

Academic Paper

A study of perceived benefits of mentoring among nascent entrepreneur women: the case of 'MET' mentoring community in Spain

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Abstract

The purpose of this paper is to identify to what extent novice/nascent entrepreneur women perceive that their participation in a mentoring programme contributes positively to their personal/professional development in terms of benefits derived. A quantitative methodology was used to gather information on perceptions/opinions of participants in a 'MET' mentoring community programme placed during academic years 2014-2015 to 2016-2017. The acronym corresponds to the concepts of Women (Mujer in Spanish), Entrepreneurship and Technology. Results show that due to the programme, women perceive themselves competent in relation to the competence analysed; show a high level of job satisfaction and degree of progress; identify new business opportunities, expand their vision, improve their business performance, achieve their goals, and transform their business project.

Keywords

mentoring, professional learning and development, women, entrepreneurs,

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Introduction

The current economic situation and the changes that are gradually taking place at the social level, have led to the consideration of entrepreneurship as one of the development options for women, both personally and professionally. However, although it seems that the number of entrepreneurial women is increasing (Jha, Makkad & Mittal, 2018), according to data from the Global Entrepreneurship Monitor (GEM report) (Elam, Brush, Greene, Baumer, Dean & Heavlow, 2019), there are still few who embark on entrepreneurship successfully. This may be due to the social reality we live in (which differs from country to country) and the lack of support mechanisms that exist for entrepreneurial women, which means that sometimes, women do not get the visibility they deserve or the economic returns they should get.

For instance, a literature review done by Cho & Moon (2019) illustrates that in the case of the potential entrepreneurs Latinas women's main barriers to start a new business include "fear, perceived risk of failure, lack of financial management knowledge, inexperience, low self-confidence and discrimination" (p.337). Other research shows that some of the factors leading to a decrease in the success of entrepreneurial women are "lack of resources, gender inequality, low technological know-how, inadequate financial assistance, lack of awareness of governmental entrepreneurship development programmes, poor government policy among others" (Ibrahim & Ismail, 2020, p.183). In any case, these authors conclude that there is a need to

Facilitate entrepreneurial activities in an economy in order to increase the level of entrepreneurial skills, competence, training, technological advancement and development, particularly for women entrepreneur, to enhance their business potentials thereby contributing to the economic development of the nation. (Ibrahim & Ismail, p.184).

This could be reached through policies aimed at promoting entrepreneurship, in general, and female entrepreneurship in particular (Rico & Cabrer-Borras, 2018) through mentoring programmes.

In this study, after explaining the context of the study, I reflect on the relationship between women and entrepreneurship, and examine what literature says about mentoring and its benefits for mentees. This is followed a description of the method used to conduct the research study. Finally, findings and conclusions of the study are presented.

The study aims to highlight the importance that mentoring programmes have on nascent entrepreneur women and the learning it generates as a result of their participation in the mentoring process. The support that these entrepreneurial women receive through this type of programmes is, at times, one of the only support interventions that they receive during their adventure referred to as entrepreneurship.

The context of the study

This research is based on the MET Community mentoring programme (METmentoring), whose acronym corresponds to the concepts of Women (Mujer in Spanish), Entrepreneurship and Technology. Founded in Spain in 2004, it is an international non-profit community consisting of great professionals who contribute to its social character and to the development of sustainable, responsible and innovative female entrepreneurship. Not in vain, MET Community accompanies entrepreneurial women (METmentee) whose projects, in addition to being sustainable and responsible, are innovative and stand out for their originality, their capacity for growth and prosperity, and their contribution to the progress and well-being of society. For MET Community, being an entrepreneur is a lifestyle that includes a professional activity, a way of understanding and being in the world and a way of relating to it.

In the case of MET Spain, the headquarters from which this research is promoted and supported is the University of Deusto (UD), where MET Basque Country is physically located. In its last Deusto 2018 Strategic Plan, the UD stands "a more social university, which will undertake transformative research with a decided focus on making a social impact" (University of Deusto, n.d., p.60). Moreover, Caro-González et al. (2018) stated that "social impact can, and should, play an important role in the research strategy of universities" (p.14), as it is done at the UD, an institution that is committed to the wellbeing of the person and the transformation of the society to a better one. This study also aims to contribute to the social impact through the search for solutions to improve women's entrepreneurial activity and experience, and a change in women's participation in society.

MET Community is known by its capacity to adapt to the specific needs of its participants from the six countries where it is operating, and its impact on society, achieved through the development of nascent entrepreneurial women and, consequently, the improvement of the economy.

MET Community is based on six values (commitment, confidence, social responsibility, humbleness, integrity and generosity), which guide their objectives and are part of their national and international identity. The specific objectives are to promote collaborative environments between public and private companies; encourage the exchange of experiences and knowledge in the areas of business management, leadership, technology and communication; develop a support network for disadvantaged high-potential women; train and develop specific skills and knowledge in diversity management and social innovation of future leaders; boost the development of entrepreneurial projects; and promote the use of technologies as the axis of entrepreneurial development and social advancement.

Based on those objectives, MET Community has been offering METmentoring for more than a decade. It is a validated mentoring programme through which a mentor generously shares his/her experiences and knowledge with a mentee for a determined period of time and following a well-structured programme. After a rigorous selection process, each mentee is matched with a mentor. They begin a process of accompaniment that lasts between 9 to 10 months. In order to guarantee success, the programme is complemented with knowledge and skills training workshops, networking and communication activities. To meet the different needs of mentees, MET Community has an international community of institutions, trainers, mentors and collaborators that shape the entrepreneurial ecosystem necessary to offer support and backing to women entrepreneurs.

Woman and entrepreneurship

Rudhumbu, du Plessis and Maphosa (2020) consider that entrepreneurship plays a critical role in the growth, development, and sustainability of global economies, and although entrepreneurial women offer multiple and varied benefits to this sector, they are seen as an insignificant factor due to the dominance of male entrepreneurs.

This may be due to some of the factors that most affect entrepreneurial women according to the literature (Barbagelata, 2019). Focused on entrepreneurial women perception, Barbagelata highlights the most relevant ones for them, self-efficacy (personal); feeling of being empowered to move the business forward (contextual); perception of risk, creativity and emotional intelligence (personal); and family (interpersonal). Then, there are factors related to knowledge of the commercial, financial, technological, innovation and internationalisation areas, and programmes to promote entrepreneurship. In addition, there is networking to boost business growth and detection of new opportunities, financing, and finally, factors related to stereotypes and assessment by society of previous work experience.

Concerning the role of women in entrepreneurial activity, special attention should be paid to the data reported by the Global Entrepreneurship Monitor (GEM) report. This report measures the Total Entrepreneurial Activity (TEA) that represents the percentage of the adult working-age population (18–64) who are either nascent or new entrepreneurs. The TEA rate for women is 10.2%, 8.1% in Spain, that is, more than three-quarters of that seen for men.

In the GEM Spain report 2017-218, according to Peña, Guerrero, González-Pernía and Montero (2018), Spanish women scored low in their perception of self-confidence, role models and their own perception of opportunities, and high in their fear of failure. In the last GEM report, these data vary slightly: 63% of entrepreneurial women perceive opportunities, although the Spanish women are less likely to report that they see opportunities; 79.5% of women perceive that they have skills to start a business; 67.9% of women indicate they are undeterred by fear of failure; 43.4% of

women reported having lower confidence levels than men in their capabilities to start a business; and women are likely to believe in the ease of starting a business and seeing entrepreneurship as a good career (Elam et al., 2019).

Mentoring

There is much research on mentoring, its definition, possible benefits and impact, and its relationship with talent retention, leadership, and development of competency. In fact, there are many definitions of this term, making it difficult to reach consensus (Berk, Berg, Mortimer, Walton-Moss & Yeo, 2005). Three decades ago, Jacobi (1991) posited that a mentoring relationship focuses on achievement or acquisition of knowledge; consists of three components (emotional and psychological support, direct assistance with career, and professional development); is reciprocal, where both mentor and mentee derive emotional or tangible benefits; and is personal in nature, involving direct interaction.

Nowadays, the “number of studies makes it difficult to find a generally agreed upon definition” (St-Jean & Audet, 2012, p.122). In general, it is identified with a process where people with more experience (the mentor), advise and help others (the mentees or protégés), with a lesser background (Solomon, 2016, Vargas, Ríos & Carey, 2017); “often a longer term career relationship from someone who has ‘done it before’” (Ilieva-Koleva, 2015, p.447); in which “the senior member who acts as a coaching role will advise to the junior staff based on their experience and knowledge” (Hui Yap & Lock, 2017, p.807); and where “a support relationship between an experienced entrepreneur (the mentor), and a novice entrepreneur (the mentee), in order to foster the latter’s personal development” is involved (St-Jean & Audet, 2012, p.122), while offering career, psychological or instrumental support to enhance the protégés career behaviour and development (Olayinka, Ehiobuche, Nwankwo & Suliyat, 2020).

Vasanth, Mousumi and Kishore (2012), stated that this process is aimed at supporting people “to manage their own learning in order to maximize their professional potential, develop their skills, improve their performance, and become the person they want to be” (p.30). Grima, Paillé, Mejia and Prud’homme (2014) posit that mentoring “can be associated with learning and personal satisfaction by virtue of the nature the relationship” (p.470).

In the case of St-Jean and Audet (2012), they suggest that mentoring “is sufficiently personalised to help a novice entrepreneur develop business management skills” (p.120); that is a training modality focused on the process of career enhancement and personal development (Vargas et al., 2017); which purpose is “to develop the talent of both individuals and enrich the organisation’s human capital, thereby benefiting the organisation” (Madarasiné & Németh, 2019, p.89), work together “to achieve predetermined goals and objectives” (Madarasiné & Németh, 2019, p.91); and “to shape an individual’s beliefs and values in a positive way” (Ilieva-Koleva, 2015, p.447).

The definition given by the European Mentoring and Coaching Council (EMCC) (2018) shares the key elements mentioned before and adds the importance of dialoguing and “partnership for mutual learning between peers or across differences such as age, race or discipline” (p.6).

Finally, Madarasiné and Németh (2019) sum up mentoring as a one-to-one relationship, a two-way process working, a means and an opportunity to achieve predetermined goals and objectives. This takes place over a period of time between a less experienced person (mentee) and a more experienced and established professional (mentor) who shares impartial and non-judgmental guidance, support and help during its progress, personal skills, knowledge, confidence, and experience.

Mentoring benefits

One of the first benefits of mentoring derives from the person who guides the mentee, i.e. the mentor. These are usually considered guides, coaches and role models, who are accessible, resourceful, experts, with good networking skills, consistent, dependable, positive, helpful, good active listeners, and are more likely to be older than the mentee (Freeman & Kochan, 2019). But there are more benefits.

According to Rueywei, Shih-Ying and Shin-Lung (2011), “some researchers have noted that the mentor role influences the job satisfaction, career satisfaction, pay satisfaction, and career expectations of the protégé” (p. 808). Other researchers state that a good mentor is associated with better academic and productivity outcomes and greater satisfaction with one's work (Allen, Eby, Poteet, Lentz & Lima, 2004; Eby, Allen, Evans, Ng & Dubois, 2008; Roch, 2016).

Harris, Chen and Gorley (2015) and Ilieva-Koleva (2015) also noted that mentors and mentees learn from each other; this is said to be one of the first impacts related to the development of human assets that improves interpersonal relationship skills, networking, provides a role model and transfers knowledge.

Vargas et al. (2017) highlight benefits such as motivation, retention of talented and committed leaders, mobilisation of skills developed during the academic training, and development of new professional skills both technical and transversal.

Vasanth et al. (2012) collated the benefits that different authors mentioned: career progression via career advice and sponsorship, management competence development, professional identity development, visibility, networking, and advancing knowledge. The survey carried out by PwC (2017) on Spanish entrepreneurs who took part in its mentoring programmes led to the conclusion that these programmes had a positive impact, among others, on the aspects listed in Table I.

Kunaka and Moos (2019) concluded that there is a clear relationship between the different mentoring outcomes and the benefits illustrated by other authors. For example, Peñalver (2019) highlighted benefits such as professional satisfaction and progression, compensation, confidence, talent retention. Also, Allen et al (2004) and Eby et al, 2008 cited benefits such as professional success, work performance, interpersonal relationships, motivation, participation, knowledge and skills, empowering beliefs, positive attitudes, and emotional support.

Recently, St-Jean and Tremblay (2020) demonstrated that entrepreneurial mentoring has a positive effect on entrepreneurial self-efficacy particularly regarding opportunity recognition.

Table I: Mentoring positive impacts

Category	Benefits
Knowledge development	Strategy and development of business model (business vision and revenue streams) Administration, taxation and finance. Sales techniques (customer loyalty and revenue).
Competences development	Organisation and planning. Analysis. Communication. Negotiation. Establishing and developing contacts. Leadership. Motivation. Confidence. Coping with risk and difficulties.
Job situation	Job satisfaction. Average annual income. Level of employability.
Entrepreneurial performance	Definition and development of product or service. Positioning of the company in the market. Customer attraction and retention.

Note: Adapted from PwC (2017)

The benefits of mentoring from the literature, in particular those with relevance for the empowerment and promotion of entrepreneurial women, have been distilled into Table II.

Table II: Mentoring benefits

Category	Type	Benefits
Generic competences	Instrumental	Communication skills. Creative thinking. Analytical thinking. Planning.
	Interpersonal	Motivation, interpersonal communication, and affective learning (Self-confidence, Self-image and Professional identity, Self-efficacy and Resilience). Ethical decision-making. Social responsibility. Teamwork. Negotiation and coping with risk and uncertainty.
	Systemic	(Project) Management. Leadership.
Job situation		Satisfaction. Progression. Business knowledge: strategy and development of business model (business vision and revenue streams); administration, taxation and finance; and sales techniques (customer loyalty and revenue).
Entrepreneurial project		Achievement of goals. Future vision for one's business. Transformation of one's business. New business opportunities identification. Work performance: definition and development of product or service; positioning of the company in the market; customer attraction and retention; and networking).

Note: The reference framework proposed by Villa and Poblete (2007) and followed by the University of Deusto, together with the EntreComp framework (Bacigalupo, Kampylis, Punie & Van den Brande, 2016) and the key competences for lifelong learning (Council of the European Union, 2018), were used for the classification and definition of generic competences.

In addition to these benefits, others could also be considered at a more advanced stage: retention of talent; understanding and adapting to the organisation's culture; increasing turnover figures, jobs, and profits; recruiting effectively; facilitating the socialisation of newcomers and professionals from other countries; compensation; visibility; and transmitting tacit knowledge from one generation to another.

Purpose

St-Jean and Audet (2012) suggest that “despite the call from many to consider mentoring in support of novice entrepreneur training, there does not appear to be any research that illustrates the learning that occurs through this process” (p.124). The purpose of this research therefore is to attend to the benefits that mentoring programmes can offer and to analyse to what extent METmentees (novice or nascent women entrepreneurs) perceive that their participation in METmentoring contributes positively to their personal and professional development. The research question for this study is: To what extent and in what terms does METmentoring benefit and affect METmentees?

Methodology

In order to meet the research purpose, in addition to analysing the main benefits yielded by the participation in a mentoring programme, a quantitative methodology was used. An anonymous online questionnaire was designed to gather information on the perceptions and opinions of the 28 entrepreneurial women participated in the METmentoring programme that took place in the Basque Country (Spain) during the academic years 2014-2015 to 2016-2017. A total of 27 women out of 28 participated, i.e., 96.42%. In order to ensure that only women participated in the research, only mentees have been invited, as the mentors are both male and female.

The METmentees who participated in this study were all women over the age of 18 with an early staged entrepreneur project (less than three years old), able to travel to Bilbao at least six times during the programme period, with an entrepreneurial profile, and with potential to develop the project. In general, they were ethical entrepreneurs, willing to develop an innovative idea by creating profitable and sustainable businesses that could produce an economic and/or social impact, thus generating employment, and spreading entrepreneurial values and experiences to their context.

The questionnaire was divided into three parts. After an introduction, some basic questions about age, education level, and type of orientation (learning or goal) were requested. In the first part of the questionnaire, 20 statements were raised to be answered on a five-digit Likert-type scale (ranging from 1 = strongly disagree to 5 = strongly agree). The second part consists of 18 other questions to be answered following the same scale. In the third and last part, there were nine open questions. According to Hernández-Sampieri, Fernández-Collado and Baptista-Lucio (2008), it was decided to pose these questions to allow participants to provide evidence and/or add comments and clarifications.

The issues raised in the first part of the questionnaire were addressed to assess METmentees' perception of the mentoring benefits directly related to the competences listed in Table II (generic competences: systemic, interpersonal and instrumental). The reference framework proposed by Villa and Poblete (2007) and utilised by the UD, together with the EntreComp framework (Bacigalupo et al., 2016) and the key competences for lifelong learning (Council of the European Union, 2018) were taken as reference.

In the second part of the questionnaire, the questions posed aimed to assess the METmentees' perception about the mentoring benefits directly related to job situation and entrepreneurial project and collected in Table II. In this second part, a question about the barriers or obstacles that METmentee had encountered in their entrepreneurial adventure was also asked. In this case, a list of 13 barriers was proposed from which a maximum of 5 should be chosen, as well as add those considered appropriate.

Finally, in the third part, nine questions were posed regarding the relationship that METmentees

have with MET, the contribution of both parties, and the professional (entrepreneurial) and personal projects developed as a result of engagement with MET.

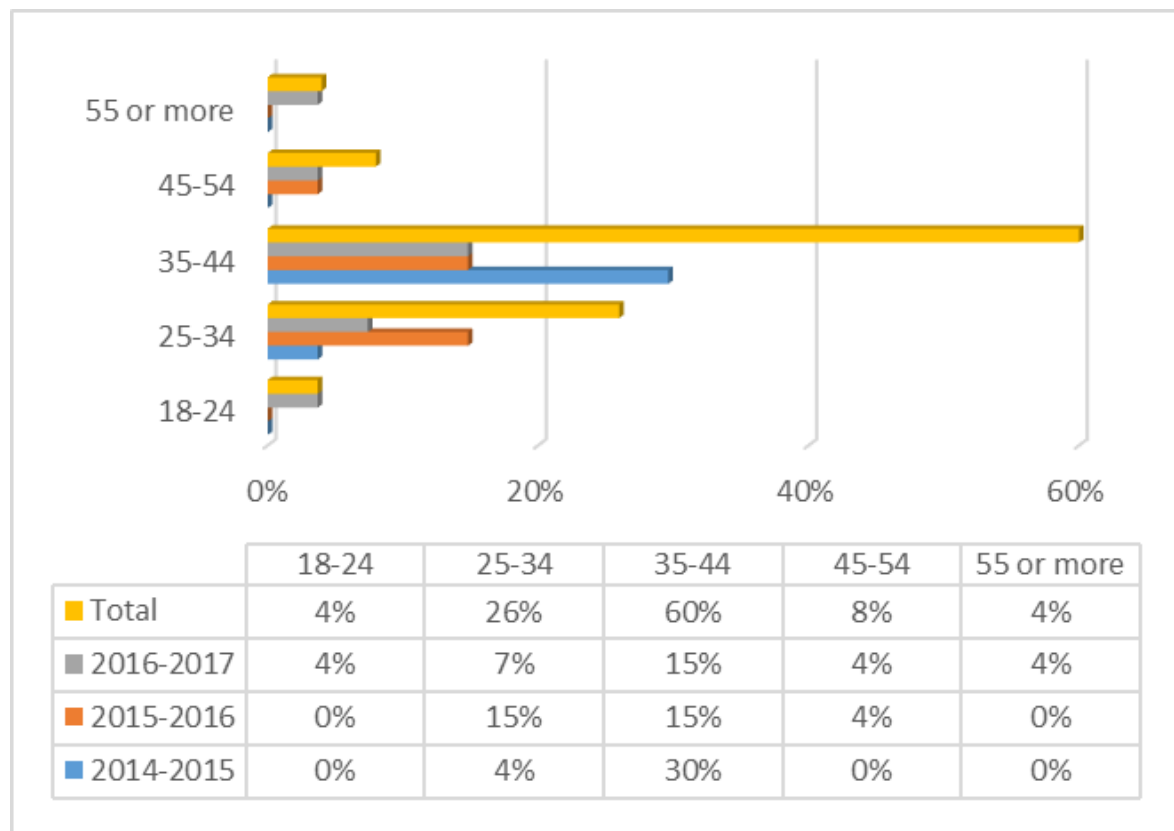
The quantitative analysis was conducted online. The questionnaire was created and sent from the internal messaging system of Google Forms on the 19th of May 2020. Since the number of mentees was easy to manage and in order not to lose any of them, the WhatsApp and LinkedIn groups were also used in order to disseminate and to notify about the sending of the questionnaire. By the 26th of May 2020 all the answers except one was received, 9 mentees for each academic year, not including the one who did not respond from 2014-2015 edition. Completion time of the questionnaire was approximately 15 minutes.

Analysis of the reliability of the questionnaires was carried out using Cronbach's α . It is argued that a coefficient of around 0.90 is excellent, around 0.80 is very good, and around 0.70 is adequate (Kline, 2005). In the case of the questionnaires used in this research, competences-related statements valued a Cronbach's α of 0.94, job situation-related an α of 0.81 and entrepreneurial project-related an α of 0.86. All the necessary steps were taken to respect the individual freedom to participate as well as to inform them of the objectives and characteristics of the research as how the results would be used (Bisquerra, 2009).

Findings

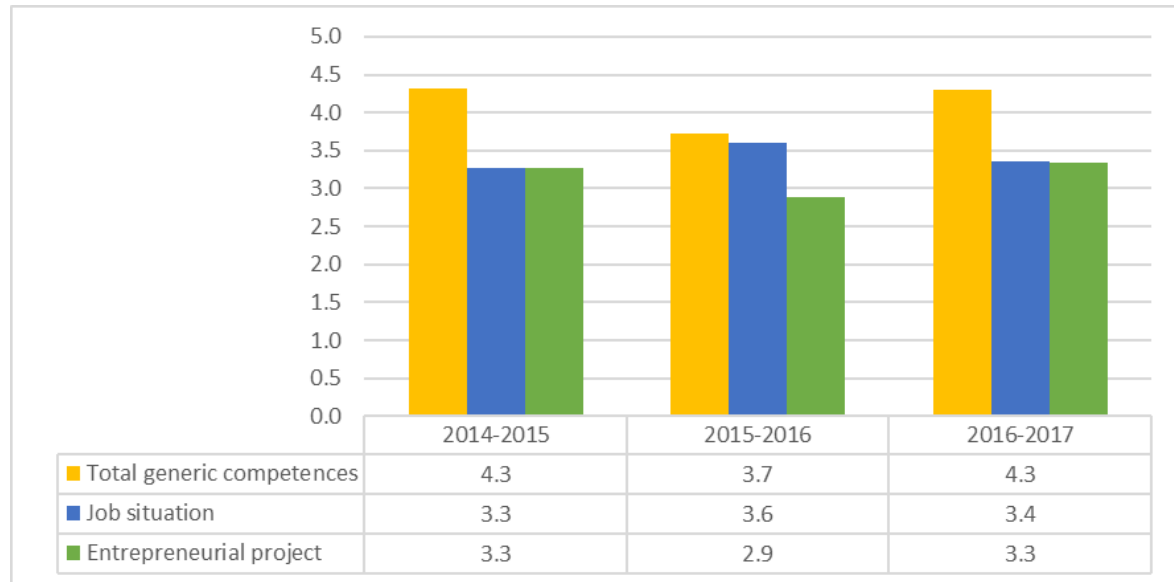
As shown in Figure 1, results confirm that 60% of the nascent entrepreneurial women participants are aged between groups of 35-44, followed by the 26% of groups aged 25-34.

Figure 1: Age groups by academic year



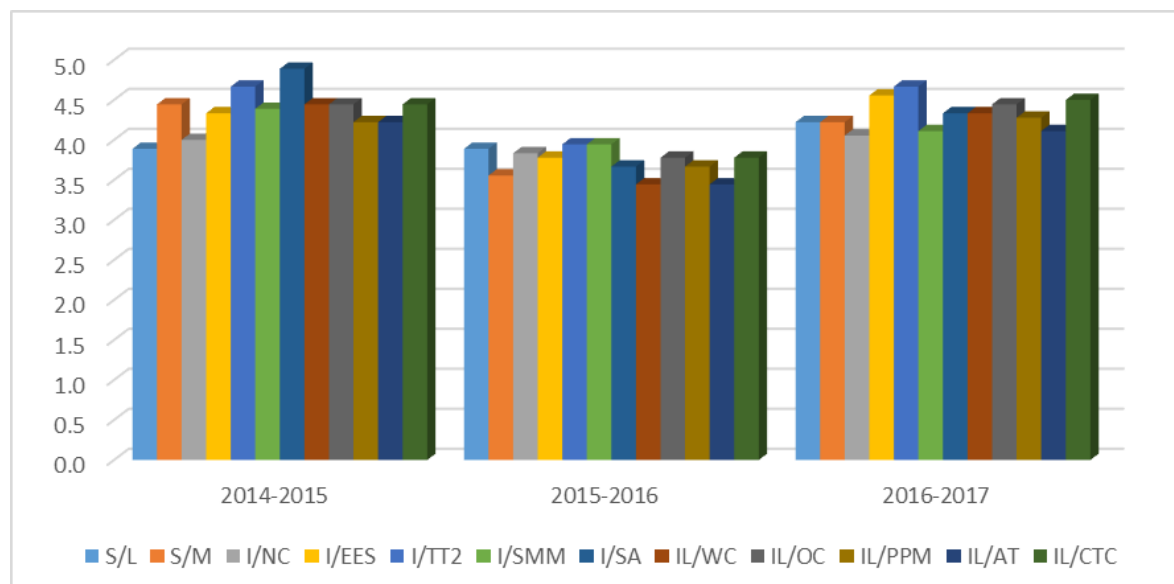
According to the perceived benefits (Figure 2), in general, METmentees responses indicate high levels of competence development between 3.7 and 4.3 out of 5. They are followed by job situation, rating between 3.3 and 3.6 out of 5, and entrepreneurial project, ratings between 2.9 and 3.3 out of 5.

Figure 2: Perception of benefits



If the results are analysed by type of benefits, with respect to the generic competences the data gives us the following results as shown in Figure 3 and Table III. It is possible to see a lower impact of the perception that METmentees have on their competences in the academic year 2015-2016, although the rating is between a 3.4 that corresponds to Analytic Thinking and Written and Oral Communication, and 3.8 in Creative thinking and Creativity, and Negotiation and Coping with Uncertainty, Ethical sense and Sustainable Thinking. These rating increase considerably in the 2016-2017 academic year, which were similar (even better) to those of the 2014-2015 academic year, standing at an average of over 4 and even reaching scores of 5 in the 35-44 age group, which represents the highest percentage of participants in the 3 years.

Figure 3: Competences' perception.



We can also analyse the rating given to the competences by METmentees of the different age groups. We can draw attention to the 25-34 range of the academic years 2014-2015 and 2015-2016, and the 35-44 range of the academic years 2015-2016 and 2016-2017 (where the highest percentages of participation are concentrated, between 15% and 30%). In these cases, we can see that: the highest ratings are given by the 25-34 group of 2014-2015 (30% of the participants), which reach an average of 5 in 7 out of 12 sub-competences and marking 5 in the three types of competences. This 30% is closely followed by the group of 35-44 from 2016-2017 who also marks 5 or close to this a group of 7 out of 12 sub-competences. Both groups practically match in the rating given in 5 out of those 7 competences, that is, in Ethical sense and Sustainable Thinking; Teamwork; Self-awareness and Self-efficacy (Interpersonal), and Oral Communication and Creative thinking and Creativity (Instrumental). They are also highly rated by the group of 25-34 Management (Systemic) and Written Communication (Instrumental), and by the group 35-44, Self-motivation and Perseverance (Interpersonal) and Planning (Instrumental).

In any case, the average rating of all the sub-competences is above 3.5 except in the cases of Management (Systemic), with a rating of 3 by the group 35-44 of 2015-2016 but rated at 5 by the group 25-34 of 2014-2015, as well as Self-awareness and Self-efficacy (Interpersonal) and Written Communication (Instrumental), rated at 3.3 by the group 35-44 of 2015-2016 but at 5 by the group 25-34 of 2014-2015. See Table III

Table III: Generic competences' perception

		Competences											
		Systemic		Interpersonal				Instrumental					
Academic year / Age group	% women	L	M	N	ES	T	SM	SA	WC	OC	P	AT	CT
2014-2015		3.9	4.4	4.0	4.3	4.7	4.4	4.9	4.4	4.4	4.2	4.2	4.4
**25-34	30%	4.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	5.0	4.5	4.0	5.0
35-44	4%	3.9	4.4	4.0	4.3	4.6	4.4	4.9	4.4	4.4	4.2	4.3	4.4
2015-2016		3.9	3.6	3.8	3.8	3.9	3.9	3.7	3.4	3.8	3.7	3.4	3.8
**25-34	15%	3.8	4.0	3.6	4.3	4.6	4.5	4.3	3.8	4.3	3.9	4.0	4.0
**35-44	15%	4.0	3.0	4.3	3.5	3.5	3.6	3.3	3.3	3.5	3.6	3.0	3.8
45-54	4%	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
2016-2017		4.2	4.2	4.1	4.6	4.7	4.1	4.3	4.3	4.4	4.3	4.1	4.5
18-24	4%	4.0	5.0	4.5	4.5	5.0	4.5	5.0	4.0	5.0	4.5	5.0	5.0
25-34	7%	4.5	4.5	4.0	5.0	4.5	4.5	4.0	5.0	4.5	4.0	4.0	4.5
**35-44	15%	4.3	4.5	4.3	4.8	4.9	4.8	4.8	4.5	4.8	4.8	4.3	5.0
45-54	4%	4.0	4.0	3.5	4.5	5.0	3.0	4.0	4.0	4.0	4.0	4.0	3.5
55 or more	4%	4.0	2.0	3.5	3.0	3.5	1.5	3.0	3.0	3.0	3.0	3.0	3.0
Total	100%	4.0	4.1	4.0	4.2	4.4	4.1	4.3	4.1	4.2	4.1	3.9	4.2

As can be seen in Figure 2, the benefits perceived by the METmentees have been better rated in terms of generic competences developed than job situation and entrepreneurial project. With respect to job situation, the analysed perceptions of benefits by age group indicate that the situation is the other way around. Thus, the best ratings are given by women of the 2015-2016 academic year, who are the ones who gave the lowest rating to their perception of the generic competences.

In general, METmentees are satisfied with their job situation, rating their general perception with a high score (almost 4 points), as well as their perception of their degree of progress or evolution at a general level. This perception and rating varies, gradually decreasing the rating given to learning on the following topics, listed in order of highest to lowest score: Business strategy, Business model/plan, Administration, Sales techniques, Finance and Taxation. The order of priority changes in the academic year 2015-2016 in which learning about Finance is better rated than Sales techniques and Taxation. In the case of Taxation, the awarded rating fall to less than 3 points, but are always close to 3, except in the case of METmentees for academic year 2014-2015, where the rating is 2.4.

If we look at the responses given by the METmentees of the age groups that concentrate most of the participants and whose data are represented in Table IV, we see that the general scheme of global satisfaction and degree or progress remains the same, as well as the order of the perceived learning topics. It is noteworthy that in the 25-34 age group for the academic year 2014-2015, the perception of the METmentees on the learning of Administration (A), Sales techniques (ST), Finance (F) and Taxation (T) is below 2 points, and even minimised to 1 in the case of Taxation (T). In the case of the other age groups, the lowest rating continues to be maintained in Administration (A), Sales techniques (ST), Finance (F) and Taxation (T), although these do not fall below 2.8, in some cases even being evaluated with 4 points and the great majority above 3.

Table IV: Job situation

Academic year	Age group	%women	GS	P	BS	BM	A	T	F	ST
2014-2015	25-34	30%	4.0	4.0	5.0	3.0	2.0	1.0	2.0	2.0
2015-2016	25-34	15%	4.0	4.0	4.3	3.8	4.0	3.3	3.5	3.3
	35-44	15%	3.5	4.3	4.0	4.3	3.8	3.0	3.3	2.8
2016-2017	35-44	15%	4.3	4.0	4.0	4.0	3.0	2.8	2.8	3.3

Concerning entrepreneurial projects, in general, METmentees perceive that their participation in METmentoring contributed, with a rating equal to or great than 3 point, in the following order: in 2014-2015 academic year, with a rating equal to or greater than 4 point, establish and develop their network, identify new business opportunities and expand their vision of the future of their business project, and with a rating equal to or greater than 3 points, improve their business performance in terms of defining and developing their product and/or service and positioning their company in the market; in 2015-2016 academic year, with a rating equal to or greater than 3 points, expand their vision of the future of their business project, identify new business opportunities, establish and develop their network, and achieve their goals; in 2016-2017 academic year, with a rating equal to 4 point, expand their vision of the future of their business project and with a rating equal to or greater than 3 point, identify new business opportunities, establish and develop their network, improve their business performance in terms of defining and developing their product and/or service, and achieve their goals, improve their business performance in terms of positioning their company in the market, and transform/adapt their business project. In summary the best contributions of the programme are establishing and developing their network, identifying new business opportunities, expanding their vision of the future of their business project, improving their business performance, not just in terms of networking, but also in terms of defining and developing their product and/or service and positioning their company in the market, achieving their goals, and, finally, transforming/adapting their business project

Similarly, METmentees do not perceive very positively the contribution of the programme to attract customers or maintain customers, being rated very low, even with just 1 point, as can be seen in Table V.

Table V: Entrepreneurial project

Academic year	Age group	%women	AG	V	T	BO	P/S	P	AC	MC	N
2014-2015	25-34	30%	3.0	4.0	2.0	4.5	3.0	3.0	1.0	1.0	5.0
2015-2016	25-34	15%	2.8	3.4	2.8	3.6	2.8	2.0	1.8	2.8	2.8
	35-44	15%	3.5	3.8	3.5	3.5	3.0	3.0	2.3	2.3	3.3
2016-2017	35-44	15%	3.5	4.3	3.0	4.4	3.5	3.5	2.5	2.3	4.0

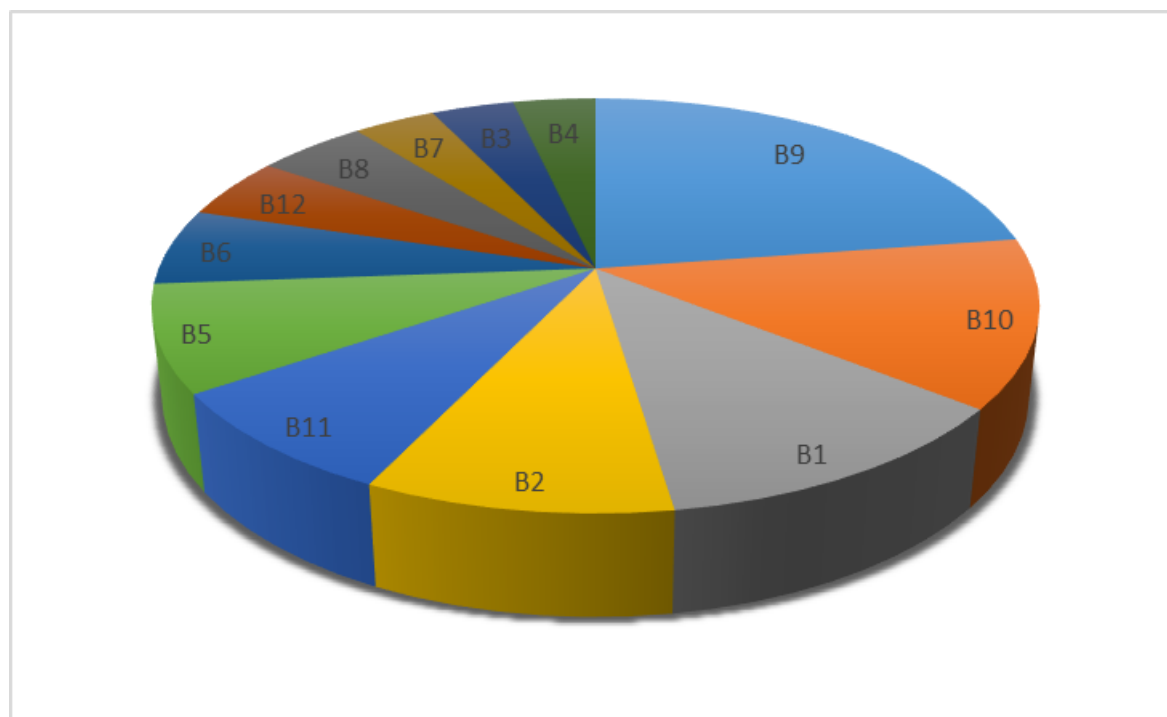
In fact, if we look at the responses given by the METmentees of the age groups that concentrate most of the participants and whose data are represented in Table V. We can see that, in general, both attract customers (AC) and maintain customers (MC) are rated below 2.5 in the three academic years. Similarly, the METmentees do not rate very positively the contribution of the programme to transform/adapt their business project, being only rated above 3 points by the 35-44 range of the academic year 2015-2016 and 3 points by the 35-44 range of 2016-2017.

The 5 points awarded to establish and develop their network by the METmentees of 25-34 of 2014-2015 represent 30% of the total participating sample, which with the 4 points awarded by the 35-44 of 2016-2017, amounts to 45%. Also noteworthy are the 4.4 points or more awarded by the 25-34 and 34-44 of 2014-2015 and 2016-2017 respectively to identify new business opportunities. Another aspect that 60% of the METmentees perceive positively with a rating equal to more than 3 points is to achieve their goals (AG).

Another aspect considered in this research are barriers and obstacles encountered by the mentees in their entrepreneurial adventure. Given a semi-closed list, an ordered list of barriers and obstacles that METmentees experienced follows (Figure 4): lack of financial resources (22.6%) (B9), inexperience in the sector (13.1 %) (B10), lack of business knowledge to start a business (11.9%) (B1), lack of technological knowledge (9.5%) (B2), fear of failure (8.3%) (B11), ignorance of aid programmes (8.3%) (B5), lack of female role models (6%) (B6), low self-confidence (4.8%) (B12), lack of opportunities (4.8%) (B8), gender discrimination (3.6%) (B7), lack of ability to start a business (3.6%) (B3), and lack of skills to start a business (3.6%) (B4).

On the one hand, it is positively noted that none of the participants consider low resilience as a barrier they had to face. On the other, there are two METmentees that add the following barriers: the discrimination of the government's contract systems, for example due to size, and financing.

Figure 4: Selected barriers and obstacles



Conclusions and implications

The results obtained after this research lead us to support Sims and Chinta's (2020) statement that stated that to ensure entrepreneurial success during nascent stages it is necessary to support and encourage entrepreneurs during this stage. We agree that mentoring is one of the most effective tools at promoting professional competences development through a guided and flexible process of continuous improvement and support, aimed at helping in the understanding of personal, organisational, and political issues, which may affect their current or future performance (Nuñez-Cacho & Grande, 2012, 2013, Solomon, 2016).

With respect to age group, the last Women's entrepreneurship report (Elam et al., 2019) posited that, among women, the highest participation rates are between the age groups of 25-34 and 35-44, that increase with their level of education. In the case of the present research, the METmentees that have participated most in the METmentoring programme are those in groups aged between 35-44, most of them (all but 1) with higher education.

The results obtained after the application of the questionnaire, also allow us to conclude that because of the METmentoring programme, METmentees perceive themselves to be competent in relation to the three types of competences (systemic, interpersonal and instrumental) and their corresponding sub-competences which they were also asked about, in line with the conclusions drawn by Vargas et al. (2017). Particularly noteworthy are the ratings given by the groups of 25-34 in 2014-2015 and 35-44 in 2016-2017 (45% of the sample), with maximum ratings of 5 points or close to this in most of the sub-competences: (Management (Systemic); Self-motivation and Perseverance, Ethical sense and Sustainable Thinking, Teamwork, Self-awareness, Self-efficacy (Interpersonal), and Written and Oral Communication, Planning, and Creative thinking and Creativity (Instrumental)). These results are supported by authors such as: St-Jean and Audet (2012) regarding ability to manage; Ilieva-Koleva (2015), St-Jean and Audet (2012), St-Jean and Tremblay (2020) and Peñalver (2019) concerning self-awareness and self-efficacy; Solomon (2016) as far as interpersonal relationship skills are concerned; and Peñalver (2019) regarding motivation and other interpersonal skills.

Concerning job situation, on the one hand, authors such as Allen et al. (2004), Eby et al. (2008), Roch (2016), and Rueywei et al., (2011) and the METmentees show a high level of job satisfaction and degree of progress. On the other, their perception and appreciation of some learning are generally reduced. This is the case of learning about business strategy, business model/plan, administration, sales techniques, finance and taxation.

These results and those related to the level of perceived competence are in line with the results reached by Barbagelata (2019). From his research, it can be deduced that those women who believe that supporting entrepreneurship is essential and who have always sought it (comparable to the women who are part of this research), have high levels of self-confidence, believe in their business idea, have important networks and a high level of education that is reflected in their university training, but show high but improvable values of theoretical knowledge.

With respect to entrepreneurial projects, METmentees also perceive that the METmentoring programme contributes particularly to identifying new business opportunities; other authors agree on the benefits of mentoring (Elam et al., 2019, St-Jean & Tremblay, 2011, 2020), and that it helps to expand: mentee vision of the future of their business project (St-Jean & Audet, 2012); improve their business performance in terms of establishing and developing their network (Solomon, 2016); define and develop their product and/or service and to position their company in the market; achieve their goals (St-Jean & Audet, 2012, Madarasiné & Németh, 2019), and, finally, transform or adapt their business project (St-Jean & Audet, 2012).

Similarly, 4 of the 27 participants have managed to set up their professional project because of their time at the MET, although 7 of them had already started to set up their project and, in their case, their time at MET helped them to consolidate it. Likewise, 18 of the 27 mentees continue nowadays with their professional project and, in addition, they oversee 4 to 8 workers, except for 3 mentees who are either alone or have 2 members of staff.

According to the METmentees, the following benefits of the programme stand out: networking, empowerment, pride of being a woman, self-confidence and self-efficacy, empathy, solidarity, illusion, a community of entrepreneurial women, a learning space, professional, innovative and personal development, entrepreneurial knowledge, business-related knowledge, tools to overcome cognitive barriers, good role models (mentors), love and affection, and a group of people with extraordinary human qualities. As stated by Ortiz (2017), there is no doubt that specific training

programmes for women, such as the one in which this study is contextualised, contribute to the development of competences and their integral formation, as well as to the creation of a culture that promotes and makes visible their entrepreneurial role. "I would certainly recommend it to other entrepreneurs", said the last woman who answered the questionnaire.

Research limitations/implications

One of the limitations of the study is that it does not specifically delve into the reasons why entrepreneur women benefit from mentoring programmes and why mentoring produces these benefits. Future research could help to fill the gap left by this research. Other research could be oriented to study the impact of mentors on entrepreneur women and their development in terms of competences, job situation and entrepreneurial project. It could be also interesting to analyse the way mentoring programmes and mentors training could be improved to reach entrepreneurs goals.

Although this is a small-scale study and not generalisable across contexts, this provides an example of how a well-known and validated mentoring programme, undertaken by hundreds of international entrepreneurial women during more than 10 years, could be replicated in Spain, and how it could bring very positive benefits to the community of participating women.

Finally, González-Serrano et al. (2019) say that unfortunately socially constructed and learned ideas about gender and entrepreneurship limit women's ability to accumulate social capital. It seems that entrepreneurial women are not sufficiently represented in technological entrepreneurship, which is considered by many to be the most profitable and fastest growing economic initiative. This experience has been replicated in the MET Community, which supports innovative, technological, and sustainable female entrepreneurship, and therefore emphasises the importance of the findings of this study.

References

- Allen, T.D., Eby, L.T., Poteet, M.L. and et al, (2004) 'Career benefits associated with mentoring for protégé: a meta-analysis', *Journal of Applied Psychology*, 89(1), pp.127-163. DOI: 10.1037/0021-9010.89.1.127.
- Bacigalupo, M., Kampylis, P., Punie, Y. and Van den Brande, G. (2016) *EntreComp: The Entrepreneurship Competence Framework*. Luxembourg: Publication Office of the European Union.
- Barbagelata, V. (2019) *Estudio de la Percepción de Mujeres Emprendedoras de los Factores Incidentes en el Emprendimiento Femenino y el Apoyo de Entidades Externas en Chile (Tesis doctoral)*. Santiago de Chile: Universidad Técnica Federico Santa María. Available at: <https://repositorio.usm.cl/bitstream/handle/11673/46935/3560903501111UTFSM.pdf?sequence=1&isAllowed=y>.
- Berk, R.A., Berg, J., Mortimer, R. and et al, (2005) 'Measuring the effectiveness of faculty mentoring relationships', *Academic Medicine*, 80(1), pp.66-71. DOI: 10.1097/00001888-200501000-00017.
- Bisquerra, R. (2009) *Metodología de la Investigación Educativa*. Madrid: La Muralla.
- Caro-González, A. (2018) *Universities, Policy Makers and Stakeholders fostering Science, Technology and Innovation (STI) nested systems for Societal Impact*. Available at: <https://www.deusto.es/cs/Satellite/deustoresearch/es/inicio/difusion-y-transferencia/jornadas-0/workshop-%E2%80%9Cwith-the-hand-in-the-dough%E2%80%9D/workshop-with-the-hand-in-the-dough/generico?idPest=3>.
- Cho, E. and Moon, Z.K. (2019) 'A qualitative study on motivators and barriers affecting entrepreneurship among Latinas', *Gender in Management: An International Journal*, 34(4), pp.326-343. DOI: 10.1108/GM-07-2018-0096.
- Council of the European Union (2018) *Recommendation on Key Competences for Lifelong Learning*. Brussels: Official Journal of the European Union. Available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&from=EN).
- Eby, L.T., Allen, T.D., Evans, S.C. and et al, (2008) 'Does Mentoring Matter? A Multidisciplinary Meta-Analysis Comparing Mentored and Non-Mentored Individuals', *Journal of Vocational Behavior*, 72(2), pp.254-267. DOI: 10.1016/j.jvb.2007.04.005.
- Elam, A.B., Brush, C.G., Greene, P.G. and et al, (2019) *GEM 2018/2019 Women's entrepreneurship report*. London: The Global Entrepreneurship Research Association.

- European Mentoring and Coaching Council (2018) *EMCC competence framework glossary V2*.
- Freeman, S. and Kochan, F. (2019) 'Exploring mentoring across gender, race, and generation in higher education. An ethnographic study', *International Journal of Mentoring and Coaching in Education*, 8(1), pp.2-18.
- Grima, F., Paillé, P., Mejia, J.H. and Prud'homme, L. (2014) 'Exploring the benefits of mentoring activities for the mentor', *Career Development International*, 19(4), pp.469-490. DOI: [10.1108/CDI-05-2012-0056](https://doi.org/10.1108/CDI-05-2012-0056).
- González-Serrano, M.H., González-García, R. and Calabuig Moreno, F. (2019) 'Análisis de los Efectos de la Educación Emprendedora en Deporte ¿el Género es un Condicionante?', *Materiales para la Historia del Deporte*, 18, pp.147-159.
- Harris, B., Chen, K.H. and Gorley, C. (2015) 'Benefits and Barriers', *Journal of Workplace Learning*, 27(3), pp.193-206.
- Hernández-Sampieri, R., Fernández-Collado, C. and Baptista-Lucio, P. (2008) *Metodología de la Investigación* (4th edn.). McGraw-Hill Interamericana.
- Hui Yap, J.B. and Lock, A. (2017) 'Analysing the benefits, techniques, tools and challenges of knowledge management practices in the Malaysian construction SMEs', *Journal of Engineering, Design and Technology*, 15(6), pp.803-825.
- Ibrahim, A. and Ismail, D. (2020) 'Skilling Framework for Women Entrepreneurs in the Knowledge Economy: a Study of Selected Women Entrepreneurs in Ilorin Metropolis', *Ilorin Journal of Human Resource Management*, 4(1).
- Jacobi, M. (1991) 'Mentoring and undergraduate academic success: a literature review', *Review of Educational Research*, 61(4), pp.505-532. DOI: [10.3102/00346543061004505](https://doi.org/10.3102/00346543061004505).
- Jha, P., Makkad, M. and Mittal, S. (2018) 'Performance-oriented factors for women entrepreneurs – a scale development perspective', *Journal of Entrepreneurship in Emerging Economies*, 10(2), pp.329-360. DOI: [10.1108/JEEE-08-2017-0053](https://doi.org/10.1108/JEEE-08-2017-0053).
- The Importance of Mentoring Programs in Business* (2015). 15th International Rome: Academic Conference, , .
- Kunaka, C. and Moos, M.N. (2019) 'Evaluating mentoring outcomes from the perspective of entrepreneurs and small business owners', *Southern African Journal of Entrepreneurship and Small Business Management*, 11(1).
- Kline, L. (2005) 'Systemic inquiry – exploring organisations', *Kybernetes*, 34(3-4), pp.439-447. DOI: [10.1108/03684920510581620](https://doi.org/10.1108/03684920510581620).
- Madarasiné, A. and Németh, K. (2019) 'Coaching and mentoring at family businesses in process of transition', *Prosperitas*, VI(1), pp.76-101.
- Núñez-Cacho, P. and Grande, F.A. (2012) 'El desarrollo de los recursos humanos a través del mentoring: El caso español', *Intangible Capital*, 8(1), pp.61-91.
- Núñez-Cacho, P. and Grande, F.A. (2013) 'The importance of mentoring and coaching for family businesses', *Journal of Management & Organization*, 19, pp.386-404. DOI: [10.1017/jmo.2013.28](https://doi.org/10.1017/jmo.2013.28).
- Olayinka, M., Ehiobuche, C., Nwankwo Igu, N.C. and Suliyat Ajoke, O. (2020) 'Career Training with Mentoring Programs in Higher Education. Facilitating Career Development and Employability of Graduates', *Education + Training*, 62(3), pp.214-234.
- Ortiz, P. (2017) 'El discurso sobre el emprendimiento de la mujer desde una perspectiva de género', *Vivat Academia. Revista de Comunicació*, 140, pp.115-129. DOI: [10.15178/va.2017.140.115-129](https://doi.org/10.15178/va.2017.140.115-129).
- Peña, I., Guerrero, M., González-Pernía, J.L. and Montero, J. (2018) *Global Entrepreneurship Monitor: informe GEM España 2017-2018*. Santander: Universidad de Cantabria.
- Peñalver, A. (2019) 'Beneficios y tendencias del mentoring', *Capital Humano*, 345. Available at: <https://cutt.ly/5yWlhpU>.
- PwC (2017) *Evaluación del impacto socioeconómico del programa de mentoring de Youth Business Spain*.
- Rico, P. and Cabrer-Borras, B. (2018) 'Gender differences in self-employment in Spain', *International Journal of Gender and Entrepreneurship*, 10(1), pp.19-38. DOI: [10.1080/02692170500119854](https://doi.org/10.1080/02692170500119854).
- Roch, G.R. (2016) 'Much ado about mentors', *Harvard Business Review*, 57(1), pp.14-20.
- Rueywei, G., Shih-Ying, C. and Shin-Lung, L. (2011) 'Does Mentoring Work? The Mediating Effect of Mentoring in China', *Social Behavior and Personality*, 39(6), pp.807-824. DOI: [10.2224/sbp.2011.39.6.807](https://doi.org/10.2224/sbp.2011.39.6.807).
- Rudhumbu, N., du Plessis, A. and Maphosa, C. (2010) 'Challenges and opportunities for women entrepreneurs in Botswana: revisiting the role of entrepreneurship education', *Journal of International Education in Business*. DOI: [10.1108/JIEB-12-2019-0058](https://doi.org/10.1108/JIEB-12-2019-0058).
- Sims, R.L. and Chinta, R. (2020) 'The mediating role of entrepreneurial ambition in the relationship between entrepreneurial efficacy and entrepreneurial drive for female nascent entrepreneurs', *Gender in Management: An International Journal*, 35(1), pp.76-91. DOI: [10.1108/GM-09-2019-0158](https://doi.org/10.1108/GM-09-2019-0158).
- St-Jean, E. and Audet, J. (2012) 'The role of mentoring in the learning development of the novice entrepreneur', *International Entrepreneurship and Management Journal*, 8(1), pp.119-140. DOI: [10.1007/s11365-009-0130-7](https://doi.org/10.1007/s11365-009-0130-7).

- St-Jean, E. and Tremblay, M. (2020) 'Mentoring for entrepreneurs: A boost or a crutch? Long-term effect of mentoring on self-efficacy', *International Small Business Journal-Researching Entrepreneurship*. DOI: [10.1177/0266242619901058](https://doi.org/10.1177/0266242619901058).
- St-Jean, E. and Tremblay, M. (2011) 'Opportunity Recognition for Novice Entrepreneurs: The Benefits of Learning with a Mentor', *Academy of Entrepreneurship Journal*, 17(2), pp.37-48.
- University of Deusto (n.d.) *Deusto 2022. Transforming our world together*. Available at: <https://cutt.ly/zyv0iLo>.
- Vargas, M.R., Ríos, J.C. and Carey, C.E. (2017) 'Educación Dual. Mentoring y Desarrollo del Liderazgo', *Revista Electrónica Anfei*, 4(7).
- Vasanth, K., Mousumi, M. and Kishore, K. (2012) 'Mentoring: A Differentiating Factor in Management Education Business', *Asia Pacific Journal of Management & Entrepreneurship Research*, 1(2), pp.25-41.
- Villa, A. and Poblete, M. (2007) *Aprendizaje Basado en Competencias. Una Propuesta para la Evaluación de las Competencias Genéricas*. Bilbao: Universidad de Deusto.

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