



Sustainable entrepreneurship in equine services

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ABSTRACT

The equine industry is in continuous development, offering opportunities to entrepreneurs in the implementation and advancement of their sustainability visions. This paper explores sustainable entrepreneurship in the equine industry through a qualitative research approach to bridge the gap between the needs of society, the environment and entrepreneurs. Structured interviews with equine industry representatives from various countries were employed to collect data, and a thematic content analysis with the Leximancer programme was conducted to seek insights. Using the theory of reciprocal determinism, the paper also explores whether there are influencing factors between the sustainability of a business in the horse industry and the entrepreneur's gender or entrepreneurial experience. This research shows that women with less than ten years of entrepreneurial experience are much more inclined towards sustainability. The entrepreneurs in the horse sector need to be aware of the potential of this industry, to promote themselves in this direction and to support each other to strengthen their self-efficacy. This study contributes to the expansion of knowledge about sustainable entrepreneurship, specifically the issues and strategies used by entrepreneurs in today's equine sector, with a specific focus on the modern context, with the inclusion of sustainability as a key factor in business success.

1. Introduction

In the business context, sustainability is defined as a “business approach to creating long-term value by considering how a given organisation operates in the ecological, social, and economic environment” (Haanaes and Olync, 2022). The 26th United Nations Climate Change conference, held in 2021 in Glasgow, Scotland, propelled the global sustainability vision by challenging businesses to align their business strategies to sustainability targets (www.ukcop26.org). As a result, in the present extremely competitive commercial world, sustainability is a topic of interest for every business. According to a recent Accenture report, 84 % of companies plan to increase investment in sustainability by the end of 2022 with a vision of achieving Net Zero by 2050 (Accenture, 2022). Besides its main objective of obtaining profit, the entrepreneurial sector also aims to strengthen its focus on sustainability (Mulqueen, 2022), acknowledging the close connection between economic prosperity and social and ecological development (Hummels and Argyrou, 2021). Global Entrepreneurship Monitor (Monitor, 2023) (<https://www.gemconsortium.org/>) defined entrepreneurship as the “engine” and the future of safe and successful development, and entrepreneurs have always had a well-defined place in society. Variables such

as a high degree of proactivity in the employees' attitudes regarding sustainability, innovation, previous entrepreneurial experience, and risk adversity (Giannakos et al., 2019; Kabo, 2021; Botella-Carrubi et al., 2022; Huang et al., 2022) have been considered highly relevant for entrepreneurial ventures.

The ecological environment provides important resources for the economy and the satisfaction of social needs. However, the activities carried out by people and corporations have profoundly affected the environment. The challenge posed by COP26 to corporations worldwide is to find innovative solutions across all industries, so that what is taken from the environment while doing business is fully appreciated and protected. Organisations are now tasked with fostering change towards a more sustainable future. Change is said to start from within each organisation. Therefore, is a change towards sustainability seen in the equine industry, and if so, what lessons and/or strategic or tactical solutions can the industry provide?

In order to protect the environment, many governments have encouraged and/or incentivised sustainable management among businesses, but the development of sustainable companies is still in its infancy in many business sectors. It has been noted that non-economic factors such as sociocultural or ecological factors should not be forgotten

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when considering the development of sustainable entrepreneurs in the equine sector (Koe and Majid, 2014, Torres-Marín et al., 2021).

The horse sector has undergone many transformations over time, and its evolution for a sustainable purpose could be the best decision entrepreneurs can embrace. Knowing the evolution of a business in the equine sector and understanding the evolution of the market can help an entrepreneur identify the strategies and theories to apply correctly. These principles of knowledge are important because entrepreneurs often start with the desire to earn a lot of money, without thinking about the long term (Sarasvathy, 2001) or about the values of society.

The culture of a nation encompasses a society's shared values, norms, beliefs, traditions, and behaviours. These cultural factors can shape how sustainable practices are perceived, adopted, and integrated within the horse industry. Cultures with a strong connection to nature are more likely to prioritise sustainable practices in industries that involve animals, natural resources, and the outdoors, such as the horse industry.

A culture that values eco-friendly and ethical choices can drive businesses to offer sustainable options. The horse industry is beginning to be defined as an integral branch of the green economy throughout the world. Borders between countries no longer represent an impediment in the horse sector, even if the economic and social conditions differ from one nation to another (Saunila et al., 2018).

Sustainable entrepreneurship in the horse industry includes the recognition, development, and exploitation of opportunities to introduce goods into the circular economy (such as horse manure) and offer services with economic, social and ecological advantages. In a globalised world full of environmental problems, where sustainability pillars are increasingly important in economic activity, the horse industry must be recognised as a major contributor to economic activity. Such recognition and understanding are necessary to ensure that investment, management and fundraising decisions are made on a fully informed and consolidated basis.

To develop a sustainable equine industry, entrepreneurs need to redefine sustainable development in the world of horses, so that there is economic progress, environmental protection, and human development (Hummels and Argyrou, 2021). The horse sector faces several environmental concerns that can increase costs for entrepreneurs and even reduce social welfare (Hadin et al., 2017). Notably, if equine entrepreneurs misunderstand certain key concepts, it could lead to inadequate planning for sustainable entrepreneurship development, making it increasingly difficult to ensure a stable and profitable future. To the best of our knowledge, few qualitative studies have explored sustainable entrepreneurship principles, issues and strategies in the equine industry. This study was therefore carried out to explore these aspects and to determine the role that social and ecological factors play in the orientation towards a sustainable business.

The current research identifies key factors, opportunities, challenges, risks and benefits for sustainable equine entrepreneurs. Therefore, the following research questions guide this study:

Q1: What are the sustainability-related factors that help equine entrepreneurs be successful?

Q2: Are there any opportunities and challenges for sustainable entrepreneurship in the equine industry?

Q3: Are the entrepreneurs in the equine industry aware of the risks and benefits of sustainability-focused business?

Q4: Does the entrepreneur's gender or entrepreneurial experience matter in shaping a sustainable business in the horse sector?

This paper examines sustainable entrepreneurship in the equine sector through the lens of Bandura's Theory - the theory of reciprocal determinism (Bandura, 1978) - from a wider contemporary, cultural perspective. This theory suggests that an entrepreneur's behaviour is influenced by a dynamic interplay between personal factors (the entrepreneur's gender and experience), environmental factors (industry trends and sustainability strategies) and social behaviour factors (market environment and adaptability). Personal factors comprise the

importance of individual characteristics, beliefs, and self-efficacy in shaping behaviour. Sustainable entrepreneurs in the horse industry need to possess a strong sense of self-efficacy: the belief in their ability to make a positive impact on the environment and society through their business ventures. Environmental factors also play a significant role in shaping behaviour. In the context of the horse industry, this means studying how sustainable entrepreneurial actions lead to positive outcomes, both for business and the environment. Last but not least, social behaviour factors underscore the relationship between social behaviour and its consequences (Hine and Leman, 2013). Understanding these complex interactions can help entrepreneurs make informed decisions and navigate challenges in a rapidly changing industry.

In essence, this research explores sustainable entrepreneurship strategies in the horse industry, seeking to discover a harmonious balance between economic growth, social responsibility, and environmental stewardship. Such a balance would ensure that the industry thrives while minimising its negative impacts and contributing positively to society and the planet.

The following sections explain how the study applied a qualitative perspective to explore sustainable entrepreneurship in the equine sector from different cultural perspectives. The next section outlines the theoretical background for this study.

2. Theoretical background

2.1. Sustainable entrepreneurship

CO₂ emissions have been increasing for many decades, so concerns about environmental degradation are increasing (Yu et al., 2022). These dangers raise new challenges for society and create opportunities for entrepreneurs by mobilising them to generate and implement new strategies to face these risks (Naudé, 2018). Traditionally, an enterprise needs to consume environmental resources to make a profit. On the other hand, entrepreneurs aware that they must protect both society's and ecological needs must find new ways of taking advantage of the available opportunities and improve resource use efficiency by adopting new management strategies (Gu and Zheng, 2021). The identification of opportunities is fundamentally based on sustainable entrepreneurial intentions (Krueger et al., 2000). Therefore, it is important to find out what the entrepreneurs in the horse sector want.

Entrepreneurship has led to economic development, but there were also cases in which it had less friendly effects on the environment (Dean and McMullen, 2007), due to the increasingly damaging industrialisation. Therefore, turning a business into a sustainable one can foster its success (Haanaes & Olync, 2022). Sustainable entrepreneurship includes both social entrepreneurship and eco-entrepreneurship, and it needs the support of government, investors, and society (Hummels and Argyrou, 2021). Establishing a startup or developing a sustainable business is based on the need for goods/services and the opportunity to create durable pillars, such as economic progress, equality and social development, and to innovate to protect the environment (Cervelló-Royo et al., 2020).

Climate change has forced entrepreneurs to develop their ability to survive in a competitive market through an innovative spirit. Changing a business model into a sustainable one, in which environmental objectives occupy an increasingly important place, presents entrepreneurs with difficult challenges (Keskin et al., 2013). As argued by Hristov et al. (2018), the entrepreneurs from the horse industry are also affected by concerns about climate change because sports events can no longer be supported to the same extent and food procurement is likely to become increasingly difficult, especially concerning grazing.

Sustainable entrepreneurship is the basis of a strong and healthy economy, meaning high-quality, sustainable development must be embedded in the sustainability model of enterprises (Gu and Zheng, 2021). Studies of sustainable entrepreneurship are increasingly complex, and they seek to highlight the company's social value, economic

feasibility and solving environmental problems (Thompson et al., 2011). Traditional forms of entrepreneurship are oriented towards obtaining economic benefits in the shortest possible time, but the new orientation focused on social responsibility and environmental protection ensures resistance in the market. Business performance consists of maximising financial indicators, social development, and protection of ecological interests. A sustainable business model leads to a happy society and a protected environment with long-term assured resources (Gu and Wang, 2022).

Banerjee et al. (2003) argue that the promotion of sustainability is supported by both society and government. They present four reasons for integrating sustainability in a business: the rules and standards imposed at the international level for a cleaner environment, society's concern for securing resources and a decent living, competitive advantage in the market and achieving better management through environmental strategies.

Importantly, the development of a sustainable enterprise is based on the motivation and values of each entrepreneur (Gast et al., 2017). Meek et al. (2010) suggest that the institutional context also influences the creation of a sustainable business model.

2.2. Sustainable entrepreneurship in the equine sector

Pickel-Chevalier and Grefe (2015) characterised the evolution of the equine industry as a "contemporary revolution". Although the uses of horses have changed much over time, businesses using them were seen as part of a "green industry" (Forsberg et al., 2012). Entrepreneurship in this field can be considered green because, for example, waste products, such as horse manure, can be introduced into the circular economy.

Businesses involving horses require a special entrepreneurial environment because entrepreneurs see this business model as a way of life (Pussinen and Thuneberg, 2015), based on passion and sometimes tradition. However, Grefe and Pickel-Chevalier (2015) highlighted that passion and love for horses are insufficient to lay the foundations of entrepreneurship in the equine sector. For example, to encourage sustainable development in the equestrian industry, entrepreneurs need an impetus and the courage to take risks (Pussinen and Thuneberg, 2015). It is necessary for entrepreneurs to be true visionaries and to understand this industry's likely future trends.

The relationship between sustainable entrepreneurship and the horse sector is an underdeveloped area. Entrepreneurs in the equine industry are key pillars in the development of enterprises that protect society, thus promoting their practices in environmental governance. The sustainability of a business in the horse industry could be affected by broader industry trends, such as changes in consumer preferences, technological advancements, green team creativity, and environmental concerns (Ogbeibu et al., 2020). These trends have an impact on the demand for services and products, the competitive landscape, and overall business viability.

Some research mentions how a sector or a region can be economically refreshed by the innovative spirit of entrepreneurs (Audretsch and Thurik, 2001). Schaltegger and Wagner (2011) described entrepreneurs as the force that takes the initiative and "builds a bridge" to sustainable progress because they bring people together to create value through innovative ideas. They described sustainable entrepreneurship as innovative entrepreneurship that greatly benefits society by satisfying stakeholder demand. This can also be applied in the world of horses, capable of offering more than social well-being. A concept associated with sustainable entrepreneurship is eco-innovation. Developing such a business model in the horse industry requires strategic management in facing the technological and non-technological changes that can bring significant environmental benefits (Barbieri and Santos, 2020).

Equine entrepreneurship is full of challenges, but its ability to adapt to economic changes and disruptive factors caused by the environment turns it into quite competitive entrepreneurship. Currently, businesses using horses are beginning to implement business models that are more

and more oriented towards the social factor, and if an entrepreneur considers sustainable development, they are most likely to succeed in adopting innovative models and technologies in their business (Rantala et al., 2018). Sustainability leads to competitive advantages and operational efficiency through technologies that improve the relationship with the environment. Moreover, implementing sustainable practices creates strategic partnerships (Mugoni et al., 2023).

Sustainable entrepreneurship, therefore, plays an important role in overcoming economic problems facing the horse sector if the opportunities are identified and exploited for the promotion of economic, social and environmental health (Cohen and Winn, 2007).

Cultural landscapes and socio-natural constructions have long been considered elements of sustainability, and equestrian tourism is one of the activities that support sustainable entrepreneurship in the equine sector (Ray, 2000). Horse riding and equine tourism also contribute to sustainable development (Sharpley and Telfer, 2014). France (2011) states that equine entrepreneurship develops sustainably due to the transformation of rural areas through community integration and links with the region's services.

Equine tourism can be considered sustainable tourism if sustainability is fully integrated into a horse business, and the economic impact can be considered quite strong. Horses support traditional practices and at the same time provide opportunities for innovation (Evans and Pickel-Chevalier, 2013). Nature walks represent an opportunity for equine tourism and sustainable entrepreneurship (Helgadóttir and Sigurðardóttir, 2008).

Some researchers indicate that social entrepreneurship is one of the basic tools in sustainable business development (Schin et al., 2023), and the social factor is a strength of the horse industry through services associated with well-being, therapies, hippotherapy and connectedness with nature.

Sustainable entrepreneurship can be a challenge for horse owners, and they must adapt to any changes to survive in the market. But this is not the strong point of horse owners, and an example can be how they reacted during the COVID-19 pandemic, specifically because such entrepreneurs began to see their opportunities decline (Williams et al., 2020).

The horse sector is, however, a very attractive one, and people's awareness of the benefits that this sector can bring is the basis for improving the horse business. Notably, the image of the entire horse sector is affected by how the prospects of a business are valued (Pussinen and Thuneberg, 2015).

2.3. Cultural influences in developing a sustainable business model

A very important aspect of this research is the cross-cultural vision of equine entrepreneurship. It is important to mention that entrepreneurial activity is closely linked to national culture (McGrath et al., 1992). The level of sustainability in horse sector businesses is a function partly of their geographical location.

Culture can be considered a key factor in the development of sustainable entrepreneurship in the equine sector because it can promote certain entrepreneur behaviours that will enhance the economy of society (Aliabadi et al., 2022). Cultural values regarding environmental stewardship, animal welfare, and sustainable living can impact how these values are reflected in business practices within the horse industry. A culture that prioritises these values is more likely to foster sustainable entrepreneurship (West et al., 2018).

Previous research in the filled noticed that perceptions of entrepreneurship, including in the equine sector, vary with the ability of each nation or culture to identify and value the newly-arising opportunities (Sternberg and Wennekers, 2005). Undoubtedly, cultural factors can influence both the entrepreneurial environment and the creation of a sustainable business model. The culture and sustainable values of a modern society help horse businesses in less developed countries to become sustainable, and entrepreneurs influence each others' behaviour

in accordance with the values of the group (Bogatyreva et al., 2019). The entrepreneurial environment is the main pillar that supports the world of sustainability, and in the equine sector this will take place in many cultural contexts (O'Neill et al., 2009).

Norton (2005) claims that sustainability is culturally influenced, through the prism of the place where an enterprise conducts its activities. Also, Krueger et al. (2013) suggest that entrepreneurship can be influenced by a nation's social and cultural values.

Cultural influences on managerial decisions have been widely discussed over time, including on the topic of sustainability (Delmas and Toffel, 2004). On the other hand, Zander and Romani (2004) claim that due to economic globalisation and the social mix, national culture no longer plays an important role in entrepreneurship. Some state that besides the culture of a country, the level of education of the entrepreneur is more important (García-Cabrera and García-Soto, 2008). Consequently, sociocultural factors should be given sufficient attention to promote sustainable entrepreneurship in the equine sector.

Schmutzler et al. (2019) argue that the confidence and courage to develop a sustainable business in the equine sector depends on the individualist-collectivist character of the national culture and self-efficacy. Cultural differences in self-efficacy can provide new ways of looking at sustainable entrepreneurship in the horse industry (Bofah, 2016). In order to understand the behavioural changes of entrepreneurs at the cross-cultural level, the theory of mutual determination is indicated to be applied (Baranowski, 1990).

2.4. The theory of mutual determination

Entrepreneurial companies play an important role in a country's economy because they are in continuous development and look for future prospects. Kuratko (2011) defines entrepreneurship as an innovative, creative process which involves visions on the implementation of ideas and solutions in solving the problems faced by society. Thus, for an entrepreneur to be innovative and involved in developing his business, he must possess certain qualities such as creativity, courage, resistance to stress and confidence in his abilities (Santos-Vijande et al., 2022). To better understand sustainable entrepreneurship in the equestrian industry, Bandura's theory of mutual determination can be applied (Bandura, 1986).

According to Bandura, in order to achieve higher goals, self-efficacy is important to be able to move forward in the face of difficulties, obstacles, and discouragement (Bandura, 1986). Self-efficacy is required because it helps the entrepreneur get through the critical moments he may encounter in his company's activity (Chen et al., 1998). Boyd and Vozikis (1994) also claim that the development of a business is correlated with the entrepreneur's self-efficacy. This quality of an entrepreneur is also reflected by his passion for what he does (Lex et al., 2016), and the horse sector has many "soul-based business owners" (Roggen, 2010). Businesses in the equine industry are founded on emotions, passion and love for horses, and one of the four main antecedents of self-efficacy is emotional arousal (Flannery and May 2000).

Notably, reciprocal support between entrepreneurs strengthens entrepreneurial self-efficacy in the horse sector. Thus, this research is based on Bandura's theory of reciprocal determinism (Bandura, 1978), as we consider that entrepreneurial models observed in the equine sector both influence other entrepreneurs from this field to adopt eco-minded behaviours and are influenced by environmental pressures. Also, entrepreneurial behaviour and society's needs to protect the environment affect each other dynamically and reciprocally over time. It is therefore fitting to look at the phenomenon of this study through the lens of this theory.

3. Research methodology

3.1. Sample and data collection

To achieve the objectives of this research, an interview approach was deemed most suitable for the collection of data which would offer deep insights (Kallio et al., 2016). To develop this interview guide, we focused on the existing literature in the field of entrepreneurship (Bosse et al., 2023; del Olmo García and Crecente Romero, 2021), sustainability (Di Vaio et al., 2022) and the horse industry (Pussinen and Thuneberg, 2015). We created an interview guide aimed at assessing the sustainability within an equine entrepreneurship-based business.

The interviews were conducted using a questionnaire that allowed the respondents to address the issue of sustainability and entrepreneurship in the equine sector. The interview questions are shown in Appendix I. To identify various entrepreneurs within the equine industry, desktop research was performed with the Google search engine. Out of the identified 50 suitable equine industry entrepreneurs, 20 responded to the interview invitation. Some researchers explain that to study the lived experience in any field of activity or cultural region 10 to 20 knowledgeable respondents are enough (Bernard and Bernard, 2013).

The interviews were conducted online in English. Over half of the 20 respondents had been in business for over ten years, and the average age range was 36 to 50. The respondents provided riding services, sports/competitions, livery stables and breeding, tourism, hippotherapy and manure processing. The following 20 countries (and regions) were represented in the Fig. 1.: Europe (Spain, Ireland, Germany, England, Portugal, Slovakia, France, Italy, Romania, The Republic of Moldova), America (Mexico, USA, Argentina), Africa (Senegal, Morocco), Asia (Jordan, Cyprus, Japan, China) and Australia.

Table 1 shows the hypotheses that relate to sustainable entrepreneurship in the horse industry:

3.2. Analytical tool used for thematic analysis

As the study related to an exploration of qualitative data, thematic content analysis was performed, using the Leximancer software (Leximancer, 2023) because it offers the possibility of intense and objective analysis (Smith and Humphreys, 2006). Leximancer offers a longer list than other qualitative analysis tools of the keywords that could be useful in interpreting the results, and it presents the themes and concepts much more attractively visually. (Sotiriadou et al., 2014). Leximancer is based on a machine-learning algorithm which discovers key themes and concepts within the data through an iterative process of seeding concept definitions via lexical analysis (Wilk et al., 2022). Leximancer presents certain keywords, defined as "concepts", and these form groups called "themes". The software uses word frequency and co-occurrence through statistical algorithms to identify concepts from the collected data. These common concepts form through semantic links with other concepts within the data and are presented visually in a Concept Map. The colours of the circles represent the importance of each theme (from red, the hottest and most prominent theme to purple, the least prominent theme). The Concept Map is likened to a "bird's eye view of the data" (Leximancer Pty Ltd, 2021). The strength of the Leximancer software is the speed with which it identifies key words and groups them into word clusters, naming these themes based on the most prominent concept (Wilk et al., 2019).

Leximancer is used in this research to discover clusters of words used in the answers received from the respondents. This process maximises the relevance of all other words in the interview so that analyses can be made of the business models developed by the entrepreneurs.

4. Findings

The first thematic analysis of all content segmented by years of

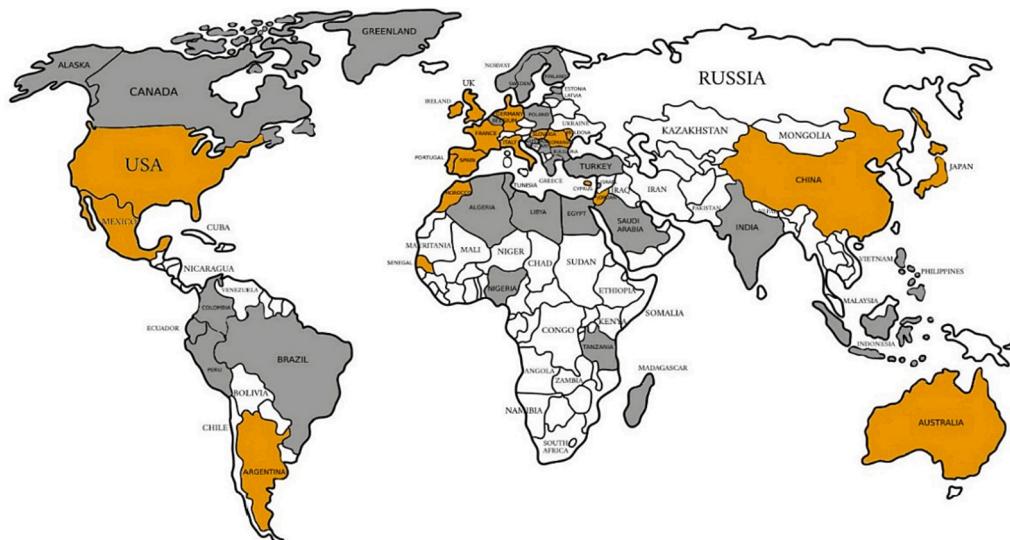


Fig. 1. Countries which participated in the interview.

Table 1
Research Hypotheses.

Research question	Hypothesis	Source
Q1: What are the sustainability-related factors that help equine entrepreneurs be successful?	H1: Sustainable practices lead to improved business performance in the horse industry.	Russell and Millar (2014)
Q2: Are there any opportunities and challenges for sustainable entrepreneurship in the equine industry?	H2: Cultural collaborative networks enhance sustainable entrepreneurship in the horse sector.	Laukkonen and Patala (2014)
Q3: Are the entrepreneurs in the equine industry aware of the risks and benefits of sustainability-focused business?	H3: The trends of sustainable entrepreneurship can be risky because they influence the adoption of innovative technologies that exceed the sphere of competence of entrepreneurs in the equestrian industry.	Deligianni et al. (2019)
Q4: Does the entrepreneur's gender or entrepreneurial experience matter in shaping a sustainable business in the horse sector?	H4: Gender diversity or entrepreneurial experience positively impacts sustainable decision-making.	Kanadlı et al. (2022) Munoz (2017) Shepherd et al. (2015)

Source: issued by the authors.

experience and gender is found in Fig. 2 below. The findings reveal 14 key themes, from the most prominent ‘Horses’, through to the least prominent ‘Risk’. Interestingly, the new equine entrepreneurs (tags with ‘Entrepreneurial experience of less than five years and between five and ten years) are more likely to be female (female tag), focused on profit, income and recycling to save costs; they are also more equipped in marketing skills and focused on marketing their business. The more experienced entrepreneurs (10 or more years) are more likely to be male, and concerned with development, economy, lack of knowledge, competition, risk and trends, showcasing a need to stay up to date on the evolving equine industry’s sustainability practices.

The concept map in Fig. 2 helps us answer the first research question (Q1). It reveals the key fourteen dominant themes across all countries and all questions asked during the interview, related to horses, horse experience, development, competitions, lack, fertiliser, riders, income, recycling, marketing, profit, risk, and trend.

The concepts “sector”, “tradition”, “passion”, “welfare”,

“sustainable”, “developing”, “challenges”, “opportunities”, “skills”, and “business” are some of the concepts associated with the “horses” theme (in red). This theme is the most prominent in the concept map. “Sector” is the most common concept on the map, but “sustainability” is the most important as it combines the three most prominent themes. This concept is associated with the key themes of “horses”, “horse” and “experience”.

It is interesting to note that both themes - "horses" and "experience" - are related to the concepts "business", "tradition", "skills" and "world".

"Horses" and "competitions" are interconnected through the strongest concept of the two, "passion".

As can be seen from Fig. 2, it seems that there is no connection between the most important themes “horses” and “profit”, “recycling”, “fertiliser”, “development”, “lack”, “marketing”, “trend”, and “risk”.

It can be deduced that, for the most part, entrepreneurs have not so far been very interested in recycling goods from the equine sector. The risk of non-development in this industry is also influenced by the lack of solutions to increase profitability and the fact that this business is not much promoted as a sustainable one.

To highlight this idea, the Leximancer-produced Insight Dashboard report offers further information to supplement the Concept Map. Specifically, it highlights the prominence score (PS) of each key concept and of compound concepts, as seen in [Table 2](#) below.

The Concept Map in Fig. 3 presents insights into the second research question (Q2). It reveals twelve dominant themes: horses, equestrian, sector, passion, future, farmers, economy, lack, demand, recycling, solution, and motivation.

The concepts “entrepreneurs”, “business”, “sustainable”, “capacity”, “skills”, “government”, “incentives”, “experiences”, “offer”, “need”, “environment”, “resources” are some of the concepts associated with the “horses” theme (in red). “Offer” and “incentives” are the most prominent concepts because they provide association with the three important themes “horses”, “passion”, and “future”, and the last one brings together “horses”, “equestrian”, and “sector”.

Although passion was the basis of establishing a business with horses, the future of this sector is marked by its sustainable power and the government's ability to support this industry.

The Concept Map in Fig. 4 answers the third research question (Q3). It reveals ten dominant themes: future, passion, sector, factors, care, carbon, economy, solar, risk, and risks.

The concepts “entrepreneurs”, “business”, “sustainable”, “renewable”, “horses”, “experiences”, “practices”, “opportunities”, “challenges”, “authentic”, “tradition”, “attractive”, “successful” are some of the concepts associated with the “future” theme (in red). “Challenges” is

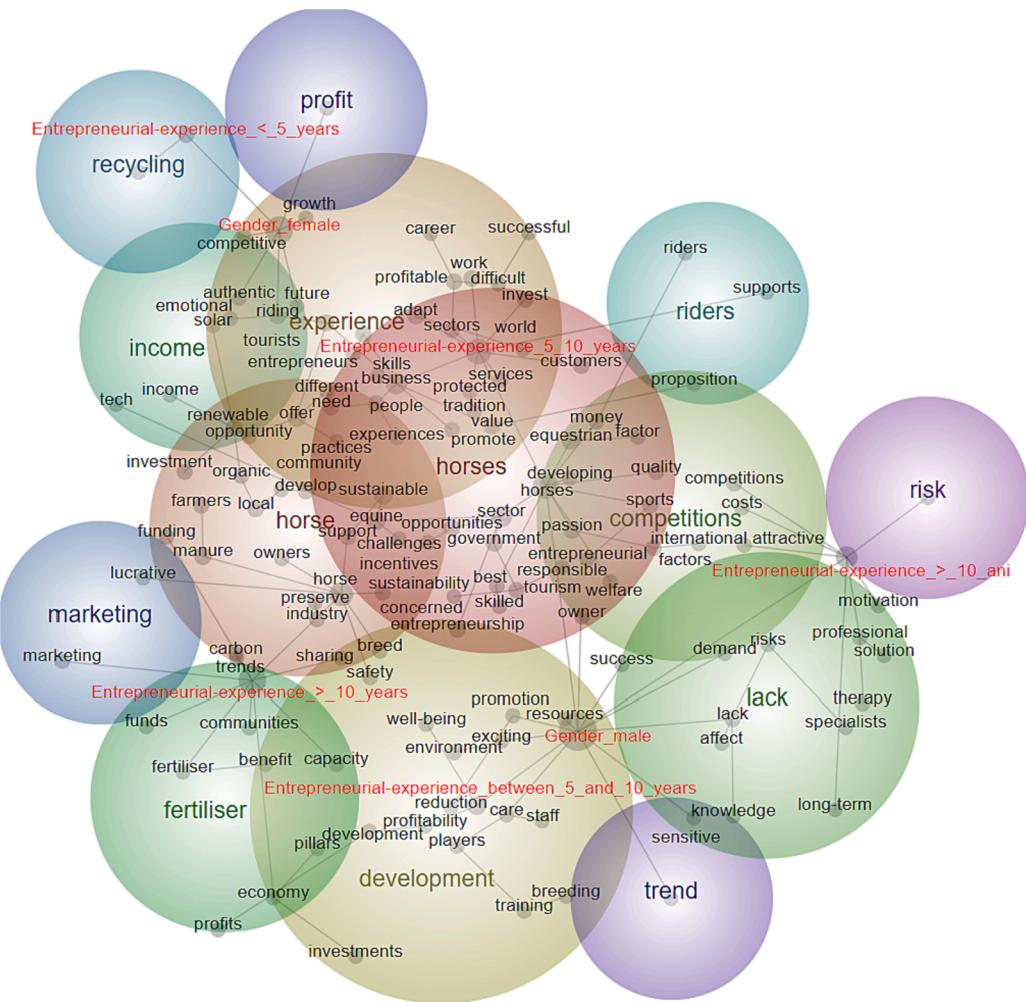


Fig. 2. Leximancer concept map: Key themes and association of concepts by entrepreneurial experience and gender.

the most important concept because it brings together the three important themes: "future", "sector and "factors".

Fig. 4 shows that there is no connection between the most important themes “future”, “economy”, and “risk”. Equine entrepreneurs see few opportunities in this sector that lead to profit maximisation, and on the other hand, they lack the courage to assume certain risks.

The Leximancer programme automatically selected a series of concepts with the highest frequency of occurrence. The preliminary results extracted by the software show the frequency, relevance and sentiment, as seen in [Table 3](#). All concepts were evaluated for their prominence and in relation to the studied topic - sustainable entrepreneurship - using Leximancer's algorithm based on Bayesian algebra. The programme calculated a Prominence Score for each concept or pair of concepts. The Prominence Score makes association comparisons by combining strength and frequency scores (Leximancer, 2021).

Note that there was a higher relevance of the concepts that indicate evolution of the horse sector (international 100 %, challenges 66 %, industry 57 %, community 50 %), a medium relevance for the concepts which describes this sector (difficult 33 %, exciting 33 %, skills 25 %), and concepts related to the sustainable future development of the sector are less common (sustainable 16 %, equine 15 %, development 14 %, sector 10 %, local 10 %, horses 3 %).

This reveals that in the analysed interviews the emphasis was more on the evolution of the sector and the difficulties faced by the entrepreneurs than on the opportunities and the development of equine entrepreneurship as a sustainable one.

This may be due to the greater interest among the interviewed

entrepreneurs in describing the difficulties encountered over time and less in the opportunities offered, or perhaps the lack thereof.

It was also noted that there are predominantly unfavourable opinions for concepts such as community, difficult, exciting, skills, and local development. On the contrary, there are predominantly favourable opinions for concepts such as industry, sector, sustainable, and equine.

To understand the analyses further, a deeper investigation was performed. The association between the analysed concepts is presented in **Table 4**.

The most prominent compound concept or association between concepts exists between “international” and “solutions”. Also, the concept “international” has a strong connection with the concept “difficult”. It can be concluded that entrepreneurship in the equine sector faces difficulties at an international level.

For example, extracts from interviewees' responses are as follows.

"All sectors will need to reform and follow...or they will disappear and new structures will arise that are more inclusive and less profit driven",

"is very difficult to sustain a successful career without additional help and sponsors- which are very hard to find",

"work more hours for less money and you have higher risks",

"The equine sector in particular has niche markets, and the lack of liquidity can affect businesses in this area.".

On the other hand, it can be observed that "opportunities" and "sustainable" factors have a rather low prominence and a "lack" at the international level when talking about entrepreneurship among horses.

For example: "The opportunities that the government can offer to

Table 2
Ranked counts.

Category	Concept	Count	Concept	Count	Concept	Count
Entrepreneurship(Count 9)	Horses	66	Sectors	7	carbon	3
	Horse	51	owners	6	protected	3
	Sector	40	Environment	6	Well-being	3
	business	35	money	5	profitability	3
	Equine	20	organic	5	developing	3
	equestrian	19	successful	5	Success	3
	sustainable	18	players	5	emotional	3
	Manure	17	services	5	risk	2
	Offer	17	professional	5	communities	2
	Passion	16	experiences	5	community	2
	Adapt	14	incentives	5	staff	2
	customers	14	knowledge	5	authentic	2
	Riding	13	opportunity	5	specialists	2
	government	12	promote	5	promotion	2
	develop	12	attractive	5	concerned	2
	Value	12	sensitive	4	pillars	2
	Sports	12	skills	4	benefit	2
	renewable	12	entrepreneurs	4	welfare	2
	Work	12	solar	4	reduction	2
	support	11	resources	4	skilled	2
	opportunities	11	profits	4	sharing	2
	Tourists	11	capacity	4	proposition	2
	profitable	11	tradition	4	affect	2
	competitions	11	recycling	4	lucrative	2
	Local	10	risks	4	therapy	2
	experience	10	breeding	4	income	2
	Invest	10	motivation	4	future	2
	investment	9	fertiliser	3	safety	2
	Lack	9	different	3	tech	2
	Need	9	funds	3	practices	2
	People	9	factor	3	marketing	2
	Quality	9	difficult	3	entrepreneurial	2
	Tourism	9	exciting	3	supports	2
	economy	8	trends	3	competitive	2
	Costs	8	riders	3	solution	2
	Factors	8	preserve	3	owner	2
	training	8	challenges	3	career	2
	industry	7	investments	3	profit	2
	development	7	Responsible	3	growth	2
	funding	7	demand	3	Long-term	2
	Sustainability	7	breed	3	international	2
	Care	7	world	3		
	farmers	7	trend	3		

Source: Leximancer software.

horses would increase the value of the business and there could be more emphasis on sustainability”.

“The opportunities are related to the exploitation of natural landscapes with horse rides, sports involving horses, green energy production.”

“The equine sector in particular has niche markets, and the lack of liquidity can affect businesses in this area.”

The concept “challenge” has a strong relationship with the concepts “safety”, “well-being”, and “profitability”. An entrepreneur in the equine sector sees the transformation of the business into a sustainable one (for environmental safety and social well-being, but also a profitable business) as a challenge.

For example: “Sustainable entrepreneurship in this sector must address the key challenges of the equine industry, which are profitability, sustainable development, safety, performance and the well-being of the horse.”.

“Challenges to this sector would be investment and affordability.”
“...challenges reside in the opportunities to evolve organically to develop our customer base, and hopefully give loyal clients the chance to experience new rides in creative ways.”

Sustainable challenges for an equine enterprise have very little impact on entrepreneurs. Equine industry entrepreneurs are still not

convinced that the development of sustainable influences in this industry can ensure the success of their businesses. Notably, the equine industry entrepreneurs are not convinced by the opportunities offered through sustainability orientation.

5. Discussion

This study aimed to explore sustainability in the equine industry through a cross-country, entrepreneurship perspective. The results show that the most important factors that keep an equine business strong are passion for horses, the legacy of carrying the traditions forward, the skills required, the power to create social well-being through therapy and the connection with nature, and - last but not least - the potential of this industry to contribute to the circular economy through the processing of manure (Q1). Many answers highlighted the value of equine business and the eco-social benefits that can be brought by horses, for example:

“I offer systemic coaching session that includes constellation work with my herd of horses to clarify the patterns in your life, harvest wisdom, release what no longer serves you, and step forward into the emerging future with courage, renewed energy and authenticity. (female, Jordan, more than ten years’ experience and > 50 years old)”

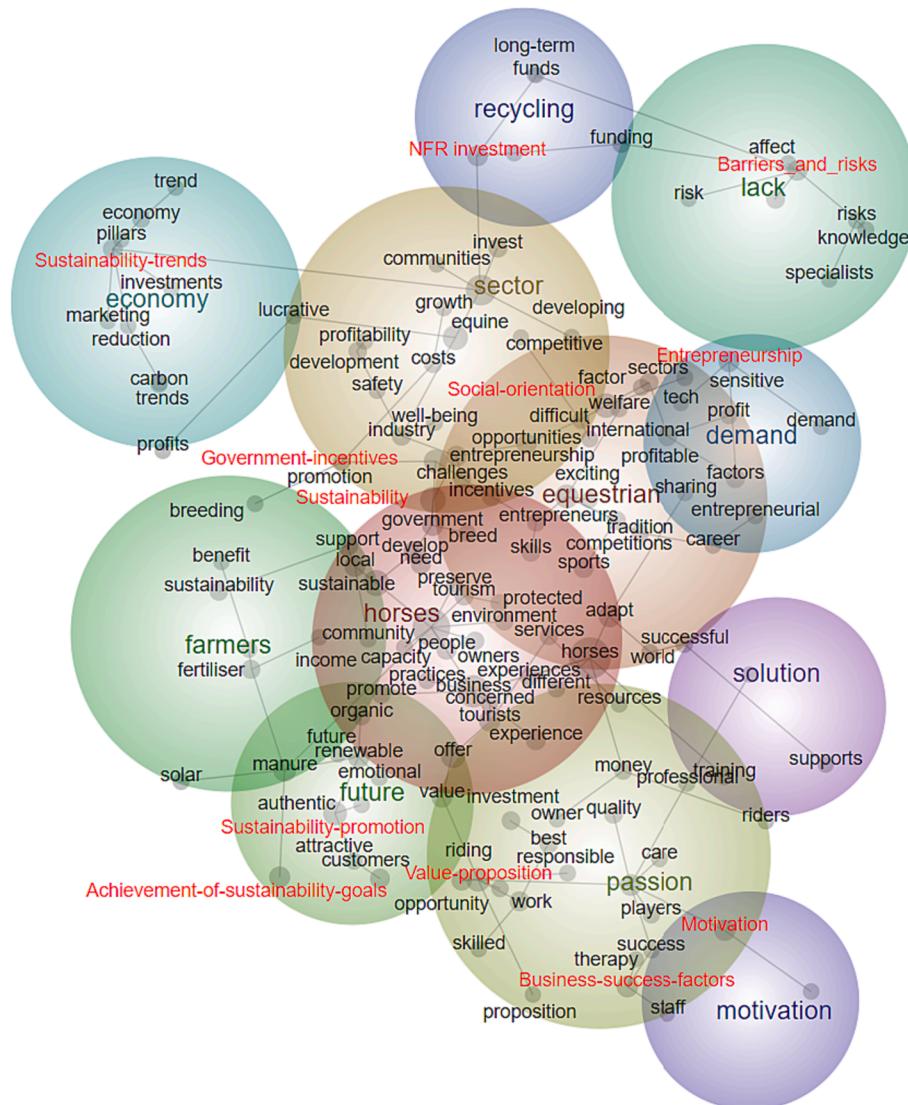


Fig. 3. Leximancer concept map for association of sustainable themes and concepts.

"During this experience our customers have the opportunity to gallop on the large sandy plateaus, to walk side by side with their faithful companion (the horse), while climbing to the top of Mount Atlas to admire the plain, with a breathtaking view. (Male, Morocco, 5–10 years' experience, 36–50 years old.)"

"Indeed, businesses in the equine sector are less profitable than others from different sectors, but horse lovers put on the first place always the client satisfaction and the business scaling is assured by recommendations to other tourists. Social orientation is about bringing together people and horses, traditions and modernity. (female, Portugal, 5–10 years' experience, 36–50 years old.)"

Horses have undergone a great transformation over time, evolving from fieldwork to a wide-ranging, enjoyable horse industry. The concepts "international" and "challenges" describe it very well.

Although sustainable entrepreneurship offers many advantages, there is also the disadvantage of generating additional costs for business remodelling (Pacheco et al., 2010). For this reason, entrepreneurs are very reluctant to implement sustainability-oriented practices and strategies and are still considering whether they are willing to take certain risks (Q2). They already see this sector as challenging due to high costs, as can be seen in their statements:

"Yes, due to the ever-increasing costs, there will be a rejection of the

activity in favour of those with major possibilities." (male, Italy, >10 years' experience, >50 years old).

"It is well oriented towards the social factor, but it is not very accessible due to the higher costs compared to other sectors. Horse-assisted therapy works on an emotional level. The impact of the human-horse interaction is powerful." (male, Romania, >10 years' experience, >50 years old).

Partnerships between organisations can develop resilient entrepreneurship with a sustainable future in the horse industry, thus increasing the sector's credibility (Pankov et al., 2021). Following this study, one of the prominent aspects was the "international solution", and the weakest was the "international sector".

For sustainable and strong entrepreneurship in the horse industry of the future, entrepreneurs will need to collaborate and look at the sector more widely, at an international level, rather than with a narrow perspective focused on the local field. Cultural collaborative networks enhance sustainable entrepreneurship in the horse sector (H2-validated). Furthermore, marketing in the online environment can represent an entrepreneurial opportunity because entrepreneurs are actively involved in the exchange of information (Micu et al., 2019), not only with clients or potential clients but also with other equine entrepreneurs. Social networks and a high level of training in digital tools can help a business in the equine sector evolve and create sustainable links

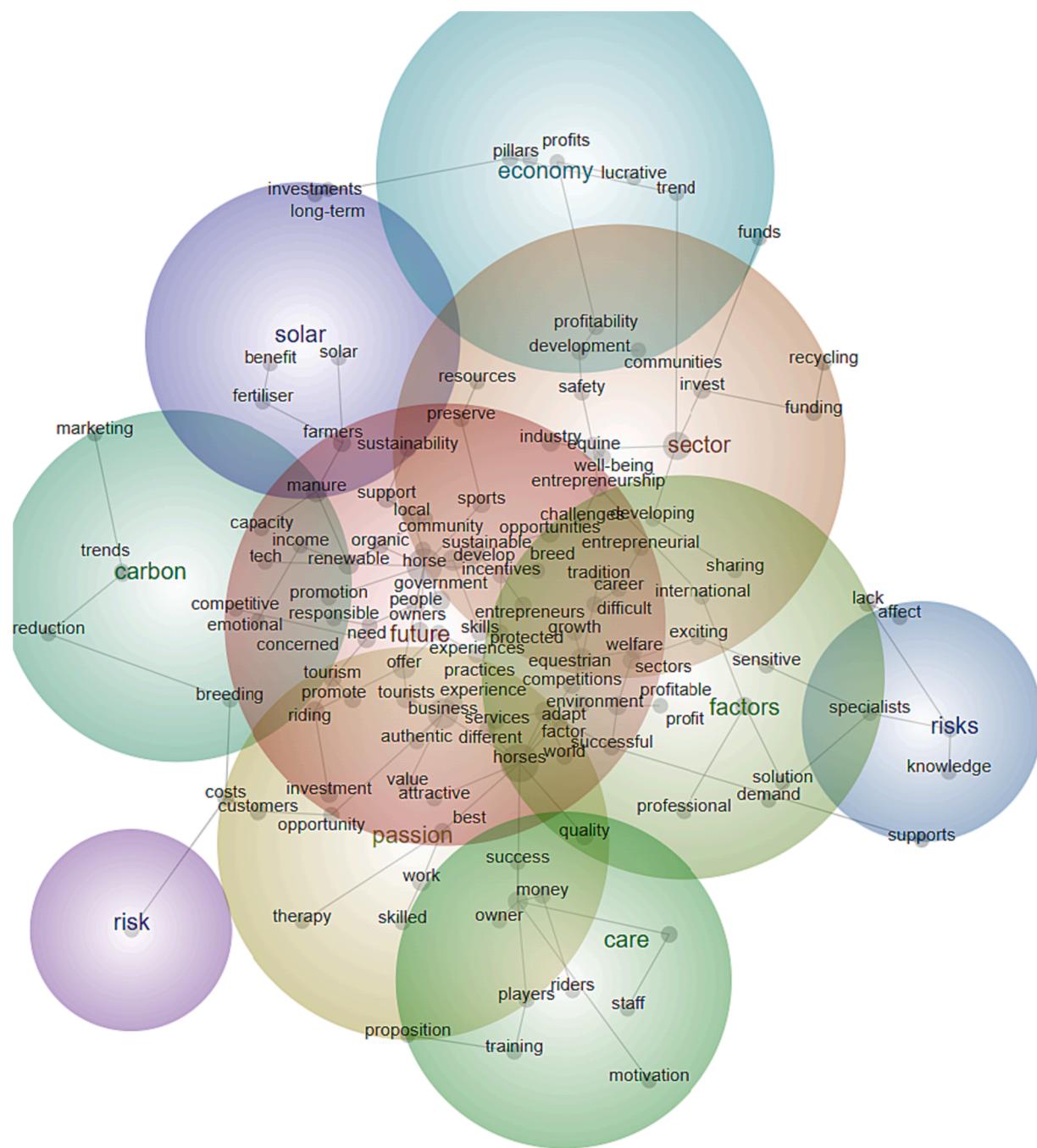


Fig. 4. Leximancer concept map for association of general themes and concepts.

with entrepreneurs worldwide (Ribeiro-Navarrete et al., 2021; Dana et al., 2022). The horse sector needs this online communication to build a strong industry at an international level and to consolidate a sustainable business model. The implementation of sustainable solutions can be discussed at the international level (Q3). One of the entrepreneurs who are passionate about horses admitted that the success of his business is also due to the power of social networks:

"I truly appreciate that Word-of-Mouth (WoM) and nowadays, e-WoM, due to social networks, is the main responsible for the success of my sports yabusame activities. Satisfied people trained in my courses are ready to share their experiences with their friends and the circle continues." (Male, Japan, 5–10 years' experience, 36–50 years old).

Many entrepreneurs are worried about how the horse sector is seen from the outside, especially that there is no awareness of the benefits

that this industry can offer (Pussinen and Thuneberg, 2015). Fig. 2 underlines this aspect through a rather weak connection between the most representative theme, "horses" and the less prominent theme "marketing". The horse industry needs much more promotion by presenting the benefits it offers, both social and cultural well-being and environmental protection. All these solutions also lead to a better financial return, and, ultimately to a successful, sustainable business. As can be seen, some entrepreneurs support these ideas:

"Promoting your business as sustainable proves that you do a good job which makes it attractive for customers." (Male, Germany, 5–10 years' experience, 20–35 years old).

"My idea is that we need to better promote horses as examples of animals with a lower carbon footprint than others. Horses are fully capable to regenerate soils, and local economies as well, by creating eco-

Table 3
Ranked Concepts for equine entrepreneurship.

Concept	Relative Frequency	Strength	Prominence
International	22 %	100 %	31.7
Challenges	22 %	66 %	21.1
Industry	44 %	57 %	18.1
Community	11 %	50 %	15.8
Difficult	11 %	33 %	10.6
Exciting	11 %	33 %	10.6
Skills	11 %	25 %	7.9
Opportunities	22 %	18 %	5.8
Sustainable	33 %	16 %	5.3
Equine	33 %	15 %	4.8
Development	11 %	14 %	4.5
Sector	44 %	10 %	3.2
Local	11 %	10 %	3.2
horses	22 %	3 %	1.0

Source: Leximancer software.

minded businesses combining tourism, sports and horse-therapy activities." (male, Japan, 5–10 years' experience, 36–50 years old).

There are entrepreneurs from different nations with different cultures who encourage innovation, risk-taking, and embracing new ideas that can accelerate the adoption of sustainable technologies and practices within the horse industry. So, hypothesis (H3) is null; the entrepreneurs are not afraid of the adoption of innovative technologies, as exemplified below:

"The market is improving every day; new reproduction techniques and new technologies are helping the development" (male, Spain, >10 years' experience, >50 years old).

"The pellets produced with our technology greatly reduce the need of chemical fertilisers. Farmers that use horse fertiliser pellets benefit from the fact that their land is able to preserve more water and develop more nutrients." (male, China, >10 years' experience, > 50 years old).

One of the entrepreneurs who responded to the interview (male, Argentina, > ten years' experience, 36–50 years old) argued that "the pillars of sustainability will remain the same; companies in the equine sector should find ways to address the "5R" of the circular economy: Rethink, Refuse, Reduce, Reuse, Recycle". Chen et al. (2020) defined the 5Rs as redesign-reduce-recovery-recycle-reuse and considered that establishing practices through them balances the circular economy, increases the sustainability of resources, and helps protect the environment. This provides a lens through which sustainability can be viewed and addressed in this industry.

Astidira Apti (2021) also believes that applying and adapting the 5Rs in each area of activity can be a sustainable strategy that connects theory and practice. Modelling and adapting the 5Rs in the horse industry requires a whole process, but it is recommended that entrepreneurs understand the importance of each element of the 5. The first stage (1) is the rethinking of every activity that involves working with horses as an integral part of sustainable entrepreneurship. Awareness of the benefits that horses offer to society is an important first step to redesigning the business. Secondly, (2) every horse owner/entrepreneur/manager must have the courage to refuse any act that could harm society and the environment. (3) Besides reducing costs, the business must consider reducing actions that damage the environment, such as the recovery of some goods and their introduction into the circular economy, their reuse, for example, (4) through recycling. (5) outlines a useful framework for business development through sustainable perspectives. A good example is the transformation of manure into bioenergy or biofertiliser.

This aspect could be implemented at the level of each activity offered by this industry, whether it is related to riding (ride don't drive motto), hippotherapy (coaching, emotional distress, social welfare), tourism (wellness tourism, eco-tourism), or manure processing.

Women entrepreneurs play an important role in today's society and contribute to the implementation of a sustainable system in the economy

Table 4
Ranked Compound Concepts for Sustainability in the Equine Entrepreneurship.

Nr. crt	Compound Concept	Relative frequency	Strength	Prominence
1	International & solution	11 %	100 %	2256.3 100 %
2	Challenges & safety	11 %	100 %	1504.2 67 %
3	International & difficult	11 %	100 %	1504.2 67 %
4	Exciting & breed	11 %	100 %	1002.8 44 %
5	Challenges & well-being	11 %	100 %	1002.8 44 %
6	Challenges & profitability	11 %	100 %	1002.8 44 %
7	International & professional	11 %	100 %	902.5 40 %
8	Challenges & industry	22 %	100 %	859.5 38 %
9	Challenges & skills	11 %	100 %	752.1 33 %
10	Industry & safety	11 %	100 %	644.6 29 %
11	Development & safety	11 %	100 %	644.6 29 %
12	Exciting & attractive	11 %	100 %	601.7 27 %
13	Community & economy	11 %	100 %	564.1 25 %
14	International & factors	11 %	100 %	564.1 25 %
15	International & lack	11 %	100 %	501.4 22 %
16	Community & local	11 %	50 %	451.3 20 %
17	Industry & preserve	11 %	100 %	429.8 19 %
18	Industry & well-being	11 %	100 %	429.8 19 %
19	Industry & profitability	11 %	100 %	429.8 19 %
20	Development & well-being	11 %	100 %	429.8 19 %
21	Development & profitability	11 %	50 %	429.8 19 %
22	Challenges & development	11 %	100 %	429.8 19 %
23	International & opportunities	11 %	100 %	410.2 18 %
24	International & competitions	11 %	100 %	410.2 18 %
25	Community & develop	11 %	50 %	376.0 17 %
26	Difficult & lack	11 %	100 %	334.3 15 %
27	Challenges & sustainable	22 %	100 %	334.3 15 %
28	Industry & skills	11 %	100 %	322.3 14 %
29	Industry & resources	11 %	100 %	322.3 14 %
30	Challenges & equine	22 %	100 %	300.8 13 %
31	Challenges & experience	11 %	100 %	300.8 13 %
32	Difficult & opportunities	11 %	100 %	273.5 12 %
33	Difficult & competitions	11 %	100 %	273.5 12 %
34	Challenges & opportunities	11 %	100 %	273.5 12 %
35	Industry & organic	11 %	100 %	257.9 11 %
36	Sustainable & safety	11 %	100 %	250.7 11 %
37	Challenges & develop	11 %	100 %	250.7 11 %
38	International & sustainable	11 %	100 %	250.7 11 %
39	Skills & experience	11 %	50 %	225.6 10 %
40	International & sector	22 %	100 %	225.6 10 %

Source: Leximancer Insight Dashboard report.

because they are not only focused on profit but also on recycling and cost reduction and denote a greater concern for marketing (Q4). Some examples below.

"I strive to offer clients genuine horse riding experiences in the beautiful landscapes of Palacio da Pena. My vision is to build a sustainable business model and continuously develop value-creation practices for the local community, as the clients could be connected to the beauty of our lands [...] For me, sustainable entrepreneurship in equine industry means to match my lifelong love of horses with my business skills." (Female, Portugal, 5–10 years' experience, 36–50 years old).

"I have lived with my horses for 14 years, they led the way for me to adapt as a Dutch woman to the Jordanian culture and way of life, they inspired a new way of being, of connecting with the world around me

from a place of heart instead of ego, of bringing out the best in me, while also generating economically value in order to sustain my life. The latter was very slow, especially in a country where this work is little known or understood." (female, Jordan, more than ten years' experience and > 50 years old).

"Our business targets tourists who are really interested in value for money, but especially involved in societal need for sustainability." (female, Mexico, > ten years' experience, 36–50 years old).

There are studies put the woman entrepreneur at the centre of sustainable development, because they are aware that they ensure the success of their business - especially new ones - by protecting the collective interests of society and protecting the environment through self-efficacy (Barrachina Fernández et al., 2021). Al-Qahtani et al. (2022) explain that women entrepreneurs can innovate and develop a sector by solving problems facing society and facing competitiveness in international markets. Women who establish a startup in the horse sector are aware of the three pillars that ensure the success of the enterprise (profitability, social interests, environmental protection), and their behaviour is conditioned and influenced by the social environment.

Johnsson-Latham (2007) argued that women focus more on sustainability than men. Women can be considered relevant images in terms of the theory of determinism because they are much more empathetic and thus become more concerned about the environment and social well-being.

The gender of the entrepreneur can also play a role in shaping their personal characteristics, perspectives, and networking opportunities. An entrepreneur's past experiences in the industry or in running a business can significantly influence their decision-making (H4-validated), problem-solving abilities, and overall business acumen. Previous successes or failures can impact their confidence, risk-taking tendencies, and approach to sustainability strategies.

On the other hand, what unites both genders is the passion for horses, regardless of social or financial sustainability.

"The value of this business fluctuates quite a lot. Depending on tourism, weather, and many other costs. I didn't start this job purely for profits, but if it's done right it can be lucrative." (Male, Cyprus, 5–10 years' experience, 20–35 years old).

"This business is more of a hobby, so it's hard to characterise the value proposition." (Female, Republic of Moldova, > ten years' experience, 36–50 years old).

Our findings are in line with those reported by O'Shea et al. (2021), who demonstrated that the "breath of air" of entrepreneurship in the equine sector can be represented by the remodelling of the entire system through sustainable thinking, an (eco)systemic vision and (co)evolution through collaboration with various actors of the sector.

Also, Bashir et al. (2022) explain that collaboration between companies with different organisational cultures, from different nations, can represent the best chance of saving the equine sector and its development in a sustainable way. Dynamic capabilities can help identify and exploit opportunities over a longer time horizon.

Kuratko (2011) presents entrepreneurship as a dominant force that can bring changes by recognising opportunities and implementing innovative ideas. The horse sector also needs such entrepreneurs to develop sustainable businesses in this industry. Adopting sustainable practices positively influences business performance in the horse industry (H1-validated). Social responsibility and environmental protection are criteria that entrepreneurs do not neglect, because they can affect the image of society (Ajide et al., 2023).

Albert Bandura's (1978) theory, which explains that behaviour is influenced by social factors, can also be applied to entrepreneurs in the equine sector. The behaviour of an entrepreneur is conditioned by its consequences. An environment "unfriendly" to society is not a consequence that entrepreneurs in the horse industry should apply:

"To me the only way forward is to have sustainable social enterprises. All sectors will need to reform and follow...or they will disappear and new structures will arise that are more inclusive and less profit

driven." (female, Jordan, more than ten years' experience and > 50 years old).

Hebert (1993) supports Bandura's theory (1978) and explains that the managers of a company tend to demonstrate a team spirit and highlight the benefits offered to society. Entrepreneurs in the equine sector can support each other through collaboration to find solutions for a sustainable future.

5.1. Theoretical contributions

This paper extends the theory of reciprocal determinism by Bandura (1978) and presents a strong case for international collaboration in sustainable equine industry entrepreneurship practices. This holistic approach helps us understand the factors that drive or hinder the adoption of sustainable practices within the horse industry that would lead to more effective strategies for promoting environmentally responsible entrepreneurship. As some researcher suggested, examining the entrepreneur is necessary to understand a sustainable business (Krueger and Brazeal, 1994). The theoretical background of the research contributed to the understanding of the behaviour of entrepreneurs in the horse sector and how to apply self-efficacy in the context of green entrepreneurship, focusing on cultural, sustainable, experience and gender factors.

This study provides a starting point for future research into sustainable opportunities in the horse industry. Entrepreneurs in the equine sector face dilemmas such as the lack of funds or incentives from the government, which leads to discouragement in their modelling of a sustainable business. Identifying the gaps in sustainable entrepreneurship in the horse industry can be the first stage of a global approach full of challenges.

Future studies are encouraged to conduct further research into this context, specifically quantitative studies, to explore further the evolution of sustainable entrepreneurship and the behaviour of entrepreneurs in the horse industry.

5.2. Practical and social implications

This study highlights the gaps and risks that equine entrepreneurs face, but there are opportunities to implement sustainable entrepreneurship models in the equine sector. These opportunities arise from business managers' increased awareness that the future of the enterprise pivots around three important pillars: profitability, protecting social interests and reducing pollution. Practitioners can use these insights to leverage opportunities for a better and profitable future for the equine industry. An example of a sustainable equine business is the presentation of equestrian tourism as sustainable tourism (tourist routes carried out by car can be replaced by riding a horse). But while this sector is quite sustainable, a business needs good marketing so that consumers are aware of the benefits of this field. These findings reveal the benefits of the horse sector being sustainable because sustainability programmes improve the image of a company (Muja et al., 2014).

The societal implications of this study relate to the ability or potential of research to impact society in visible or useful ways. This study shows that the behaviour of an entrepreneur in the equine sector influences society's quality of life. In addition to the therapeutic benefits that horses offer, there are alternatives to replace certain resources with renewable products. For example, horse manure can be transformed into biofertiliser, biofuel or bioenergy, reducing storage costs and the implicit environmental pollution (because the horse manure contains nitrogen and ammonia). This means that the horse sector can offer social welfare, protection of the common capital stock, balance between collective and individual needs, and development of innovative technologies and services.

5.3. Limitations and future research lines

This study has certain limitations, one set of which relates to the sample. The overall number is small; only a few countries are included, and there is just one company from each country. Although this study covers all continental areas with different cultures, it could be extended to more countries. Another improvement would be to extend the study in future research by using a different type of qualitative methodology to quantify these results, for example, social media user-generated content (UGC) or news media content.

6. Conclusions

This paper explored a sustainable perspective in the equine entrepreneurship sector. This research's main contribution is to bridge the gap between the needs of society and entrepreneurs from different perspectives - economic or environmental - and the opportunities offered by the horse industry.

It is important that sustainable entrepreneurship in the horse sector leverages collaborations at an international, national or even regional level. Collaboration between entrepreneurs from different countries is no longer an impediment in our era because the development of the digital economy blurs the boundaries of any industry.

The culture of a nation plays a pivotal role in shaping the adoption and success of sustainable entrepreneurship within the horse industry. Cultural values, attitudes, and norms influence how sustainable practices are integrated into business operations and how the industry responds to environmental and social challenges.

Also, this research shows that female entrepreneurs exhibit inclusive leadership qualities that prioritise collaboration, stakeholder engagement, and social responsibility, all of which align well with the goals of sustainable entrepreneurship. Women entrepreneurs often show a heightened awareness of social and environmental issues in the horse sector, and they may be more inclined to integrate sustainability into their business models.

Certainly, promoting sustainable entrepreneurship in the horse industry involves a combination of environmental, social, and economic considerations. Entrepreneurs in the horse industry can contribute to more sustainable management and business operations by adopting eco-friendly stable management practices such as efficient waste management, developing business plans that emphasise long-term sustainability over short-term gains, staying updated on industry advancements and innovations, collaborating with other entrepreneurs to address sustainability challenges, and inspiring others in the industry by showcasing the benefits of sustainable practices for both the business and the environment. This not only benefits the environment but also enhances the overall reputation and longevity of their businesses.

This research has highlighted that the inclusion of cultural differences, entrepreneurial experience and gender perspectives improves our understanding of the implementation of a sustainable business model in the horse sector. The trend in the horse industry is closely related to the behaviour of the entrepreneur who, in turn, is influenced by the social and ecological environment, as Bandura explains in the theory of reciprocal determinism (Bandura, 1978). The conclusion is that the time is right for entrepreneurs to recognise the potential of the equine sector and accept the challenges of sustainable development for a successful future.

CRediT authorship contribution statement

Oana-Daniela Lupoae: Writing – review & editing, Writing – original draft, Supervision, Project administration, Methodology, Investigation. **Violetta Wilk:** Visualization, Validation, Software, Methodology, Data curation. **Riana Iren Radu:** Formal analysis, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix 1. . INTERVIEW GUIDE

1. You have embraced an entrepreneurial career in the equestrian sector. What was your **main motivation** to invest your know-how, time and financial resources in this sector?
2. How would you characterise the **value proposition** of your business model? To what extent is it related to your passion for horses?
3. Could you present from your personal experience the **factors that led to the success** of your business in this sector?
4. Do you consider that businesses in the equine sector **are less profitable and more socially oriented** than other sectors? Please offer some arguments to support your insights.
5. How would you personally perceive "**sustainable entrepreneurship**" in the horse industry (equine sector)? Please outline in your answer the sustainability challenges and opportunities in this sector.
6. Do you consider **promoting your business as sustainable** is highly attractive to customers? Please offer us several arguments in the case of a favourable opinion.
7. As **sustainability** is globally perceived as a **key success factor** for any business in the equine sector, how have you achieved this goal?
8. Do you think that the pillars of **sustainability** will change in the future in this sector? Have you in mind any **trends** in this regard?
9. What do you think are currently the **opportunities for nascent entrepreneurs** to create ventures in the equine industry?
10. What do you think are currently the **barriers/risks for nascent entrepreneurs** to create ventures in the equine industry?
11. Do you think governments should pay more attention to the equine sector and offer more **incentives to entrepreneurs** who could contribute to the sustainable development of this sector?
12. If you could raise non-reimbursable funds, would you **invest** them in the equine sector or choose another sector?

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