



A qualitative investigation into perceived barriers experienced by European female agri-food entrepreneurs

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Abstract

Purpose Agri-food systems in Europe are predominantly male dominated. Female food entrepreneurs can play a key role in the development of novel, sustainable food products. The aim of the present study was to gain an increased understanding of the various barriers which female agri-food entrepreneurs situated in rural areas perceive as hindrances to their entrepreneurial growth and development and their opinions on mentorship programmes.

Methodology Seven separate focus groups comprising of a total of 25 female participants were carried out with agri-food entrepreneurs throughout Europe (Ireland, Belgium, Poland, Italy). Discussions were semi-structured and revolved around individuals' perceptions of the support received from their surrounding infrastructure and their opinions on barriers and enablers for entrepreneurship development. A reflective thematic analysis was conducted following verbatim transcription of the conversations from the focus groups.

Findings Three major themes were identified. Barriers to business development included the lack of adequate financial support and the frustrations experienced with the complexity of funding applications. Socio-cultural support was oftentimes lacking. Participants were aware of the benefits of an online presence to develop their business but lacked confidence in their digital abilities. Few female entrepreneurs were aware of mentorship programmes, and most were unsure what this practice would entail. These findings highlight a range of issues in need of addressing to improve the infrastructure surrounding female agri-food entrepreneurs throughout Europe.

Keywords Entrepreneurship · Perceptions · Barriers · Mentorship · Supports · Female entrepreneurship

JEL Classification Q10 Agriculture—general · Q13 Agriculture—markets and marketing · Cooperatives · Agribusiness

Introduction

Entrepreneurship is an individual's creative capacity to firstly identify an opportunity, then to pursue it with the aim of producing new value or economic success (Department of Enterprise, Trade and Employment, 2014). More recent definitions, such as that by Elia et al. (2020), highlight the process, innovation, and creativity behind entrepreneurship, recognising it as a 'process of identifying potential business opportunities and exploiting them through the recombination of existing resources or the creation of new ones to develop and commercialise new products and services'.

Primary characteristics of a successful entrepreneur include having a willingness to seek out new information in order to expand their knowledge and skillset and having the ability to pursue opportunities when they arise (Anand & Krishna, 1994; Meek et al., 2010). Such entrepreneurial activity is a significant measure of a country's vitality (Stice & Desjardins, 2018). Therefore, ensuring adequate supports are available to those in this profession should be among a country's key priorities. However, previous research has suggested that entrepreneurs feel supportive resources such as training and skill development programmes are lacking. This has been cited as one of the main barriers early-stage entrepreneurs face across Europe (Iakovleva et al., 2014).

Often recognised as its own type of entrepreneurship, female entrepreneurship aims to gain an insight and better understanding as to how females specifically develop their entrepreneurial ventures (Hossain et al., 2023).

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Females have been suggested as among the most vulnerable of entrepreneurs, and therefore, understanding their experiences within the entrepreneurial realm is critical for the development of counteractive supports (Gangadhar, 2020; Rajendran and Indapurkar 2020; Kumari and Egu-ruze 2022). The most recent statistics from the Central Statistics Office (CSO, 2020) in Ireland show that women account for approximately 25% of the total agricultural labour force in Ireland, of which approximately 13% are holders of the farm which they work on. On a European scale, 31.6% of all farmers in 2020 were women (Eurostat, 2022). Both in developing and developed countries, males dominate the entrepreneurial field, and of those who are female, their businesses are oftentimes smaller and less productive than that of their male counterparts (Nsengi-mana et al., 2017). Previous research comparing the barriers men and women perceive in the entrepreneurial realm, though sparse, suggests that there is a significant difference in the barriers perceived between genders. The potential barriers to entrepreneurship are many and vary hugely and include, for example, institutional, political, economic, social, legal, and psychological constraints (Khanin et al., 2022). While financial constraints are among the leading physical barrier perceived by all entrepreneurs, family constraints for example are more prominently experienced by females (Gorgi, 2018). Entrepreneurs have previously stated that they faced a variety of barriers, both at the initial start-up phase and further developmental phases of their businesses. Of these, issues being able to adequately finance their business were among the most common, particularly in the earlier stages of their endeavour (Hoogendoorn et al., 2019). The notion of inadequate financial support for entrepreneurs is a shared perception throughout the European Union (Grilo & Thurik, 2005). In addition to this, entrepreneurs situated in rural areas experience a range of barriers unique to their geographical location which are not issues for those situated in urban areas, such as underdeveloped and ineffective transport system (Chu et al., 2007). Entrepreneurs have previously described their awareness of potential hinderances to their business success and the pressure they feel to prepare for upcoming financial struggles, indicating that the viewpoint of entrepreneurship as a financially insecure profession still exists (Nyström, 2021). In addition to physical supports, it has previously been established that peers and entrepreneurs' degree of emotional support from their surrounding infrastructure can substantially impact their behaviours and activity (Klyver et al., 2018; Downing, 2005). Suggestions to counteract the negative emotions resulting from a psychologically unsupportive environment include increasing the availability of training courses not only to support entrepreneurs physical business development and

success but also to improve their inner self-talk, self-belief, and self-confidence (Roper & Scott, 2009). Other barriers often cited include difficulties with the administrative processes behind applying for financial support, females experiencing gender discriminatory behaviour from those at higher levels, peers, and customers, and having difficulties navigating technology in a manner to efficiently market and expand their business (Kirkwood, 2009; Ilie et al., 2021).

As a potential method to decrease the stressors of starting an entrepreneurial endeavour, the concept of integrating role models from similar backgrounds into training programmes has been recommended (Kelley, 2013). Partaking in mentorship programmes has also been suggested as an activity to support gender equality throughout entrepreneurship. Providing both physical information and skill development advice, as well as supporting psychological growth, integrating entrepreneurial role models as mentors holds a myriad of benefits (Kelley, 2013). Mentorships may offer an entrepreneur guidance, direction, and support throughout their endeavour and help them overcome barriers as they arise (Prastyangtyas et al., 2023). Previous findings suggest that longer-term relationships may be more beneficial than once-off interactions (Humberd & Rouse, 2015). This may be related to how mentorship can support and improve entrepreneurial self-efficacy and opportunity recognition over time, but decreases upon mentorship cessation (St-Jean & Tremblay, 2020). However, the majority of existing research focuses on these single interactions and overlooks long-term relationships (van Werven et al., 2023). Research regarding entrepreneurs' willingness to partake in a mentorship programme, whether as the mentor or mentee, is sparse, making it difficult to investigate entrepreneurs' desires when taking on either of these roles.

The agri-food sector encompasses the primary production of food and non-food agricultural products, their storage, handling, transporting, marketing, and any other related processes. This sector includes businesses relating to agriculture, food, drinks and tobacco, and wood processing (Department of Agriculture, Food and the Marine, 2023). Research investigating agri-food entrepreneurs is scarce. Without this information, it remains a challenge for policymakers and those at decision-making levels to develop adequate supports. Having current, up-to-date insight and understanding of the agri-food entrepreneurial environment is of particular importance given the recent global pandemic and its subsequent effects on global supply chains (Apostolopoulos et al., 2021). The aim of this research was to gain an increased understanding of the various barriers which female agri-food entrepreneurs situated in rural areas throughout Europe perceive as hindrances to their entrepreneurial growth and development.

Methodology

Study design

This was a collaborative European project with partners from Ireland, Belgium, Poland, and Italy. This research was conducted in line with the Braun and Clarke methodology for conducting thematic analysis (Clarke et al., 2015). Seven separate semi-structured focus groups were held throughout Europe with agri-food entrepreneurs. Participants were questioned on a variety of topics, including how they marketed and managed their business, the barriers they are aware of in their profession, and their opinions on mentorship programmes as a means of support for their growth and development. The questions asked in these focus groups were designed specifically to gain a deeper understanding of the positive impact of mentorship for supporting the growth of female agri-food entrepreneurs.

Ethics and procedure

This research was granted ethical approval by the Research Sub-Committee of the Academic Council of Atlantic Technological University (ATURCS_AC_2022). Participants were recruited via circulating participant information sheets with the researchers' contact details. Eligibility included being an agri-food producer, entrepreneur, mentor, mentee, Vocational Education and Training (VET) educator in food entrepreneurship, researcher, or individual in the wider rural agri-food community across Europe. Those who volunteered and were deemed eligible by the researchers for inclusion received more detailed information on this study. Focus groups happened either in person or online depending on availability of participants. Upon confirmation of participant availability, participants were invited to attend their focus group session and to sign a participant consent form in advance of attendance. Two researchers attended each focus group with one researcher leading the focus group and the questions, the other researcher observed participants and the dynamic of the group. Focus groups were recorded and transcribed verbatim. All identifying participant information was removed from the transcripts. Where necessary, transcripts were translated into English.

Data collection

The participants' responses to a range of questions were used to collect information on their beliefs and experiences in the agri-food industry in rural Ireland, Poland,

Italy, and Belgium as part of a European project. A general script was followed in all focus group discussions, with additional questioning being employed where necessary to tease out additional information or expand on answers.

Coding

The transcripts were analysed by a single researcher (T.R.) and subsequently reviewed by other members of the lead research team (L.R., M.McD., A.M.). The themes and sub-themes identified were developed in line with the methods of Braun and Clarke and discussed and agreed upon by all members of the team. This is a 6-phase method of thematic analysis, whereby (1) familiarising with the data, completing and reviewing all transcriptions, and recording initial thoughts and prominent themes; (2) generating initial codes, taking note of key meaningful quotes, and developing initial data sets to potentially categorise these quotes; (3) searching for themes in the transcripts and grouping relevant quotes; (4) conducting a research team meeting to discuss potential themes and map the thematic analysis; (5) refining specific themes and sub-themes; and (6) conducting the analysis of data extracts from the transcripts.

Data analysis

Transcripts from each focus group were thematically analysed according to the method of Braun and Clarke (Clarke et al., 2015). This interpretive approach to qualitative data analysis enables and supports the identification and analysis of themes or patterns in a qualitative data set. Semantic coding, whereby the surface-level meaning of data is noted, was prioritised over latent coding, which goes beyond the surface-level of the data and attempts to uncover hidden meanings and underlying assumptions. A predominantly deductive or 'theory-driven' approach was taken, through which codes were produced relative to a pre-specified conceptual framework.

Findings

A total of seven separate focus groups were carried out across European partner countries, involving a collective of 25 female agri-food entrepreneurs. This is comprised of $N=8$ individuals from Ireland, $N=8$ from Poland, $N=5$ from Belgium, and $N=4$ from Italy. Participants came from a wide variety of backgrounds ranging from new to the sector, to coming from a multi-generational farming family. The majority had their business already in motion, though $N=5$ reported that they were still in the earlier entrepreneurial idea and start-up phases. Specific sectors included general

farming, butchering, baking, market gardening, organic farming, kimchi cultivation, microbrewing, and conducting food demonstrations. The main themes identified were business initiation and development, perceived barriers, and mentorship programmes.

Theme 1: business initiation and development

This theme illustrates the knowledge held and practices employed by rural agri-food entrepreneurs. This includes the conducting of market research, conversing with relevant personnel, and partaking in any training programmes (Table 1). Comparably, once established as a business, this is comprised of activities to further develop and broaden their knowledge-base and entrepreneurial skills in order to expand their business. Also included in this main theme is the awareness and perceptions entrepreneurs have with regard to their surrounding infrastructure.

Sub-theme 1: business preparation

Among the most common practices of entrepreneurs in preparation for business development was to seek out relevant experienced agri-food entrepreneurs and organising to meet them for advice and guidance. No participants of this study indicated that they carried out any specific procedure for market research. Of those who did conduct market research prior to opening their business, their research involved ‘just listening to people in the local community’ to uncover their wants and needs as well as visiting similar businesses to better understand their turnover.

Sub-theme 2: business development

Speaking of their current practices to grow and develop their businesses, participants described the importance of building and maintaining relationships with local customers. This enables the entrepreneurs to continually gain input and monitor the public’s opinion on their business. Using ‘word-of-mouth’ is a key method these entrepreneurs rely on to expand their business and is essential to maintain a positive relationship with customers. Many businesses rely on digital tools to communicate and grow their customer base. However, the majority of participants, though aware of the benefits of an active digital presence, lacked confidence in their digital skills and abilities and were unsure how to overcome these.

I would love to learn more about that, and I don’t even know where to go. I suppose in terms of finding out more information on how to promote my business bet-

ter. So, it’s something that I’d love to look into and learn more about. (Participant A)

Theme 2: perceived barriers

Participants highlighted the various barriers they have experienced and overcome and continue to struggle with to grow and sustain their business (Table 1).

Sub-theme 1: financial supports

Financial supports were considered the ‘biggest barrier’ to entrepreneurship, particularly in its earlier phases. Participants of this study collectively described a variety of issues with regard to the financial aids available to them. Sourcing information on financial assistance was difficult and confusing. Many noted that throughout the earliest phases of their business development, they were unaware of any financial support. Of those who had experience applying for financial support, they described the application process as overly complicated and exhaustive, with the effort required to apply often outweighing the value of the funding awarded. One participant (participant B) explained that they felt it necessary to plan and prepare in advance in order to overcome financial difficulties they see as inevitably occurring in the future, noting that planning was critical to be ‘able to overcome the financial challenges that are going to be coming in the years to come’.

Sub-theme 2: sociocultural supports

In terms of participants’ surrounding infrastructures and the degree of social and psychological support they perceived, many entrepreneurs felt that larger companies were overpowering and unwelcoming. This is not just with regard to nation-wide chain businesses but also with smaller, community-based businesses and previously established entrepreneurs and their businesses. Participants of this study described information as being ‘gate kept’ from them by other entrepreneurs and because of this, oftentimes felt alone in their entrepreneurial endeavour.

Sub-theme 3: bureaucracy and administration

Bureaucracy and administrative processes were recognised by the vast majority of entrepreneurs partaking in this research as among the biggest deterrent to entrepreneurship. Participants described situations of feeling overwhelmed, overburdened, and confused with the plethora of legalities and paperwork surrounding entrepreneurship which can be ‘tiring, slow, and complicated’ (Table 1). Not only was this the case when applying for financial support but also with the various aspects to

Table 1 Themes and sub-themes of thematic analysis from focus group discussions with agri-food individuals in Ireland, Poland, Belgium, and Italy. Quotes are supplied to support the themes and sub-themes, with the participants' assigned codes accompanying their quotes

Theme	Sub-theme	Participant code	Related quote
Business initiation and development	Business preparation	A	The only market research I suppose I would have done at the minute would be just listening to people in the local community
		D	We would have looked into it and visited other organic farms in Ireland. My parents travelled to other organic farm for farm walks and talks
	Business development	B	At the present minute it is through I suppose word of mouth... we also have two young lads that are in our local area that do YouTube videos
		A	I would love to learn more about that and I don't even know where to go. I suppose in terms of finding out more information on how to promote my business better. So, it's something that I'd love to look into and learn more about
Perceived barriers	Financial supports	A	For me, I would have heard about some training in relation to mentors helping in specific areas of your business, maybe and finances and that, but I wouldn't know where to go about getting information on this
		B	I suppose the biggest barrier that I had seen at the beginning was the major financial aspect
	Sociocultural Supports	B	If you can build that trust with a customer, it's the hardest part, and that's the hardest part for me anyways, was to was to get your customer base
		W	I asked one of the local farmers if he could recommend any person to help with the finances, insurance etc. and can you imagine he didn't want to say even that much?
	Bureaucracy and administration	D	There were lots of rules and regulations to learn and lots of training, especially for my parents The paperwork too was a challenge for us
		I	The bureaucratic procedures to obtain permits from administrations to create something or to implement certain aspects of the company are tiring, slow and complicated
	Gender discrimination	D	Some wives and partners would be involved in the farms too to help out if you know what I mean
		H	I did actually have some troubles because of my gender. We had a site coordinator that was supposed to help us and teach us how to take care of our crops, things that he's learned from his many years of experience but my gender didn't really suit him and that made me feel uncomfortable, so I stopped asking for help or asking any questions I had
	Digital transformation	C	I think the social media side of our business and getting the word out more about our advertising, our business that would be one thing we really need to work on. It always seems to be changing and it can be hard to keep up. We probably need someone on board to help with advertising
		F	Yes, through Facebook groups for farmers. It can be handy to just immediately be able to ask your question, but it can also be confusing because if you get a lot of answers and they're different they confuse you more than help you
Mentorship programmes	Current awareness	G	I've never heard of any mentoring programmes, I'm not sure what that would look like
	Mentee openness and desires	D	Yeah, maybe just how to expand the organic farm Maybe, just look at other opportunities that could work alongside the organic farm

Table 1 (continued)

Theme	Sub-theme	Participant code	Related quote
		K	Personally, I feel the need to be supported in the processing of agricultural products. Now we are producing ready-to-cook products, but I would like to expand our business in the field of processed products offered with the introduction of preserves, sauces, jams. To do this I feel I would need to learn the job from a mentor or someone who has experience from a “maestro” in a word
		P	“Can make that person feel safe and not afraid to take the next steps”
	Mentor openness and desires	E	I would need some sort of guidance of what exactly is expected of me as a mentor since I’ve never done it before but I would be happy to help newcomers out as much as I can
		AZ	Yeah, I’d be very happy to be a mentor...(laughing) I think anytime you can save anybody reinventing the wheel or spending, you know, spinning their wheels for six weeks on something that you could help somebody in a matter of hours, it would be great

setting up their business. One participant noted that thoroughly researching and spending time understanding such procedures is essential before beginning an entrepreneurial endeavour and to be prepared for slow, time-consuming paperwork that can be quite disheartening and monotonous.

Sub-theme 4: gender discrimination

Participants did not feel they were overtly discriminated against based on their gender; however, as females involved in agri-food entrepreneurship, they recognised that it remains a male-dominated profession, similar to many other types of entrepreneurship. Participants highlighted situations where they were not taken as seriously as they felt their male counterparts would be and that they were seen more as ‘seconds-in-command’ than primary business owners by others in the profession and the wider community.

Sub-theme 5: digital transformation

Participants recognised the benefits of using technology, in particular social media sites, to further expand their business but were not confident in their use of these platforms. One entrepreneur explained how she is in contact with two young men who promote their business on social media platform YouTube by releasing regular videos that offer watchers an insight into the workings of their business. Apart from this, there was a lack of digital usage for work-related activity. The participants not only agreed that they were underutilising social media for business expansion but also highlighted that they were unsure in how best to use these platforms.

They also praised such social media sites as platforms to get the younger generations more actively involved and interested in entrepreneurship.

Theme 3: mentorship programmes

Participants had limited experiences with mentors and mentorship programmes.

Sub-theme 1: current awareness

Regarding entrepreneurs’ current awareness of mentorship programmes, many had never heard of such programmes. Some even exclaimed that they would ‘not know what one would look like’ (see Table 1, participant G), or even know where to begin looking for such support. Of those who were aware of such programmes, they were hesitant as to whether the programmes were specifically tailored to sufficiently support their business and its development. They expressed worries that mentorships may perhaps be too broad and more suited to those in the earlier phases of their business development. Participants were also concerned that the further their business develops, the more difficult it would become to find a mentor with a similar pathway who has successfully overcome the same struggles and procedures.

Sub-theme 2: mentee openness and desires

Apart from a small few, most of the participating entrepreneurs agreed that they would positively benefit from

partaking in a mentorship programme as a mentee. They suggested that such a relationship would support and guide their physical business development and also enhance their confidence and self-efficacy as entrepreneurs (Table 1). In terms of the specific areas, entrepreneurs desire support in expanding their business is a key goal which they believe a mentor could substantially help with.

Sub-theme 3: mentor openness and desires

Although participants of this study did not have a full and in-depth understanding of mentorship programmes and what being a mentor entails, most were open to the idea of taking on that role after completing the relevant training. A desire for guidance and advice on mentorship and what exactly is 'expected' of them as mentors exists. With such training, they can confidently support newcomers on a similar entrepreneurial pathway. Participants highlighted that this would accelerate new entrepreneurs' business growth by helping them through various situations rather than leaving them to struggle for long periods of time to overcome any barriers they may face.

Discussion

Throughout the study, three main themes were identified. These comprise of business initiation preparation and further business development, perceived barriers, and mentorship programmes.

Participants of this research described a lack of digital skills and confidence. Similarly, participants felt a lack of sufficient supports from government and non-government bodies, in particular during the initial phases of their entrepreneurial endeavour. A willingness to seek out information and broaden one's knowledge and skills is a significant characteristic attributed to successful entrepreneurs (Anand Singh and Krishna, 1994). However, there remains a lack of adequate supportive resources, such as training and skills programmes. This is in line with previous research, which has found that a lack of such skills is one of the biggest hindrances to entrepreneurial activity across Europe (Iakovleva et al., 2014). When discussing their current situation and entrepreneurial abilities, participants of this research expressed feeling that they lacked the skills and abilities to adequately use technology for expanding their business. Alternatively, many entrepreneurs in this study were dependant on word of mouth and feedback from customers. Of all skills relevant to entrepreneurs, digital competence is critical for business survival. Currently, there is a substantial need for entrepreneurial activity to evolve accordingly, making productive, creative, and analytical use of information communication technologies and other advantageous software

(Azevedo & Almeida, 2021; Oberländer et al., 2020, Vial, 2019). While some research suggests that entrepreneurial training may have a negative effect as it may highlight upcoming potential barriers and setbacks, it has overall been shown to have a positive effect (Bae et al., 2014; Graevenitz et al., 2010; Martin et al., 2013). In preparation for starting their business, many participants described seeking out advice from already established entrepreneurs whose businesses were in the same or a similar field but unfortunately felt unwelcome. Integrating entrepreneurial role models into training programmes is one of the key recommendations for inspiring young entrepreneurs (Kelley, 2013). Conversely, a lack of such role models is regularly considered as off-putting and a deterrent from entrepreneurship (Lafuente et al., 2007). It is vital that more supports be made available to female entrepreneurs, not only in the earliest phases of their business but also throughout its development. It is essential that those at decision-making levels create training programmes with acknowledgement of the beneficial effects of digital skills as well as role models and mentors for entrepreneurs.

Participants in this study also discussed the barriers which accompanied their business development, gave feedback on the supports which they previously availed of, and recommended supports they desire and feel necessary for overall improving entrepreneurship.

The lack of adequate financial supports for female entrepreneurs was recognised by participants of this research as being the 'biggest barrier' to their success. In recent years, entrepreneurs have become more forward-thinking in their methods of sourcing financial support, branching out from traditional sources such as bank loans to new sources such as online funding websites (Bruton et al., 2015). This perceived lack of financial support expressed by participants of this study is not new. Grilo and Thurik (2005) investigated this topic using data from a survey conducted across 15 old EU member states and found that the vast majority of those involved in their research also perceived a lack of financial support as a main barrier to pursuing entrepreneurship. Previously, the same authors used two data sets from the Flash Eurobarometer survey of entrepreneurs across 33 different countries and noted that this perception is still very much still in existence (Grilo & Thurik, 2008). Entrepreneurship is often separated into different types, such as urban and rural. Acknowledging that this perception of a lack of financial supports hinders entrepreneurial activity, Hoogendoorn et al. (2019) investigated whether this differed across entrepreneur types but concluded that it is evident across all sorts. When comparing the degree to which this financial support and its availability are perceived, females have been more likely to express perceiving this barrier as larger than males have (Roper & Scott, 2009). Participants of this research who did successfully avail of financial support, whether

from government or non-government bodies, described the administrative procedures as hugely deterring, a finding which also aligns with previous research (Grilo & Thurik, 2008). The majority of participants explained that they felt overwhelmed and confused by the administrative tasks accompanying issues such as applying for funding. Application processes were often time-consuming and confusing, with the resulting finance not equating to the amount of time and effort they spend on the application.

Participants of this study also described how they felt it necessary to plan and prepare for potential upcoming financial difficulties, highlighting that the perception of entrepreneurship as being accompanied by financial insecurity remains a common viewpoint (Nyström, 2021).

An emotionally supporting infrastructure can significantly impact entrepreneurial intentions and activities (Klyver et al., 2018, Downing, 2005). Additionally, it is well-established that individuals' peers can substantially impact their behaviours and activity (Brechtwald & Prinstein, 2011). Edelman et al. (2016) highlighted that this is true for entrepreneurship, particularly for younger entrepreneurs in the earlier stages of their endeavour. They noted that receiving support and positive feedback from family members and overall familial cohesiveness positively impacts entrepreneur's start-up activities. More recently, Cogan et al. (2022) found that with regard to an entrepreneur's degree of activity, a supportive and encouraging sociocultural environment is superior to one where the family members are distant. Throughout entrepreneurial research, the terms self-confidence, self-efficacy, and self-belief are often used interchangeably to express one's perception of their ability to complete tasks and be successful and have been linked to one's interest in their career (Wilson et al., 2007). Regarding support from larger, previously established businesses, whether small and local or a large national chain, participants in this research described feeling unwelcomed and belittled. A potential method to counteract these negative emotions, Roper and Scott (2009) suggested that along with training courses to support entrepreneurs' physical business expansion and development, programmes teaching confidence-building should also be considered.

While gender discrimination was not often cited as an off-putting element of their entrepreneurial experience, many female participants of this study did describe feeling overlooked and not taken seriously. More recent research highlights this, noting that entrepreneurship is widely regarded as gendered (Kirkwood, 2009). Ilie et al. (2021) observed that this perception of entrepreneurship as having a gendered nature has a negative impact on entrepreneurial intentions, especially for females.

Although participants were aware of the huge impact technology could have on their business, they expressed

uncertainty about how best to use it for marketing and advertising, as well as a lack of confidence in their general digital skills. Digital competence is widely recognised as 'confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It is defined as a combination of knowledge, skills and attitudes' (European Commission, Directorate-General for Education, Youth, Sport and Culture, 2019). Previous findings suggest that the majority of workers feel that it is necessary to have digital competence and to be constantly developing and improving it. Although this issue is well-known, research in this area remains sparse (Murawski & Bick, 2017).

Most participants were unaware of any current mentorship programmes which they could avail of. For some, this was to the extent of being unsure what a mentorship programme would even comprise of. Of those who had heard of mentorship programmes, they saw the potential benefits of partaking in such a relationship. In terms of beneficial effects, feedback from trusted individuals from prolonged relationships is superior to that from once-off interactions (Humberd & Rouse, 2015). However, the majority of existing research focuses on once-off interactions (van Werven et al., 2023).

Research regarding entrepreneurs' willingness to partake in a mentorship programme, whether as the mentor or mentee, is sparse, making it difficult to investigate entrepreneurs' desires when taking on either of these roles. Some research suggests that mentorship relationships may have both positive and negative effects on entrepreneurial activity, as through interactions the mentee becomes more aware of the limitations regarding their initial business plan (St-Jean & Mathieu, 2015). Brodie et al. (2017) more recently investigated the perceived value of mentoring by entrepreneurs through semi-structured interviewing and observed an overall positive perception. Findings indicated that particularly during the start-up phase of a business, mentorship can work to improve entrepreneurs' knowledge and confidence, as well as offer guidance and support. This will subsequently increase entrepreneur's self-efficacy. However, the beneficial effects of mentorship may be temporary, with entrepreneur learning goal orientation and self-efficacy decreasing once this relationship ceases. Because of this, current suggestions note that long-term mentorship should be considered in order to maintain the beneficial effects mentees receive (St-Jean & Tremblay, 2020). The results of this research suggest that actions such as integrating entrepreneurial role models into training programmes, programmes teaching confidence-building, and long-term mentorship opportunities should be considered to remove the various barriers perceived by female entrepreneurs in this sector.

Research limitations

This research has certain limitations. Though this research gives an overview of entrepreneurs' experiences throughout Europe, there is a high likelihood that the supports available to individuals vary at national levels. Future research would also benefit from recruiting cohorts in different countries and regions to better understand the processes behind their endeavours and the obstacles they often face to refine and improve their surrounding infrastructure throughout Europe. Also, recruiting larger cohorts to investigate country-specific barriers would be beneficial and support the government in responding sufficiently at a national level. Ensuring females and males are in such a cohort would enable a comparison of the experienced barriers to entrepreneurship between genders. Due to the small number of individuals from various locations in this research, no definite country-specific issues were identified. There is a lack of qualitative investigations into the perceptions of female entrepreneurs of their surrounding environment. Moreover, of those that do conduct qualitative analyses, the majority focus on entrepreneurs situated in developing regions. With the rapid and continuous advancement of technology, more opportunities arise for entrepreneurs to develop their skills, expand their business, and avail of support and guidance from others. For decision-makers to adequately support entrepreneurs, it is vital that they have a detailed understanding of their needs and desires.

Practical implications

Having a detailed understanding of the issues rural agri-food entrepreneurs face will enable policymakers and those at decision-making levels to develop adequate counteractive policies and practices. Resources can be directed where most needed, and the entire profession of entrepreneurship as challenging may be addressed. Economically, such activity will positively affect the economy and allow for an increase in those pursuing entrepreneurship.

Conclusion

This research aimed to qualitatively investigate female agri-food entrepreneurs' perception of the various barriers that may affect their entrepreneurial growth and development, their opinions on mentorship programmes, and their willingness to be either a mentee or mentor. A variety of barriers were identified such as the lack of adequate financial support and experiencing frustration with the complexity of funding applications' administrative processes. Socio-cultural

support was oftentimes lacking, with participants noting they often felt more senior, experienced entrepreneurs gatekept information to avoid their development and expansion. Females experienced gender discriminatory behaviour from peers and those more senior than themselves. Finally, the vast majority of participants were aware of the benefits of an online presence but lacked confidence in their digital abilities and were unsure where to source the relevant support. Regarding mentorship, few entrepreneurs were aware of such a relationship, and most were unsure what this practice would entail. While some believed this would only be beneficial at earlier stages in business development, the majority spoke positively of the idea and expressed an openness to partaking regardless of whether as mentor or mentee.

These findings highlight a range of issues in need of addressing to improve the infrastructure surrounding agri-food entrepreneurs throughout Europe. Additionally, mentoring plays an important role as it can contribute to overcoming these issues. This knowledge may be used to guide policymakers and those at decision-making levels to develop female entrepreneurs in the agri-food sector.

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Author contribution TR analysed the interview transcripts, generated codes, and was major contributor in writing the manuscript.

AM compiled the interview transcripts and was contributor in writing manuscript.

MMcD developed the data concept, collection and funding application for the research reviewed, and refined the written manuscript.

LR developed the data concept, collection and funding application for the research reviewed, and refined the written manuscript.

All authors read and approved the final manuscript.

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Data availability Not applicable.

Declarations

Ethics approval This research was granted ethical approval by the Research Sub-Committee of the Academic Council of Atlantic Technological University (ATURCS_AC_2022).

Consent to participate All participants consented to participation.

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