

*Research Paper***Women Entrepreneurs in Algarve: a case study***Submitted in 2nd, October 2023**Accepted in 13th, November 2023**Evaluated by a double-blind review system***BEATRIZ GÓIS^{1*}**
FRANCISCO BANHA²**ABSTRACT**

Purpose: This paper adds to the literature on female entrepreneurship in the Algarve region in Portugal. We obtained data on the profile, motivations and difficulties experienced by female entrepreneurs and studied the effects of the Covid-19 pandemic crisis on their ventures.

Design/methodology/approach: The research resorted to a Case Study approach, along with semi-structured interviews with twenty-four women who create and develop their activity in Algarve.

Findings: It was concluded that the presence of entrepreneurs in the family, the influence of networking, and knowledge and professional experience were relevant factors for their entrepreneurial initiative and behaviour. The main constraints identified were: insecurity and difficulties in hiring staff. Regarding the motivations of female entrepreneurs, the need for independence and personal fulfilment stand out, reflecting a predominance of entrepreneurial activity based on the identification of opportunities. The negative impact of the pandemic on the business development of the interviewees, although mitigated by digital tools, was felt globally.

Originality/value: As the literature review established, despite being a well-known tourist destination internationally, the Algarve region remains overlooked, especially when it comes to the study and analysis of social and economic dynamics. In the same vein, so has the study of female entrepreneurship in the region. The methodology used in this paper allowed for the creation of a survey that provides new empirical information.

Keywords: Entrepreneurship, Female Entrepreneurship; Algarve Entrepreneurial Ecosystem; Pandemic; Case Studies.

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1. Introduction

The role that entrepreneurship plays in women's freedom and independence is of the utmost importance (GEM, 2022; Kacar et al., 2023). It promotes gender equality and social inclusion (Vieira, 2019; Abbas et al., 2022; Tillmar et al., 2022), as well as economic development. It should be noted that there are fewer companies created and managed by women compared to those run by men (GEM, 2022). This asymmetry became more pronounced with the covid-19 pandemic crisis (OECD, 2021a; Strawser et al., 2021; GEM, 2022). Given the significant contribution that women can make to entrepreneurship (Noguera, Álvarez & Urbano 2013) and economic development (Kelley et al., 2017; Hechevarría et al., 2019), inquiries on this topic are essential. This study resorted to a case study research based on the real-life stories of female entrepreneurs with businesses in the Algarve region.

Our aim was to consolidate and strengthen the existing research on female entrepreneurship and to provide insights regarding the Portuguese case in general, and the Algarve region in particular. In this context, the general objectives of the research were to obtain data on the profile, motivations and difficulties experienced by female entrepreneurs who have created and run their businesses in the Algarve region. It is also intended to study the influence of the covid-19 pandemic crisis on female entrepreneurship, both in existing businesses and in those that emerged after the pandemic.

Studies concerning entrepreneurship in Portugal exist but are still scarce. When it comes to female entrepreneurship, research tends towards sociological issues, closely associated with the social, professional and emotional dimensions. This leaves almost untapped a more economic side, that we explored in this research. Furthermore, the methodology used, the region we looked into, and the period (indeed, the post-pandemic era frames this paper) are novel. This research builds-up on more than a decade of studies in Portuguese academia, while bringing to the discussion new information and data, in order to fill the gap concerning the profiling of women's entrepreneurship in the Algarve, along with the factors that compel or hinder their action and how they were affected by the pandemic.

According to the OECD-European Union report "The Missing Entrepreneurs 2021" women are 40% less likely to be self-employed. The same situation occurs in Portugal, according to the results presented by the Global Entrepreneurship Monitor. In 2019/2020, early-stage male entrepreneurs corresponded to 16% of the adult male population, while the number of early-stage female entrepreneurs was only 9.9% of the adult female population (GEM 2021b). Data obtained by the report "The Mastercard Index of Women Entrepreneurs" (2022) indicates that globally 80% of female entrepreneurs experience difficulties in obtaining credit. The results of this index show that, in what concerns female entrepreneurs' access to finance, Portugal is still in 31st position, significantly below the global average. One of the main causes attributed in the literature for the existing barrier to access to finance is gender discrimination (Gupta et al., 2019). Moreover, insufficient access to business networks, lack of training and technical knowledge are other factors that make women have fewer opportunities to make their business ideas a reality (OECD, 2021a).

The reasons presented above lead us to analyse what motivates women to undertake entrepreneurial activities despite difficulties. Women's motivations for entrepreneurship can be divided into push and pull factors (Carranza, Dhakal & Love 2018). Female entrepreneurs motivated by push factors (or pull factors) are those who are pressured by an external force, namely: the loss of a job; economic needs and financial burdens; dissatisfaction with their previous job (Carranza et al., 2018; Patil, 2019). In this case, they create their own company not out of choice but out of necessity (Orhan, 2005; Sangolagi & Alagawadi, 2018). In Portugal in the period between 2016 and 2020 there was an increase in the number of entrepreneurs who started their businesses out of necessity, especially women, with a percentage of 31% (OECD, 2021a). Pull (or attraction) factors, include women's desire to do something for themselves or for society, the pursuit of social status, passion for a particular field and the search for independence and personal growth (Carranza et al., 2018; Patil, 2019). These factors attract individuals to a particular business for its potential and future advantages it will bring (Orhan, 2005). Also, while a large part of entrepreneurs strives for wealth and economic growth, (Pereira, 2016; Carranza et al., 2018), several authors suggest that a better work-life balance is one of the most recurrent reasons for women to start their businesses (IFDEP, 2014; Pereira, 2016; Carranza et al., 2018; Rivera et al., 2021).

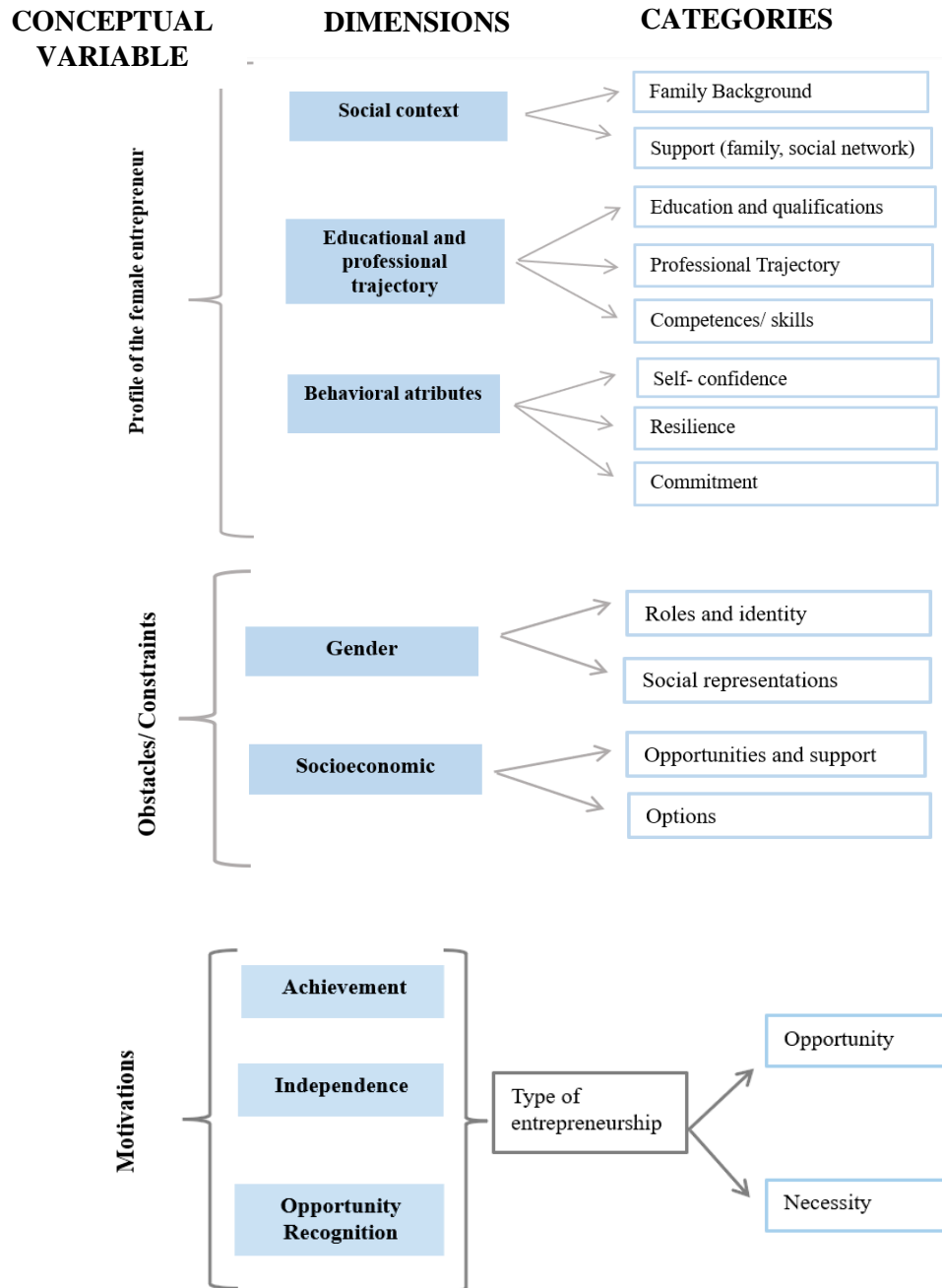
Finally, we should highlight the Covid-19 pandemic crisis, and in what ways it affected the most women's entrepreneurship and women's business. Containment measures had a strong impact on self-employment, which has resulted in the closure of companies, a decrease in the number of employees, a reduction in hours worked and in the income obtained (Papadopoulos, Baltas & Balta 2020; OECD 2021a). As it happened in other areas, women were also the most affected in the business environment, mainly due to the aggravation of the challenges and limitations they were already dealing with before the pandemic (OECD, 2021a; Abuhusseini, 2022; MIWE, 2022). About two out of three female-run businesses were heavily affected by the pandemic (MIWE, 2022), with 27% of female-run businesses closing globally compared to 20% of male-run businesses in the period January-May 2020 (OECD, 2021a).

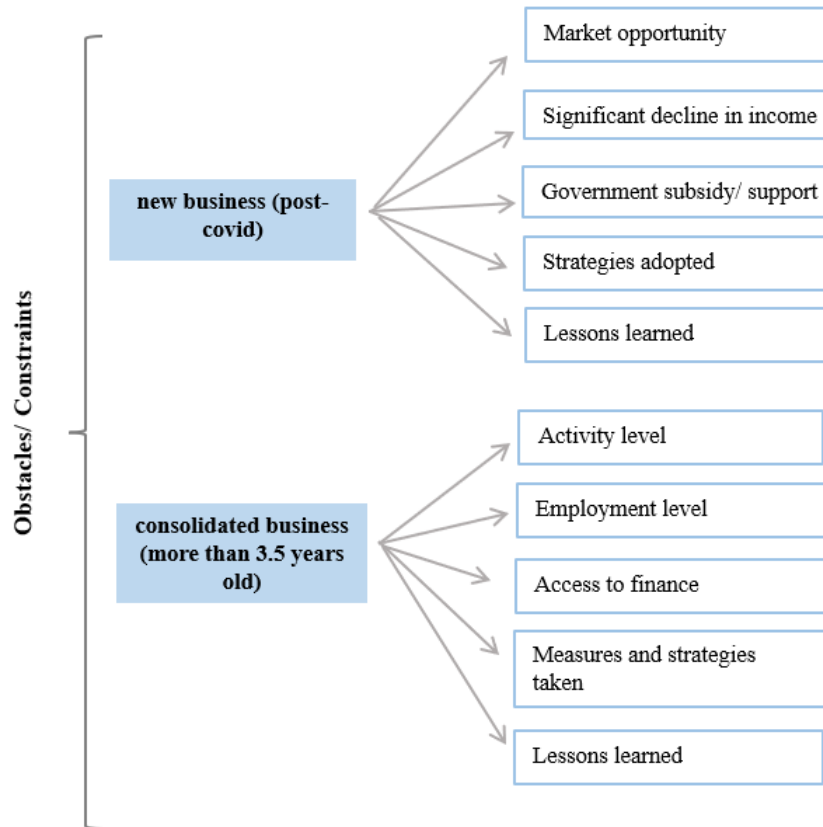
One justification for the strong impact of the pandemic crisis on female entrepreneurs relates to their concentration in sectors that have suffered a greater impact and with less access to resources (ITC, 2020; OECD, 2021a; MIWE, 2022). According to Popović-Pantić et al. (2020) the sectors most likely to have been affected by Covid-19 measures and restrictions are those in which women have most of their small and medium-sized enterprises namely tourism, education, day care centres, restaurants, beauty salons and hairdressers. Manolova et al. (2020) further add that one of the causes for women being disproportionately affected during the pandemic crisis compared to men is the fact that female entrepreneurs run younger and more vulnerable businesses. Another challenge that the pandemic crisis caused for women entrepreneurs was the reduction in the time they devoted to their businesses. With schools closed and family members sick, women were the ones who assumed the most domestic responsibilities and primary care during the pandemic as they struggled to save their businesses (Luño, 2020; Manolova et al., 2020; Popović-Pantić et al., 2020; Afshan et al., 2021; OECD, 2021a; MIWE, 2022).

When it comes to the framework of data synthesis, bearing in mind the need to identify a model that could provide an adequate basis for research, including the development of instruments for data collection and processing, interpretation and presentation of results and the conclusion of research results (Banha, 2020), the model developed by Vieira, as part of her research on female entrepreneurship in the Algarve region, was adapted to the objectives of this study. The general research objectives allowed the identification of four

conceptual variables (profile, motivations, obstacles and impact of the covid-19 pandemic crisis), for which the respective dimensions and categories were created. The categories created, by grouping a set of similar elements under an identifying title (Bardin, 2018), allowed us to operationalize the key concepts of the adopted model (Banha 2020). The analysis framework is presented in figure 1, where each of its constituent elements are detailed.

Figure 1: Conceptual Framework Synthesis





Source: own elaboration

2. Methodology

2.1 Choice of research methodology

The case study, by seeking to answer the questions of "how" and "why", proves to be the most appropriate choice as it allows for holistic and real context analysis of variables (Yin, 2018). In addition, the case study was chosen because it deals with a contemporary phenomenon embedded in a real context (Yin, 2018) and allows for a deeper analysis of the phenomenon under study. In this research, the case study allows the expansion of a problem that is still underdeveloped, particularly in the Algarve region.

2.2 Organization and implementation of the empirical research

2.2.1 Region of study

The research was delimited to the Algarve region. Located in the south of Portugal it consists of 16 municipalities. The city of Faro is the district's capital. Despite its favourable environment for innovation and entrepreneurship, this region still remains highly dependent on tourism and below the EU average in terms of competitiveness, which makes the emergence of new entrepreneurial opportunities all the more relevant (Vieira, 2019; EC, 2022).

Figure 2: Map of Portugal with the location of the Algarve and its 16 municipalities



Source: <https://www.pordata.pt/O+what+are+NUTS> and <https://cheveuxcrepusfrun.blogspot.com/2017/09/algarve-mapa-concelhos.html?m=0> (Access: April 26, 2023)

2.2.2 Selection of Case Studies

Taking into account the chosen region and in order to choose cases that would allow for a broad understanding of women’s entrepreneurship (Banha, 2020), the following selection criteria were established: women aged between 18 and 65 years, with consolidated enterprises, i.e., who started their entrepreneurial activity more than 42 months ago and are responsible for its management (RED GEM, 2020; GEM, 2021a). We also sought to select women entrepreneurs who developed their businesses after the beginning of the pandemic, i.e. 2020 and 2021, in order to also grasp the perspective of women involved in the entrepreneurial process during the context of the pandemic.

The first contact was established with the National Association of Young Entrepreneurs (ANJE), in which the project and research objectives were presented via email, requesting testimonies from women entrepreneurs according to the criteria previously established. Priority was also given to accessing key informants and the snowball sampling technique was used. These techniques allowed access to female entrepreneurs with characteristics and experiences interesting to the research objectives. In the end, the testimony of 24 participants was recorded, which constitutes the case studies of this research.

2.2.3 Data collection organization and implementation process

The data collection process consisted of semi-structured interviews, which assumed particular importance given its recognised advantages (despite the existence of a set of previously defined questions) in enabling the interviewees a great deal of leeway to respond (Bryman, 2019). In this context, out of the 24 interviews conducted, 13 were conducted face-to-face and 11 were conducted online through the Zoom platform. The interviews were conducted between 17 December 2021 and 8 March 2022 and their duration varied according to the participants, registering an average time of 30 minutes

per interview. Based on the conceptual model adopted, a script consisting of open and closed questions was prepared and acted as a guide to the conversation dynamics.

2.2.4 Process of data treatment, analysis and presentation

In order to interpret the interviewees' accounts and the meanings assigned by them to their behaviours (Banha, 2020), content analysis was used as a data analysis technique. A selection of the most important information to answer the proposed objectives was thus carried out (Miles et al., 2018). For data synthesis, a coding system was applied, which allowed for transforming the raw data collected in the interviews and presenting it in a more simplified way (Bardin, 2018). For this process, the grids below were created, guided by the theoretical framework. The most relevant quotes and sentences from the interview transcripts were grouped into the corresponding categories and dimensions.

Finally, the collected material was analysed and compared to other studies. The data obtained from the interviews are presented in four subheadings corresponding to each of the conceptual variables of the theoretical model adopted. It should be clarified that in the presentation and analysis of the results obtained, for confidentiality reasons, the names of the women entrepreneurs interviewed are not mentioned, and each one is identified with a numerical character that follows the chronological order in which the interview was conducted.

3. Presentation and discussion of results

Table I: Profile of entrepreneurs

Entrepreneur	Age	Civil status	N° of children	Level of studies	Business Training	Education Entrepreneurship in the educational pathway
E1	29	Single	0	Degree in business administration Master in Marketing	Yes	Yes
E2	32	Single	0	Degree in Educational Sciences	No	No
E3	40	Single	0	Degree in Communication Sciences Degree in Design	No	No
E4	36	Married	2	Master in Economics, Innovation and Entrepreneurship	Yes	Yes
E5	42	Married	2	Degree in Civil Engineering Master in Management	Yes	Yes
E6	43	Married	1	Degree in Economics Postgraduation in Taxation	Yes	No
E7	65	Divorced	3	Law degree Postgraduation in Taxation and Human Resources	Yes	No

E8	45	Married	2	Degree in Computer Engineering MBA	Yes	Yes
E9	58	Divorced	1	Degree in History	No	No
E10	57	Non-marital partnership	1	12th grade	No	No
E11	46	Divorced	2	Degree in Social Communication	No	No
E12	40	Non-marital partnership	0	Degree in Design	No	No
E13	62	Widow	1	4th grade	No	No
E14	36	Single	0	Degree in Hotel Management	Yes	No
E15	46	Divorced	2	Degree in business administration	Yes	No
E16	55	Married	1	Degree in Hotel Management Postgraduation in Organizational Leadership and Team Empowerment	Yes	No
E17	37	Non-marital partnership	0	Professional course	No	No
E18	46	Married	1	Law degree	No	No
E19	50	Married	0	9th grade	No	No
E20	37	Married	2	12th grade	No	No
E21	26	Married	0	12th grade	No	No
E22	33	Non-marital partnership	2	Degree in Educational Sciences Postgraduation in Human Resources	Yes	No
E23	34	Non-marital partnership	3	Degree in Educational Sciences	No	No
E24	40	Married	2	Law degree	No	No

Source: Own elaboration

Table II: Business Information

Entrepreneur	Company Activity	Year of Beginning of Activity	Location	Nº of employees
E1	Organic Bulk Grocery	2018	São Brás de Alportel	0
E2	Hairdresser	(julho) 2021	Loulé	0
E3	Holistic therapies and coaching	2015	Faro	0
E4	Restoration	2010	Lagos	3
E5	Civil Engineering	2018	Faro	0

E6	Accounting and consulting	2007	Faro	8
E7	Agronomic Engineering	1982	Olhão	86
E8	consumer electronics	2013	Faro	40
E9	Marketing, communication and events agency	2002	Loulé	3
E10	Natural products store/ Soap shop	2014	São Brás de Alportel	0
E11	coworking space	2014	Faro	4
E12	jewelery	2012	Loulé	0
E13	Clothing store	2000	Loulé	0
E14	Platform for digital nomads	2020	Lagos	0
E15	Interior Design	2010	Loulé	16
E16	Luxury Hospitality Consulting and Human Capital Development	2014	Faro	6
E17	Software development	2009	Albufeira	6
E18	Yoga Centre	2019	Loulé	0
E19	Hairdresser	2000	Loulé	0
E20	Clothing store	2017	Loulé	1
E21	Florist	2018	Loulé	1
E22	Restoration	2021	Olhão	5
E23	Restoration	2012	Loulé	12
E24	Advocacy	2016	Faro	0

Source: Own elaboration

3.1 Profile of female entrepreneurs

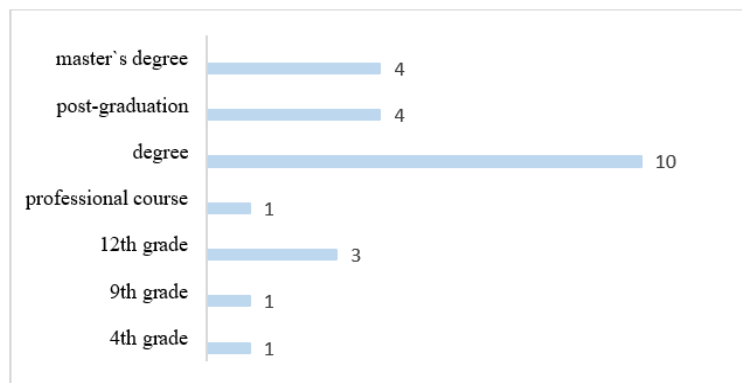
The average age of the female entrepreneurs that participated in this study is 43.1 years. Most are married and have children and the mode of the number of offspring is 2. This data is in line with previous studies that point to a positive relationship between female self-employment and the presence of children and there is a high probability that female entrepreneurs are married (Afeju, 2019; Molina, 2020). In addition, women are less likely to employ employees than men, as demonstrated by Nunes and Capontes (2014) and by the GEM (2021b). In this research, 11 female entrepreneurs have no employees and only two have more than 20.

In order to identify the factors that contributed to the creation of businesses by the interviewees, we sought to understand the influence of the social context and family origin in the creation of the women entrepreneurs' businesses. The existence of an entrepreneurial family background was perceptible since only 3 of the 24 participants stated that they did not have an entrepreneurial figure in their family. Among the remaining interviewees, who grew up with entrepreneurial siblings, parents and grandparents, almost all of them mentioned that the fact that they had had contact with entrepreneurship from an early age made it easier for them to follow the same path, since,

in addition to the support provided by their family members, this allowed them to have a greater sense of confidence in their abilities and to input important knowledge and experiences into their current activity. These traits are aligned with similar studies (Edelman et al., 2016; Rahim et al., 2017; Rugina, 2018; Ogundana et al., 2021). This study found that almost all female entrepreneurs had the support of family and friends when starting their activities and consider the support of the network of contacts to be essential for those who want to follow an entrepreneurial path. Based on the testimonies analysed, it is also important to highlight the importance of networking by providing female entrepreneurs with access to resources, information, experiences and new business opportunities (Bullough et al., 2021).

We also sought to understand whether the female entrepreneurs had any type of training in entrepreneurship education to encourage them to become entrepreneurs. It was concluded that none of the interviewees had contact with entrepreneurship education during compulsory school. Only one of the female entrepreneurs had contact with entrepreneurship during her college course. However, these interviewees considered entrepreneurship education crucial and of great added value if and wished they had had the opportunity to be taught the skills and knowledge necessary for the activity they currently develop. It is important to highlight that the evidence presented above on the generalised lack of participation and/or contact with entrepreneurship education programmes by female entrepreneurs is in line with the results of different studies (Saúde et al., 2019; Toutain et al., 2019; Banha et al., 2021; Jardim, 2021; GEM 2022; Banha et al., 2022a, 2022b). In this sense, it is considered that the implementation by policymakers of clear strategies that allow the development of entrepreneurship education programmes in the region could contribute to better-prepared and adapted entrepreneurs (Banha et al., 2022a).

Graphic 1: Academic Qualifications



Source: Own elaboration

As can be seen in graphic 1, regarding the participants' educational qualifications, a high level of education is visible. These results are in line with the data presented by OECD (2021a), which indicate that most female entrepreneurs in the European Union are more likely to have higher education degree, and that there is a positive correlation between the level of education and women's entrepreneurial success (Khan et al., 2021; Babajide et al., 2022; Ge et al., 2022). All participants considered their previous education or work experience indispensable for their current activity, which reinforces the studies of other authors such as Rahim et al. (2017) and Rugina (2018) regarding the importance of previous knowledge and experience for business management. Ten of the female entrepreneurs in this research have attended higher education courses in the business

domain in areas such as innovation economics and entrepreneurship, human resources, management, taxation and marketing, a circumstance that has been deemed relevant to business success, as noted by Switten (2013).

When questioning the participants about the attributes that characterised them, resilience was identified as the most cited, followed by optimism. Commitment, empathy and concern for others are also mentioned. These qualities are often cited in the literature to characterise women entrepreneurs (Acevedo-Duque et al., 2021; Pierli et al., 2022). Other research conducted indicates that women tend to show particular concern for the environment and sustainability (Acevedo-Duque et al., 2021; Pierli et al., 2022), features that are also found in these female entrepreneurs. Commitment, passion for what they do and the search to constantly improve and innovate their products are other characteristics of these interviewees.

3.2 Obstacles

Table III: Obstacles

Difficulties	Participants
Fear and lack of confidence	E5, E7, E12, E17, E23
Talent recruitment, attraction and retention	E6, E7, E8, E14, E15
Customer acquisition and loyalty	E3, E9, E11, E20
Financial resource management	E2, E3, E7, E16
Find space	E6, E8, E21
Legislation and bureaucracy	E2, E10
Access to information	E1, E2
Balancing work with family life	E23; E24
Get funding	E4, E7
Strategy	E5, E22
Organisation / management of various areas	E12, E24
Social network management	E18

Source: own elaboration

As shown in Table III, in addition to difficulties in recruiting staff, the biggest barrier to entrepreneurship was the lack of confidence, fear and insecurity associated with setting up a new business. This data corroborates other research that analysed the lack of confidence that female entrepreneurs feel regarding their perceived abilities to start a business (Rahim et al., 2017; GEM, 2021b). Unlike a study conducted in the north of the country, which concluded that bureaucratic issues are the biggest impediment for female entrepreneurs to launch their businesses in Portugal (Bernardino & Cardoso, 2018), in this research, excessive bureaucracy and difficulties in legalising the space and products were factors mentioned by only two female entrepreneurs.

Being a woman and age are perceived as difficulties when contacting financial institutions for two of the interviewed entrepreneurs, which is in line with the conclusions of Fielden

and Davidson (2005) and Gupta et al. (2019) regarding the difficulty in accessing finance resulting from gender status. It should be noted that of the 24 research participants, only 6 contacted financial institutions when starting their activity, the rest invested only their own capital. Most of them stated that they have never needed external financing, as they run businesses with little risk and that require small investments. These findings are also aligned with other research, which concluded that women entrepreneurs' initiatives are usually less risky because they operate in sectors that require less investment (Carranza et al., 2018; Cowling et al., 2020). Furthermore, the literature also mentions that women usually turn to sources of finance close to them such as friends and family, rather than external sources such as bank loans or investments from venture capital firms (Carranza et al., 2018; Molina, 2020).

Another question asked concerned the support used by the research participants. Some participants highlighted their perception of a lack of support for entrepreneurs. We also found that the interviewees were unaware of the existence of other key entities of the entrepreneurial ecosystem. This reality made it possible to observe that most of the female entrepreneurs did not benefit - largely due to their lack of knowledge of the existence of these entities that promote and boost the entrepreneurial process, nor of the instruments they have to support the development of their activity - from existing public support policies, namely the advantages provided by the interaction with the various entities of the regional entrepreneurial ecosystem, particularly in terms of the use of their infrastructures, training programmes and instruments to support entrepreneurial initiative. As Graça (2015: 50) identified, despite the existence of programmes, stimuli and support networks to boost entrepreneurial activity in the Algarve region, "creativity and innovation do not take root in public and private actors", which means that the message that should be transmitted is not reaching its target audience.

We also sought to understand in what way gender worked as a conditioning factor for entrepreneurship. As in other studies conducted in Portugal with female entrepreneurs (e.g. Santos, 2014 & Vieira, 2019), most of the interviewed participants never felt any prejudice due to their gender status. However, we found some cases of female entrepreneurs who felt disadvantaged for being women. By the same token, multitasking and work-life balance were very present in the discourses of these entrepreneurs. Despite not occurring in all cases, most women confirm having an increased effort in performing daily tasks, which reinforces the weight of women's double journey in managing paid and unpaid work (Vieira, 2019). As Vieira (2019) mentions, this issue varies according to the entrepreneurs' household, i.e. according to their marital status and number of offspring. Therefore, this research also shows that reconciling the business with family responsibilities is an added challenge for female entrepreneurs who have children. Some participants also indicated an increased difficulty in reconciling family responsibilities and childcare with running the business during the pandemic crisis, which is in line with the data presented in the literature regarding the time spent by female entrepreneurs during the pandemic crisis period on performing household chores and family care (Luño, 2020; Manolova et al., 2020; Afshan et al., 2021; OECD, 2021a; MIWE, 2022).

3.3 Motivations

Table IV: Motivations

<i>Entrepreneurship by necessity</i>	
Motivations	Participants
Unemployment situation	E10; E23
<i>Entrepreneurship by opportunity</i>	
Motivations	Participants
Autonomy/ Independence	E4, E6, E7, E11, E14, E15, E18, E21
Personal fulfilment /Passion for the field	E3, E4, E10, E13, E16, E20, E22
Identifying and exploiting business opportunities	E1, E8, E11, E14
Expertise and experience in the field	E2, E6, E7, E9, E16
Job dissatisfaction	E1, E2, E5, E6, E12, E16
Better work-life balance	E9, E24
The opportunity arose	E17, E18, E19

Source: Own elaboration

As can be seen in table IV, the participants were driven by a combination of several factors and most of them created their businesses out of opportunity. Only two women entrepreneurs started their businesses out of necessity, due to unemployment. It should be noted that none of the 24 interviewees indicated wealth creation as a reason for having started their activity. As in the study conducted by (Switten, 2013), also in this research, the search for greater independence and autonomy were the motivations most often identified by the participants. The search for independence and autonomy was considered to include the freedom and desire to make their own choices and the willingness to act according to their own rules, be their own boss and manage their own schedule, as described in (Solesvik et al., 2019).

Interestingly, the search for better schedule flexibility in order to reconcile family and professional life was not a preponderant factor for them start their activities, contrary to what other studies already conducted indicate and that consider this as the main reason for the creation of women's ventures (e.g. Rivera et al., 2021).

3.4 Pandemic Crisis Covid-19

For most of the women interviewed the pandemic had a negative impact, especially in the areas of accommodation and catering, similarly to what happened across the board in Portugal (Manteu et al., 2020). The inability to make physical sales due to lockdowns and the decreased purchasing power of customers caused a decrease in sales and a loss of consumers of their products/services. Other difficulties experienced were related to access to raw materials and the closure of events, markets and fairs. However, despite the negative effects of the pandemic on businesses, not all economic activity was affected (Digitally Driven, 2021; Blaique et al., 2022). In this research, we found several female entrepreneurs who did not experience changes in the turnover of their companies, and in

some cases, there was a reinforcement of the activity, namely in the areas of engineering, law, interior design and florist.

There was an increase in the number of employees during the pandemic period in the companies of four interviewees (accounting and consulting, agricultural engineering, consumer electronics and interior design) and a decrease in the number of employees in the companies of two entrepreneurs (marketing and communication of events and software development). The changes brought about by the pandemic crisis required adaptation in business operations (Akpan et al., 2022). As in other studies conducted with women entrepreneurs (e.g. Afshani et al., 2021; Manolova et al., 2020) it was concluded that despite the strong impact of covid-19 on their businesses, they developed strategies and managed to capture new opportunities. The main measure used by the interviewees was the adaptation to digital through the use of online tools and teleworking, which demonstrates the importance of information and communication technologies during the pandemic crisis (Afshani et al., 2021; Digitally Driven, 2021; Akpan et al., 2022).

Other measures implemented included the adjustment of the corresponding business plans as a means of supporting the management of the respective enterprises, the use of synergies, the development of new areas useful at the pandemic level, the reorganisation of spaces by alternating presence in the facilities and the use of universal measures promoted by the government. In line with Ratten (2021), it was found that very few female entrepreneurs had contingency plans that allowed them to respond strategically, reacting and adapting their business to the circumstances that arose. Most of the interviewees used support from the central government, such as lay-offs and suspension of tax and contribution payments (Manteu et al., 2020), considering this aid to be fundamental to maintaining their business afloat.

In a crisis situation, the increase in unemployment and the lack of alternatives lead many people to start a new venture. Similarly, there is an increase in entrepreneurial activity caused by opportunity, through the creation of ambitious projects capable of surviving and growing in a situation of economic instability (Linã & Jaén 2020; Baral et al., 2023), as is the case of entrepreneur 14 who created a digital platform aimed at digital nomads, given the growing increase during the pandemic, in the Lagos region. Indeed, an increase in opportunities for new entrepreneurs with the acceleration of digital during the pandemic is confirmed by the literature (ILO, 2021; Scheidgen et al., 2021).

Finally, intending to gain a better understanding of the experiences of female entrepreneurs that may be useful for the future (Afshani et al., 2021), we sought to assess the main changes in the companies and lessons that the participants learned from the pandemic. Based on the literature analysed and the testimonies of the female entrepreneurs the capacity for adaptation, resilience and taking advantage of opportunities that a crisis can provide stands out (Doern et al., 2019; Tagliazucchi et al., 2023). In addition, as identified in the literature (Ratten, 2020; Thorgren and Williams, 2020; Afshani et al., 2021; Belitski et al., 2021), from the perspective of these female entrepreneurs, the pandemic caused permanent effects on the way businesses are managed, leading to a more technological entrepreneurship and, consequently, to new work concepts.

3.5 Limitations and proposals for future research

Even bearing in mind that the study provided important information for understanding entrepreneurship in Algarve carried out by women, it is important to mention the

existence of some limitations. The fact that the study was carried out based on the perceptions of the interviewees is a limitation, due to subjectivity. In order to eliminate or reduce these research gaps, we suggest for future research the use of a quantitative method by applying a questionnaire to a larger number of women entrepreneurs, and a combination of quantitative and qualitative methodology may also be used. In order to obtain results on gender-related differences, a study with a male group may also be interesting for data comparison.

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