




Determinants of women opportunity-driven entrepreneurship and business diversification in diverse contexts

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Abstract

This research is focused on women entrepreneurship across various geographies with distinct economic, institutional, and cultural contexts, including Portugal, a developed European country, and a group of emerging African nations characterized by turbulent political and sociocultural environments. For both men and women, the opportunity to start a business and the necessity of supporting oneself and one's family are significant motivations for engaging in entrepreneurship, and their motivations are influenced by personal and family characteristics that can enhance the business's viability and survival. However, women face specific challenges that can be analyzed through the lens of social role theory, which provides a framework for understanding how gender affects entrepreneurship. A fuzzy-set Qualitative Comparative Analysis was employed to analyze individual-level entrepreneurial data and to identify how different combinations of conditions lead to entrepreneurial decisions and business expansion through market and activity diversification.

Keywords Women entrepreneurship · Personal factors · Business factors · Necessity and opportunity motivations · fuzzy-set qualitative comparative analysis (fsQCA)

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Introduction

Entrepreneurship often arises more intensely as a response to instability felt by individuals who, considering their personal characteristics, react by developing new projects. Entrepreneurs resort to innovation, driven either by necessity or by seizing opportunities to create wealth. When their entrepreneurial initiatives succeed, the benefits extend to the entrepreneurs' families, but also to the economy and society, leading to economic and social progress.

Recognizing the importance of entrepreneurship, this research, based on social role theory (Eagly & Wood, 1999), assumes that women-led entrepreneurship does not align with “masculinised models of entrepreneurship” (Shaw et al., 2009, p. 28) and acknowledges the importance of the context, as these entrepreneurs face distinct challenges in turbulent or volatile sociopolitical environments which disrupt business operations. In this environment, sustainability, and even mere survival are difficult (Al-Dajani & Marlow, 2013). Along with the turbulence in social and political environments, the institutional context—and, in some cases, the absence of institutions—affects women entrepreneurship. Institutions are typically reliable and stable over time, but this may not hold true in the unstable contexts of emerging economies (Welsh et al., 2017).

Previous research on women entrepreneurship seems to be concentrated in developed countries (Welsh et al., 2018) and, despite some exceptions (e.g., Khodor et al., 2024), there is a lack of knowledge about women entrepreneurs in emerging economies, which are usually characterized by weak regulations and inefficient systems (Kimosop et al., 2016; Mas-Tur et al., 2015). However, despite their fragilities, these emerging economies, including Portuguese-speaking African countries, have significant entrepreneurial populations, highlighting the importance of these contexts for research.

Notwithstanding consensus on the importance and growth of women entrepreneurship, there are also nuances regarding whether this is necessity- or opportunity-driven and on the underlying motivations. In European societies, women entrepreneurs may be attracted by business opportunities—helping them achieve their personal goals while leveraging existing entrepreneurship training programs and other incentives—in stable contexts and in the presence of strong institutions. In African societies, however, women entrepreneurship is often driven by the need to generate income to address economic difficulties and instability, in informal and weak institutional contexts, and a cultural setting shaped by differing perceptions of women's roles in society and within the family.

Against this backdrop, this research aims to address research gaps on women entrepreneurship, underscoring the implications of the different national contexts and existing institutions, while providing insights for public policies to address the contextual and institutional conditions that influence women entrepreneurs to create and expand their businesses. To fulfil these purposes, this research uses fuzzy-set qualitative comparative analysis (fsQCA) to identify combinations of factors (conditions) that lead to women opportunity-driven entrepreneurship and business expansion intentions (outcomes), while exploring similarities and differences across various geographies.

The first objective is to examine the importance of personal and business factors and identify the combinations of conditions associated with opportunity-driven entrepreneurship. The second objective is to identify combinations of conditions that lead to business expansion intentions. Consistent with Woodside (2013), our focus is not on the net effects of the variables (conditions), but rather on the possible alternative combinations of personal, business, and contextual conditions (equifinality) that lead to the presence or absence (causal asymmetry) of the outcomes under analysis. Using fsQCA enables the identification of alternative paths to entrepreneurial and expansion outcomes, suggesting that there may be multiple trajectories towards entrepreneurial success, each suited to entrepreneurs' characteristics and context.

Our results highlight that the entrepreneurial process is highly complex and reinforce the importance of further research on women entrepreneurship in developing countries. The findings, as expected, vary across different contexts, contributing to the existing literature by helping women entrepreneurs understand how their own characteristics and the business environment interact in their particular context, and how this interaction influences entrepreneurial outcomes. Furthermore, the results emphasize the significance of context, with implications concerning institutions, culture, and social roles when formulating policies to support women entrepreneurs in both developed and developing countries/regions. Finally, the results highlight the challenges to business expansion intentions, especially in developing contexts, consistent with findings in recent research (e.g., Uebbing et al., 2025).

Literature review and propositions

Women entrepreneurship

Both opportunity- and necessity-driven entrepreneurship (Alexeeva-Alexeev et al., 2025) has been linked to the concept of innovation. An entrepreneur can be an inventor, but it is the ability to introduce innovations that defines entrepreneurs, according to Schumpeter (1934). These are often seen as individuals who initiate their own new small businesses, but Drucker (1986)—arguing that not all new small businesses qualify as entrepreneurial ventures—highlights the importance of those individuals' entrepreneurial behavior. In turn, Bruyat and Julien (2001, p. 169) underscore the importance of new value creation, defining an entrepreneur as an “individual responsible for the process of creating new value” resulting in “an innovation and/or a new organization”.

Despite the economic importance of entrepreneurship (Bruyat & Julien, 2001) and the growth in women entrepreneurship (Wu et al., 2019; Gomes et al., 2022; GEM, 2023; Alexeeva-Alexeev et al., 2025), women continue to face various gender-related barriers (Henry et al., 2016; Wu et al., 2019; Muñoz-Céspedes et al., 2024), including existing socially rooted differential treatment (Wu et al., 2019). In this context, Social Role Theory suggests that the differences between women and men are a consequence of their distinct social roles (Eagly & Wood, 1999), which shape the development of different skills, and which, in turn, ends up influencing their social behavior (Eagly, 1987, 1994). In such a setting, feminine and masculine are independent of a person's

biological sex, but still influence social interaction (Wu et al., 2019). Therefore, gender biases can be considered part of the social norms that shape a group's specific value system. These biases motivate individuals to behave in specific ways, which leads to entrepreneurship being perceived as a stereotypically masculine occupation (Wu et al., 2019). Despite the different perspectives on gender (Ahl, 2006), previous research captures the cultural dimension, assuming gender as a social construction.

Personal factors

Several personal factors influence both opportunity- and necessity-driven entrepreneurship decisions (Alexeeva-Alexeev et al., 2025), including the level of education (Marques et al., 2011; Santos et al., 2019; Gomes et al., 2022; Enri-Peiró et al., 2024), the family role (Gomes et al., 2022; Santos et al., 2019; Carvalho & Fernandes, 2019; Wolf & Frese, 2018), and the non-family role model (Carvalho & Fernandes, 2019; Ratten & Braga, 2024).

For women entrepreneurs, family serves as a vital source of emotional support, understanding, and attention, as well as economic assistance during critical situations that can affect entrepreneurial success (Akehurst et al., 2012; Prasad et al., 2013). Family support helps women entrepreneurs develop a stronger entrepreneurial spirit, to maintain greater persistence, and greater risk-taking, all of which have been found to contribute positively to business growth (Prasad et al., 2013).

Exemplifying the importance of family, focusing on women students in higher education in Portugal, Gomes et al. (2022) noticed that most students reported that they were encouraged and influenced by their entrepreneur fathers to start their own businesses. Furthermore, Carvalho and Fernandes (2019) highlight that family succession is the primary motivation for women to start their businesses. Most are co-entrepreneurs with their husbands, and some women have become entrepreneurs to manage their family business. As for their intentions, most women entrepreneurs aim to sustain the family business and plan to keep investing and expanding. Nevertheless, in many circumstances, they need to overcome the existing perception of their illegitimacy as role model and assume an unconventional role (Carvalho & Fernandes, 2019).

Previous research also reports on a positive relationship between educational level and firm performance (Ayala & Manzano, 2014; Hampel-Milagrosa et al., 2015). Yet for women entrepreneurs with medium-level qualifications, motivations and behaviors are fundamentally 'artisan', enabling both professional and personal development in personal services and retail, which are both characterized by lower profits, limited decision-making autonomy, and time flexibility (Marques et al., 2011).

Existing management skills have been positively associated with entrepreneurial performance (Mari et al., 2016; Rey-Martí et al., 2015; Staniewski et al., 2016). However, women often have inadequate training in entrepreneurship and management, lack awareness of support programs, misunderstand the role of bureaucracy in establishing their businesses, and face a lack of societal support and personal insecurity (Vossenbergh, 2013). Additionally, they encounter challenges such as competition, lack of market credibility, economic recession, difficulties in business growth, and also struggle to obtain adequate human capital (Nissan et al., 2012). Age also shows

a positive correlation with performance, but younger women entrepreneurs face additional challenges in obtaining finance (Pinazo-Dallenbach et al., 2016), as well as less educated women (De Clercq & Brieger, 2022).

The expansion of sales signals the entrepreneur's ability to dominate the business and take advantage of opportunities, considering that in the initial years, business survival is very difficult (Kimosop et al., 2016; Staniewski et al., 2016). The professional situation and the work-family interface contribute to business performance (Hodges et al., 2015; Hsu et al., 2016).

Accordingly, the following propositions are formulated:

- *P1: Personal factors influence opportunity-driven entrepreneurship decisions.*
- *P2: Personal factors influence business expansion intentions.*

Business factors

Business factors are also linked to decisions related to necessity- or opportunity-driven women entrepreneurship (Ratten & Braga, 2024; Ribeiro et al., 2019; Carvalho & Fernandes, 2019; Santos et al., 2017, 2018; Marques et al., 2011; Mayanja et al., 2022; Nadya & Fernandes, 2017) as well as to the associated barriers (Ribeiro et al., 2019; Costa & Miragaia, 2024; Carvalho & Fernandes, 2019; Nadya & Fernandes, 2017; Amine & Staub, 2009; Spring, 2009). One of the main obstacles to starting an entrepreneurial project, noted by several authors, is access to credit. As financial resources from internal sources (e.g., family and friends) are usually limited, women face challenges in gathering financial resources to support their businesses (Wu et al., 2019; De Clercq & Brieger, 2022) and, consequently, usually start their entrepreneurial activities without meeting the adequate level of capital (Carter et al., 2015). Furthermore, due to the dominance of men in the financial sector, women also face barriers in attracting interest from other suppliers of financial resources, including business angels and venture capitalists (Gupta et al., 2009; Brush et al., 2014). On this issue, Costa and Miragaia (2024) highlight the importance of financial support from family members as an alternative to overcome difficulties in obtaining bank loans.

Recognizing opportunities increases women's entrepreneurial orientation in terms of innovation, risk-taking, and proactivity, mediated by the development of entrepreneurial skills through appropriate training in management-related areas, such as human resources, taxes and labor legislation, strategy, accounting and financial management, logistics, sales, and market analysis (Santos et al., 2018). However, entrepreneurial orientation is also influenced by the ability to form networks and establish professional contacts, along with other soft skills such as leadership and communication, and the ability to develop new products and services (Santos et al., 2018). In their research focused on women Portuguese winemakers with higher education degrees, Santos et al. (2019) highlight the importance of their inter-organizational and horizontal networks, which positively influence internationalization and networking. An analysis of the activities of the "Muambeiras" (women devoted to importing and reselling a variety of products locally, in an informal economy context) in Angola shows the existence and importance of an informal network to promote support for

work and emotional relationships between the Muambeiras, reflected, for instance, in joint arrangements to travel to foreign countries, and to share information about trade routes (Nadya & Fernandes, 2017).

In terms of obstacles, in Portugal, as in other contexts (De Clercq & Brieger, 2022), access to financial resources is the main obstacle for a nascent business, combined with the absence of an image or name in the market (Ribeiro et al., 2019). Some entrepreneurs also cite difficulties related to consecutive testing of the project's viability and respective adjustments, and a high number of competitors. Costa and Miragaia (2024), in turn, highlight the lack of support among women through sharing experiences and knowledge. The financial-related concerns also extend to specific aspects such as paying suppliers and employees without delay, and payments from customers (Carvalho & Fernandes, 2019).

In other contexts, such as Angola, most difficulties are related to corruption, economic instability, and limited access to credit (Nadya & Fernandes, 2017). Gender and the emancipation obtained through business activities aggravate these difficulties. A study conducted in Nigeria, the Central African Republic, Kenya, and Botswana reported that potential women entrepreneurs are held back due to "current prejudicial beliefs and discriminatory behaviors" that constitute barriers and reveal "old stereotypes about women's limited abilities to contribute to society" (Amine & Staub, 2009, p. 207). On top of this, a challenge is posed by the prevalence of the informal sector for women entrepreneurs in Africa, and these women face financial barriers (together with education and networking handicaps) in moving to the formal sector (Spring, 2009). Accordingly, the following propositions are presented:

- *P3: Business factors influence opportunity-driven entrepreneurship decisions.*
- *P4: Business factors influence business expansion intentions.*

Entrepreneurial context

Gender equality differs across cultures (De Clercq & Brieger, 2022). In African cultures, women are often relegated to a secondary role in wealth creation, as their capabilities are diminished in male-dominated cultures; therefore, they mostly occupy the role of caregivers. Nevertheless, women are now seen as essential to economic development and growth and innovation, and their contributions are seen as complementary to men's efforts. Still, in emerging economies, social norms and gender-related barriers, such as motherhood and domestic responsibilities, as well as access to finance, severely limit women entrepreneurship (Wu et al., 2019; Gupta et al., 2009). However, other factors may influence the outcome of entrepreneurial efforts. For instance, in Eswatini, Lesotho, and Zimbabwe, the fact that women do not own assets, such as land (which could be used as collateral), is an obstacle to access credit and restricts the sales volume of micro and small firms (Brixiová et al., 2020). But, once women start their businesses, there are almost no gender disparities in business productivity or growth (Bardasi et al., 2011; Hansen & Rand, 2014).

However, the context can also moderate the effect of other factors. The analysis of women-led microenterprises in Mozambique revealed that the combination of access to savings, technology, and financial literacy has a positive, significant, and lasting

effect on profits (Batista et al., 2022). Furthermore, the analysis of women entrepreneurship in sub-Saharan Africa reveals that women's business performance can be positively influenced by their husband's support in several areas, including financial, business, and emotional support, but also through advice, ideas, and access to networks (Wolf & Frese, 2018).

Even in most industrialized countries, there are differences between men and women regarding entrepreneurship. In general, men are twice as likely to create a business (Thébaud, 2010), but there are differences between countries due to the social and cultural context influencing the role of women in family and domestic activities (Brush et al., 2014). In developed countries, one in six women expresses interest in starting an entrepreneurial activity; in Africa, the continent with the highest rate of entrepreneurs, the proportion is one in three (GEM, 2023). Furthermore, women entrepreneurship in Africa is influenced by the context of the country that culturally colonized the territory. Still, Africa is characterized by political instability, causing a contraction in investment and affecting the growth of businesses owned by women. Finally, corruption compromises the start-up and expansion of new businesses (Ojong et al., 2021).

Worldwide, women tend to initiate projects in which they are the only ones involved. In Portugal, women involved in start-up businesses or in the management of new and growing businesses are increasing, but to a lesser extent in terms of entrepreneurship. Nevertheless, the entrepreneur ratio between men and women decreased between 2016 and 2019, which reveals a greater balance between genders (GEM, 2020). Low-income economies have a lower proportion of men to women entrepreneurs, which, in general, comes closer to parity; this can be explained by the fact that women play a fundamental role in household subsistence (GEM, 2020). For instance, in Angola, entrepreneurship is considered an excellent option and is socially recognized (GEM, 2022). In this context, the percentage of women who consider themselves entrepreneurs is much higher than that of men, which can be attributed to the difficulties in employment.

In other Portuguese-speaking African countries, such as Cape Verde, entrepreneurship programs are being promoted by the State, but without practical results as yet, and in Guinea-Bissau, the concept of women entrepreneurship is increasingly present. Despite this evolution, there are still difficulties, as in the legalization of firms, financial incentives, accessing products and materials, and the level of education of employees. In São Tomé and Príncipe, in addition to gender stereotypes, several barriers inhibit women's participation in the job market, including early pregnancy, the weak transport network, or gaps in their education/vocational training (ONGD TESE, 2023), which may also influence entrepreneurial decisions. Accordingly, the following propositions are presented:

- *P5: Context influences and differentiates opportunity-driven entrepreneurship decisions.*
- *P6: Context influences and differentiates configurations leading to business expansion intentions.*

Research model and propositions

Based on the literature, we consider two distinct moments in entrepreneurs' decisions. The first pertains to the choice to proceed with the business venture, which results from the interaction among contextual factors (specifically comparing developed and developing countries), personal factors, and business factors influencing whether the decision to start a business is driven by necessity or opportunity. In a second moment, entrepreneurs decide on the expansion of their business to other markets or activities/business areas. This requires a deliberate effort and will increase the complexity of the business. Based on the literature (e.g., Uebbing et al., 2025), we assume that these decisions are also influenced by contextual, personal, and business factors, but certain business factors will only emerge after the business activity has begun. Therefore, we differentiate the conditions influencing the entrepreneurial type outcome (Fig. 1) from those affecting the expansion intentions outcome (Fig. 2). Figure 1 focuses on propositions 1, 3, and 5, while Fig. 2 concerns propositions 2, 4, and 6, revealing the potential intricacy of conditions leading to the different outcomes, which will be explored using fsQCA.

Methodology

Data collection and analysis

To conduct this research, we collected data through a survey that was sent via email to previously identified women entrepreneurs. This survey was administered online via Google Forms from February to April 2024, resulting in 51 voluntary responses (no incentives were offered to improve the response rate), of which four were excluded because the entrepreneurs had not initiated business activities. Therefore,

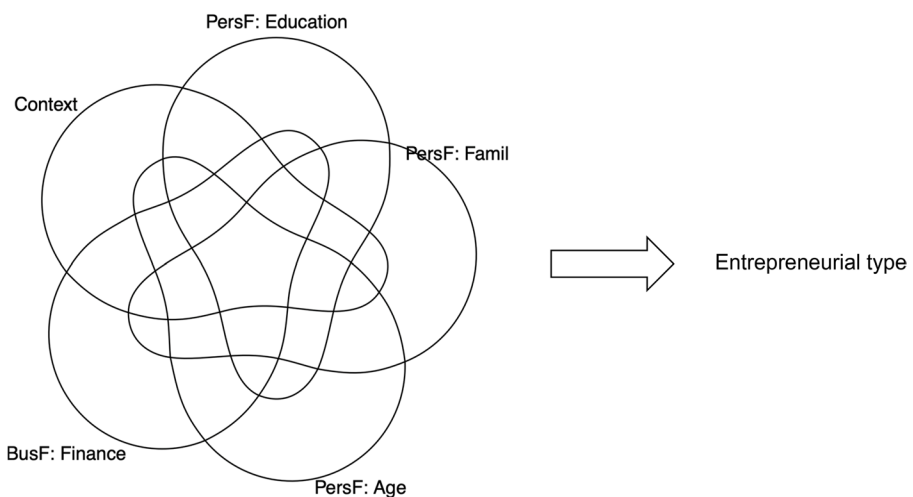


Fig. 1 Conditions influencing the entrepreneurship-based outcome

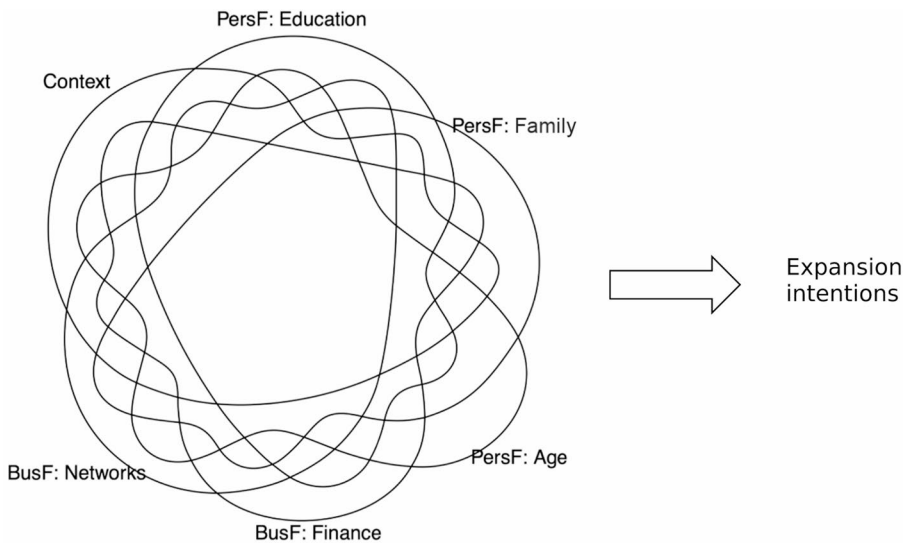


Fig. 2 Conditions influencing the business expansion intentions outcome

this research considers the responses of 47 women entrepreneurs (26 from Portugal, 9 from Angola, 5 from Cape Verde, 4 from Mozambique, and 3 from São Tomé and Príncipe). In terms of marital status, 27 were married, and the remainder were single, widowed, or divorced. Focusing on the number of children, around 30% had none, but others had 1 (25.5%), 2 (23.4%), or more (up to 4). As for the activity sector, 38 started their business in the services industry (including 12 with online only businesses), 8 in the secondary sector, and only one in the primary sector.

The questionnaire was based on the literature review and specifically targeted personal factors, such as education, family support, and age of the entrepreneur, as well as business factors like access to financing and business networks. We focus on two distinct outcomes: the first relates to the decision to start a business, and the second pertains to the expansion of a newly established business. The details of the variables are presented in Sections below. Despite the articulation with the previous literature, the survey was pre-tested to assess whether the participants understood the questions properly (Saunders et al., 2009).

Considering the specificities of the research objectives and research models introduced in Sect. previously, this study employs fuzzy-set Qualitative Comparative Analysis (fsQCA). FsQCA is a set-theoretic method that has been effectively applied in management and entrepreneurship research over recent years. Unlike traditional quantitative methods, which provide a single solution, fsQCA allows for the identification of equifinal configurations—different solutions leading to the same outcome—of conditions (i.e., independent variables) that may be present or absent when a certain outcome (i.e., dependent variables) is present or absent (asymmetry of solutions). Given that this research involves two different outcomes, it is possible (even if the conditions in the research models differ) for multifinality configurations to emerge (i.e., the same configuration leading to different outcomes), which would be a valuable finding.

To conduct fsQCA, the data must be calibrated, i.e., a value from 0 to 1 is assigned to represent the degree of membership in a specific set. This step is followed by necessity analysis, which aims to determine whether a specific condition is always or almost always necessary (consistency values equal to or above 0.9 or 0.8, respectively) for an outcome to occur. Finally, we proceed to sufficiency analysis, which, based on the truth table algorithm, identifies the configurations of conditions that lead to the outcome under analysis. The resulting configurations are evaluated based on consistency (above 0.75 to be acceptable) and coverage.

Outcomes

Opportunity-driven entrepreneurship

As noted in the literature review, opportunity-driven versus necessity-driven entrepreneurship is a relevant research topic. Furthermore, this is closely related to gender issues, and previous research finds that women are primarily necessity-driven entrepreneurs due to less developed social networks, among other factors. This trend persists despite the presence of policies targeting the reduction of this imbalance in several contexts.

To capture the nature of the entrepreneurial motivation (necessity versus opportunity), we had a group of options on the topic, including “being unemployed”, “desire to reach a better balance between personal and professional life”, or “being demotivated with the former job”, which we associate primarily with necessity-driven entrepreneurship, but also “desire to increase income”, “secure the continuity of a family project”, “there was a business opportunity” or “I wanted to convert a hobby into a business”. Participants could select multiple options. In this context, even if the respondent was unemployed but expressed being inspired by finding a business opportunity, this was classified as opportunity-driven entrepreneurship. Based on this approach, if we determined that the business was necessity-driven, we codified it as 0; otherwise, we codified it as 1.

Business diversification

For the business diversification variable, we asked the respondents two questions. The first was a closed question to understand the expectations and intentions regarding the evolution of the business over the following two years in terms of the number of employees, markets, and business areas. The respondents could indicate whether they expected changes and whether those changes would be positive or negative. For instance, they could report expectations of an increase in the number of workers while simultaneously predicting a decrease in the number of markets and business areas. We also included an open-ended question to clarify the basis for the respondents' expectations and intentions.

Based on the combination of both questions, we were able to determine whether the participants intended to diversify their activities (new markets, new business areas, or both) in the following two years and coded it as a binary condition where 0

refers to entrepreneurs not expecting business diversification, while 1 refers to entrepreneurs expecting to diversify their activities in the following two years.

Following this procedure, we identified only 18 entrepreneurs expecting or intending to diversify, which is itself relevant information. Analyzing the answers to the open-ended question and considering the findings by Uebbing et al. (2025), it was interesting to realize that some preferred to maintain their current activities because they feel fulfilled, wish to preserve a well-balanced life, or recognize that diversification would imply access to unavailable financial resources. One respondent stated, "I appreciate the comfort I have now, and expanding the target market and increasing the number of employees would raise stress levels without a corresponding financial return." Others expressed a negative assessment of the business environment, stating, "it is better not to explore other areas." Conversely, some participants acknowledged their expectation to diversify, noting that their accumulated experience makes running the business "easy." Others emphasize the importance of "not always doing the same thing" and their goal of increasing income or the strategic significance of diversification.

Conditions

Context

A distinguishing feature of this research is the context (European country, coded as 1 vs. developing African countries, coded as 0). Around 55% of the sample is composed of entrepreneurial projects in Portugal.

Education

Regarding education, the data were organized into four categories: (1) school education up to the 9th grade, (2) school education up to the 12th grade, (3) undergraduate degree, and (4) master's or PhD degree. The variable was coded such that a higher level of education corresponds to a higher value (4 for master's or PhD degree), and we calibrated 4 as the full-membership threshold, 1 as the non-membership threshold, and 2.5 as the maximum ambiguity threshold. Most participants attended school until they completed 12th grade or obtained an undergraduate degree.

Family support

The family's support for the entrepreneurial project was evaluated based on responses to a single question about the importance of such involvement in starting the business, using a Likert scale ranging from 1 (totally disagree) to 6 (totally agree) agree. To calibrate this variable, which had an average value of 3.9, we considered 1 as the non-membership threshold, 3.5 as the maximum ambiguity threshold, and 6 as the full-membership threshold.

Age

The respondents in the questionnaire were asked about their age when they started their first entrepreneurial initiative. The available answer options were 25 years old or less, between 26 and 35, between 36 and 45, between 46 and 55, and 56 or more. For the calibration of this variable, we assumed 0 as the younger, the interval of 36 to 45 as neither young nor old (maximum ambiguity), and 56 or more as the older, therefore calibrated as 1. The descriptive analysis of the data reveals a tendency to start entrepreneurial activities at a young age.

Access to finance

Gender differences in access to finance have emerged as a significant focus of research in the literature (Carter et al., 2015). Therefore, we used the responses to a question regarding the importance of banks in starting a business. As for family support, we employed a Likert scale ranging from 1 (totally disagree) to 6 (totally agree). To calibrate this variable, which had an average value of 1.8, we set 1 as the non-membership threshold but lowered the maximum ambiguity threshold to 2.5 and considered 4 as the full-membership threshold.

Business networks

In the stage after starting the business, the entrepreneur may enroll in networks with other businesses (calibrated as 1, i.e., full membership). We considered this a condition influencing the willingness to expand to other markets and business areas.

Results and analysis

After the calibration of the data, according to the steps presented in Sect. 3.1, we proceeded with the necessity analysis to check whether any of the conditions (or its absence) is necessary for the presence or absence of the outcomes. The results reveal that none of the conditions under analysis is necessary to the presence or absence of the outcomes, i.e., all had consistency values below 0.8. We then proceeded to conduct the sufficiency analysis for the presence and absence of opportunity-driven entrepreneurship and the business diversification intention. For the presence of opportunity-driven entrepreneurship, the results for the intermediate solution are presented in Table 1.

The results presented in Table 1 reveal the existence of configurations for the presence of opportunity-driven entrepreneurship specific to each context, as C1, C2, and C3 refer to developing contexts, while C4, C5, and C6 refer to the developed context. In the developing contexts, we notice the importance of education for younger entrepreneurs, even in the absence of access to finance (C1), but also in the presence of family support (C2). Nevertheless, opportunity-driven entrepreneurship can also occur for women with lower education and higher age, which is a very different type

Table 1 Configurations for the presence of opportunity-driven entrepreneurship (intermediate solution)

	C1	C2	C3	C4	C5	C6
Context	⊗	⊗	⊗	•	•	•
Education	•	•	⊗	⊗	•	⊗
Family Support		•	•	⊗	⊗	•
Age	⊗	⊗	•	⊗	⊗	⊗
Access to Finance	⊗		⊗	⊗	•	•
Raw Coverage	0.17	0.13	0.09	0.18	0.05	0.06
Unique Coverage	0.09	0.05	0.05	0.15	0.01	0.03
Consistency	0.96	0.86	0.83	0.81	0.80	0.83
Solution Coverage	0.49					
Solution Consistency	0.86					

• represents the presence of a condition, while ⊗ represents the absence of a condition. Source: Authors' data analysis using fs/QCA version 3.0 software.

of woman, if they have family support, even considering the difficulties in access to external financial resources, which seems to be a factor in developing countries.

In the developed context, we noticed that young, uneducated women, struggling to access external financial resources and without family support can, nevertheless, still pursue opportunity-driven entrepreneurship (C4), which is a very relevant configuration in the context of the importance of entrepreneurship to improve living conditions and brings to the debate the importance of the institutional context. C5, in this perspective, is much more according to expectations as it reveals well-educated women who manage to access external financial resources, despite their young age (which is a common trait in these opportunity-driven configurations in a developed context), and the lack of family support. Finally, C6 reveals the role of family support to overcome the lack of education, in a similar context of young women entrepreneurs with access to external financial resources.

Considering the research propositions and the asymmetry associated with fsQCA, we also ran an analysis for the absence of opportunity-driven entrepreneurship (a proxy for necessity-driven entrepreneurship), but the results didn't reach the minimum acceptable consistency (0.75). Therefore, we proceeded to analyze the presence of diversification intentions, obtaining the results presented in Table 2.

The analysis focused on the presence of a diversification intention (Table 2) reveals a single configuration, which is consistent but has very low coverage. This is a configuration for the developed context and depicts a young woman entrepreneur who, despite the low education and difficulties in accessing external financial resources, has relevant family support, which is well-described in the literature, and established business networks. Focusing on the absence of diversification intentions, the results are presented in Table 3.

Table 3 reveals the existence of five very diverse configurations for the developing countries' entrepreneurs (C1 to C5) and only two for the developed context (C6 and C7). Analyzing in detail the configurations pertaining to the developing contexts, C1 and C2 reveal that low education entrepreneurs, despite the family support, have in common the limited access to financial resources. However, even with access to financial resources (C4), older entrepreneurs without family support

Table 2 Configurations for the presence of diversification intentions (intermediate solution)

	C1
Context	•
Education	⊗
Family Support	•
Age	⊗
Access to Finance	⊗
Business Networks	•
Raw Coverage	0.04
Unique Coverage	0.04
Consistency	0.94
Solution Coverage	0.04
Solution Consistency	0.94

• represents the presence of a condition, while ⊗ represents the absence of a condition.
Source: Authors' data analysis using fs/QCA version 3.0 software.

Table 3 Configurations for the absence of diversification intentions (intermediate solution)

	C1	C2	C3	C4	C5	C6	C7
Context	⊗	⊗	⊗	⊗	⊗	•	•
Education	⊗	⊗	•	⊗	•	⊗	⊗
Family Support	•	•	⊗	⊗	•	⊗	⊗
Age		•	⊗	•	⊗	•	⊗
Access to Finance	⊗	⊗	•	•	⊗	⊗	⊗
Business Networks	⊗		⊗	⊗	•	⊗	•
Raw Coverage	0.16	0.11	0.03	0.04	0.06	0.10	0.03
Unique Coverage	0.09	0.02	0.01	0.02	0.03	0.10	0.03
Consistency	0.85	0.87	0.85	0.90	0.80	0.80	0.94
Solution Coverage	0.40						
Solution Consistency	0.85						

• represents the presence of a condition while ⊗ represents the absence of a condition

Source: Authors' data analysis using fs/QCA version 3.0 software

and lack of a business network tend to avoid diversification of their activity. Young and highly educated entrepreneurs are represented in configurations C3 and C5, but these are very diverse in terms of family support, access to financial resources and business networks but, still, don't expect to expand to new markets or to new business areas.

Interestingly, the developed context reveals two configurations that differ in terms of the age of the entrepreneur and the existence of business networks, highlighting that older entrepreneurs without business networks don't have plans to diversify their activities (C6) while younger entrepreneurs with business networks (C7) also intend to maintain their businesses focused on the current location and the current area of activity.

Discussion

Among the personal factors selected to conduct this research, education (Marques et al., 2011; Santos et al., 2019; Gomes et al., 2022) is considered one of the most important. Education enables a background that may help entrepreneurs find and successfully react to opportunities, access to financial resources (De Clercq & Brieger, 2022), and is known for its relationship with performance (Ayala & Manzano, 2014; Hampel-Milagrosa et al., 2015). Our results sustain the importance of education (especially for younger entrepreneurs in developing contexts) both in developed and in developing contexts, but having a higher education is not always necessary to pursue opportunity-driven entrepreneurship of business diversification, which opens the range of opportunities for women who, for whatever reason, possess a lower education level.

The family support, according to Prasad et al. (2013), associated with a stronger entrepreneurial spirit, greater persistence, and more risk-taking, is, in fact, relevant but not mandatory. The results reveal that, even without family support, women can start their entrepreneurial activity and, conversely, that even with family support they may decide not to diversify their businesses, therefore controlling the risk level.

Regarding age, although women typically engage in entrepreneurship in the 35–50 age range, we found that various configurations indicate that younger women can successfully pursue entrepreneurial opportunities. Previous research approaches the positive influence of age on performance and accessing financing (Pinazo-Dallenbach et al., 2016), but our results reveal that in a developing context, even older women have difficulties accessing financing, while in a developed context, even younger women can access financing, which reveals the importance of the institutional context and general business environment.

Considering the results on these three personal factors and the research propositions, we find support for P1 and P2, as personal factors are shown to influence opportunity-driven entrepreneurship and business expansion intentions.

Moving to the business factors, based on the literature review, we elected access to financing as one of the most critical business factors. Indeed, as Godwin et al. (2006) report, access to financing may be a significant barrier to starting a business. Based on the descriptive analysis of the data, we notice that the values for this variable are very low, which reveals the perception of the entrepreneurs based on their experience. Furthermore, we noticed that access to financing in the entrepreneurship decision is more severe in developing contexts, and in the expansion decision stage, access to financing is not a sufficient condition. After starting the business, the formation of networks may be relevant to introducing new products and services or entering new markets. However, the results are not conclusive despite the importance of this condition in several configurations. Based on these results, and considering P3 and P4, we consider that both propositions are supported.

Finally, P5 and P6 focused on the importance of the context. We collected data on developing countries, characterized by the turbulence and volatility in their sociopolitical environments, creating more challenges for business activities than in developed contexts, which were also covered by our data collection. Previous research has revealed the relevance of addressing women entrepreneurship in developing contexts

due to the specific implications (Hampel-Milagrosa et al., 2015; Roy-Mukherjee, 2015) and our research confirms that, in fact, both the configurations for opportunity-driven entrepreneurship and for diversification intentions are influenced and differentiated accordingly to the context, thus fully supporting our research propositions.

Conclusions and contributions

The phenomenon of entrepreneurship has been an increasingly vibrant research topic and has gained the attention of policy-makers worldwide, aiming to improve the context for the successful development of entrepreneurial activities. However, despite all previous contributions, we notice a lack of research focusing on entrepreneurship activities developed by women and in developing countries. Our research aims to contribute to this debate by embracing the topic of women entrepreneurship (Shaw et al., 2009) and by contrasting the conditions for opportunity-driven entrepreneurship both in a developed and in a developing context.

The results reveal the presence of several configurations both for the presence and absence of the outcomes under analysis, which supports our decision to use fsQCA to conduct the data analysis. Furthermore, in none of the configurations is the context an irrelevant condition, and there are no configurations common to both contexts. Both these findings support the importance of the context as an important analysis variable in entrepreneurship research and, most likely, the findings obtained in developed contexts need to be adapted to developing contexts, where, for instance, the institutional context, the culture, and social norms pose barriers to women trying to establish their own businesses based on opportunity identification. Therefore, when it comes to women entrepreneurship, not only is there a need to challenge the “masculinised models of entrepreneurship” (Shaw et al., 2009, p. 28), but also the direct use of the perspectives developed in developed countries to developing ones. This is an important theoretical implication of this research to be further consolidated.

In a complementary analysis, we also focused on how these entrepreneurs’ activities unfold, seeking to identify the conditions supporting expansion into other markets and areas. From the analysis of the respondents’ answers, we became aware that some entrepreneurs deliberately wish to maintain their businesses within the geographical limits and the activities they are involved in, for example, to maintain a balance between their professional and personal lives (De Clercq & Bieger, 2022), which aligns with research by Uebbing et al. (2025) on the stage after the foundation of a new business by women and their findings on the importance of the lack of support, lack of time for personal relationships, masculine stereotyping, and the implications of mental health problems on business growth intentions and opportunities. Nevertheless, we found some support for the importance of the simultaneous presence of business networks and family support in the developed context for business expansion. However, in terms of the absence of such intention, we found several configurations that lead us to believe that the phenomenon of business expansion needs to be better clarified to inform entrepreneurs and policymakers.

Considering the objectives of this research, we confirm that there are numerous differences in the configurations leading to opportunity-driven entrepreneurship between

developed and developing contexts and that both opportunity-driven entrepreneurship and business diversification result from a complex interplay between individual and business-related factors. Some of our findings related to individual conditions align well with previous research, but we also realized that, for instance, family support or education may not be sufficient to support opportunity-driven entrepreneurship or business diversification when other conditions are not properly aligned, which constitutes an avenue for new theoretical contributions. Additionally, although specific variables have been found to be relevant in previous research, their absence does not prevent entrepreneurial success, as there are alternative paths to meet the entrepreneurial goals.

These findings may be useful both for practitioners and policymakers targeting the development of new businesses led by women, for instance in terms of education/training as well in the conditions to access financial resources.

Limitations and future research

The instrument employed in this academic study, the questionnaire, emerges as the primary limitation of the research. Questionnaires were distributed to entrepreneurs in various regions; however, they were not sent to all entrepreneurs in these areas, resulting in a sample that is not representative. The limited number of responses obtained is also a limitation, as it may be considered biased due to the use of technology, which certainly won't be available to all entrepreneurs.

In future, researchers may consider conducting the survey among men in the same contexts to determine the extent to which gender influences the results. In this research, we handle the type of entrepreneurship as a binary variable, but we admit that there can be different degrees of membership both to opportunity-driven and necessity-driven entrepreneurship.

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Declarations

Competing interests The authors have no competing interests to declare that are relevant to the content of this article.

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