

Peruvian entrepreneurship in the framework of sustainable development

Emprendimiento peruano en el marco del desarrollo sostenible

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Abstract: in the Peruvian context, entrepreneurship has become a determining factor in driving the country's social and economic progress. In addition, it plays an active role in the achievement of the Sustainable Development Goals proposed by the United Nations. The main objective of the study was to establish the relationship between Peruvian entrepreneurship and sustainable development. A quantitative, non-experimental, correlational and cross-sectional approach was used the study population was established using data from the technical report Entrepreneurial Demographics of Peru, according to this report, 2,054 ventures were registered and established in the year 2021, with a life cycle of two years at the time of the study. For the sample, 746 ventures were purposively selected. A questionnaire composed of 40 items with Likert-type response options was used, was validated by five experts and its reliability was established through the Cronbach's Alpha measure, obtaining a very reliable coefficient of 0.93. The resulting data were analyzed using the SPSS version 25 statistical software. The results revealed a moderate positive correlation between entrepreneurship in Peru and sustainable development. In conclusion, entrepreneurship in Peru is significantly related to sustainable development, especially in terms of contributing to the SDGs and promoting innovation and adaptability. However, greater attention to community engagement is required to strengthen the relationship between entrepreneurship and the broader community.

Keywords: entrepreneurship, sustainable development, Sustainable Development Goals, community participation, community.

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Resumen: en el contexto peruano, el emprendimiento se ha consolidado como un factor determinante para impulsar el progreso social y económico del país. Además, desempeña un papel activo en la consecución de los Objetivos de Desarrollo Sostenible propuestos por las Naciones Unidas. El objetivo central del estudio fue establecer la relación entre el emprendimiento peruano y el desarrollo sostenible. Se utilizó un enfoque cuantitativo, no experimental, correlacional y transversal. La población de estudio se estableció utilizando datos del informe técnico Demografía Empresarial del Perú, según este informe, se registraron y establecieron 2054 emprendimientos en el año 2021, con un ciclo de vida de dos años en el momento del estudio. Para la muestra se seleccionaron intencionalmente 746 emprendimientos. Se utilizó un cuestionario compuesto por 40 ítems con opciones de respuesta tipo Likert, fue validado por cinco expertos y se estableció su confiabilidad a través de la medida Alfa de Cronbach, obteniendo un coeficiente muy confiable de 0.93. Los datos resultantes fueron analizados utilizando el programa estadístico SPSS versión 25. Los resultados revelaron una correlación positiva moderada entre el emprendimiento en Perú y el desarrollo sostenible. En conclusión, el emprendimiento en Perú está relacionado de manera significativa con el desarrollo sostenible, especialmente en términos de contribución a los ODS y la promoción de la innovación y adaptabilidad. Sin embargo, se requiere una mayor atención a la participación comunitaria para fortalecer la relación entre el emprendimiento y la comunidad en general.

Palabras clave: emprendimiento, desarrollo sostenible, Objetivos de Desarrollo Sostenible, participación comunitaria, comunidad.

Introduction

Entrepreneurship in Peru has been an important driver for achieving not only the country's economic but also its social development, additionally it plays a key role in performing the sustainable development goals set by the United Nations. In a society aware of the need to address environmental and social challenges, sustainable entrepreneurship is proving to be a promising response to foster equitable and responsible growth (Calanchez *et al.*, 2022; Huamán *et al.*, 2022).

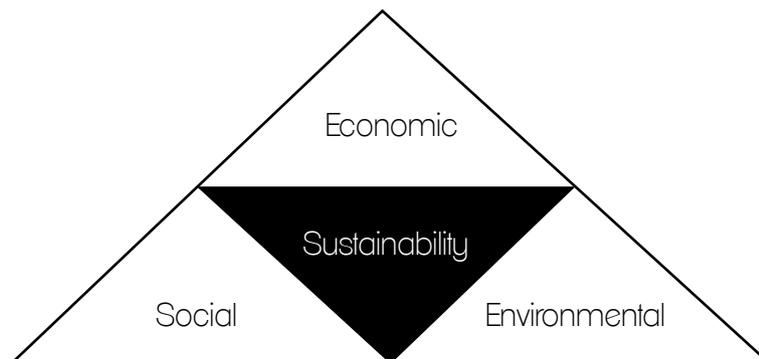
In recent years, the Peruvian entrepreneurial ecosystem has experienced remarkable growth, becoming a key factor in promoting the country's development. However, in a world where sustainability and environmental responsibility are increa-

singly important, it is essential to analyze the role of Peruvian entrepreneurship within the context of sustainability. This scientific article focuses on exploring and analyzing Peruvian entrepreneurship in relation to the principles and objectives of sustainable development (Martínez, 2023).

In this sense, development from sustainability, defined as the balance between increased economic elements, greater social inclusion and actions that ensure that the environment is protected (Figure 1), has become a global priority. The SDGs provide a road map to address the major challenges of today's world, such as poverty, economic disparity, climate mismatch and environmental crisis (Fernández and Gutiérrez, 2013; Aguado, 2023).

Figure 1

Intervening elements in the sustainable balance



Note. The figure shows the intervening elements in the sustainable balance where the terms of sustainability, the equitable, the bearable and the viable emerge, which are the subject of analysis. Based on Aguado (2023).

In this context, sustainable entrepreneurship offers a unique opportunity to drive inclusive economic growth while addressing environmental and social challenges. By integrating sustainable practices into their business models, Peruvian entrepreneurs can generate a positive impact on both the local economy and the environment. Based on the above, the aim is to establish the relationship between Peruvian entrepreneurship and sustainable development. By studying this interaction, it is possible to understand the phenomenon and promote actions for its effectiveness.

This article develops important items such as entrepreneurship and sustainability from an economic, social and environmental perspective which offers a comprehensive and balanced framework. Likewise, entrepreneurship is considered as the skills of recognizing opportunities from the view of social entrepreneurship, focusing on a big difference between the traditional and the social.

Entrepreneurship and sustainability

Sustainable development has been considered a relevant aspect of the global agenda, which is intended to promote as it seeks to reconcile economic growth by including the environmental aspect and social welfare. This holistic approach understands the interdependence of the economic, environmental and social components of development and seeks to promote a harmonious balance between them (Montero, 2021). First, the starting point for sustainability is to fill current gaps or needs, without involving a potential risk to preserving future generations' satisfaction of their own. This principle, presented by the UN Committee on Environment and Development in its report "Our Common Future" (1987), shows the importance of long-term decisions and actions that promote intergenerational equality.

From an economic perspective, sustainability recognizes that economic growth must be accompanied by the efficient management of natural assets and the promotion of responsible business practices, requiring the adoption of business models that minimize negative environmental impacts and encouraging innovation in

sustainable products and services. At the same time, recognizing the relevance of equality and economic inclusion ensures that the benefits of economic growth are distributed fairly (Zenck, 2018; Cuenca, 2020).

Therefore, from an environmental perspective, the purpose of sustainability is to save and preserve natural ecosystems, as well as mitigate the negative consequences of human actions on the environment, involving the implementation of sustainable production and consumption practices, minimizing the release of gases that contribute to the greenhouse phenomenon, protecting biodiversity and sustainably manage resources (Hernández-Huerta, 2018; Lozano *et al.*, 2022). Simultaneously, it seeks to foster resilience to the impact of climate change and strengthen the resilience of natural systems. In the social sphere, sustainability focuses on promoting social balance and justice, as well as the well-being of all. This means addressing poverty, inequality, exclusion and ensuring equitable access to basic and fundamental services for society. In addition, it recognizes the importance of strengthening citizen participation, promoting gender equity, and respecting freedoms in all dimensions of development (Rendon *et al.*, 2018; Bonifaz *et al.*, 2021).

It can be argued that sustainable development provides a comprehensive and balanced framework for solving today's global challenges. Combining economic, environmental and social aspects, this approach aims to promote positive and sustainable changes in society. The effective implementation of the principles and practices of sustainable development requires the active cooperation of State entities, business organizations, social groups and citizens to ensure sustainability for present and future generations. Entrepreneurship, with its innovative and change-oriented approach, offers a unique platform for addressing environmental and social challenges. Entrepreneurs have the ability to recognize opportunities and generate innovative proposals to address market demands, while valuing the environmental and social effects that derive from their actions (Bailiff and Roman, 2020; Batista *et al.*, 2023).

Hence, a sustainable enterprise characterizes by its commitment to a comprehensive approach

based on the environment, without prejudice to the economic and social values. These companies not only seek to generate profits, but also contribute to the well-being of people and the care of the planet. They adopt responsible business practices, incentivize efficient use of resources and minimize waste, care for social inclusion and seek innovative solutions to address sustainable development challenges (León *et al.*, 2022).

Towards social entrepreneurship

It should be noted that entrepreneurship is based on the ability to recognize opportunities, develop innovative ideas and turn them into economic opportunities. Entrepreneurship has the power to transform economy through the creation of new businesses and the introduction of innovation in both new and existing organizations (Fernández-Bedoya, 2023). It involves the continuous pursuit of opportunities and creates value through invention and the ability to anticipate change and mobilize the necessary resources. In short, entrepreneurship is defined as the ability to identify opportunities, generate innovative ideas and use them to create economic and social value, thus promoting progress and development in various fields (Al Hussaini, 2019, Mellado, 2023).

In this sense, unlike traditional entrepreneurship, where profit generation is the priority, social entrepreneurship incorporates social and environmental dimensions in the search for innovative and sustainable solutions. Social entrepreneurs identify and solve social problems by implementing business models that positively impact communities and contribute to their well-being (Condes, 2023). Social entrepreneurship involves a unique combination of business and social components. By seeking innovative approaches to address challenges such as poverty, lack of accessibility to education, gender inequality, environmental degradation and other pressing social problems, these entrepreneurs seek to generate income and try to balance social value creation (Ruiz-Ruano and Puga, 2016; Odera, 2022).

Social entrepreneurship arises when entrepreneurs, in addition to pursuing economic profit, also work to solve social and environmental

problems. These entrepreneurs have a broader vision and strive to achieve a positive impact in the community they live, through their business activities. In addition, social entrepreneurship is based on the cooperation and participation of various stakeholders, such as local communities, government entities, civil society and private business sector corporations. These actors come together in strategic alliances to comprehensively address social problems and generate more impact (Sánchez, 2018; Méndez-Picazo *et al.*, 2021).

Likewise, this type of enterprise seeks not only to find short-term solutions, but also to generate long-term systemic change. This means implementing sustainable business models, promoting inclusion and equity, and creating positive impacts that extend beyond the economic dimension to society (Barrutia and Echebarria, 2010; Martínez, 2020). Traditional entrepreneurship focuses on making financial profits. However, with the growing awareness not only of social problems, but also of the environment that arise from corporate activities, the need to create social value in addition to economic value has been emphasized (Campo-Terenera, 2019). Sustainable entrepreneurship goes a step further, integrating economic, social and ecological value creation into a holistic approach. This means setting up, managing and growing companies focused on the triple economic, social and environmental benefits, in other words, innovating in a sustainable way.

Therefore, sustainable innovation is a process that allows to create and apply ideas, processes, products and services that not only generate economic benefits, but also bring benefits to society and the environment. This term refers to the way in which innovation evolves to be part of a sustainable approach, in which the satisfaction of current needs is sought without requiring the commitment of resources to meet the future demands of society (Infante, 2019; Alonso, 2022). This approach is in line with current global sustainable goals and responds to the growing demand for business practices that contribute positively to society and the environment (Fuertes *et al.*, 2018). Sustainable innovation exerts a fundamental influence on this process, helping entrepreneurs to identify new profitable business opportunities

favorable to society and the environment. Sustainable innovation provides a competitive advantage, increases business resilience and contributes to the achievement of the UN SDGs.

Therefore, sustainable entrepreneurship can have positive impacts at multiple levels. First, it can generate employment and economic opportunity in local communities, especially in disadvantaged areas. By fostering the creation of socially responsible businesses, local economies can be strengthened and poverty reduced (García *et al.*, 2020). It also fosters innovation and responsible business practices. Entrepreneurs are constantly looking for more efficient and sustainable solutions in terms of resources, which can lead to improvements in waste management, energy efficiency, water conservation and emissions reduction (Silva *et al.*, 2022; Lozano *et al.*, 2022).

It can also have a significant impact on society, as it addresses pressing social problems. Entrepreneurs can focus on education and health, gender equality, access to clean energy and community development (Sánchez-Álvarez *et al.*, 2022). By developing inclusive business models and affordable solutions, they can enhance citizens' wellbeing and contribute to progress in the conduction of the Sustainable Development Goals (Cuenca, 2020; Rivera Martínez *et al.*, 2022). Importantly, the relationship between entrepreneurship and sustainable development requires a collaborative approach and the participation of multiple actors. The branches of government, business organizations and academic institutions must therefore work together to create an enabling environment for sustainable entrepreneurship, facilitating access to finance, promoting supportive policies and raising awareness and education about the importance of sustainable development.

Clearly, an important dimension related to entrepreneurship is economic sustainability, understood as the ability of a company to generate sufficient income to support its costs, reinvest in growth and provide reasonable returns to investors when needed. But in the context of sustainable entrepreneurship, economic sustainability has a broader meaning (Guevara *et al.*, 2023). It is not just about making a profit, but also about how a profit is made. Businesses should consider how

their business operations and practices impact society and the environment and strive to reduce negative impacts and spread positive impacts. This includes, for example, choosing fair-trade suppliers, investing in renewable energy, and implementing fair labor practices.

In relation to the previous idea on sustainable entrepreneurship, the aspects related to social and environmental impact are as important as economic sustainability. These aspects are related to the way in which a company impacts society and the environment through its operations and activities. The social dimension refers to the social contribution of the company. According to Mair and Marti (2006), this includes the development of new job positions and the improvement of the conditions of those already created, contributing to local communities, and supporting disadvantaged communities. This may also include implementing ethical business practices, developing diverse and inclusive environments, and addressing social issues by innovating business models including products and/or services.

In relation to the environmental aspect of entrepreneurship, it refers to the connection and collaboration between a company and its environment. According to Cohen and Winn (2007), it includes reducing a company's environmental footprint by promoting sustainable practices in the use of natural assets and species richness. It may also include the implementation of business practices that support a circular economy that minimizes waste and reuses or recycles resources (Álvarez-Aros, 2017; Gómez, 2022). Therefore, these aspects in sustainable entrepreneurship are seen as suitable scenarios for innovation and value creation rather than additional constraints and costs. Sustainable entrepreneurs seek ways to create economic value while having a positive impact on society and minimizing environmental impact. This holistic approach gives organizations a competitive advantage and contributes to their long-term resilience.

Materials and methods

This article shows the findings of a study that aimed to establish the relationship between en-

trepreneurship in Peru and sustainable development. The methodological approach used was quantitative and followed the stages of a non-experimental research, correlational approach and with cross-sectional design, as described in Hernández-Sampieri and Mendoza (2018). The study population was established using data from the technical report "Business Demography of Peru" (INEL, 2021), prepared by the National Institute of Statistics and Informatics. According to this report, 2,054 startups were registered and established in 2021, implying that they had a two-year life cycle at the time of the study. For the sample, an intentional approach was used and 746 enterprises were selected, this sample size guarantees

a 95 % certainty in the results and a maximum error of 3 % (Monje, 2011).

Therefore, a survey was used to collect the data, in which a questionnaire composed of 40 items with Likert type response options was applied. The questionnaire was validated by five experts. In addition, its reliability was established through the Cronbach's Alpha measure, which resulted in a very reliable coefficient of 0.93. The analysis of the collected data was developed by the SPSS statistical program version 25, and graphs and tables were used to compare the results and obtain conclusions. Based on the literature review, the operationalization of the variables (entrepreneurship and sustainable development) was elaborated, which is shown in table 1.

Table 1
Operationalization of variables

Variables	Dimensions	Indicators
Entrepreneurship	Economics	Revenue Growth Employment generation Profitability and financial viability
	Social	Social inclusion Community impact Gender equity
	Environmental	Carbon footprint Efficient use of resources
Sustainable Development	Contribution to the SDGs	Scope of the SDGs Impact of the SDGs
	Community participation	Local Participation Collaboration with local actors
	Innovation and adaptability	Level of innovation Adaptability to change

Note. This table shows the variables under study, as well as the dimensions and indicators corresponding to each variable. Based on Chavez *et al.* (2023).

Based on the above, the following general hypothesis was established: there is a correlation between entrepreneurship and sustainable development. In addition to three specific hypotheses: a) There is a correlation between entrepreneurship and the contribution to the SDGs, b) There is a correlation between entrepreneurship and community participation, c) There is a correlation between entrepreneurship and innovation and adaptability. Finally, it is important to note that

hypotheses will be accepted when the p-value is < 0.05 .

Results

Table 2 presents descriptive statistics of the sample studied, which may help to identify biases for future research. There was a greater participation of entrepreneurs over 50 years old, 65 % of those consulted were women, and most of them have university studies.

Table 2
Descriptive sample

Age	Frequency	Percentage
18-30 years	261	35%
31-50 years	216	29%
Over 50 years	269	36%
Sex	Frequency	Percentage
Women	484	65%
Men	262	35%
Level of education	Frequency	Percentage
University studies	403	54%
Secondary education	283	38%
No studies	60	8%
Total	746	100%

Note. This table presents the sample used to develop the research, considering social levels of individuals. Based on Chavez *et al.* (2023).

The Kolmogórov-Smirnov test was implemented in the research to examine the assumption of normality. This test compares the cumulative distribution of samples with an ideal normal dis-

tribution. The results obtained (table 3), showed a p-value of 0.000, representing a significant deviation from the normal.

Table 3
Test for normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistical	gl	Sig.	Statistical	gl	Sig.
Entrepreneurship	.376	746	.000	.630	746	.000
Sustainable Development	.327	746	.000	.720	746	.000

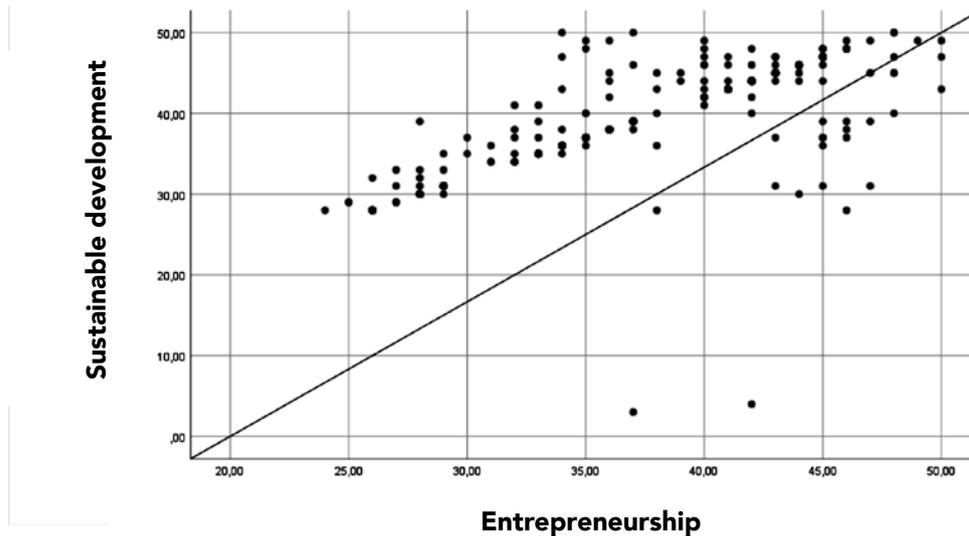
a. Lilliefors' correction of meaning

Note. This table shows the normality test to compare the cumulative distribution function of the sample data with the distribution. Based on Chavez *et al.* (2023).

This finding guided subsequent decisions regarding the choice of appropriate statistical techniques, in this case, the Spearman Rho co-

efficient was selected for the analysis. Figure 2 visually provides the dispersion of the variables.

Figure 2
Simple dispersion of the relationship of variables



Note. The graph represents the disposition of the relationships between the variables entrepreneurship and sustainable development. Based on Chavez *et al.* (2023).

Table 4
Relationship between entrepreneurship and sustainable development variables

		Entrepreneurship	Sustainable Development
Spearman's Rho	Entrepreneurship	Correlation coefficient	1,000
		Sig. (bilateral)	.000
		N	746
	Sustainable Development	Correlation coefficient	,693**
		Sig. (bilateral)	.000
		N	746

** The correlation is significant at level 0.01 (bilateral).

Note. This table shows the relationship between entrepreneurship and sustainable development using Spearman's Rho coefficient. Based on Chavez *et al.* (2023).

As shown in Table 4, the correlation coefficient between entrepreneurship in Peru and sustainable development, presents a Spearman rho value of 0.693. This value indicates a moderate to strong positive correlation between the two variables. In addition, the established hypothesis is accepted. In other words, when the magnitudes of the entrepreneurship variable increase, so do the values of the sustainable development variable and vice versa. This positive correlation suggests that there is an ascending relationship between

both variables. In other words, it is important to note that the correlation coefficient is closer to 1 than to 0, indicating that the relationship between entrepreneurship and sustainable development is not only positive, but also has moderate strength. This information supports the idea that entrepreneurship can play an important role in promoting sustainable development, since there is a significant connection between the variables.

On the other hand, according to García-Cabrera *et al.* (2020), who analyzed the relationship

between entrepreneurship and development, their findings demonstrated a solid, outstanding, significant and positive connection between the variables studied in the context of Latin America, supporting the idea that entrepreneurship can contribute to sustainable development in the region. Likewise, Wennekers *et al.* (2018) in their study on global variables, found that entrepreneurship has a positive influence on the sustainable development of countries. They analyzed data from multiple countries, including Peru, and found a significant correlation between the level of entrepreneurship and the sustainable development index. These findings support the observed positive correlation.

It should be noted that Table 5 shows the results of the relationship between the entrepreneurship variable and the dimensions of sustainable development (contribution to the SDGs, Community participation and innovation and adaptability). Regarding the variable and the first dimension, a Spearman rho value of 0.688 was reached indicating a moderate positive correlation between entrepreneurship in Peru and contributing to the Sustainable Development Goals (SDGs). This means that there is a general trend in which, as the level of entrepreneurship increases, the contribution of entrepreneurs to the SDGs also tends to increase.

Table 5
Relationship between the entrepreneurship variable and the dimensions of sustainable development

		Contribution to the SDGs	Community participation	Innovation and adaptability	
Spearman's Rho	Entrepreneurship	Correlation coefficient	.688	.385	.655
		Sig. (bilateral)	.000	.000	.000
		N	746	746	746

** The correlation is significant at level 0.01 (bilateral).

Note. This table shows the relationship between the entrepreneurship variable and the dimensions of sustainable development using Spearman's Rho coefficient. Based on Chavez *et al.* (2023).

Regarding the relationship between entrepreneurship in Peru and the community participation dimension, a Spearman rho value of 0.385 was obtained, indicating a weak positive association between entrepreneurship in Peru and community participation. This means that there is a certain tendency in which, as the level of entrepreneurship increases, community participation also tends to increase, although this relationship is not very strong. In this sense, it is understood that a Spearman's rho value of 0.655 indicates a moderate to strong positive correlation between entrepreneurship in Peru and the innovation and adaptability dimension of sustainable development. This means that there is a clear trend in which, as the level of entrepreneurship increases, innovation and adaptability in the field of sustainable development also tends to increase.

However, the results show that entrepreneurship in Peru is positively correlated with different

dimensions of sustainable development, such as contribution to the SDGs, community participation, innovation and adaptability. These correlations suggest that entrepreneurship can have a significant impact to promote sustainable development in the country.

Conclusions and discussion

The study found a significant moderate positive relationship with a tendency to strong between entrepreneurship in Peru and sustainable development, which implies that the increase in levels of entrepreneurship is associated with an increase in levels of sustainable development, and vice versa. The results reported are in line with León *et al.* (2022) who point out that entrepreneurship plays an essential role to achieve the sustainability of a country. They emphasize that entrepreneurs can generate innovative and

sustainable solutions that allow to face and overcome the economic, social and environmental challenges of the environment.

Entrepreneurship plays a fundamental role in the sustainable development of a country, since entrepreneurs are agents of change capable of generating innovative and sustainable solutions to face and overcome challenges and obstacles from social, environmental and economic indicators. However, it is important to know that the relationship between entrepreneurship and sustainable development is strongly influenced by the national context. Government policies, available infrastructure and access to resources play a crucial role in the ability of entrepreneurs to contribute to sustainable development (Cueva *et al.*, 2021; Silva *et al.*, 2022).

Similarly, Bailiff and Roman (2020) point out that the national context influences the way in which the variables studied are associated. They stress that government policies, infrastructure and access to resources can affect the ability of entrepreneurs to contribute to sustainable development. In Peru, contextual factors may be related to the observed coefficient.

An enabling environment with clear supportive policies, adequate infrastructure, and equitable access to resources, provides entrepreneurs with the tools needed to create and scale sustainable solutions. It is the responsibility of governments and other stakeholders to create and promote this enabling environment, thereby fostering sustainable entrepreneurship and enabling entrepreneurs to drive sustainable development for the contribution to society as a whole (Pazmiño *et al.*, 2021; Lozano *et al.*, 2022).

The results also coincide with those of Batista *et al.* (2023) who mention that formalized entrepreneurship is essential for sustainable development. When Peruvian entrepreneurs have secure access to property and can formalize their businesses, this allows them to access credit, establish legal contracts and participate fully in the economy. Formalized entrepreneurship generates employment, contributes to economic growth and reduces poverty, thus contributing to sustainable development. With the above result, the relationship between entrepreneurship and

the dimensions of sustainable development is confirmed. Regarding the variable and the first dimension contribution to the SDGs, a moderate positive correspondence was obtained between entrepreneurship in Peru and collaboration to the Sustainable Development Goals (SDGs). This means that there is a general trend in which, as the level of entrepreneurship increases, the contribution of entrepreneurs to the objectives also tends to increase.

The study by Sánchez-Álvarez *et al.* (2022) also found a moderate positive contribution between entrepreneurship and the contribution to the Sustainable Development Goals (SDGs). Similarly, Lozano *et al.* (2022) in their study establish that entrepreneurship can have a key impact to play an essential role in generating disruptive and sustainable innovations to address these challenges. A positive relationship between entrepreneurship and its participation in achieving the SDGs means that entrepreneurs can help advance these goals.

These studies support the idea that entrepreneurship can be an effective tool to address sustainable challenges and achieve a positive impact on society. Both studies support the idea that entrepreneurship can be a driving force to achieve the Sustainable Development Goals. A positive relationship between entrepreneurship and the contribution to the SDGs is crucial to progress towards sustainable development. Entrepreneurship can generate social and environmental impact, create jobs, promote innovation, and mobilize resources, all of which contribute directly to the implementation of the SDGs and to achieving a fairer, more sustainable, and more prosperous society.

Regarding the relationship between entrepreneurship in Peru and the community participation dimension, a weak positive association was obtained between these aspects. Silva *et al.* (2022) indicated that entrepreneurship is associated with entrepreneurship and the search for individual opportunities. Entrepreneurs may be more focused on their own business goals and maximizing their profits than on engaging with the community in which they operate. They agree with García *et al.* (2020) who indicated that entrepreneurs generally focus on developing and growing their own busi-

nesses, which involves dedicating time, resources and energy to their companies. On the other hand, community participation involves working for the benefit of the community at large, without an exclusive focus on individual commercial interests. This difference in objectives can make it difficult to collaborate and create synergies between entrepreneurs and the community.

According to Silva *et al.* (2022) and García *et al.* (2020), the weak association between entrepreneurship and community participation is because entrepreneurs focus on growing their own businesses and seeking personal opportunities, which can limit their involvement in community activities. The focus on maximizing profits and the focus on individual business interests hinders collaboration and synergy with the community. This discrepancy in objectives and approaches between entrepreneurs and community participation acts as an obstacle to establishing a solid relationship between both aspects.

The moderate to strong positive coincidence between entrepreneurship in Peru and the innovation and adaptability dimension of sustainable development indicates that there is a clear trend in which both concepts are positively related. In this context, this implies that Peruvian entrepreneurs are more willing to generate innovative ideas and solutions that address the challenges and demands of sustainability. These results coincide with those obtained by Alonso (2022), establishing that entrepreneurs are often agents of change and have a mindset oriented to action and problem solving. They are therefore more open to exploring new opportunities and finding creative ways to address the challenges of sustainable development. Moreover, entrepreneurship can be a key driver of innovation, as entrepreneurs are motivated to find innovative solutions that will enable them to excel in the market and outperform competition. This can lead to the generation of more sustainable products and services and the adoption of business practices that promote sustainable development.

On the other hand, sustainable development requires adaptability as it involves continuously adjusting and modifying business strategies and practices to adapt to changes in the economic,

social, and environmental context. Entrepreneurs tend to be more flexible and adaptable to changes, allowing them to be more responsive and able to incorporate the dimension of innovation and adaptability in their business activities (Guevara *et al.*, 2023). A positive relationship between entrepreneurship and sustainable development implies that entrepreneurship can become a valuable aspect to advance towards a development model that considers that the economic, environmental, and social aspects are sustainable over time. Entrepreneurs can generate innovation, create jobs, adopt responsible practices and promote a sustainable entrepreneurial culture, thus contributing to the achievement of goals for a sustainable future.

There were limitations when conducting the study, including the lack of data provided by government agencies on the subject studied, which made it difficult to compare the results with what the State indicated. In addition, Peru's cultural, social and economic conditions pose some challenges for a comprehensive understanding of sustainable entrepreneurship. Perceptions and approaches can vary widely across regions, social groups and economic sectors within a country. Therefore, it is important to consider these differences in circumstances to avoid inaccuracies in the study. Future research could explore the obstacles and challenges that Peruvian companies face in adopting sustainable practices. This may include exploring new business models, using energy efficiency systems and environmentally friendly practices.

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