



Characterization of attitudes towards entrepreneurship, creativity and innovation in female entrepreneurs of Latin America

Caracterización de actitudes en emprendimiento, creatividad e innovación en mujeres emprendedoras de Latinoamérica

Giovanny Melquicedec Martin Peña¹  

ABSTRACT

This research shows the results of a study that aimed to explore entrepreneurial behaviors, creativity, and innovation in Latin American women. The study was developed with a mixed approach that was primarily qualitative, exploratory, and descriptive in scope, based on scoping review designs, where relevant articles in the Scopus database of peer-reviewed journals were reviewed. Among the results analyzed, it was found that the most outstanding entrepreneurial behaviors are resilience, the construction of support networks, the development of leadership, and the environmental and social projection of companies. On the other hand, it was evident that there are still cultural paradigms that contribute to gender-based exclusion, the presence of poor support and accompaniment programs, as well as difficulties in accessing financing for entrepreneurial projects. The study facilitated the identification of critical factors to consider in future research and for strengthening public policies and governance.

Keywords: industrial design, innovation, organizations, small enterprises.

JEL Classification: J16, L25, L26

Received: 17-02-2024

Revised: 29-05-2024

Accepted: 15-06-2024

Published: 01-07-2024

Editor: Carlos Alberto Gómez Cano 

¹Universidad Militar Nueva Granada. Cajicá, Colombia.

Cite as: Martin, G. (2024). Caracterización de actitudes en emprendimiento, creatividad e innovación en mujeres emprendedoras de Latinoamérica. Región Científica, 3(2), 2024526. <https://doi.org/10.58763/rc2024526>

RESUMEN

Esta investigación muestra los resultados de un estudio cuyo propósito fue explorar los comportamientos emprendedores, la creatividad y la innovación en mujeres latinoamericanas. El estudio se desarrolló con un enfoque mixto primordialmente cualitativo, de alcance exploratorio y descriptivo, basado en los diseños de scoping review; se revisaron artículos relevantes en la base de datos Scopus revistas arbitradas. Dentro de los resultados analizados, se encontró que los comportamientos emprendedores más sobresalientes son la resiliencia, la construcción de redes de apoyo, el desarrollo del liderazgo y la proyección ambiental y social de las empresas. También, se evidenció que aún existen paradigmas culturales que contribuyen a la exclusión basada en el género, la presencia de pobres programas de apoyo y acompañamiento, así como dificultades en el acceso a la financiación de los proyectos emprendedores. El estudio facilitó la identificación de factores críticos a considerar en futuras pesquisas, así como para el fortalecimiento de políticas públicas y la gobernanza.

Palabras clave: creatividad industrial, innovación, organización, pequeña empresa.

Clasificación JEL: J16, L25, L26

INTRODUCTION

Since economic liberalization and the phenomenon of globalization, Latin America has faced the challenge of increasing its competitiveness in the face of new international conditions. In this context of continuous improvement, it has been necessary to reconfigure the economic, cultural, and educational paradigms that were designed for industrial society but have become anachronistic under the lens of developing innovation and entrepreneurship competencies.

In order to develop these types of competencies, it is essential to reorient educational policies and practices toward training that explicitly integrates them into the curriculum and culture of higher education organizations. In this



Atribución No Comercial Compartir Igual 4.0 Internacional.

regard, in the case of Colombia, Colciencias proposes that universities encourage entrepreneurship education, foster entrepreneurial intentions, and support entrepreneurs through education, training, and knowledge transfer (Castrillón-Muñoz et al., 2020). It is noteworthy that this position represents the cardinal elements pointed out by mainstream science (Andrade et al., 2022; Prencipe et al., 2020; Schaeffer et al., 2021).

At the same time, the general legal framework motivates university institutions to guarantee the training of competent and socially responsible individuals who foster the development of nations. In this sense, after analyzing the current models of university and society, it is appropriate to encourage citizens to develop competencies in business creativity, organizational innovation, and entrepreneurship. Under this logic, engineering programs, like all other undergraduate and graduate university programs, must be oriented not only toward promoting disciplinarily qualified professionals but also toward facilitating the development of these competencies if they are to contribute to the transformation of Colombian economic culture.

In the case of Latin American nations, the entrepreneurial culture has been more focused on the exploitation of commodities and less on the generation of markets supported by technological research and development. This imbalance between the extraction and processing of raw materials can be compared with countries such as Singapore and Luxembourg, which currently stand out as the strongest economies in the world, according to the analysis of the relationship between innovation and economic development (Mtar & Belazreg, 2021; Raihan & Tuspekova, 2022). It is precisely within this framework of promoting entrepreneurial behavior that the foundations for the future and sustainable development of nations are established (Mohamed et al., 2022; Pradhan et al., 2020).

In this context, the reconfiguration of educational paradigms based on the development of creative thinking, as well as the promotion of innovation and entrepreneurship, first and foremost involves recognizing the main characteristics of the process. Once these foundations are established, a realistic dialogue must be established between these three areas of knowledge since, in some disciplines, they are tacitly assumed to be similar or synonymous concepts.

In the case of “entrepreneurship,” it is important to note that the entrepreneur is conceived as an individual who identifies needs, proposes solutions, and derives economic benefit from risk assessment (Caliendo & Kritikos, 2012). This position can be complemented by an analysis of intrinsic motivation as the foundation of entrepreneurial behavior since personal determination to satisfy needs is an essential characteristic of being an entrepreneur.

Regarding “creativity,” the literature refers to the ability to generate novel and innovative ideas to develop and improve an organization’s products, services, processes, or business models. In this regard, creative thinking involves creating original proposals, solving problems in novel ways, and seeking innovative opportunities that lead to business growth and success. Entrepreneurial creativity is essential for adapting to changing environments and strengthening competitiveness in the business world; hence, it is considered an important resource or asset within a business (Škare et al., 2022; Tantaway et al., 2021; Wang et al., 2022).

The third concept, concerning “entrepreneurial innovation,” represents the process of introducing new ideas, concepts, products, services, or practices of an organization into a market to generate value (Tantawy et al., 2021). This implies a degree of entrepreneurial creativity for sustainable development over time. Although in the articles consulted, they may appear as two intrinsically related processes or as two inseparable categories, innovation is distinguished by its feasibility to design and implement; that is, more than a mental capability, it constitutes a fundamental branch within organizations that aspire to a widespread presence within the aforementioned market frameworks (Wang et al., 2022).

Based on the above conceptualizations, particularly focused on the business context, it can be stated that entrepreneurship is oriented toward the creation of companies; creativity aims at the creation of new ideas and products; while innovation focuses on the construction of alternative marketing spaces. Therefore, this study focuses on the relationship between the three categories in the context of Latin American female entrepreneurship.

METHODOLOGY

Approach and design

In order to fulfill the research objectives, a mixed-method approach based on a scoping review design was chosen. This decision was made due to the convergence of a wide variety of categories, brought together and interpreted through a critical lens based on studies on the intersectionality of gender.

A mixed-method literature review using a scoping review design is an alternative used to map the existing evidence in a research field, identify knowledge gaps, and establish areas for future research. This approach is particularly useful when exploring broad and complex topics where a comprehensive systematic review has not yet been developed, a fact that qualified the author's intention by having to employ multiple filters by field, gender, and region.

Consequently, the first part of the strategy was to define the research problem and formulate specific review questions. These questions guided the review process, content analysis, and report writing:

- What are the main theoretical approaches used in the study of entrepreneurial behavior and attitudes related to success, creativity, and innovation?
- Which categories have been predominantly used in research on entrepreneurial behavior and attitudes related to success, creativity, and innovation?
- What are the main gaps, findings, and limitations in the study of entrepreneurial behavior and attitudes related to success, creativity, and innovation?

Methodological procedures

Following this strategy, a protocol was created based on different scoping review design proposals aimed at exploring convergence between categories. The research process was operationalized by mapping the existing literature on entrepreneurial behavior and attitudes related to success, creativity, and innovation.

This initial phase was conducted in the Scopus database, and different tags were used to explore the literature. This generated two fundamental search formulas that yielded an initial sample of 133 documents. Once the most relevant articles were identified, the key findings and areas of consensus and disagreement were summarized, knowledge gaps were identified, and the most notable directions for future research were assessed. The formulas used were:

Table 1.

Formulas used in the search

Formula used	Result obtained
(TITLE-ABS-KEY (female AND entrepreneurship) AND TITLE-ABS-KEY (entrepreneurship AND behavior) AND TITLE-ABS-KEY (entrepreneurial AND attitude)) AND PUBYEAR > 2018	n= 73 70 original articles
(TITLE-ABS-KEY (female AND entrepreneurship) AND TITLE-ABS-KEY (creativity)) AND PUBYEAR > 2018	n=44 original articles

Source: own elaboration

Inclusion and exclusion criterias

In order to select the most representative documents within the field of study, inclusion and exclusion criteria were designed. Inclusion criteria were developed to ensure thematic relevance, classify the type of studies (qualitative, quantitative, mixed), and analyze original articles that presented results from empirical data and were published between 2019 and 2024. Exclusion criteria were used to eliminate from the search results conferences and other types of publications, such as books and book chapters, observations of the time frame, and articles that did not sufficiently address or address the topic in adequate depth. This process was carried out by the author alone, although a specialist librarian was consulted to minimize bias; this is a limitation of the study presented here.

Data extraction and analysis

Data analysis was based on the coding and categorization process, although it used a priori codes determined by the topic itself. The selected documents were exported to the qualitative analysis program Atlas.ti, where they were processed using a priori codes, round-robin reading, and network representation. To minimize the risk of losing relevant data, an extraction matrix was developed to compile relevant information based on author and year of publication, study objectives, theoretical and methodological approach, and main findings. Once this process was completed, the extracted data were analyzed; an effort was made to identify and represent patterns, recurring themes, and divergences in the literature, and the results were discussed in relation to the literature.

RESULTS AND DISCUSSION

Innovative behavior

The first element to highlight was the prevalence of the concept of “entrepreneurial behavior,” which, while general in nature and initially focused on the male gender, favors a vision of the essential traits of entrepreneurs. Although the approaches are varied, the most repeated and analyzed was David McClelland’s model, from which it is concluded that an entrepreneur is a person capable of achieving goals in the process of starting a business or project; a path that, among other things, leads them to identify opportunities and take relatively carefully considered risks (Mourão & Schneider, 2020; Schneider et al., 2021). Furthermore, the behavioral profile of these individuals highlights their ability to make decisions in uncertain environments after analyzing a market. Based on this model, entrepreneurial behavior is defined in 3 needs, which can be consulted in table 2, based on the synthesis made on the contributions of various studies (Ataei et al., 2020; Mourão and Schneider et al., 2020; Schneider et al., 2021; Woodside et al., 2020):

Table 2.
Needs of the entrepreneur

Type of need	Characteristics
Need for achievement	Entrepreneurial Persistence Search for opportunities in the market. Risk measurement Self-imposed demands Fully fulfilling commitments.
Need for affiliation	Ability to plan for future events. Research information that contributes to your business. Setting measurable goals and objectives
Need for power	Being a leader to build support networks. Being confident in your abilities.

Source: own elaboration

Based on this model based on the needs-motivation-behavior relationship, the fundamental themes for analysis were established. The findings of the literature review, guided by content analysis and triangulation, are presented below.

Need for achievement in female entrepreneurship

The first element to analyze was the positive orientation toward entrepreneurial activity, which has gradually strengthened in recent decades, especially as a result of the introduction of programs to support individual intentions and small collective initiatives (Perez et al., 2024). In the case of female entrepreneurship, it appears to have increased considerably in Latin America, despite the presence of obstacles related to self-efficacy and resilience (Kogut and Mejri, 2022; Margaça et al., 2021).

According to the authors, personal and professional fulfillment is among the most identifiable characteristics, which can be interpreted as a manifestation of achievement needs. Furthermore, the relationship between these individual needs and the context points to overcoming cultural and social barriers, which demand robust motivation to excel in their businesses (Chafloque-Cespedes et al., 2021).

On the other hand, the studies analyzed demonstrate that there are still opportunities for improvement in traditional societies by allocating financial resources to key sectors, especially when it involves supporting women and connecting them to entrepreneurial ecosystems (Wannamakok & Chang, 2020). The need for achievement is often affected by the limited range of options available to women and their access to support networks. In this regard, the study by Wannamakok and Chang (2020) stands out in the international literature. In this regard, the study by Wannamakok and Chang (2020) stands out in the international literature. They found that fear of failure was not a limiting factor for entrepreneurial intention, while role models, opportunities, and access to knowledge about entrepreneurship were; an element that reinforces the idea that it is necessary to generate and strengthen these ecosystems (Calabuig-Moreno et al., 2021; Fernandes & Ferreira, 2022; Hakala et al., 2020).

Need for affiliation in female entrepreneurship

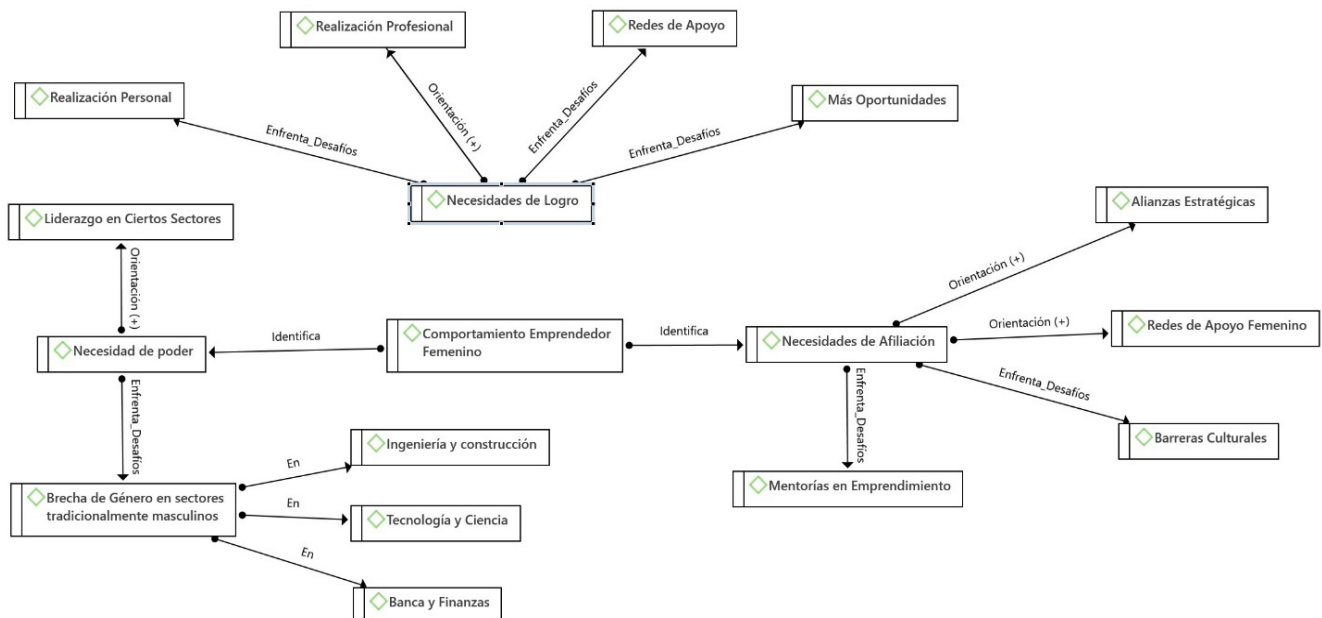
Based on these demands related to multipurpose engagement, studies highlight the collaborative spirit among female communities (Dal Mas & Paoloni, 2020; Acevedo-Duque et al., 2021). However, although female entrepreneurs stand out for their constant search for support networks and adequate management of strategic alliances to strengthen their businesses, there are difficulties in maintaining these support networks, especially in male-dominated industries. Because most ventures are male-owned, the presence and reproduction of cultural barriers limit mentoring in companies across different sectors. In light of this, regional and international studies suggest that female entrepreneurs need to further develop their resilience in the face of cultural and social challenges, which requires training programs and specialized care (Martínez-Rodríguez et al., 2022; Nate et al., 2022; Neumeyer, 2022).

Need for power in female entrepreneurship

An essential element explored in the literature is women's orientation toward exercising agency. Female entrepreneurs have demonstrated a growing desire to influence and lead in their sectors; this is not only a characteristic of successful entrepreneurs but also a necessity in highly competitive contexts (Corrêa et al., 2022). Analysis of the figures recorded in the sources showed an increase in the active participation of different genders and sectors. Thus, in recent years, women have increasingly assumed the role of change agents and leaders, both in small and medium-sized enterprises, as explained by Acevedo-Duque et al. (2021). On the other hand, it is necessary to recognize that Western and some Eastern societies have given women a more prominent role because the success of entrepreneurship demands certain catalysts that involve the external and concerted action of different social agents (Corrêa et al., 2024; Hossain et al., 2023).

However, this topic repeatedly mentioned the challenges faced by both women entrepreneurs and their ventures. Among the most notable were the perception and acceptance of women in leadership roles in some sectors dominated by traditional male profiles, namely, Technology and Science, Banking and Finance, and Engineering and Construction. The gender gap remains a cultural paradigm and a persistent problem in public policy, as reflected in multiple regional and international studies (Barrachina et al., 2021; Bastida et al., 2020; Vracheva & Stoyneva, 2020).

Figure 1.
Analysis of female entrepreneurial behaviors



Source: own elaboration

Note: the figure appears in its original language

Based on these analyses, a matrix of codes and categories was created in the Atlas.ti software. This representation of the data allowed for the identification of factors associated with the needs for achievement, affiliation, and power

(figure 1). Particularly notable is the predominance of external factors that can act as drivers or disruptors. Hence, personal and business resilience cannot be limited, in its conception, to personal qualities and needs but must be supported from ontogenetic, temporal, social, and political perspectives (Beuren et al., 2022; Candeias & Franco, 2022; Monzón et al., 2023).

Innovative female behavior in Latin America

In the business world, female innovative behavior is considered to focus on identifying market opportunities, introducing creative solutions, and contributing to the expansion and diversification of commercial offerings. This is based on a different understanding and interpretation framework than primarily male-dominated approaches (Ughetto et al., 2020). According to the studies explored, female entrepreneurs in Latin America must further develop their problem-solving skills, adopt emerging technologies, and create distinctive value propositions.

Collaboration, adaptability, and a commitment to sustainable development are also relevant aspects of female innovative behavior, as the findings demonstrate that they contribute to the region's socioeconomic development. However, as Kamberidou (2020) rightly points out, entrepreneurial success transcends gender in principle, as innovation is intrinsic to such success, but the impact of external factors on innovative behavior must be recognized.

In recent years, female innovative behavior has grown in various economic sectors, promoting significant and positive changes, albeit slow and unstable, depending on the sociopolitical conditions of each region. Among the most important categories, innovative developments in entrepreneurship emerged, allowing us to understand the causes behind this growth, primarily in areas such as educational technology, health and wellness, and sustainability and the environment.

The reasons for this evolution are diverse, but concurrent trends were identified, such as:

- 1) Greater capacity to care for others.
- 2) Greater commitment to addressing social problems.
- 3) Greater opportunities in some technology sectors.
- 4) Diversification in gender roles.

Additionally, women entrepreneurs in Latin America have shown a greater inclination toward social and environmental roles. Among the experiences reported, projects focused on addressing local problems, such as poverty, education, discrimination, and environmental sustainability, were observed. This stance not only aligns with the Sustainable Development Goals (SDGs) but also responds to a long tradition of social, racial, ethnic, and gender struggles (Aguinis et al., 2020).

Another issue clearly identified as an influential factor was the adoption of technology. In order to create sustainable and resilient female entrepreneurship ecosystems, the studies reviewed show that a growing willingness to grow in certain technological sectors is necessary. This includes the development of applications, online platforms, and digital solutions in various fields, such as healthcare, data science, agriculture, and education (Raman et al., 2022). This highlights growing female empowerment in sectors previously considered exclusively for men, as evidenced by findings from regional and international sources (Avnimelech & Rechter, 2023; Ge et al., 2022; Osei & Zhuang, 2020).

Another recurring argument refers to the demands and opportunities offered by support and collaboration networks. The formation of these networks among female entrepreneurs has been a fundamental aspect in addressing the aforementioned shortcomings compared to men and their traditional networks. As demonstrated, the studies emphasize the creation of mentoring programs, the creation of networks for knowledge generation and transfer, the establishment of financial support, and the strengthening of strategic alliances. The international studies analyzed show that the functioning of organizations will largely depend on the ability of entrepreneurs to insert themselves into these networks, while isolation could strengthen disruptive factors (Civera & Meoli, 2023; Leyva-Townsend et al., 2021; Ribeiro et al., 2021).

Along the same lines, there is a growing trend towards the development of financial strategies adapted to the reality of women and their contexts. Regardless of social and cultural paradigms, there has been an increase in funding sources for female entrepreneurship, primarily based on economic growth, but also on its social ramifications.

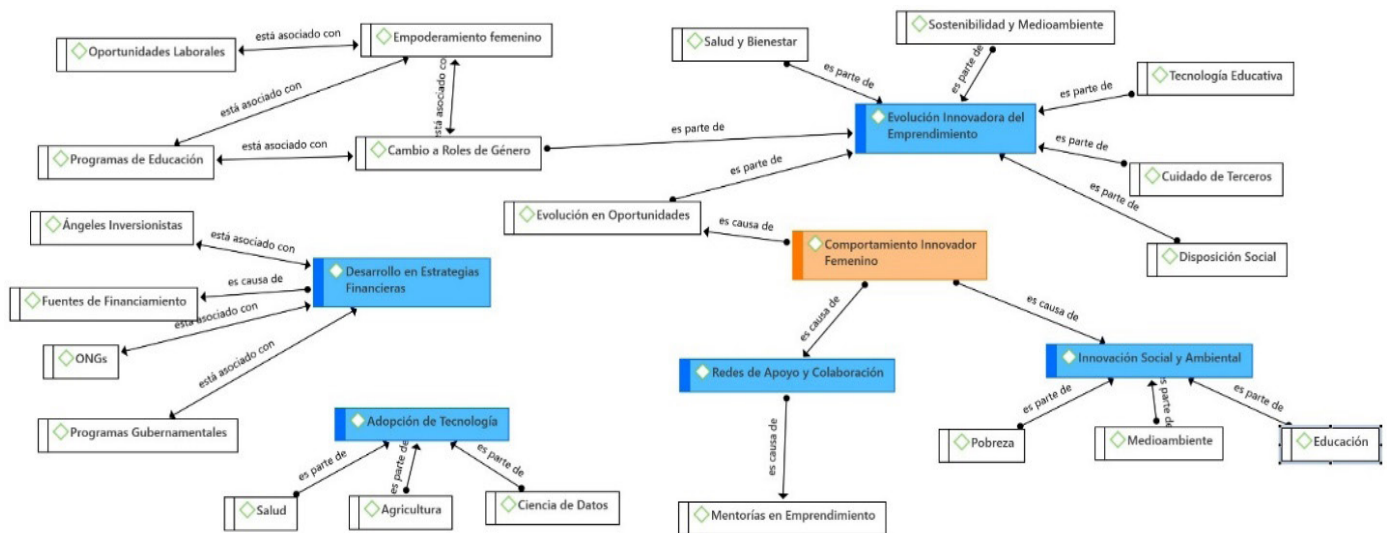
Among the most common factors were government programs, support from impact investors, and the increase

in non-profit organizations, which have contributed to improving financial conditions for women. This favorable environment has fostered the design and implementation of training programs in female entrepreneurship aimed at strengthening business skills, leadership development, and corporate resilience. This is also due to social and cultural movements, which have led to substantial changes in the representation of roles in traditionally male-dominated sectors. As a key challenge, women have transformed gender stereotypes and contributed to workforce diversification. According to the literature, this is mainly due to:

- 1) Better access to education and job opportunities.
- 2) Large-scale changes in traditional cultural stereotypes.
- 3) Development of gender equity.
- 4) Female economic empowerment.

As identified, there are several aspects related to female innovation and entrepreneurship that address fundamental elements for strengthening, from within and without, the organizations created. As shown in the previous figure, it highlights the need to delve deeper into the social context-gender-entrepreneurship connections and strengthen female ecosystems, not as closed entities but as open networks (Khoo et al., 2024; Ratten & Pellegrini, 2020).

Figure 2.
Analysis of innovative female behaviors



Source: own elaboration

Note: the figure appears in its original language

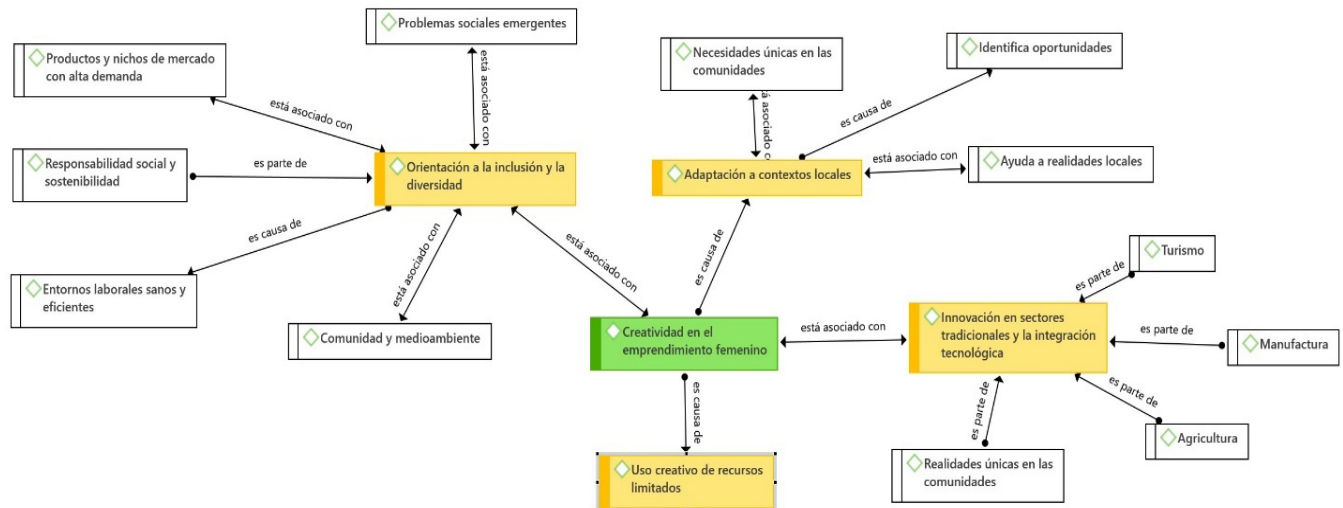
Creative behavior

Based on the content analysis, creative behaviors are categorized into two categories. The first refers to personal traits such as persistence, originality, tolerance and divergence, experimentation with new experiences, intrinsic motivation, need for achievement, self-confidence, independence, and the ability to take controlled risks. The second category highlights cognitive aspects such as fluency, sensitivity to problems, flexibility of thought, and analogical thinking. This attitude is complemented by the factors that define the creative personality, which are expressed in curiosity, enjoyment of what one does, sustained effort, passion, and the ability to adapt to circumstances (Akbari et al., 2020).

After analyzing the sources, it is identified that a successful entrepreneur must foster the ability to create new products, achieve greater market shares for those products, and appropriately design mechanisms to achieve long-term sustainability. Among the experiences analyzed, it is noteworthy that Latin American female entrepreneurs have demonstrated a strong tendency toward inclusion and diversity in their companies, the creation of healthy and efficient work environments, as well as the development of an organizational identity that reflects the rich cultural and ethnic diversity of the region. Studies show leadership based on initiatives focused on social responsibility and sustainability, the creation of businesses with a positive impact on the community and the environment, with an emphasis on urgent social problems (Acevedo-Duque et al., 2021; Benites et al., 2021; Rosca et al., 2020).

This topic, due to the conceptual relationships, the theoretical positions reviewed, and the author's own lens, was the narrowest, with a high saturation index. The result can be interpreted as an argument that reinforces the notion of comprehensiveness, defended in the presentation of the previous topics. As can be seen in the following figure, female entrepreneurship is by no means a simple phenomenon; therefore, its proliferation and strengthening require more comprehensive and transdisciplinary approaches.

Figure 3.
Analysis of female creative behaviors



Source: own elaboration

Note: the figure appears in its original language

CONCLUSIONS

Latin American women entrepreneurs have contributed to growth and diversification in recent years, generating a positive impact on the economy and society. However, cultural and social barriers persist, creating challenges and hindering their full participation. Furthermore, a shift, albeit incipient, toward cultural and social approaches that empower, encourage inclusion, and promote their social development was highlighted.

In this sense, the study concluded that it is necessary to contribute to sectoral diversification, strengthen leading roles in companies, train for transformative leadership, and support women's entrepreneurship as an ecosystem. Dialectically, it is necessary to delve deeper into the factors that divide these scenarios and hinder access to financing, training, and decision-making. Therefore, in future developments, it is critical that governmental and non-governmental institutions generate and implement public policies aimed at pro-entrepreneurship governance, provide spaces for active participation, and contribute to reducing the impact of the aforementioned barriers.

REFERENCES

- Acevedo-Duque, Á., Gonzalez-Diaz, R., Vargas, E., ... y D'Adamo, I. (2021). Resilience, Leadership and Female Entrepreneurship within the Context of SMEs: Evidence from Latin America. *Sustainability*, 13(15), 8129. <https://doi.org/10.3390/su13158129>
- Aguinis, H., Villamor, I., Lazzarini, S., ... y Allen, D. (2020). Conducting Management Research in Latin America: Why and What's in It for You? *Journal of Management*, 46(5), 615–636. <https://doi.org/10.1177/0149206320901581>
- Akbari, M., Bagheri, A., Imani, S., y Asadnezhad, M. (2020). Does entrepreneurial leadership encourage innovation work behavior? The mediating role of creative self-efficacy and support for innovation. *European Journal of Innovation Management*, 24(1), 1–22. <https://doi.org/10.1108/EJIM-10-2019-0283>
- Andrade, R., Pinheiro, P., Carvalho, L., y Rocha, R. (2022). Building a Bridge: Knowledge Sharing Flows into Entrepreneurial Ecosystems. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 144. <https://doi.org/10.3390/joitmc8030144>

- Ataei, P., Karimi, H., Ghadermarzi, H., y Norouzi, A. (2020). A conceptual model of entrepreneurial competencies and their impacts on rural youth's intention to launch SMEs. *Journal of Rural Studies*, 75, 185–195. <https://doi.org/10.1016/j.jrurstud.2020.01.023>
- Avnimelech, G., y Rechter, E. (2023). How and why accelerators enhance female entrepreneurship. *Research Policy*, 52(2), 104669. <https://doi.org/10.1016/j.respol.2022.104669>
- Barrachina, M., García-Centeno, M., y Calderón, C. (2021). Women Sustainable Entrepreneurship: Review and Research Agenda. *Sustainability*, 13(21), 12047. <https://doi.org/10.3390/su132112047>
- Bastida, M., Pinto, L., Oliveira, A., y Cancelo, M. (2020). Female Entrepreneurship: Can Cooperatives Contribute to Overcoming the Gender Gap? A Spanish First Step to Equality. *Sustainability*, 12(6), 2478. <https://doi.org/10.3390/su12062478>
- Benites, M., González-Díaz, R., Acevedo-Duque, Á., Becerra-Pérez, L., y Tristancho, G. (2021). Latin American Microentrepreneurs: Trajectories and Meanings about Informal Work. *Sustainability*, 13(10), 5449. <https://doi.org/10.3390/su13105449>
- Beuren, I., dos Santos, V., y Theiss, V. (2022). Organizational resilience, job satisfaction and business performance. *International Journal of Productivity and Performance Management*, 71(6), 2262–2279. <https://doi.org/10.1108/IJPPM-03-2021-0158>
- Calabuig-Moreno, F., Gonzalez-Serrano, M., Alonso-Dos-Santos, M., y Gómez-Tafalla, A. (2021). Entrepreneurial ecosystems, knowledge spillovers, and their embeddedness in the sport field: A bibliometric and content analysis. *Knowledge Management Research & Practice*, 19(1), 65–83. <https://doi.org/10.1080/14778238.2020.1752120>
- Candeias, A., y Franco, M. (2022). The role of entrepreneurial resilience in forms of collaboration: A systematic literature review with bibliometric analyses. *EuroMed Journal of Business*, 17(4), 752–789. <https://doi.org/10.1108/EMJB-05-2021-0075>
- Castrillón-Muñoz, A., Infante-Moro, A., Zúñiga-Collazos, A., y Martínez-López, F. (2020). Generación de empresas derivadas de base tecnológica (Spin Offs), a partir de los resultados de I+D+i de los grupos de investigación de la Universidad del Cauca, Colombia. *Información Tecnológica*, 31(1), 67–78. <https://doi.org/10.4067/S0718-07642020000100067>
- Chafloque-Céspedes, R., Alvarez-Risco, A., Robayo-Acuña, P., ... y Vicente-Ramos, W. (2021). Effect of Sociodemographic Factors in Entrepreneurial Orientation and Entrepreneurial Intention in University Students of Latin American Business Schools. En P. Jones, N. Apostolopoulos, A. Kakouris, C. Moon, V. Ratten, y A. Walmsley (Eds.), *Contemporary Issues in Entrepreneurship Research* (pp. 151–165). Emerald Publishing Limited. <https://doi.org/10.1108/S2040-724620210000011010>
- Civera, A., y Meoli, M. (2023). Empowering female entrepreneurs through university affiliation: Evidence from Italian academic spinoffs. *Small Business Economics*, 61(3), 1337–1355. <https://doi.org/10.1007/s11187-022-00729-z>
- Corrêa, V., Brito, F., Lima, R., y Queiroz, M. (2022). Female entrepreneurship in emerging and developing countries: A systematic literature review. *International Journal of Gender and Entrepreneurship*, 14(3), 300–322. <https://doi.org/10.1108/IJGE-08-2021-0142>
- Corrêa, V., Lima, R., Brito, F., Machado, M., y Nassif, V. (2024). Female entrepreneurship in emerging and developing countries: A systematic review of practical and policy implications and suggestions for new studies. *Journal of Entrepreneurship in Emerging Economies*, 16(2), 366–395. <https://doi.org/10.1108/JEEE-04-2022-0115>
- Dal Mas, F., y Paoloni, P. (2020). A relational capital perspective on social sustainability; the case of female entrepreneurship in Italy. *Measuring Business Excellence*, 24(1), 114–130. <https://doi.org/10.1108/MBE-08-2019-0086>

- Fernandes, A., y Ferreira, J. (2022). Entrepreneurial ecosystems and networks: A literature review and research agenda. *Review of Managerial Science*, 16(1), 189–247. <https://doi.org/10.1007/s11846-020-00437-6>
- Ge, T., Abbas, J., Ullah, R., ... y Zhang, R. (2022). Women's Entrepreneurial Contribution to Family Income: Innovative Technologies Promote Females' Entrepreneurship Amid COVID-19 Crisis. *Frontiers in Psychology*, 13, 828040. <https://doi.org/10.3389/fpsyg.2022.828040>
- Hakala, H., O'Shea, G., Farny, S., y Luoto, S. (2020). Re-storying the Business, Innovation and Entrepreneurial Ecosystem Concepts: The Model-Narrative Review Method. *International Journal of Management Reviews*, 22(1), 10–32. <https://doi.org/10.1111/ijmr.12212>
- Hossain, S., Islam, M., Hosen, M., y Thas, H. (2023). Missing catalysts of female entrepreneurship success: Evidence from an emerging economy. *Global Business and Organizational Excellence*, 42(5), 50–64. <https://doi.org/10.1002/joe.22201>
- Kamberidou, I. (2020). "Distinguished" women entrepreneurs in the digital economy and the multitasking whirlpool. *Journal of Innovation and Entrepreneurship*, 9(1), 3. <https://doi.org/10.1186/s13731-020-0114-y>
- Khoo, C., Yang, E., Tan, R., ... y Barahona-Canales, D. (2024). Opportunities and challenges of digital competencies for women tourism entrepreneurs in Latin America: A gendered perspective. *Journal of Sustainable Tourism*, 32(3), 519–539. <https://doi.org/10.1080/09669582.2023.2189622>
- Kogut, C., y Mejri, K. (2022). Female entrepreneurship in emerging markets: Challenges of running a business in turbulent contexts and times. *International Journal of Gender and Entrepreneurship*, 14(1), 95–116. <https://doi.org/10.1108/IJGE-03-2021-0052>
- Leyva-Townsend, P., Rodríguez, W., Idrovo, S., y Pulga, F. (2021). Female board participation and firm's financial performance: A panel study from a Latin American economy. *Corporate Governance: The International Journal of Business in Society*, 21(5), 920–938. <https://doi.org/10.1108/CG-07-2019-0235>
- Margaça, C., Hernández-Sánchez, B., Sánchez-García, J., y Cardella, G. (2021). The Roles of Psychological Capital and Gender in University Students' Entrepreneurial Intentions. *Frontiers in Psychology*, 11, 615910. <https://doi.org/10.3389/fpsyg.2020.615910>
- Martínez-Rodríguez, I., Quintana-Rojo, C., Gento, P., y Callejas-Albiñana, F. (2022). Public policy recommendations for promoting female entrepreneurship in Europe. *International Entrepreneurship and Management Journal*, 18(3), 1235–1262. <https://doi.org/10.1007/s11365-021-00751-9>
- Mohamed, M., Liu, P., y Nie, G. (2022). Causality between Technological Innovation and Economic Growth: Evidence from the Economies of Developing Countries. *Sustainability*, 14(6), 3586. <https://doi.org/10.3390/su14063586>
- Monzón, L., Dávila, J., Rodríguez, E., y Pérez, A. (2023). La resiliencia en el contexto universitario, un estudio mixto exploratorio. *Pensamiento Americano*, 16(31), 1–15. <https://doi.org/10.21803/penamer.16.31.636>
- Mourão, P., y Schneider, D. (2020). Testing McClelland at the Academy: An Analysis of Entrepreneurial Behavioral Characteristics. *Sustainability*, 12(5), 1771. <https://doi.org/10.3390/su12051771>
- Mtar, K., y Belazreg, W. (2021). Causal Nexus Between Innovation, Financial Development, and Economic Growth: The Case of OECD Countries. *Journal of the Knowledge Economy*, 12(1), 310–341. <https://doi.org/10.1007/s13132-020-00628-2>
- Nate, S., Grecu, V., Stavitsky, A., y Kharlamova, G. (2022). Fostering Entrepreneurial Ecosystems through the Stimulation and Mentorship of New Entrepreneurs. *Sustainability*, 14(13), 7985. <https://doi.org/10.3390/su14137985>
- Neumeyer, X. (2022). Inclusive High-Growth Entrepreneurial Ecosystems: Fostering Female Entrepreneurs' Participation in Incubator and Accelerator Programs. *IEEE Transactions on Engineering Management*, 69(4), 1728–1737. <https://doi.org/10.1109/TEM.2020.2979879>

- Osei, C., y Zhuang, J. (2020). Rural Poverty Alleviation Strategies and Social Capital Link: The Mediation Role of Women Entrepreneurship and Social Innovation. *SAGE Open*, 10(2), 215824402092550. <https://doi.org/10.1177/2158244020925504>
- Perez, J., Martins, I., Mahauad, M., y Sarango-Lalangui, P. (2024). A bridge between entrepreneurship education, program inspiration, and entrepreneurial intention: The role of individual entrepreneurial orientation. Evidence from Latin American emerging economies. *Journal of Entrepreneurship in Emerging Economies*, 16(2), 288–310. <https://doi.org/10.1108/JEEE-04-2021-0137>
- Pradhan, R., Arvin, M., Nair, M., y Bennett, S. (2020). The dynamics among entrepreneurship, innovation, and economic growth in the Eurozone countries. *Journal of Policy Modeling*, 42(5), 1106–1122. <https://doi.org/10.1016/j.jpolmod.2020.01.004>
- Prencipe, A., Corsi, C., Rodríguez-Gulías, M., Fernández-López, S., y Rodeiro-Pazos, D. (2020). Influence of the regional entrepreneurial ecosystem and its knowledge spillovers in developing successful university spin-offs. *Socio-Economic Planning Sciences*, 72, 100814. <https://doi.org/10.1016/j.seps.2020.100814>
- Raihan, A., y Tuspekova, A. (2022). The nexus between economic growth, energy use, urbanization, tourism, and carbon dioxide emissions: New insights from Singapore. *Sustainability Analytics and Modeling*, 2, 100009. <https://doi.org/10.1016/j.samod.2022.100009>
- Raman, R., Subramaniam, N., Nair, V., ... y Nedungadi, P. (2022). Women Entrepreneurship and Sustainable Development: Bibliometric Analysis and Emerging Research Trends. *Sustainability*, 14(15), 9160. <https://doi.org/10.3390/su14159160>
- Ratten, V., y Pellegrini, M. (2020). Female transnational entrepreneurship and smart specialization policy. *Journal of Small Business & Entrepreneurship*, 32(6), 545–566. <https://doi.org/10.1080/08276331.2019.1616257>
- Ribeiro, M., Adam, I., Kimbu, A., ... y Jong, A. (2021). Women entrepreneurship orientation, networks and firm performance in the tourism industry in resource-scarce contexts. *Tourism Management*, 86, 104343. <https://doi.org/10.1016/j.tourman.2021.104343>
- Rosca, E., Agarwal, N., y Brem, A. (2020). Women entrepreneurs as agents of change: A comparative analysis of social entrepreneurship processes in emerging markets. *Technological Forecasting and Social Change*, 157, 120067. <https://doi.org/10.1016/j.techfore.2020.120067>
- Schaeffer, P., Guerrero, M., y Fischer, B. (2021). Mutualism in ecosystems of innovation and entrepreneurship: A bidirectional perspective on universities' linkages. *Journal of Business Research*, 134, 184–197. <https://doi.org/10.1016/j.jbusres.2021.05.039>
- Schneider, D., Mourão, P., y Silva, R. (2021). Lusophone Entrepreneurship: Analysis of Entrepreneurial Behavioural Characteristics in Brazilian and Portuguese Universities. *Sustainability*, 13(8), 4568. <https://doi.org/10.3390/su13084568>
- Škare, M., Blanco-Gonzalez-Tejero, C., Crecente, F., y del Val, M. (2022). Scientometric analysis on entrepreneurial skills - creativity, communication, leadership: How strong is the association? *Technological Forecasting and Social Change*, 182, 121851. <https://doi.org/10.1016/j.techfore.2022.121851>
- Tantawy, M., Herbert, K., McNally, J., ... y Foord, D. (2021). Bringing creativity back to entrepreneurship education: Creative self-efficacy, creative process engagement, and entrepreneurial intentions. *Journal of Business Venturing Insights*, 15, e00239. <https://doi.org/10.1016/j.jbvi.2021.e00239>
- Ughetto, E., Rossi, M., Audretsch, D., y Lehmann, E. (2020). Female entrepreneurship in the digital era. *Small Business Economics*, 55(2), 305–312. <https://doi.org/10.1007/s11187-019-00298-8>
- Vracheva, V., y Stoyneva, I. (2020). Does gender equality bridge or buffer the entrepreneurship gender gap? A cross-country investigation. *International Journal of Entrepreneurial Behavior & Research*, 26(8), 1827–1844. <https://doi.org/10.1108/IJEBr-03-2020-0144>

- Wang, C., Mundorf, N., y Salzarulo-McGuigan, A. (2022). Entrepreneurship education enhances entrepreneurial creativity: The mediating role of entrepreneurial inspiration. *The International Journal of Management Education*, 20(2), 100570. <https://doi.org/10.1016/j.ijme.2021.100570>
- Wannamakok, W., y Chang, Y.-Y. (2020). Understanding nascent women entrepreneurs: An exploratory investigation into their entrepreneurial intentions. *Gender in Management: An International Journal*, 35(6), 553–566. <https://doi.org/10.1108/GM-12-2019-0250>
- Woodside, A., Megehee, C., Isaksson, L., y Ferguson, G. (2020). Consequences of national cultures and motivations on entrepreneurship, innovation, ethical behavior, and quality-of-life. *Journal of Business & Industrial Marketing*, 35(1), 40–60. <https://doi.org/10.1108/JBIM-10-2018-0290>

FINANCING

None.

CONFLICT OF INTEREST STATEMENT

None.

ACKNOWLEDGMENTS

Military University Nueva Granada.

AUTHORSHIP CONTRIBUTION

Conceptualization: Giovanny Melquicedec Martin Peña.

Data curation: Giovanny Melquicedec Martin Peña.

Formal analysis: Giovanny Melquicedec Martin Peña.

Acquisition of funds: Giovanny Melquicedec Martin Peña.

Research: Giovanny Melquicedec Martin Peña.

Methodology: Giovanny Melquicedec Martin Peña.

Software: Giovanny Melquicedec Martin Peña.

Writing - original draft: Giovanny Melquicedec Martin Peña.

Writing - proofreading and editing: Giovanny Melquicedec Martin Peña.