

Scientific and technological
research article

How to cite: Ricardo Jiménez, L. S. (2026) Teaching experiences and organizational factors linked to research productivity at a university in Montería, Colombia. *Estrategia y Gestión Universitaria*, 14, e9205.
<https://doi.org/10.5281/zenodo.22306395>

Received: 17/08/2026

Accepted: 02/09/2026

Published: 22/09/2026

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Conflict of interest: the authors declare that they have no conflict of interest, which may have influenced the results obtained or the proposed interpretations.

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Teaching experiences and organizational factors linked to research productivity at a university in Montería, Colombia

Experiencias docentes y factores organizacionales vinculados con la productividad investigativa en una universidad de Montería, Colombia

Experiências docentes e fatores organizacionais vinculados à produtividade em pesquisa em uma universidade de Montería, Colômbia

Abstract

Introduction: university faculty scientific production is currently a priority topic because institutional trends affecting this indicator have been observed, which highlights the need to carry out a study that positively contributes to developing and making this issue visible. **Objective:** to explore faculty experiences and the organizational environment in terms of research productivity at a university in Montería, Colombia. **Method:** a descriptive and comprehensive qualitative study was conducted using semi-structured interviews; the secondary target population consisted of university faculty. **Results:** research productivity is not exclusively an individual outcome nor can it be explained solely by a teacher's motivation, training, or professional trajectory. **Conclusion:** it is pertinent to continue deepening the study of aspects directly related to this topic, since it is a priority axis for written research; given that science is largely built from such production, promoting organized actions by institutions should be a fundamental task to ensure a higher degree of scientific rigor.

Keywords: organizational environment, research productivity, academic performance, university

Resumen

Introducción: las actividades de producción científica de los docentes universitarios constituyen actualmente un tema prioritario, debido a que se han observado tendencias institucionales que afectan este índice, de ahí la necesidad de ejecutar un estudio que contribuya de forma positiva a desarrollar y visualizar esta temática.



Objetivo: explorar las experiencias del profesorado y el entorno organizacional en términos de productividad investigativa en una universidad de Montería en Colombia. **Método:** se desarrolló un estudio con enfoque cualitativo descriptivo y comprensivo, todo ello a través de entrevistas semiestructuradas, cuya población objetivo-secundaria fueron los docentes universitarios. **Resultados:** la productividad investigativa no constituye un resultado exclusivamente individual ni puede explicarse únicamente por la motivación, la formación o la trayectoria profesional del docente. **Conclusión:** se considera pertinente continuar profundizando en aspectos relacionados de manera directa con el presente tema, ya que constituye un eje prioritario en lo que a investigación escrita se refiere, todo esto teniendo en cuenta que la ciencia se construye, en gran medida, a partir de dicha producción, por lo que fomentar acciones organizadas desde las institucionales debe ser una tarea elemental a seguir para garantizar un mayor grado de científicidad.

Palabras clave: entorno organizacional, productividad investigativa, desempeño académico universidad

Resumo

Introdução: as atividades de produção científica dos docentes universitários constituem atualmente um tema prioritário, pois foram observadas tendências institucionais que afetam esse indicador, o que evidencia a necessidade de realizar um estudo que contribua positivamente para desenvolver e visibilizar essa temática. **Objetivo:** explorar as experiências do corpo docente e o ambiente organizacional em termos de produtividade investigativa em uma universidade de Montería, Colômbia. **Método:** desenvolveu-se um estudo qualitativo, descritivo e abrangente, por meio de entrevistas semiestructuradas; a população secundária alvo foi composta por docentes universitários. **Resultados:** a produtividade investigativa não constitui um resultado exclusivamente individual nem pode ser explicada apenas pela motivação, formação ou trajetória profissional do docente. **Conclusão:** considera-se pertinente aprofundar aspectos diretamente relacionados ao tema, uma vez que constitui um eixo prioritário no que se refere à pesquisa escrita; dado que a ciência se constrói, em grande medida, a partir dessa produção, fomentar ações organizadas pelas instituições deve ser uma tarefa fundamental para garantir maior grau de rigor científico.

Palavras-chave: ambiente organizacional, produtividade investigativa, desempenho académico, universidade



Introduction

Scientific output has become a matter of global concern within the research community, given its substantial bearing on the academic and scientific development of nations (Astegiano et al., 2019; Bender et al., 2021; Carta et al., 2021; Alqahtani et al., 2022; Zhang et al., 2023; Brignardello-Petersen et al., 2024). It is now widely recognized, internationally, that faculty research performance does more than drive technological and scientific progress: it also strengthens each country's educational and cultural fabric. Research, in this view, functions as a complement to the formative work carried out at universities, and its productivity emerges from the interplay between the research activities that faculty and university researchers undertake and the outcomes those activities yield (Duque & Quintero, 2016; Gómez et al., 2017; Cui et al., 2022; Feng et al., 2024; Christou et al., 2025).

Building on the work of Cujía et al. (2017), Li and Zhang (2022), Manasia et al. (2022), Kwiek and Roszka (2024), Kwon et al. (2023), Lee et al. (2023), and Haby et al. (2024), the sweeping changes that have accompanied the knowledge era have made it essential to develop new tools capable of improving the way these activities are carried out (Momeni et al., 2022; Nguyen et al., 2022; Nygaard et al., 2022a, 2022b; Meza-Mejía et al., 2023; Varsha et al., 2024; Song et al., 2025; Stupnisky & Salahuddin, 2025), thereby raising competitiveness, quality, and excellence. This is indispensable for universities, since knowledge is what allows the teaching, research, and community-outreach functions to serve national development, fostering the transfer of knowledge and technology to the business sector and forging a collective bond between academia and industry (Obando et al., 2020; Rachid et al., 2021; Puertas et al., 2023; Sá et al., 2023; Sayyed, 2024; Padilla Yaa et al., 2025; Ramezani et al., 2026).

The situation in Latin America, however, brings its own set of challenges. Structural barriers are the starting point, such as insufficient funding, limited infrastructure, and education policies that do not always treat research as a core component of teaching practice, and together they underscore the need for strategies tailored to local realities, capable of overcoming these obstacles and cultivating a more favorable environment for research (Guzmán & Valenzuela, 2017).

Compounding this, teacher training in Colombia has historically been shaped by a gradual process of social and political recognition. From the colonial period through independence, the preparation of educators has consistently been marked by the country's shifting circumstances, and the recognition afforded to their expertise has moved through several historical stages, from the dissolution of their role and its subsequent institutionalization, through acknowledgment by the ecclesiastical establishment, to eventual recognition by the state in matters of quality of life and working conditions, including remuneration commensurate with their duties (Calvo et al., 2004).

It is precisely in these working conditions that a certain regression can sometimes be observed, in Colombia and across Latin America more broadly. Professors frequently report a lack of institutional support and organizational constraints that hinder their capacity to conduct quality research, alongside the other duties they are expected to fulfill (Calvo et al., 2004).

Montería provides the territorial setting for this research. The study is not intended as a case study of the city or of the university selected; rather, it sets out to explore faculty experiences and the organizational conditions surrounding research productivity at a university in Montería, Colombia.

Methods and materials

This study was conducted within the interpretive paradigm, seeking to understand the meanings that faculty members attach to their experiences with research productivity and to the organizational conditions of the university context. The paradigm proved appropriate because it recognizes that social and educational phenomena cannot be grasped through the measurement of variables alone, but rather through the interpretations that people construct as they live through them in specific contexts (de Franco & Vera Solórzano, 2020).

From this vantage point, knowledge is built by engaging closely with participants' experiences, narratives, and expressed meanings. Castillo Rocubert (2010) notes that the interpretive paradigm aims to understand human action and social life from the subjective standpoint of the actors themselves, taking into account their beliefs, motivations, intentions, and particular circumstances.

The method adopted was descriptive phenomenology, drawing on the Husserlian tradition. It allowed the researchers to approach faculty experiences as they were lived and articulated, with the aim of understanding the meanings attached to research productivity and to the organizational conditions under which participants carried out their work. Phenomenology is concerned with describing lived experiences, perceptions, and meanings from the standpoint of those who undergo the phenomenon in question (Leal, 2000).

A qualitative approach was adopted, as it provided access to the experiences, perceptions, and meanings that faculty construct around their research productivity and the organizational conditions of the university setting. This approach is concerned with understanding social phenomena through the voices of the people involved, taking into account the context, relationships, and circumstances that shape their experiences (de Franco & Vera Solórzano, 2020).

This approach was likewise appropriate given that the data consisted primarily of narratives elicited through the interview guide. These narratives shed light on participants' research trajectories, academic practices, institutional support, difficulties, motivations, and the meanings they attach to their work within the university. A qualitative lens, moreover, makes it possible to capture the complexity and singularity of educational phenomena without reducing them to numerical expressions alone (Supo, 2002).

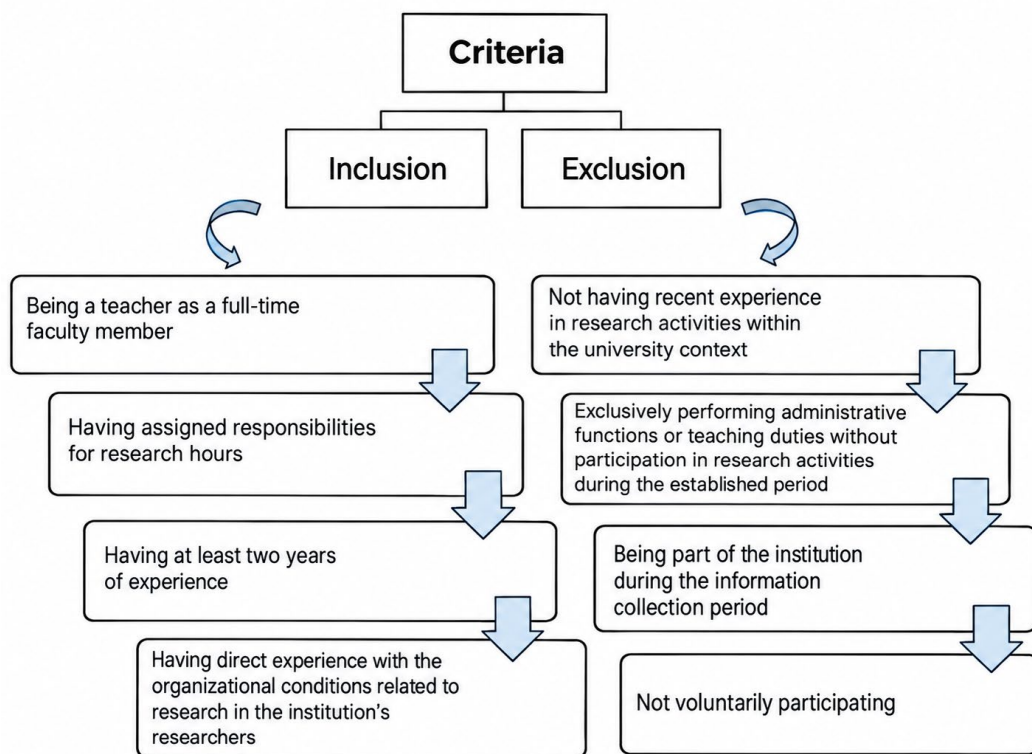
Participants were selected through criterion-based purposive sampling, consistent with qualitative research practice. This procedure made it possible to include faculty who met characteristics relevant to the study's purpose, without seeking statistical representativeness of the institution's entire faculty body. The study was carried out at a private higher-education institution located in the city of

Montería, department of Córdoba, Colombia. At the time data collection took place, the campus had 74 faculty members on staff, six of whom held full-time appointments with assigned responsibilities or hours dedicated to research activities.

These six faculty members took part voluntarily and authorized the collection and processing of their information by signing an informed-consent form. To protect their identities, alphanumeric codes were used throughout the transcriptions, analysis, and presentation of results, so as to avoid linking data such as department, education, sex, position, or career trajectory back to any single individual.

Figure 1

Eligibility criteria



Source: Author's own elaboration.

Results and discussion

What follows is an analysis of the six faculty members' experiences with research productivity and organizational conditions. The corpus comprised six semi-structured interviews, each built around 25 open-ended questions, yielding 150

response units in total; a synthesis of those most relevant to the object of study is presented below. To preserve confidentiality, participants are identified by the codes P01 through P06.

It bears noting that the analysis was not aimed at measuring variables or establishing causal relationships; its purpose, rather, was to describe how participants approached research within their broader experience as faculty. Recurring elements were therefore used to identify convergences rather than as statistical frequencies, and divergent responses were retained as meaningful variations in experience. The quoted excerpts preserve the sense of the original wording and were normalized only where obvious typographical errors would otherwise hinder readability.

Data were analyzed through a qualitative coding procedure compatible with the ATLAS.ti working logic: primary documents, quotations, codes, code groups, analytic memos, and relationships among categories. The procedure followed the tenets of descriptive phenomenology throughout. In a first phase, each interview was read in its entirety to grasp the overall sense of the account, while a phenomenological reduction was maintained at every stage, bracketing any premature explanations of productivity, performance, or organizational causality.

In a second phase, responses were broken down into units of meaning tied to the lived experience of conducting research, teaching, publishing, participating, and navigating the institutional environment. A third phase assigned initial codes closely tied to participants' own expressions, for instance, insufficient time, unbalanced workload, self-management, academic networks, undergraduate research groups, uneven support, personal resources, recognition, autonomy, participation, and communication. A fourth phase compared these codes and subsequently grouped them conceptually. The analysis concluded with individual descriptions of the six participants and an overall structure of the experience, preserving both the meanings they shared and the cases that diverged from the pattern.

Table 1

Participant coding

Code	Identification
P01	Participating faculty member
P02	Participating faculty member
P03	Participating faculty member
P04	Participating faculty member
P05	Participating faculty member
P06	Participating faculty member

Source: Author's own elaboration.

Table 2

Codebook and emerging categories

Emerging category	Grouped codes	Phenomenological meaning
C1. Research driven by individual agency and networks	Insufficient time; unbalanced workload; self-management; personal rigor; funding; conferences; networks and dissemination.	The continuity of research depends largely on faculty initiative and on relational support.
C2. Teaching-research integration	Undergraduate research groups; formative research; PBL; curriculum; classroom problems; updating; teaching-research tension.	Teaching can nourish research, yet teaching load can also hinder it.
C3. Uneven organizational conditions	Collaborative climate; infrastructure; software; training; recognition; autonomy; participation; communication.	The relational environment is favorable, yet operational and managerial support remains uneven.
C4. Professional development and institutional transformation	Continuous learning; pedagogical innovation; responsible use of technology and AI; protected time; resources; incentives; governance.	A research culture requires institutionalizing forms of support that currently rest on individual effort.

Source: Author's own elaboration.

Comparison was carried out on three levels. The first involved within-case comparison, examining the internal coherence of each account. The second was a cross-case comparison, aimed at identifying convergent and divergent experiences. The third linked the emerging categories to the study's research aims and theoretical framework. Because only one data-collection technique was used, no claim is made of instrument triangulation; rather, the analysis contrasted participants, categories, research purposes, and the relevant literature.

All six participants reported experience with projects, publications, or dissemination activities, yet productivity was not described as a uniform institutional sequence. For some faculty, publishing stemmed from professional commitment or the need to sustain a research trajectory; for others, it was shaped by time, funding, access to laboratories, the cost of dissemination, and the possibility of forming partnerships.

"Funding for publications has made it difficult" (P01).

"The lack of laboratories has made it difficult to run the trials, and I've had to rely on contacts at other universities" (P02).

"There's no money to do research, let alone money to publish" (P05).

These accounts reveal that publishing is experienced as a process that

extends well beyond writing the manuscript itself. It involves managing teams, searching for journals, securing funding, and drawing on external networks. P02 reported having to use other universities' laboratories and purchase certain resources out of pocket; P04 noted that faculty had to seek out journals and support on their own in order to publish; and P05 relied on free software or trial versions. Self-management thus emerges as a compensatory strategy for material and financial gaps.

Academic events, for their part, were a component shared across the participants' experiences. Five of the six reported attending once or twice a year, while one reported a bimonthly frequency. The meaning attached to these spaces went beyond mere attendance: participants also associated them with staying current, gaining visibility for their results, and, above all, expanding the networks capable of sustaining future collaborations.

"You get to know what others are working on, and you can invite them to collaborate" (P02).

"The impact lies in staying up to date and in building academic networks" (P03).

Dissemination, in this respect, revealed two distinct experiences. P01 and P03 considered it accessible, particularly when outputs were open access, whereas P02, P04, and P05 described a form of dissemination built on free networks, personal contacts, and self-directed searches for opportunities. P06 linked it instead to the relevance of academic programs. Accessibility, then, does not hinge solely on whether knowledge is available, but on having the resources, channels, and support needed to put it into circulation.

Time was the most pervasive constraint. Five participants stated that the workload distributed across teaching, research, and outreach was not balanced. In the most striking accounts, conducting research meant drawing on personal or family time, bringing work home, and halting projects altogether during the academic semester.

"When the semester is in full swing, research always comes to a halt; it's very hard to manage classes, assessments, and lab sessions all at once" (P02).

"It isn't balanced, because you have to take time out of your own schedule to get things done" (P05).

"The time available is tied to the workload assigned for research" (P06).

P03 offered a notable exception, describing her workload as balanced and her autonomy as sufficient. This divergent account does not invalidate the others; rather, it shows that conditions can be experienced favorably when responsibilities, decision-making capacity, and career trajectory are aligned. The shared underlying structure, then, is not an absolute absence of support but its uneven distribution.

Five participants linked research to teaching through undergraduate

research groups, classroom projects, problem- or project-based learning, curriculum updates, and student participation. Their accounts show that the classroom is not a space set apart from research: it can serve as a source of questions, a setting for research training, and a channel for transferring the knowledge produced.

"It comes together through the research-group practicum, involving the student researchers in projects and subprojects" (P01).

"I connect formative research with the students to complement the research work done in the classroom" (P03).

"I'd like ideas to emerge from the classes themselves, because that's where the problems worth solving show up" (P05).

P04, for his part, explained that working with research groups produced a kind of reciprocal learning, since students' questions broadened the range of concerns faculty themselves considered. P06 tied the curriculum to these research groups, while P01 linked research activity to student projects more generally. Taken together, these experiences point to an understanding of productivity that reaches well beyond a simple publication count, encompassing the training of new researchers, curricular transformation, and the circulation of knowledge within pedagogical practice.

P02, meanwhile, offered the clearest counterpoint: during the semester, teaching absorbed all available time, and research simply stopped. Teaching, in other words, can act as a bridge when planning is genuinely integrated, but it can just as easily become an obstacle when scheduling, assessments, and in-person workload crowd out research activity. This helps explain why integration cannot depend on the individual educator's goodwill alone.

Pedagogical practices, too, showed signs of ongoing change. Notably, every participant expressed openness to shifts in how they teach, while at the same time a critical stance emerged toward the unreflective use of technology.

"AI might help, but that's a far cry from letting it do the analysis and draw the conclusions" (P02).

"One of the challenges is bringing innovation into the classroom, artificial intelligence being the current one" (P06).

It should be stressed that this divergence does not amount to resistance toward innovation as such. What comes through instead are several complementary concerns: making the most of new tools to broaden teaching while safeguarding independent thought, authorship, and professional judgment. Institutional training, accordingly, needs to combine technological competencies with both ethical and methodological criteria.

Organizational climate was the most consistently favorable dimension. All six participants described the atmosphere as pleasant, good, ordinary but with adequate relationships, or excellent, highlighting respect, responsibility, commitment, collaboration, loyalty, and closeness among colleagues. In some accounts, the work team itself became a direct source of learning and research

capacity.

"It's a good, collaborative work environment; everyone helps each other out" (P02).

"Excellent work environment. My team strengthens my knowledge" (P05).

This finding makes it possible to distinguish the relational climate from the underlying support structure. A good working atmosphere did not eliminate the difficulties tied to workload, funding, infrastructure, autonomy, or participation. Put differently, trust among colleagues is a valuable foundation, but it cannot substitute for the policies, resources, and time that research actually requires.

Perceptions of available resources, meanwhile, proved highly uneven. P03 reported having internet access and technological resources, and P01 rated theirs as adequate, whereas P02 said the tools were only available because they had purchased them personally. P04, by contrast, pointed to shortcomings in the facilities; P05 got by using free software; and P06 noted a shortage of simulators and specialized programs. Needs, in other words, vary by discipline and cannot be met with a one-size-fits-all allocation.

"I have the tools, but only because I buy them myself" (P02).

"We should have better access to modeling software" (P05).

Support for professional development was likewise experienced unevenly. Some participants pointed to training pathways, diplomas, courses, mobility programs, or workshops; while others did not regard these as sufficient support. P01 confirmed that policies existed but went largely unnoticed for want of feedback; P04 and P06 said they were unaware of any growth plans. This points to a gap between the formal existence of such activities and their recognition as a coherent institutional pathway.

"They do exist, but they go unnoticed because there hasn't been that feedback" (P01).

"It isn't enough; there's always a need for more training to teach better" (P05).

Recognition, in turn, ranged from formal distinctions, congratulations, flexibility, involvement in institutional processes, and emotional salary, to ambivalent responses or the absence of any visible mechanism. P03, for instance, mentioned merit-based distinctions; P02 emphasized the backing of supervisors and colleagues; and P06 valued both freedom and time as forms of emotional salary.

Autonomy and participation showed even greater variation. P03 and P05 felt they had the autonomy to organize their own processes and schedules, whereas P01, P02, and P04 said they lacked it, and P06 described it as relative. Committees were the participation mechanism cited by P01, P03, and P04; P05 pointed to self-assessment; and P02 and P06 maintained that no effective mechanisms existed at all. Communication was rated as continuous or adequate in some cases, acceptable for P01, and distant or difficult to assess for P02 and P04.

“You decide how to carry out your own research and academic processes; there's autonomy” (P03).

“The only place I feel we're actually heard is in the curriculum committees” (P04).

Taken together, the organizational experience emerges as an uneven web: the institution can feel close-knit in its relationships while remaining restrictive in terms of time and decision-making authority. This tension is central to understanding the phenomenon, since it rules out any simple classification of the environment as either favorable or unfavorable.

Participants' careers ranged from four to thirty years, yet all of them described transformations in their practice over time. Accumulated experience manifested as greater humanization, patience, attentiveness to learning styles, disciplinary updating, use of active methodologies, and openness to technological resources. Training was understood as an ongoing process, even among those who already held advanced degrees.

“I've learned to be patient and to understand that there are different learning styles; not everyone is the same” (P05).

“It has evolved quite a bit, become more humanistic” (P03).

These findings confirm that research productivity cannot be reduced to a simple publication count. Reyes Cruz and Hernández Méndez (2014) link it instead to motivation, institutional support, and organizational conditions, while other researchers such as Serra and Tovar (2011) incorporate both relevance and academic and social contribution into the concept. The accounts gathered here extend this line of thinking, showing that productivity is built within a web of time, teaching, networks, and managerial decisions.

The recurring workload imbalance echoes what authors such as Serrano de Moreno et al. (2024) have observed, namely, that time devoted to research can prove insufficient relative to other academic demands. Sarmiento and Ramírez (2023) similarly argue that time, financial support, and technological provisioning are all associated with scientific productivity. It is worth noting that these factors appeared closely interconnected in the interviews: the absence of laboratories, for instance, activated external networks, while a lack of resources for publishing pushed participants toward free channels.

Another point worth considering concerns the integration of teaching and research, an issue that aligns with the work of Rosero et al. (2016), who examine the tensions and possibilities inherent in this relationship within the university context. Undergraduate research groups, classroom projects, and curriculum updates tend to function as integration mechanisms in this setting; yet P02's account shows that such integration breaks down whenever teaching and research compete for the same block of time. Educational administrators, accordingly, need to move beyond merely recommending integration and instead design the conditions that make it actually happen.

Bastidas (2019), in a study on the basic principles of research training for faculty, argues that such training must develop specific competencies alongside a

broader research culture. The participants here do recognize certain training pathways and formative experiences, though not all of them regard these as sufficient or as forming part of a coherent development plan. The finding, then, points to something beyond simply adding more courses: it calls for differentiated pathways tailored to experience and need, capable of translating training into concrete outputs and practices.

With respect to the collaborative climate, these results align with Sandoval Caraveo (2021), who ties climate to communication, trust, support, and cooperation. The present findings add a further distinction, however: a positive climate is necessary but not sufficient. Cordiality among colleagues, in other words, is no substitute for laboratories, funding, or transparent workload rules.

Finally, the experiences of recognition and autonomy align with Herzberg's motivation-hygiene theory as discussed by Madero Gómez (2019), as well as with the self-determination theory of Ryan and Deci (2000). Recognition, autonomy, and the opportunity to participate can all strengthen commitment, while their absence or ambiguity can just as easily weaken it. In the accounts gathered here, recognition carries weight when it takes the form of distinctions and flexibility, but loses force when no visible mechanism exists or when it fails to translate into the actual conditions needed to write and to conduct research.

Conclusions

This study concludes that faculty experiences of research productivity carry diverse meanings, yet share an underlying structure: faculty sustain their research through personal planning, additional time, resource-seeking, ties to external networks, and the involvement of students in research groups and projects. When the institution fails to adequately guarantee the time, resources, and support required, however, research shifts into the personal domain and comes to depend more heavily on each faculty member's own capacity for self-management, which keeps the work going, but at the cost of making it more fragile, uneven, and difficult to sustain. The study likewise identifies time availability, the distribution of academic workload, funding, access to laboratories and specialized software, opportunities for publication and dissemination, academic networks, professional motivation, and the integration of research with teaching as central elements of this experience.

References

- Alqahtani, M. S., Abbas, M., Muqeet, M. A., & Almohiy, H. M. (2022). Research productivity in terms of output, impact, and collaboration for university researchers in Saudi Arabia: SciVal analytics and t-tests statistical based approach. *Sustainability*, 14(23), 16079. <https://doi.org/10.3390/su142316079>
- Astegiano, J., Sebastián-González, E., & de Toledo Castanho, C. (2019). Unravelling

- the gender productivity gap in science: a meta-analytical review. *Royal Society open science*, 6(6), 181566. <https://doi.org/10.1098/rsos.181566>
- Bastidas, C. B. (2019). Principios básicos de la formación docente para la investigación. *Revista Iberica De Sistemas e Tecnologias De Informacao*, (E21), IX-X. https://media.proquest.com/media/hms/PFT/1/yv4KC?_s=sCRjoCM2gmhqqvNPkMH6LwKRbsE%3D
- Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the dangers of stochastic parrots: Can language models be too big? *Proceedings of the ACM Conference on Fairness, Accountability, and Transparency*, 610-623. <https://doi.org/10.1145/3442188.3445922>
- Brignardello-Petersen, R., Santesso, N., & Guyatt, G. H. (2024). Systematic reviews of the literature: An introduction to current methods. *American Journal of Epidemiology*, 194(2), 536-542. <https://doi.org/10.1093/aje/kwae232>
- Calvo, G., Rendón Lara, D. B., & Rojas García, L. I. (2004). Un diagnóstico de la formación docente en Colombia. *Revista Colombiana De Educación*, (47). <https://doi.org/10.17227/01203916.5519>
- Carta, M. G., Angermeyer, M. C., & Tagliagambe, S. (2021). The trend of scientific productivity of Chinese, European Union, and United States universities and private companies: Does the future belong to E-technology companies? *Publications*, 9(2), 18. <https://doi.org/10.3390/publications9020018>
- Castillo Rocubert, N. (2010). Acerca de los Paradigmas de la investigación educativa. *Mendive. Revista De Educación*, 9(1), 16-24. <https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/353>
- Christou, E., Parmaxi, A., & Zaphiris, P. (2025). A systematic exploration of scoping and mapping literature reviews. *Universal Access in the Information Society*, 24, 941-951. <https://doi.org/10.1007/s10209-024-01120-3>
- Cui, R., Ding, H., & Zhu, F. (2022). Gender inequality in research productivity during the COVID-19 pandemic. *Manufacturing & Service Operations Management*, 24(2), 707-726. <https://doi.org/10.1287/msom.2021.0991>
- de Franco, M. F., & Solórzano, J. L. V. (2020). Paradigmas, enfoques y métodos de investigación: análisis teórico. *Mundo recursivo*, 3(1), 1-24. <https://atlantic.edu.ec/ojs/index.php/mundor/article/view/38>
- Feng, R., Xie, Y., & Wu, J. (2024). How is personality related to research performance? The mediating effect of research engagement. *Front. Psychol.* 14:1257166. <https://doi.org/10.3389/fpsyg.2023.1257166>
- Gómez, D., Carranza, Y., & Ramos, C. (2017). Revisión documental, una herramienta para el mejoramiento de las competencias de lectura y escritura en estudiantes universitarios. *Revista Chakiñan de Ciencias Sociales y Humanidades*, (1), 46-56. https://scielo.senescyt.gob.ec/scielo.php?script=sci_arttext&pid=S2550-67222017000300046
- Guzmán-Valenzuela, C. (2017). Tendencias globales en educación superior y su impacto en América Latina: Desafíos pendientes. *Lenguas Modernas*, 50(50),

15-32.

<https://lenguasmodernas.uchile.cl/index.php/LM/article/view/49248>

- Haby, M. M., Barreto, J. O. M., Kim, J. Y. H., Peiris, S., Mansilla, C., Torres, M., Guerrero-Magaña, D. E., & Reveiz, L. (2024). What are the best methods for rapid reviews of the research evidence? A systematic review of reviews and primary studies. *Research Synthesis Methods*, 15(1), 2-20. <https://doi.org/10.1002/jrsm.1664>
- Kwiek, M., & Roszka, W. (2024). The gendered persistence in research productivity among university professors: A longitudinal study. *Higher Education*. <https://doi.org/10.1007/s10734-023-01022-y>
- Kwon, E., Yun, J., & Kang, J. H. (2023). The effect of the COVID-19 pandemic on gendered research productivity and its correlates. *Journal of Informetrics*, 17(1), 101380. <https://doi.org/10.1016/j.joi.2023.101380>
- Leal, N. (2000). El método fenomenológico: principios, momentos y reducciones. *Revista Electrónica de Investigación Científica, Humanística y Tecnológica*, 1(5), 51-60. <https://www.academia.edu/download/52192549/lealnestorepistemologia.pdf>
- Lee, K. G., Mennerat, A., Lukas, D., Dugdale, H. L., & Culina, A. (2023). The effect of the COVID-19 pandemic on the gender gap in research productivity within academia. *elife*, 12, e85427. <https://doi.org/10.7554/eLife.85427>
- Li, Y., & Zhang, L. J. (2022). Influence of mentorship and the working environment on English as a foreign language teachers' research productivity: The mediation role of research motivation and self-efficacy. *Frontiers in Psychology*, 13, 906932. <https://doi.org/10.3389/fpsyg.2022.906932>
- Madero Gómez, S. M. (2019). Factores de la teoría de Herzberg y el impacto de los incentivos en la satisfacción de los trabajadores. *Acta universitaria*, 29, e2153. <https://doi.org/10.15174/au.2019.2153>
- Manasia, L., Popa, D., & Ianos, G. (2022). Anatomy of research performance from a bottom-up approach: Examination of researchers' perspective. *Sustainability*, 14(4), 2254. <https://doi.org/10.3390/su14042254>
- Meza-Mejia, M. C., Villarreal-García, M. A., & Ortega-Barba, C. F. (2023). Women and leadership in higher education: A systematic review. *Social Sciences*, 12(10), 555. <https://doi.org/10.3390/socsci12100555>
- Momeni, F., Karimi, F., Mayr, P., Peters, I., & Dietze, S. (2022). The many facets of academic mobility and its impact on scholars' careers. *Journal of Informetrics*, 16(2), 101280. <https://doi.org/10.1016/j.joi.2022.101280>
- Nguyen, T. D., Nguyen, D. N., & Dao, K. T. (2022). Management factors influencing lecturers' research productivity in Vietnam National University, Hanoi, Vietnam: A structural equation modeling analysis. *Heliyon*, 8(10), e10510. <https://doi.org/10.1016/j.heliyon.2022.e10510>
- Nygaard, L. P., Aksnes, D. W., & Piro, F. N. (2022a). Identifying gender disparities

- in research performance: The importance of comparing apples with apples. *Higher Education*, 84, 1127-1142. <https://doi.org/10.1007/s10734-022-00820-0>
- Nygaard, L. P., Piro, F. N., & Aksnes, D. W. (2022b). Gendering excellence through research productivity indicators. *Gender and Education*, 34(6), 690-704. <https://doi.org/10.1080/09540253.2022.2041186>
- Obando, G., Pontón, T., Parada, S. E., & Villa, J. A. (2020). Research into cognition and numerical thinking in Colombia. *Studies in Psychology*, 41(2), 319-347. <https://doi.org/10.1080/02109395.2020.1748841>
- Padilla Yaá, Z. I., & Barrera Rojas, M. A. (2025). Una revisión documental de la evolución del concepto de brecha digital. *Sintaxis*, (15), 158-174. <https://doi.org/10.36105/stx.2025n15.10>
- Puertas, R., Martí, L., & García-Álvarez-Coque, J. M. (2023). Are female researchers more efficient? An analysis of gender in a Spanish technological university. *Scientometrics*, 128(11), 6611-6632. <https://doi.org/10.1007/s11192-023-04844-w>
- Rachid, E., Nouredine, T., Tamim, H., Makki, M., Naalbandian, S., & Al-Haddad, C. (2021). Gender disparity in research productivity across departments in the faculty of medicine: A bibliometric analysis. *Scientometrics*, 126(6), 4715-4731. <https://doi.org/10.1007/s11192-021-03958-3>
- Ramezani, S. G., Azizi, N., & Siri, A. (2026). Women's research productivity in academia: A systematic review of challenges and solutions. *Higher Education. Advance online publication*. <https://doi.org/10.1007/s10734-025-01576-z>
- Reyes Cruz, M. D. R., & Hernández Méndez, E. (2014). Productividad y condiciones para la investigación: el caso de los profesores de lenguas extranjeras. *Sinéctica*, (42), 1-17. https://www.scielo.org.mx/scielo.php?pid=S1665-109X2014000100011&script=sci_abstract&tlng=pt
- Rosero, A., Montenegro, G. y Pinchao, L. (2016). La relación investigación-docencia en el ámbito universitario. ¿Utopía o realidad? *Revista Criterios*, 23(1), 181-19 <https://revistas.umariana.edu.co/Criterios/article/view/1793>
- Ryan, R., & Deci, E. L. (2000). La Teoría de la Autodeterminación y la Facilitación de la Motivación Intrínseca, el Desarrollo Social, y el Bienestar. *American psychologist*, 55(1), 68-78. https://www.selfdeterminationtheory.org/SDT/documents/2000_RyanDeci_SpanishAmPsych.pdf
- Sá, C., Cowley, S., Shahrin, B., Stevenson, C., & Su, A. (2023). Disciplinary gender balance, research productivity, and recognition of men and women in academia. *PLOS ONE*, 18(12), e0293080. <https://doi.org/10.1371/journal.pone.0293080>
- Sandoval Caraveo, M. del C. (2021). Concepto y dimensiones del clima



- organizacional. *Hitos De Ciencias Económico Administrativas*, 10(27), 83-88. <https://doi.org/10.19136/hitos.a10n27.4402>
- Sarmiento, M. B., & Ramírez, E. P. (2023). Capacidades institucionales de los gobiernos subnacionales en periodos de crisis: el caso del departamento de Santander en Colombia, 2020-2022. *Papel Político*, 28. <https://revistas.javeriana.edu.co/index.php/papelpol/article/download/37305/30190>
- Sayyed, M. A. (2024). *Research productivity and quality among university faculty members: Evidence from publication and citation indicators*. SAGE Open. <https://doi.org/10.1177/21582440241237050>
- Serra, J. N., & Tovar, J. B. (2011). La productividad investigativa del docente universitario. *Orbis. Revista Científica Ciencias Humanas*, 6(18), 116-140. <https://dialnet.unirioja.es/servlet/articulo?codigo=3633050>
- Serrano de Moreno, M. S., Castellanos Herrera, S. J., & Andrade, D. J. (2024). Competencias en investigación del profesorado universitario: Desafíos en la construcción de la cultura investigativa. *Revista De Ciencias Sociales*, 30(1), 381-397. <https://doi.org/10.31876/rcs.v30i1.41662>
- Song, Y., Liu, Y., & Wei, J. (2025). Factors influencing university teachers' research productivity: Evidence from academic career characteristics and institutional context. *Journal of Librarianship and Information Science*. <https://doi.org/10.1177/09610006241264824>
- Stupnisky, R. H., & Salahuddin, N. (2025). Faculty motivation and research productivity in higher education: Examining psychological factors influencing scholarly performance. *Higher Education*. <https://doi.org/10.1007/s10734-025-01546-5>
- Supo, A. (2014). Perspectivas de la evaluación cualitativa en educación. *Investigación Educativa*, 7(10), 80-91. <https://revistasinvestigacion.unmsm.edu.pe/index.php/educa/article/view/8155>
- Varsha, P. S., Chakraborty, A., & Kar, A. K. (2024). How to undertake an impactful literature review: Understanding review approaches and guidelines for high-impact systematic literature reviews. *Vision: The Journal of Business Perspective*, 13(1). <https://doi.org/10.1177/22779779241227654>
- Zhang, Y., Zhang, Y., & Li, J. (2023). How is personality related to research performance? The mediating effect of research engagement. *Frontiers in Psychology*, 14, 1257166. <https://doi.org/10.3389/fpsyg.2023.1257166>

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Special Acknowledgments:

Financing:

Own resources