unity with others. Fulfilling this latter need not only enables the individual to feel "linked" to people who are important to him or her, but also makes these people feel important to others. When the need for social ties is thwarted, the individual may experience a form of social alienation, a feeling of exclusion or loneliness.

- Competence is a need, which refers to a feeling of efficiency, or mastery over one's environment and which gives rise to curiosity and a desire to take up challenges (Deci 1975, White 1959). The need for competence encourages the individual to seek out challenges that are optimal for his or her abilities, and to constantly improve these through activities. When this need is thwarted, the individual experiences a feeling of failure or weakness.

The theory of self-determination allows us to distinguish between several types of motivation, intrinsic motivation, extrinsic motivation and a motivation, depending on the degree to which the above-mentioned needs are met. The more needs are fulfilled, the more motivation is intrinsic, and the more needs are not fulfilled, the more we move towards A motivation.

Intrinsic motivation is 'at play when an activity is performed for the pleasure and satisfaction it brings'. When an individual is intrinsically motivated, he or she freely engages in an activity that will enable him or her to experience interest and joy. Intrinsic motivation is non-instrumental; it is generated by the satisfaction inherent in the action itself and is perceived by the individual as coming from him or her.

In contrast, in extrinsic motivation, the activity is pursued with a view to achieving a goal external to the individual and the activity (earning money, obtaining a reward, submitting to social or family pressure, avoiding punishment, etc.).

-A motivation is the total absence of motivation.

Deci and Ryan's theory of self-determination provides a solid framework for understanding the motivation of women teachers in higher education, highlighting the importance of autonomy, competence and social relationships.

Self-determination theory (SDT), applied to the context of women, particularly in areas where they face structural inequalities, gender stereotypes, or systemic barriers (such as the workplace, education, healthcare, or the political sphere), offers a powerful theoretical framework for understanding and addressing the specific challenges they encounter. Regarding autonomy—the right to choose, to act according to one's values, and to exercise free will—and the capacity to engage in actions aligned with one's core values and interests, without undue external pressure, women are often steered (or even constrained) towards traditional roles (caregiving, motherhood, domestic management), which limits their ability to make free choices about their careers, studies, or bodies. Women frequently experience social pressure to behave well, to be agreeable, or to sacrifice their ambitions for the sake of the family. In certain socioeconomic or geographical contexts, women have limited access to property, finance, or mobility. The SDT (Skills Development and Training) program promotes women's autonomy, enabling them to make authentic decisions, break free from restrictive social expectations, and rediscover a sense of agency, essential for their intrinsic motivation and well-being.

Regarding the feeling of efficacy and control in their activities, the need for competence implies feeling effective in their interactions with the environment and being able to achieve their goals. Women face specific challenges, such as underestimating their abilities. They are often victims of imposter syndrome, reinforced by environments where they are underrepresented. In education or the workplace, their skills are sometimes perceived as inferior, which hinders their recognition and advancement. The absence of women in positions of power also limits opportunities for learning and validating their skills. Skills development support addresses women's need for competence by recognizing their successes, offering constructive feedback, creating safe learning spaces, and challenging gender stereotypes that undermine their confidence in their abilities.

Regarding the sense of belonging, which refers to the fundamental need for authentic connection with others, to feel integrated into a community, and to be treated with respect and kindness, specific challenges for women can include professional or social isolation. In predominantly male environments, women may feel excluded, ignored, or victims of aggression. Sexual harassment, sexist comments, and the glass ceiling create hostile environments that erode their sense of belonging. Furthermore, women are often expected to be the social glue, which can emotionally exhaust them without fulfilling their own relational needs. Women's empowerment fosters a sense of belonging, creates inclusive communities, validates women's experiences, combats exclusion, and encourages mutual and respectful relationships. This strengthens not only their well-being but also their engagement and resilience. Women's empowerment addresses women's challenges in an integrated way, taking into account both their fundamental psychological needs and social constraints. Rather than pathologizing women, women's empowerment focuses on transforming the environmental conditions necessary to foster their development. Whether in education, management, health, or public policy, women's empowerment offers clear levers for action (e.g., supporting autonomy through real choices, valuing skills, building trust).

2. Methodology

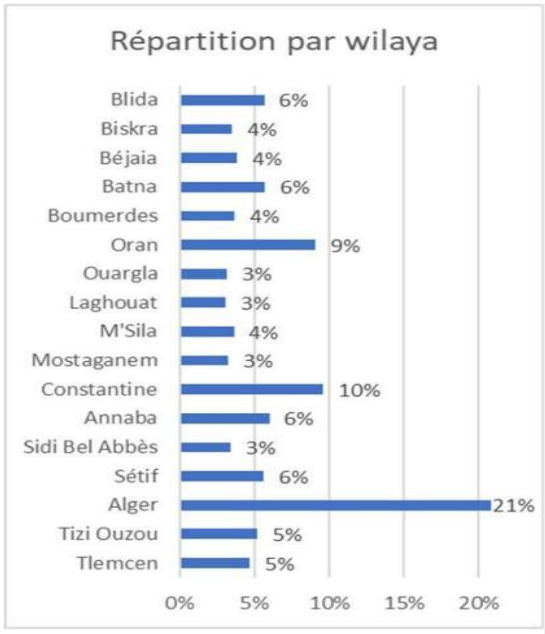
To test our hypotheses, we conducted a large-scale questionnaire survey in March 2023. The target population consisted of tenured higher education faculty members of both genders, holding positions defined under the 2008 teacher-researcher status framework namely, Professor, Associate Professor A (MCA), Associate Professor B (MCB), Assistant Professor A (MAA), and Assistant Professor B (MAB). While the initial objective was to cover all wilayas (cities) in the country, budgetary constraints required us to limit the geographical scope to 17 wilayas only. Based on an estimated population of 60,832 tenured faculty members (according to 2018–2019 statistics), we designed a representative sample of approximately 1,000 male and female instructors. The sample was stratified by grade, gender, nationality, and institution, and the selected geographical area comprised 67 higher education institutions.

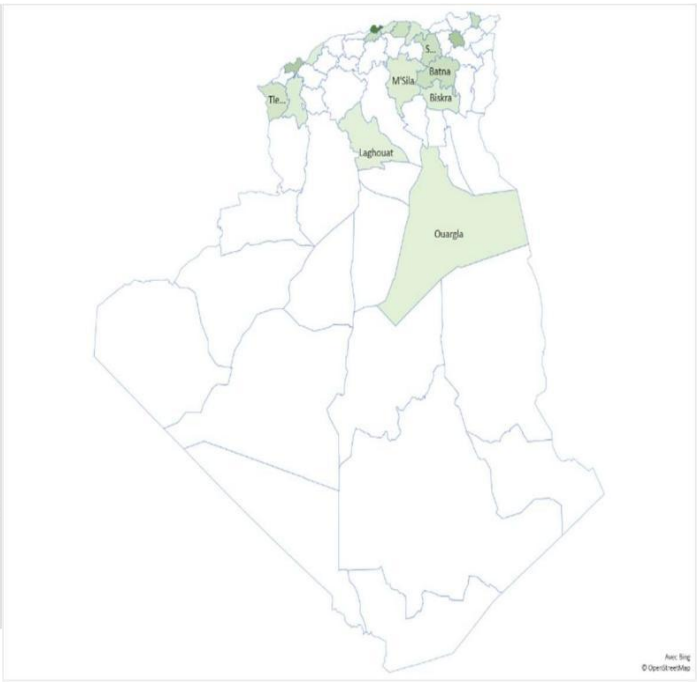
The quantitative survey employed stratified random sampling to ensure representativeness at the national, disciplinary (specialist), and institutional levels. Stratification was conducted based on the retained higher education institutions, totaling 67 establishments. A total of 897 teacher-researchers responded to the questionnaire, of whom 49.4% were women and 50.6% were men. For the purposes of this article, the analysis focuses exclusively on the responses of 434 female teachers. The questionnaire explored various dimensions, including their values, their motivational drivers, their perceptions of autonomy, competence, belonging within their professional environment, aptitudes, perceptions of their work environment, key motivational dimensions, their sense of autonomy, personal fulfilment and belonging within the workplace.

Table1:

Composition by grade of teachers surveyed

Grade	Female university teachers	%
1.MAB	47	11%
2.MAA	161	37%
2.MAA	3	1%
3.MCB	101	23%
4.MCA	78	18%
5.Pr	44	10%
Total general	**434**	





The quantitative survey employed a single-stage stratified random sampling method. Stratification was conducted based on the retained higher education institutions in 17wilayas, totaling 67 establishments.

The formula, therefore, used to compute the required sample size is as follows:(The case of two proportions for a large, finite population without replacement (total number of faculty members: 60,832 in 2018–2019):

$$n = \frac{2\bar{p}(1-\bar{p})\left(\sum z\alpha_{/2},\beta\right)^2}{d^2}$$

Knowing that:

Represents the maximum absolute error margin;

$\bar{p}$, Is the average proportion retained;

$\alpha_{/2},\beta$, , are the z-scores with a confidence level of 95% (Type 1 error) and a power of 80% (Type 2 error).

Given the small sample size of the preliminary survey and the lack of quantitative studies on integrated models of teacher-researcher motivation in Algeria, we decided to opt for the scenario of an unknown average proportion (Maximum variance.).

Thus, the calculated sample size was 1021 with a margin of error of 0.062.

Rounding applied to the distribution of this sample brought the total to 1026, or less than 1%.(To account for potential errors and unforeseen circumstances in the field, a total of 1100 questionnaires were printed (530 in Arabic and 570 in French).)

The maximum recalculated margin of error is therefore, approximately, ±0,0618 (±6,18%)(The exact value is 0,061846389. The confidence interval (CI) = 0.123692778.)

The following formula was used to calculate the stratified mean:

$$\bar{y}_{st} = \frac{1}{n}\sum_{st} y_k$$

The following formula was used to calculate the variance.(Strata of the large population). :

$$Var(\bar{y}_{st}) = \sum_{h=1}^{H} \left(\frac{n_h}{n}\right)^2 \left(\frac{1-f}{n}\right) Var(\bar{y}_h)$$

Knowing that:

**f represents the survey rate.*

Statistics regarding the distribution of the target population by academic rank and sex were not utilized to further increase the degree of stratification, for two principal reasons:

1. Data Unavailability: The statistics for the target population were not available by the cross classification of sex and academic rank. Only the total population was distributed between men and women.
2. Population Dynamics and Data Age: Stratification by academic rank was deemed risky due to the dynamic nature of researchers' career progression. Consequently, the relative share of each rank in the total population is in constant flux. Furthermore, the available database was dated (2018–2019), rendering the data potentially outdated for precise stratification by rank or sex.

Based on these constraints, indicative quotas were communicated to the surveyors concerning the academic rank and sex of the respondents. Additionally, instructions were provided to target all faculties within the selected institutions. As noted above, these quotas were primarily intended to enhance the qualitative aspect of the data collection (i.e., ensuring representation across key categories, even if not strictly proportional).

The researcher-teachers who participated in the survey were selected randomly by the interviewer through random movement across the higher education institution (i.e., a form of convenience or haphazard selection within the randomly chosen strata).The final sample is considered self-weighting (or *epsem*—equal probability of selection method). In other words, within each stratum, the sample was drawn using a uniform sampling fraction relative to the sampling frame.

-For the reliability and Internal Consistency of the Questionnaire, the aim was to verify the convergence of all elements of the selected scale toward the same response intensity. To do this, we relied on the most widely used method, namely the calculation of Cronbach's alpha index.

The general idea is that the selected scale measures the same general construct, which is, of course, the motivation of the teaching and research staff. Therefore, Cronbach's alpha index was first calculated for the entire questionnaire. The result is presented in the table 2.

Table 2.

Cronbach's Alpha Index for the Entire Questionnaire

Statistiques de confiance

Alpha de Cronbach	Nb éléments
,87	138,00

The value of Cronbach's alpha coefficient is 87%, well above the minimum acceptable range (70–80%). In other words, the internal consistency of the questionnaire as a whole is very satisfactory.

The data collected via Google Forms was initially exported to Excel for preliminary handling. However, Excel proved to be inefficient for two main reasons: (1) the non-standard format in which Google Forms exported the data, and (2) the large volume of responses in the dataset. Consequently, the data was converted and imported into SPSS, which allowed for more effective processing, including the generation of statistical outputs, tables, and analytical graphs essential for the study's interpretation. For data analysis, we generated multivariate cross-tabulations and descriptive graphs.

3. Results and Discussion

3.1. Autonomy

As illustrated in the figure below, the majority of female teachers perceive a relatively high level of autonomy in their professional environment. On average, they report feeling that they are able to act independently in their academic roles and responsibilities. Additionally, a significant number of respondents indicated that their recommendations and input are taken into consideration, although some noted that this recognition occurs less consistently than desired.

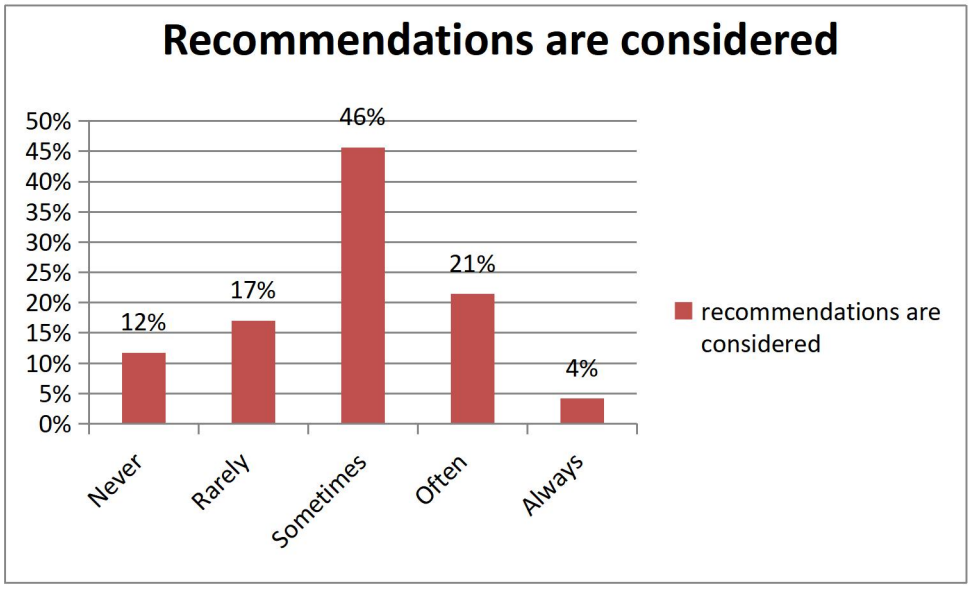


Figure 1

Autonomy at university

As demonstrated in Figure 1, which examines the dynamics of academic autonomy, Algerian female academics report a generally satisfactory level of professional autonomy, noting that their pedagogical and research recommendations are occasionally to frequently integrate into institutional decision-making processes. Although this finding appears moderately encouraging, it requires substantial conceptual qualification. Such reports do not necessarily indicate the existence of a consolidated,, institutionalized, or structurally embedded form of autonomy. Instead, they reflect or perceived autonomy; a subjective sense of latitude that may derive from a strong professional ethos, an elevated sense of responsibility, or the absence of explicit and rigorous supervisory mechanisms. In this sense, the autonomy described by these academics can be interpreted less as the outcome of deliberate institutional empowerment and more as a by-product of regulatory ambiguity and systemic under-structuring.

This perception of autonomy aligns closely with a coherent constellation of foundational values asserted with marked consistency by the respondents. The data reveal near-universal adherence to six core ethical and professional pillars, which collectively delineate the profile of the Algerian female academic as deeply anchored in a logic of public service, institutional stability, and moral integrity.

Within this value system, equity (90%) and job security (93%) emerge as non-negotiable values. They reflect a profound distrust of precarity and arbitrariness, legacies of past institutional neglect and poorly executed reform initiatives. The demand for employment stability is not merely an economic claim; it is symbolic of a deeper quest for professional dignity within a context where academic careers are frequently obstructed by bureaucratic hurdles, politicized appointments, and discontinuities in educational policy.

Similarly, respect for tradition (82%) and discipline (95%) reinforce this image of an academic corps that sees itself as the guardian of an intellectual and moral heritage. This is not blind conservatism, but rather a quiet resistance to institutional instability: by anchoring their professional identity in transmitted values—seriousness, rigor, and adherence to rules—female academics compensate for the absence of clear, formalized frameworks. Discipline here is not an externally imposed constraint, but an internalized norm, an ethical work ethic that self-imposes itself as a moral response to an under-structured system.

Intellectual independence (85%) stands out as a fundamental pillar: it reflects a deep aspiration to academic freedom, not only the freedom to teach according to one's approach, but also the freedom to think, to inquire, and to publish without subtle forms of censorship. This value becomes especially significant in a context where research funding is limited, local academic journals lack visibility, and research priorities are sometimes shaped by political or institutional pressures. That 85% of respondents emphasizing this freedom indicates that they view it as indispensable to their professional legitimacy.

Equally, net worthy is the predominance of hedonism (95%) which appears as a striking revelation. Teaching and research are not perceived as burdens or mere occupational duties but as profound sources of personal and intellectual fulfillment. This is not mere transient enthusiasm; it is a form of spiritual resilience. Faced with often arduous working conditions—administrative overload, insufficient resources, and inadequate recognition—female academics find in the passion for knowledge a fundamental 'raison d'être'. This pleasure is not selfish; it is collective, transmissive, and generous. It sustains their commitment, their perseverance, and even their patience in the face of systemic dysfunction.

Taken collectively, these six values equity, stability, respect, discipline, intellectual independence, and hedonism constitute an implicit moral framework, an unwritten code of conduct that guides the daily practices of female academics in the absence of a formally codified professional status. This is the crux of our analysis: the absence of formal institutional structures

does not produce a vacuum, but rather an ethical overcompensation. Female academics compensate for institutional deficits through an abundance of self-imposed values. In effect, they become the spontaneous architects of their own professionalization.

However, this resilience comes at a cost. This moral framework, while powerful, is fragile and non-institutionalized. It offers no protection against arbitrary decisions, gender-based discrimination, career stagnation, or unequal treatment. It does not empower women to claim rights, as it rests on implication and emotion rather than formal entitlement. Consequently, it is vulnerable to erosion: a shift in educational policy, a poorly conceived reform, or heightened budgetary pressures could cause it to collapse without institutions being able—or willing—to replace it.

This observation leads to a critical conclusion: the strength of individual values cannot substitute for institutional weakness. Algeria possesses an exceptional human capital—highly committed, ethically grounded, and intrinsically motivated female academics—yet this capital is undermined by a system that fails to formally recognize and institutionalize their contributions. The status of the female academic must therefore be revised not as a mere administrative update, but as a political and moral acknowledgment of the very values these professionals already embody.

Ultimately, the data reveal not merely what female academics believe, but what they must do to sustain their professional engagement within a system that offers minimal structural support. Their perceived autonomy, deep-seated values, and intrinsic enjoyment of work collectively constitute an act of silent resistance. It is time the institution ceased to view this resilience as an exception, and instead recognized it as the norm upon which a new, more just academic order must be constructed.

3.2. Fulfillment

3.2.1. Sense of fulfillment at work

As illustrated in the figure below, the majority of female teacher-researchers report experiencing a strong sense of fulfillment in their professional roles. This suggests that many women in higher education perceive their academic careers as meaningful and rewarding, both intellectually and personally. The feeling of fulfillment is likely linked to their engagement in teaching, research, and the broader university community, as well as the recognition they receive for their contributions.

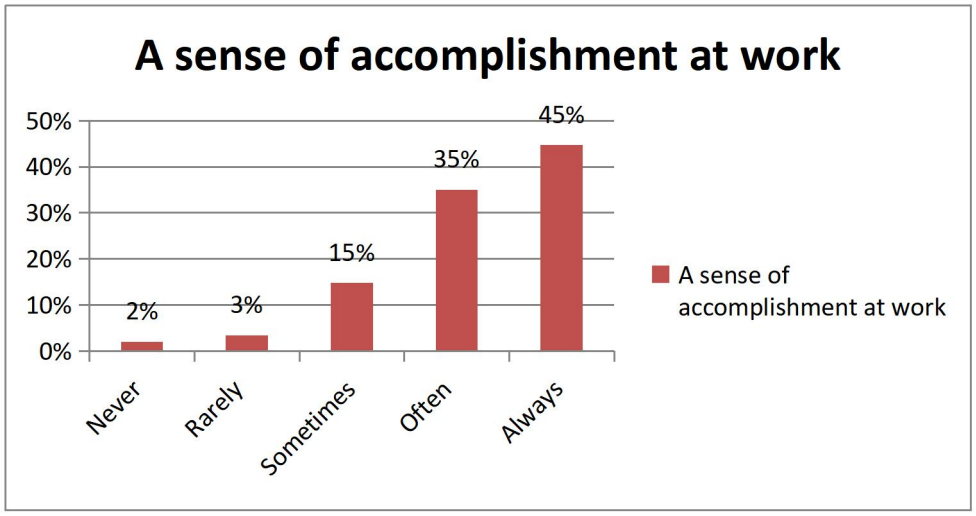


Figure 2.

Sense of fulfillment at work

Figure 2 reveals a finding that is both encouraging and nuanced: 45% of female academics report experiencing a sense of accomplishment always in their professional roles, while 35% report feeling it often. Together, these two categories account for 80% of the sample, indicating a strong emotional and professional commitment to their work. Only 15% report feeling this sense sometimes, and 5% (2% + 3%) report feeling it rarely or never. These figures suggest that, despite the well-documented structural and institutional challenges within the Algerian higher education system, the majority of female academics derive profound meaning from their work.

This sense of accomplishment does not emerge spontaneously; it is closely tied to the deeply rooted values we have previously analyzed namely, hedonism (95% associate their work with pleasure), discipline (95% believe in the moral duty to perform their work well), and intellectual independence (85% value the freedom to choose their own methods). It is precisely because they believe in what they do, find joy in it, perceive it as a moral obligation, and exercise autonomy that they experience this fulfillment. In other words, the sense of accomplishment is not the product of an ideal environment but rather the outcome of a resolute internal stance. It represents a form of psychological and ethical resilience, where satisfaction stems less from external conditions (salary, institutional recognition, material resources) and more from the alignment between their actions and their core values.

It is noteworthy that, within a system characterized by the absence of a clear and protective legal framework, limited material and institutional resources, sometimes-burdensome bureaucracy, and insufficient social and political recognition, female academics manage to maintain a high level of personal satisfaction. This underscores an extraordinary capacity to generate meaning despite institutional chaos. This phenomenon can be interpreted as a form of positive resistance: they do not merely survive within an imperfect system; they actively find space to express their professional and moral identity. Their sense of accomplishment stems from knowledge transmission, scientific creation, and student mentorship—acts that retain intrinsic value even when performed in obscurity.

However, these data warrant qualification: While 45% respondents report always, feeling accomplished at work, what are the underlying reasons? Is this sense of accomplishment sustainable? Is it tied to episodic events (student success, publication of an article, peer recognition) or to a deeper, enduring stability? Without complementary qualitative data, we cannot definitively conclude. It is possible that this sentiment is fragile, contingent upon external triggers (e.g., promotion, securing funding) rather than institutional stability. A high rate of self-reported accomplishment may also mask excessive personal investment: when the system fails to acknowledge effort, individuals compensate by deriving satisfaction internally. Yet, this can lead to burnout, especially if accomplishment becomes the sole source of validation. The remaining 20% (sometimes, rarely, never) are not negligible. They may represent academics in precarious situations, facing gender-based discrimination, excessive administrative burdens, or professional isolation. Their lack of accomplishment could serve as an institutional warning sign, pointing to areas of professional suffering yet unaddressed.

The sense of accomplishment reported by 80% of Algerian female academics represents a significant strategic asset for the university. It attests to a profound commitment to service, knowledge, transmission and scholarly creation, even under adverse conditions. At the same time, it constitutes a critical warming: this sentiment must not be exploited as a replacement for essential structural reforms. A sense of accomplishment cannot substitute for rights, adequate resources, or coherent institutional frameworks; rather, it functions as a complementary dimension that can enhance their effectiveness once they are ensure.

3.2.2. Colleagues' image of self-fulfilment

As shown in the figure below, the majority of female teacher-researchers report that their sense of fulfillment at work is recognized and reflected by their colleagues.

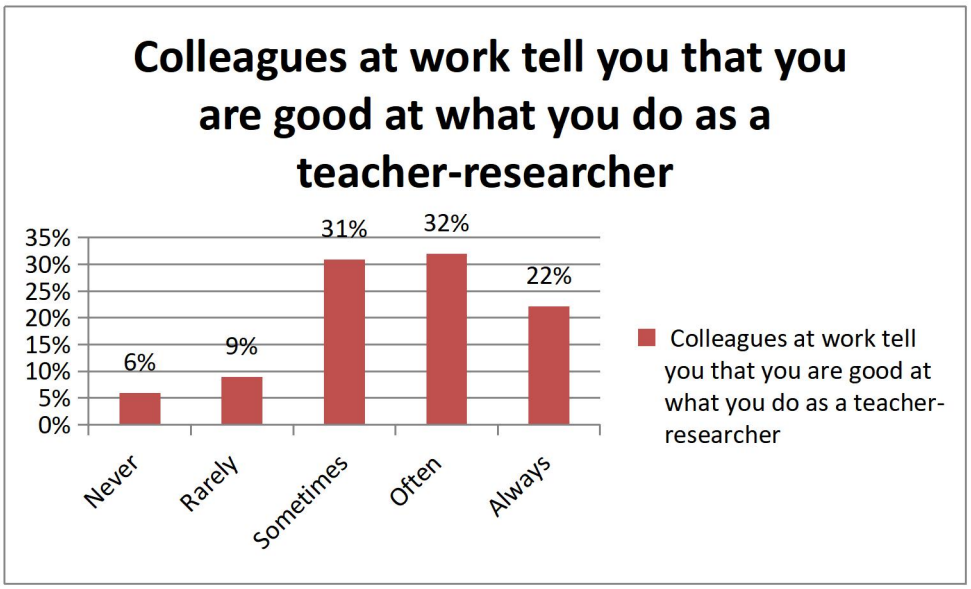


Figure 3

Image of self-fulfilment

This chart shows how frequently female academics in the study report receiving positive feedback from their colleagues regarding their performance as *teacher-researchers* , a dual role combining teaching and research responsibilities. The majority receive positive feedback regularly. 54% of respondents report receiving affirming feedback often (32%) or always (22%). This suggests that more than half of the female academics feel recognized and validated by their peers for their professional competence.

Significant minority experience inconsistent or minimal Recognition. 40% receive feedback only sometimes (31%) or rarely/never (15%).This group may feel undervalued, invisible, or isolated, which can negatively impact motivation, job satisfaction, and mental well-being ,especially in high-pressure academic environments. Low “Never” Rate (6%) ,But Still Concerning ;While only 6% say they *never* receive praise, even this small percentage indicates a systemic gap in peer recognition for some individuals , potentially linked to gender bias, departmental culture, or lack of supportive networks.

3.2.3. Teaching and Research Competencies

Further corroborated by an analysis of teaching and research competencies, evaluated in relation to the objectives defined in the Statute of the Academic-Researcher: (1) delivering high-quality instruction (pedagogy); (2) conducting research-training activities (research and training); and (3) producing and transmitting knowledge (publications and student supervision). The analysis (Appendix 5) revealed that overall teaching and research competencies are relatively strong.

Table3 :

Perception of own teaching and research skills

Dimension / Indicator	Description	Score (%)
Teaching & Pedagogy		**81%**
Instructional Planning & Implementation	Objectives, methods, content, teaching materials, assessment	79%
Pedagogical Communication	Oral, written, non-verbal communication	82%
Use of Multimedia Tools	Teaching technologies and pedagogical communication	78%
Teaching Ethics	Anti-indoctrination, critical thinking, anti-plagiarism, scientific objectivity	85%
Research & Training		**77%**
Literature Review	Identification and consultation of scientific sources	82%
Interdisciplinary Collaboration	Multi-/interdisciplinary teamwork	75%
Scientific Participation	Conferences, seminars, webinars	74%
Publication, Supervision & Knowledge Valorization		**66%**
Funding Acquisition	Ability to secure external funding	48%
Student Integration in Research	Undergraduate, Master's, and PhD students in active projects	58%
Supervision & Methodology	Mentoring, monitoring, formative assessment	76%
Scientific Output	Articles, books, conference papers	77%
Integration of Research into Teaching	Lectures, tutorials, practical sessions	76%
Knowledge Transfer	Public sector, industry, practical applications	65%

The composite component "Teaching and Research Competencies" achieved a normalized average score of 75%, with the pedagogy dimension performing particularly well, reaching a normalized mean of 81%; Within this dimension, 79% of respondents demonstrated strong proficiency in planning and implementing teaching and assessment activities encompassing the selection and articulation of learning objectives, teaching methods, content, instructional materials, and evaluation techniques. Additionally, 82% exhibited proficiency in diverse forms of pedagogical communication, including oral and written expression as well as non-verbal communication, while 78% showed competence in using multimedia tools to support teaching and communication. Notably, 85% consistently upheld high ethical standards in teaching, rejecting indoctrination, fostering critical thinking, avoiding plagiarism, properly citing sources, and maintaining scientific objectivity while minimizing non-scientific subjectivity.

In the research-training dimension, the normalized mean score was 77%. Specifically, 82% of academics demonstrated strong skills in actively identifying and consulting relevant scholarly literature tied to their courses or research themes. Meanwhile, 75% effectively collaborated in multi or interdisciplinary teams to carry out research projects or programs, and 74% regularly participated in conferences, seminars, and webinars aligned with their teaching and research interests.

The publication and supervision dimension revealed a lower normalized mean score of 66%, highlighting notable disparities. Only 48% reported mastery in securing external research funding, and 58% effectively integrated students from all three academic cycles Licence, Master, and Doctorate into active research projects. On a more positive note, 76% demonstrated strong competence in student mentoring, methodological guidance, and formative assessment; 77% exhibited proficiency in writing and publishing research outputs such as articles, books, and conference papers; and another 76% successfully integrated their research findings into course content and practical sessions. However, just 65% reported competence in transferring research knowledge to practical contexts, including public administrations and enterprises.

Beyond competencies, the data also indicate that the majority of female academics perceive a strong sense of belonging to the academic community, underscoring positive interpersonal relations within the institution.

The findings reveal a clear pattern: Algerian female academics possess robust professional competencies, with an overall normalized score of 75% in teaching and research. This achievement is particularly remarkable given the institutional context, where the academic-researcher status remains inadequately codified, pedagogical and research resources are frequently scarce, continuing professional development opportunities are rare or misaligned, and research support policies lack structure. This suggests that academic quality is shaped not only by institutional conditions, but is fundamentally shaped by individual willpower, self-directed learning, and personal ethical commitment. Nevertheless, this overall performance masks significant domain-specific disparities, necessitating a differentiated analysis.

With regard to Pedagogy, this is an area of exceptional mastery 81%. Pedagogical planning reached 79%, reflecting a high capacity to structure instruction, align objectives with content and assessment. a skill notably rare in contexts where curricula are rigidly imposed with little flexibility. Pedagogical communication was rated at 82%, reflecting a well-developed awareness of the impact of verbal, written, and non-verbal communication in knowledge transmission. Ethical attitudes achieved the highest score of all domains (85%), demonstrating that female academics actively resist indoctrination, champion critical thinking, rigorously cite sources, and strive for scientific objectivity. These are foundational pillars of the modern university—and they defend them proactively, even in the absence of formal institutional mandates.

This underscores that pedagogy is the primary domain in which female academics exercise concrete autonomy. Here, despite institutional constraints, they create, adapt, and humanize teaching. Their excellence in this area is further explained by the fact that pedagogy remains the only area over which they retain direct control—unlike research, which is often subject to external funding priorities and institutional agendas. The use of multimedia scored a respectable but comparatively lower 78%, potentially reflecting limited access to digital tools, insufficient targeted training, cultural resistance to technological integration, or simply a lack of formal recognition of these competencies in performance evaluations.

Research and training demonstrates strong skills despite structural constraints (77%).The high rate of literature consultation (82%) attests to strong scientific vigilance and intellectual curiosity. The collaboration score (75%) is commendable, indicating a capacity for teamwork essential in contemporary research, though further strengthening is needed, particularly in interdisciplinary projects. Participation in conferences and seminars reached 74%, an acceptable level suggesting limited scientific visibility, likely due to financial constraints, insufficient local opportunities, or an academically insular culture.

This domain reveals a tension between individual dedication (active literature review) and structural barriers (limited access to events, weak interdisciplinary collaboration). Female academics perform admirably under constraints, yet their full research potential remains hindered by institutional and logistical impediments. Publication and Supervision: The Most Fragile Domain (66%).This domain is critical, as it links scientific production to knowledge transmission, and thus to the social and institutional impact of research. Yet, it is precisely here that scores drop most significantly.

Student supervision scored a strong 76%, confirming deep engagement in the intellectual and human development of students through tutoring, methodological guidance, and formative assessment. Research writing and publication achieved 77%, indicating strong writing capacity and a clear desire to disseminate findings, even amid limited publishing channels. And Integration of research into teaching reached 76%, demonstrating a consistent alignment between scholarly inquiry and pedagogical practice: research is not pursued in isolation but to enrich instruction.

By contrast, obtaining research funding scored the lowest of all indicators at 48%, revealing a critical structural deficit in access to financial resources that severely constrains ambitious projects, a systemic, not individual, failure. Integration of students into research projects scored only 58%, suggesting that, despite their willingness, female academics struggle to involve students in active research, likely due to insufficient time, resources, or institutional frameworks. Knowledge transfer to practical sectors scored 65%, indicating that research remains largely confined within academic walls, with minimal societal, industrial, or administrative impact. This domain exposes a profound rupture between individual excellence and collective recognition. Female academics produce, publish, and supervise—but their work is neither adequately valued, funded, nor disseminated beyond the campus. They excel in doing more with less, yet their potential remains systematically underutilized.

The graph titled “Colleagues tell you that you are good at what you do as an academic-researcher” complements this analysis perfectly. 32% reported receiving recognition “always,” and 31%“often,” meaning 63% of colleagues regularly affirm their excellence. Only 15% (6% “never” + 9% “rarely”) reported receiving little or no recognition, a remarkably low figure that signals strong professional solidarity and mutual respect.

This finding is pivotal: recognition originates primarily from peers, not from hierarchical institutions. It reinforces the notion that the university functions as an informal community, where legitimacy is built through mutual respect, shared quality of work, and horizontal not vertical recognition. This explains why the sense of accomplishment remains so high: even when the institution remains silent, the acknowledgment from colleagues “bravo” is sufficient.

The data collectively reveal that Algerian female academics operate with remarkable professionalism and ethical commitment, despite operating in a context of institutional underdevelopment. Their strengths lie in pedagogical mastery, ethical integrity, and collegial recognition—areas where they exercise autonomy and generate meaning. Yet, their research potential is systematically constrained by structural deficits: inadequate funding, limited access to dissemination platforms, and weak mechanisms for integrating students and transferring knowledge. Their resilience is not a sign of institutional success, but of individual and collective resistance. The high levels of accomplishment and peer recognition are not substitutes for institutional reform, they are its most urgent call.

4.The Sense of Social Belonging to the University Community

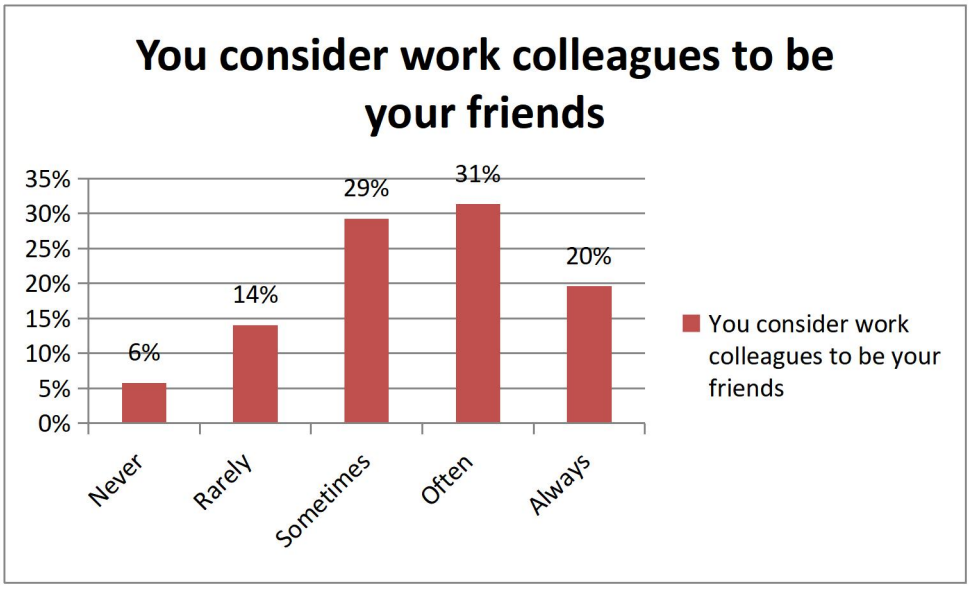


Figure 4

The sense of social belonging to the university community

Analysis of this graph reveals that a significant majority experience their professional environment as a space of friendship. The fact that more than half of female academics (51%) consider their colleagues to be friends either "often" or "always"is a strongly positive and revealing finding. This indicates that; despite institutional challenges, the academic milieu fosters a favorable relational climate conducive to trust, mutual support, and solidarity. Professional relationships are not merely functional or hierarchical; they are human, affective, and at times deeply personal. This constitutes a sign of social resilience: in a system where formal structures are weak, interpersonal bonds become the cement holding daily operations together.

Approximately one-third of respondents report an intermediate relationship dynamic: the 29% who answered "sometimes" is also noteworthy. It suggests that many female academics maintain cordial yet professionally distant relationships with colleagues, without cultivating genuine friendship. This may reflect relational caution—particularly in contexts where rivalries, jealousy, or political tensions may exist—or it may signal professional fatigue: after years of workload overload, it becomes increasingly difficult to sustain deep personal connections with everyone.

A fifth of respondents (20%) do not consider their colleagues to be friends—a non-negligible figure warranting careful analysis. Of these: 6% respond "never," potentially indicating situations of conflict, isolation, or disaffection; 14% respond "rarely," suggesting greater emotional distance or even mistrust. This 20% may represent zones of professional suffering: female academics in precarious positions, facing gender-based discrimination, excessive workloads, or institutional isolation. This group could benefit from psycho-social support or professional relationship coaching.

This graph should not be interpreted in isolation. It fits seamlessly within the broader framework of our study; linked to sense of accomplishment (80%), If you like your colleagues, you are more likely to feel fulfilled at work. Workplace friendship reinforces enjoyment and motivation. Linked to peer recognition (63%), Those who view colleagues as friends are also

more likely to receive positive feedback from them. A virtuous cycle emerges: recognition → friendship → motivation → performance.

Linked to core values (hedonism, respect, equity), Friendship at work is a concrete expression of these values: mutual respect, equitable exchanges, and pleasure in collaboration. Linked to the absence of a formal status; in a system where rules are ambiguous, human relationships become the implicit norm. Trust is placed in people, not procedures.

This graph reveals that the Algerian university functions as an "affective community", a space where personal bonds compensate for institutional deficiencies.

It represents a form of gentle resistance, if the system cannot be changed; one creates a micro-system, warm, supportive, and meaningful and finds purpose within it. But caution is warranted: this solidarity comes at a cost. It may mask structural problems (ex: lack of resources, unequal treatment); It may foster cliques or exclusions; It may lead to emotional burnout if female academics must constantly navigate complex interpersonal dynamics alongside their heavy workloads.

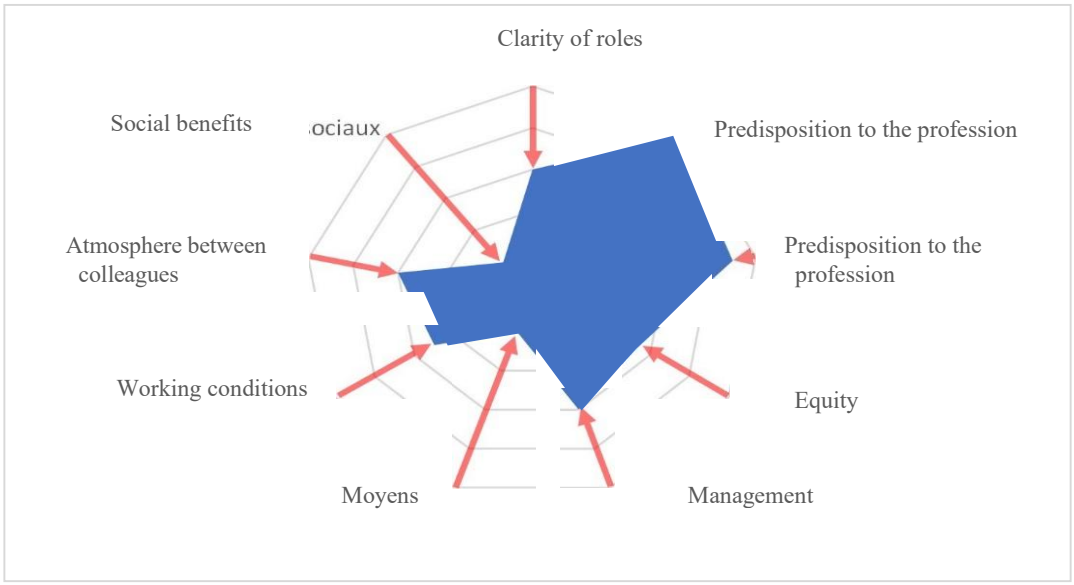


Figure 5:

Perceived characteristics of work in higher education establishments

This organizational diagram enables a deeper discussion of these findings, interpreting them not merely as descriptive observations, but as critical warning signals, potential leverage points for reform, and revealing contradictions that expose the structural tensions within the current system.

A central paradox emerges clearly: passion juxtaposed with devaluation.. This tension lies at the heart of the data: while female academics demonstrate strong professional predisposition and preparation, indicating high levels of motivation, competence, experience, and deep commitment to their mission, they simultaneously perceive severe deficits in material resources, working conditions, equity, and social benefits. This creates a profound dissonance between their personal investment and the institutional support they receive. The issue is not one of motivation or capability, but of systemic recognition and resource allocation. When passionate professionals are forced to operate under undignified conditions, the result is not merely dissatisfaction, it is burnout, frustration, alienation, and ultimately, attrition, as talented individuals exit the profession or migrate to more supportive environments.

Structural deficits in means and working conditions are neither incidental nor trivial. The absence of dedicated offices, deteriorating classrooms and lecture halls, unsanitary restrooms, and the lack of recreational or rest spaces are not minor inconveniences, they constitute the material infrastructure of professional dignity. Insufficient means directly impede the capacity to perform core academic functions: without adequate workspace, meeting rooms, or modern pedagogical tools, teaching and research become arduous, if not impossible, tasks. Deteriorated working conditions exert tangible impacts on physical and mental well-being: overcrowded classes generate excessive workload; insecurity fosters chronic stress; poor hygiene poses health risks; and the absence of rest areas prevents recovery. The consequence is a measurable decline in pedagogical and scientific quality, as even the most dedicated educators cannot compensate for the absence of basic material conditions. This also damages the university's reputation among students and the broader public.

Regarding perceived inequity and inadequate social benefits, the issue takes on profound symbolic and social dimensions. Inequity is not merely understood in monetary terms, it is experienced as a lack of social and institutional recognition. Female academics consistently compare their status, compensation, and benefits with those of other professions (e.g., physicians, engineers, civil servants) and perceive themselves as systematically undervalued despite their advanced qualifications and heavy workloads. Social benefits such as transportation allowances, housing access are widely regarded as either non-existent or symbolic, failing to serve as meaningful instruments of well-being or retention. What these women seek is not simply higher salaries, but concrete acknowledgment of their professional worth. Salaries and benefits function as symbols of respect; when they are inadequate, the very dignity of the profession is eroded.

The perception of colleague relations stands out as one of the few consistently positive dimensions, suggesting that human connection, solidarity, and cooperation remain intact within the academic community, forming a vital social capital. However, this positive dynamic is fragile. If external pressures, chronic under-resourcing, excessive workloads, and insecurity continue to intensify, this solidarity may erode. Human networks cannot indefinitely substitute for institutional support; their capacity to buffer systemic failures has clear limits.

The data further reveal that role clarity and management practices are perceived as critically deficient. Female academics frequently navigate overlapping and often undefined responsibilities, teaching, research, administrative duties, student supervision, and ad hoc tasks, without clear delineation or institutional guidance. The absence of clearly defined roles generates confusion, overload, and a pervasive sense of injustice. Management is often perceived as absent, ineffective, or disconnected from front-line realities. Effective leadership, by contrast, could optimize resource allocation, prioritize core missions, and actively protect staff from systemic overburdening.

5. Conclusion

This study provides a profound exploration of the motivations of female academics in Algerian higher education, a field long under-researched despite its strategic importance for the quality of education and scientific development in the country. Through a mixed-methods approach combining a quantitative survey (897 respondents, including 434 women) with qualitative analysis, this research reveals a nuanced, simultaneously encouraging and concerning portrait of the professional and motivational landscape faced by women in academia in Algeria.

The findings clearly demonstrate that female academics are deeply motivated by intrinsic factors, in full alignment with our central hypothesis grounded in Deci and Ryan's Self-Determination Theory (SDT). Their professional commitment is anchored in the fulfillment of three fundamental psychological needs: for the Autonomy, They highly value their pedagogical and intellectual freedom, perceiving it as an essential pillar of their professional identity. For the Competence, They exhibit high levels of proficiency in teaching, research, and student

supervision, coupled with a strong sense of efficacy and mastery. For the Relatedness, They experience a strong sense of belonging within a supportive academic community, where collegial relationships are frequently characterized by camaraderie and mutual recognition.

This triad explains why 80% of the surveyed female academics report a profound sense of accomplishment in their work, and why they continue to pursue their profession not out of obligation or constraint, but through deep conviction, passion, and ethical commitment to a mission of social, intellectual, and pedagogical service.

Yet, this high level of intrinsic motivation coexists with a stark and systemic institutional deficit. The data unveil a central paradox: highly competent, passionate, and morally committed professionals operating under degrading structural conditions, lack of dedicated offices, dilapidated classrooms and lecture halls, overcrowded courses, insufficient resources, insecurity, and unsanitary facilities. Simultaneously, they express persistent perceptions of inequity regarding salary, social benefits (housing, transportation, etc.), and broader institutional recognition compared to other professions. This dissonance between personal investment and institutional response fosters a growing risk of moral exhaustion, professional disillusionment, and long-term attrition.

A further critical finding concerns the persistent gender-based career fracture. Although women constitute nearly 49.4% of Associate professor (B) they represent only 22.3% of full professors. This progressive attrition at senior levels signals entrenched structural barriers linked to gender: the glass ceiling, the double burden of professional and domestic responsibilities, limited access to research funding (only 48% report mastery of funding application procedures), and a breakdown in inter-generational knowledge transmission among female researchers.

Moreover, while collegial ambiance and peer recognition emerge as vital sources of resilience, more than half of respondents consider their colleagues friends. This informal solidarity must not obscure the urgent need for institutional reform. Personal ethics, discipline, and intrinsic enjoyment of the work cannot substitute for formal structures: a clearly defined professional status, effective leadership, equitable career progression mechanisms, and dignified material conditions.

Overall, this research demonstrates that the motivation of female academics in Algerian higher education is fundamentally intrinsic, rooted in a strong professional culture, a heightened sense of duty, and deep social commitment. However, for this enduring motivation not to be exhausted as sacrifice, it is imperative to transition from a model reliant on individual resilience to one grounded in institutional recognition and systemic support. Their dedication is a national asset, deserving protection, recognition, and sustained institutional support through ambitious, equitable, and durable public policies.

Key interventions include improving working conditions; revaluing the academic profession; establishing a robust, codified status for the academic-researcher; ensuring equitable access to leadership positions and research funding; and strengthening quality assurance mechanisms. These are not mere administrative adjustments. They are essential levers to transform individual motivation into collective performance and structural innovation.

By illuminating both the strengths and vulnerabilities of the system, this study constitutes not only a significant academic contribution but also an urgent appeal to policymakers: investing in female academics is, ultimately, an investment in the future of Algerian higher education.

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Appendices:

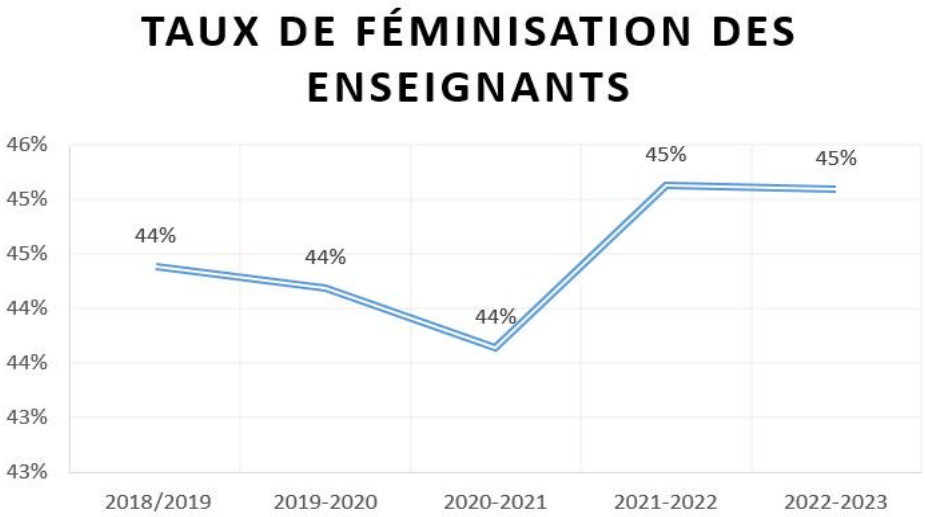
Appendix 1

Table 1: Percentage of Teachers by Rank and Gender

Year	Professor (M)	Professor (F)	Assoc. Prof. A (M)	Assoc. Prof. A (F)	Assoc. Prof. B (M)	Assoc. Prof. B (F)
2010/2011	82.3%	17.7%	76.4%	23.6%	66.1%	33.9%
2011/2012	82.2%	17.8%	75.3%	24.7%	62.0%	38.0%
2012/2013	80.2%	19.8%	73.0%	27.0%	62.5%	37.5%
2013/2014	80.2%	19.8%	73.5%	26.5%	59.3%	40.7%
2014/2015	80.4%	19.6%	71.2%	28.8%	57.6%	42.4%
2015/2016	79.5%	20.5%	69.4%	30.6%	56.5%	43.5%
2016/2017	78.2%	21.8%	67.5%	32.5%	54.6%	45.4%
2017/2018	77.9%	22.1%	65.2%	34.8%	52.2%	47.8%
2018/2019	77.7%	22.3%	63.4%	36.6%	50.6%	49.4%

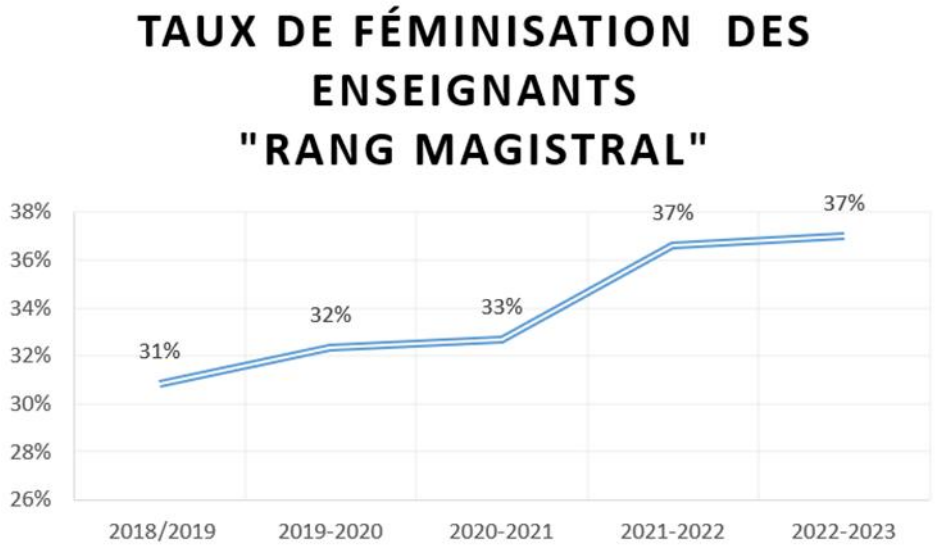
Data provided by the statistics department of the Ministry of Higher Education and Scientific Research MESRS 2019

Appendix 2



Data provided by the statistics department of the Ministry of Higher Education and Scientific Research MESRS 2024

Appendix 3



Data provided by the statistics department of the Ministry of Higher Education and Scientific Research MESRS 2024

Appendix 4

Executive Decrees N° 24-102, 24-103, 24-104, 24-105, 24-106 and 24-107 of 7 March 2024

Appendix 5

These percentages were obtained by calculating the average of the percentages for each theme.

Teaching and research skills

According to their specific status, teacher-researchers must:

A. Deliver high-quality courses (pedagogy)
B. Conduct research and training activities (research)
C. Develop and disseminate knowledge (publication, supervision)

• Choose the level of mastery according to the question

Axe	Questions	Choix
A	I have a …% proficiency in planning and implementing relevant, effective, and efficient teaching activities (choosing and articulating objectives, teaching methods, content, materials, etc.).	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a …% mastery of the planning and implementation of learning assessment activities (choice and articulation of criteria, assessment methods, instruments, correction techniques, etc.)	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a …% mastery of the various forms of educational communication	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10

	(oral and written expression, non-verbal communication, use of multimedia, etc.)	
	I have a …% proficiency in facilitating and managing interactions within student groups of varying sizes.	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a …% grasp of attitudes that respect ethical rules (Do not opt for indoctrination and allow critical thinking to emerge; Give credit where credit is due – no plagiarism, cite sources; Be objective and avoid any unscientific subjectivity)	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
B	I have a …% grasp of attitudes that respect ethical rules (Do not opt for indoctrination and allow critical thinking to emerge; Give credit where credit is due – no plagiarism, cite sources; Be objective and avoid any unscientific subjectivity)	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a …% grasp of the process of working effectively in a multi- or interdisciplinary team to carry out research projects or programs.	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a good grasp of the process of finding and actively registering for conferences, seminars, and webinars relevant to my courses and research topics.	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
C	I have a …% grasp of the necessary steps to obtain research funding	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a …% grasp of the necessary steps to integrate students from all three cycles into research projects	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a …% proficiency in supporting students in their learning (tutoring, methodological guidance, formative assessment)	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a …% grasp of the necessary steps to write and publish my research work (in the form of articles, books, conferences, etc.)	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a …% grasp of the necessary steps to integrate my research results into my lectures or tutorials/practical work.	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10
	I have a …% mastery of the necessary steps to transfer the knowledge from my research so that it is accessible and usable by practical settings (administrations, companies, etc.)	10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1 2 3 4 5 6 7 8 9 10