REVIEW ARTICLE

# Entrepreneurial culture, social-emotional skills, and self-esteem in students participating in sports programmes in Colombia

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## ABSTRACT

This research presents the results of a systematic review that analyses the relationship between entrepreneurial culture, social-emotional skills and self-esteem in students enrolled in sports programmes in Colombia, with the aim of identifying the factors that influence their positive attitude towards entrepreneurial capacity. In the literature review, 100 articles and academic research papers were selected between 2019 and 2025, prioritised from 42,958 results from different resources such as reference databases, multidisciplinary databases, academic repositories and academic journals. The databases with the highest number of results were Scopus, Web of Science, Wiley, Springer Nature, Science Direct, Ebsco Host, among others such as (COnnecting REpositories), Taylor & Francis, and Google Scholar. The results showed an interest in academia to research and reflect on the relationship between entrepreneurial culture, emotional skills, and young people. However, in most studies, entrepreneurial culture is associated with variables such as emotional intelligence and social skills in university contexts, leaving the field of the relationship between these variables and the field of sports somewhat lacking in studies. Studies that explore this relationship in depth conclude that athletes develop socio-emotional skills that make them strong candidates for entrepreneurship. However, there are limitations in the implementation of mechanisms that promote an entrepreneurial culture ( ) in university contexts for young people studying sports programmes.
**Keywords**: Physical education, Culture, Social-emotional skills, Self-esteem.

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## INTRODUCTION

Entrepreneurship and business development have become fundamental components in strengthening local and global economic dynamics and, in turn, opportunities for personal growth. Entrepreneurship has been studied in different dimensions, including its relationship with the socio-emotional skills, motivation and resilience of entrepreneurs. In the sports sector, there is growing recognition of the role of entrepreneurial attitudes among young people in university education. This has led to a shift in the academic focus towards the development of entrepreneurial skills in the younger generation, particularly among university students and young people with a background in sports. While the positive relationship between sport and entrepreneurial intention in sports students has been explored, more research is needed, especially focused on characterising entrepreneurs in the field of sport, their socio-emotional skills applied to entrepreneurial contexts, and the mechanisms of training for entrepreneurship in higher education contexts.

This research aimed to analyse the relationship between three variables: entrepreneurial culture (entrepreneurial intention, attitude towards entrepreneurship, entrepreneurial self-efficacy, entrepreneurial knowledge, support networks), socio-emotional skills (self-awareness, self-control, motivation, empathy, social skills) and self-esteem: (Personal Worth, Self-Satisfaction, and Self-Confidence) in sports degree students in Colombia. To achieve this purpose, a methodology based on systematic review of 100 articles and academic research published between 2019 and 2025 was implemented. Based on the methodology implemented, searches were conducted in Spanish, English, and Portuguese, taking into account the inclusion criteria, by key terms (Entrepreneurial Culture, Socio-Emotional Skills, Self-Esteem, Sport), including other related terms; by time period (2019-2025); by population type (youth, academic sports programmes); by type of study (indexed journals); and by geographical area (international and local).

Based on the systematic review, there is evidence of an increase in research seeking to explain the relationship between entrepreneurial culture, socio-emotional skills and self-esteem as key factors in young people's entrepreneurial intentions. However, there is less research focused on clarifying the influence of these factors on students studying for a degree in sport. Studies that investigate this relationship agree that athletes develop skills that facilitate the task of starting the path to entrepreneurship.

The findings showed that entrepreneurship education is essential for developing entrepreneurial skills, including socio-emotional skills such as resilience and proactivity. Entrepreneurial culture, defined by risk tolerance, proactivity, and autonomy, is linked to the psychological characteristics of athletes, who naturally develop these skills that make them potential entrepreneurs. Studies (Vidal-Vilaplana et al., 2025) highlight that elite athletes, especially older ones, show high entrepreneurial intentions due to their resilience and creativity. The results show that high resilience in athletes reduces fear of failure and enhances entrepreneurial commitment, while creativity, together with entrepreneurial intention, emerge as crucial skills for all identified entrepreneurial profiles.

Analysis of national and international studies shows that a comprehensive entrepreneurial culture not only drives economic development but also provides opportunities for students' personal and professional growth and strengthens their role as agents of social change. Although there is abundant international research (USA, Spain, United Kingdom, China, etc.), little specific research was found on entrepreneurship among sports students in Colombia. National studies focus on the general characterisation of Colombian entrepreneurs, highlighting the need to strengthen business training and emphasising organisational skills when creating a business. On the other hand, some studies investigate entrepreneurial culture in university contexts and the factors that influence the entrepreneurial attitude of young people in sports contexts. For

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example, the study by González et al. (2019) highlights the importance of implementing entrepreneurial training strategies in university sports curricula.

In conclusion, entrepreneurial culture, socio-emotional skills and self-esteem are key variables in the training of sports professionals with entrepreneurial skills. This research shows that the academic and sporting environment can become a breeding ground for social leaders, capable of creating impact through solid, sustainable and contextualised entrepreneurial initiatives.

## METHOD

### *Search strategy*

The methodology focused on an exhaustive literature review in the Scopus and Web of Science reference databases. The former yielded more results in Science Direct, while the latter referred its results to different journals and publishers included in its platform. Multidisciplinary and international databases such as Core (COnnecting REpositories), Wiley, Taylor & Francis, Springer Nature, Esbsco Host and PubMed were also included, as were open-access databases from Latin America such as Dialnet and Scielo, among others.

Searches were performed using the Boolean operators AND, OR, and NOT in the following search equations: "*Social-Emotional Skills AND Entrepreneurship*," "*IT Entrepreneurship AND IT Emotions*," "*Culture of Entrepreneurship AND Social-Emotional Skills AND Young*," "*Entrepreneurship*" AND "*Emotional Skills*," "*Entrepreneurial intention AND young people*", "*Entrepreneurship AND self-esteem*", "*Entrepreneurial Culture AND Social-Emotional Skills AND athlete*", "*Entrepreneurial Culture AND Social-Emotional Skills AND Young*", "*Culture of Entrepreneurship AND Social-Emotional Skills AND Young*", "*Culture of entrepreneurship AND Social-Emotional Skills AND university students AND sport*". Similarly, filters were applied for time ranges and publication types (academic, peer-reviewed). A total of 42,958 results were obtained from which 100 articles were selected that included at least two of the search terms among the first 100 results.

As shown in Figure 1, the databases with the highest number of results contain information resources involving sports science, administration, finance, psychology, and entrepreneurship studies.

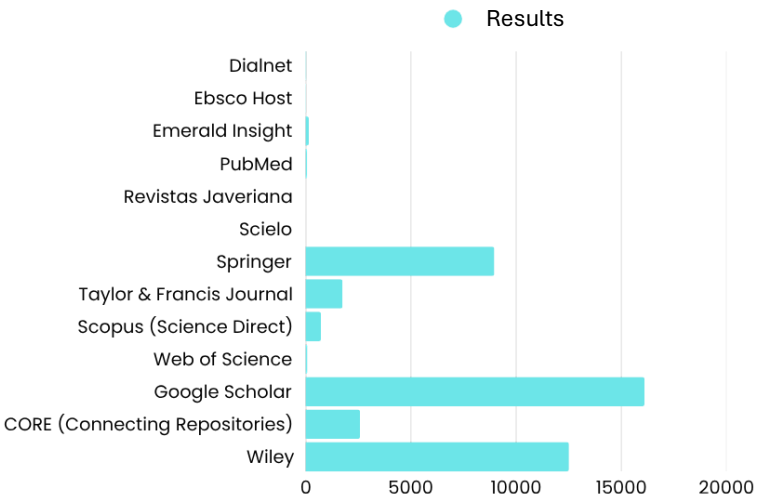



Figure 1. Search by descriptors in databases.

In the case of Springer Nature, it includes scientific journals such as the International Entrepreneurship and Management Journal, the Journal of International Entrepreneurship, Sport and Business and Management, which publish research on this topic. For its part, the Taylor & Francis Journal database is a publisher that includes on its platform a considerable digital collection of scientific and research journals and articles addressing the topic of entrepreneurship in sport, as well as related fields such as sports management and the sports business.

Platforms such as CORE (Connecting Repositories) and Google Scholar connect various resources that provide freely accessible information, including articles, books, book chapters, postgraduate theses, and doctoral dissertations. These are useful tools in the literature review process.

Likewise, WoS and Scopus are databases that index thousands of academic journals from different publishers and provide a selection of prestigious academic resources that enrich document analysis. WoS includes many journals that specialise in sport t management, business, sports sociology, economics, and business studies, such as Sport Management Review and the Journal of Sport Management. For its part, Scopus is also a comprehensive source of information on entrepreneurial culture in sport due to its extensive coverage of journals and other publications in the social sciences and business.

### *Variables analysed*

*Dependent variables*

- Entrepreneurial Culture: (Entrepreneurial Intention, Attitude towards Entrepreneurship, Entrepreneurial Self-Efficacy, Entrepreneurial Knowledge, Support Networks). This variable will indicate the values, norms and beliefs that individuals in the selected group have regarding creating businesses, innovating and, in turn, their willingness to take risks and seize opportunities to develop business ideas.
- Social-Emotional Skills: (Self-Awareness, Self-Control, Motivation, Empathy, Social Skills). This will allow us to assess a person's ability to manage emotions and establish healthy relationships and face challenges.
- Self-esteem: (Personal worth, self-satisfaction and self-confidence). This scale, due to its psychometric properties, which include high internal consistency and validity, allows us to measure self-esteem.

### *Analysis of the quality of studies and/or data analysis*

Entrepreneurship education has proven to be a key tool for fostering entrepreneurial skills in university students. Authors Lindh and Thorgren (2016) describe the importance of local partnerships between universities and businesses for developing entrepreneurial skills. This involves not only technical knowledge, but also the development of socio-emotional skills such as resilience, teamwork and e decision-making in uncertain environments (Smith and Yang, 2022). Furthermore, entrepreneurial culture becomes an adaptive behaviour in the face of contemporary changes in the world of work. Entrepreneurship is understood to generate benefits in terms of economic growth and job creation. On the other hand, Rae and Melton (2013) indicate that fostering an entrepreneurial mindset in students enables them to face complex situations and take calculated risks.

Entrepreneurial culture is understood as the set of values, norms, and beliefs that motivate individuals to create businesses, innovate, take risks, and seize opportunities (Shane et al., 2003, as cited in Sánchez-Oliver et al., 2019).

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Entrepreneurial culture is incorporated into personal and psychological elements that influence young people's ability to become entrepreneurs. Studies have shown that qualities such as self-efficacy, autonomy, innovation and stress tolerance are key characteristics of entrepreneurs (Hausmann and Heinze, 2016). These attributes are also associated with the subject's self-control and motivation to achieve goals, which are necessary components for competing with challenges and achieving success in business creation (Baron and Markman, 1999).

In this research paper, the concept of entrepreneurial culture is explored based on the research carried out by Stephan (2009), which highlights the essential components of entrepreneurial culture: The ability to apply new ideas (innovation); the ability to take risks and manage uncertainty (risk tolerance); the ability to anticipate opportunities and act on them (proactivity); and the ability to make decisions without relying on others (autonomy). Stephan has contributed significantly to the understanding of how entrepreneurial culture influences individuals' behaviour and attitudes towards business creation.

In the context of sport, the culture of entrepreneurship takes on greater relevance, given that sport cuts across different sectors, such as technology, health, the environment, education, society and the economy. Sport is widely recognised internationally, is a field in constant growth and innovation, and offers a wide range of possibilities in the market.

In this regard, Vidal-Vilaplana et al. (2025) provide significant empirical evidence by exploring the entrepreneurial intentions of elite athletes, demonstrating that entrepreneurship is a viable option for these professionals due to the transferable skills they have developed during their sporting careers. The study, carried out with a sample of 200 Spanish elite athletes using non-probabilistic intentional sampling, reveals that variables such as resilience, creativity and proactivity have a decisive influence on the entrepreneurial intentions of these elite athletes. The results of these studies show that high resilience reduces fear of failure and enhances entrepreneurial commitment, while creativity, together with resilience, emerge as crucial skills for all the entrepreneurial profiles identified. In particular, older athletes with developed skills show greater entrepreneurial intentions, suggesting the importance of educational training for post-sport entrepreneurial success.

It is crucial that institutions offering degrees in sports and physical activity implement various exploration and learning mechanisms in their curricula that expose students to the exercise of ideas and innovation, carrying out processes in which the knowledge learned, experience, and socio-emotional skills are applied and respond to the needs of the context, from the initial formulation of the project to its final execution.

In this context, Sánchez-Oliver et al. (2019) contribute significantly to the understanding of the implementation of an entrepreneurial culture in the university field through the presentation of the EmprendeSport project, an initiative developed by the University of Seville between 2015 and 2018 with the aim of improving business knowledge and promoting entrepreneurial culture in the university context. The initiative consisted of seminars aimed at students and professionals in the sports sector, with an average attendance of 200 participants in four editions, and revealed a significant problem: There is limited literature on the entrepreneurial intentions of young people, as well as a marked lack of knowledge and interest in entrepreneurship among attendees, a situation that is exacerbated in the Spanish context, where risk aversion and fear of failure prevail, placing the country among the lowest levels of entrepreneurship in the European Union.

The authors emphasise that universities play a crucial role in entrepreneurship and innovation ecosystems, being fundamental to the promotion of emotional skills such as self-confidence and overcoming the fear of failure, elements that inhibit entrepreneurial initiatives. The results of the EmprendeSport project demonstrate that entrepreneurial culture and values improve motivation for entrepreneurial activity, showing that educational interventions can create a culture of entrepreneurship in higher education and promote entrepreneurial skills among students and teachers, thus providing a valuable framework for the design of institutional policies and s aimed at strengthening university entrepreneurial activities in the field of sport.

Another interesting study by Steinbrink et al. (2020) provides evidence regarding the entrepreneurial potential of athletes through a comparative study involving 163 participants, including 110 high-performance athletes, categorised according to high- and low-risk sports, and a control group of non-athletes. The findings reveal that athletes share important personality traits with entrepreneurs, being less neurotic and more sociable than the reference groups, as well as showing significant differences in dimensions such as conscientiousness and risk propensity.

The research, based on the measurement of the five major personality traits (neuroticism, extraversion, openness, conscientiousness, and agreeableness), including risk propensity, suggests that these psychological traits predict both entrepreneurial intention and the potential for entrepreneurial success in athletes. Based on the theory of person-job fit, the authors argue that athletes can successfully become entrepreneurs due to the alignment between their psychological characteristics and the demands of entrepreneurship. The study highlights the importance of providing personalised entrepreneurial education to athletes during their transition to entrepreneurial careers, emphasising that understanding athletes' entrepreneurial temperament is critical to developing effective entrepreneurship programmes that maximise their potential as ideal candidates for entrepreneurship. However, limitations of the study in terms of sample size were evident, preventing the generalisation of the results.

Social-emotional skills emerge as a determining factor in the development of entrepreneurial competencies in educational contexts, being fundamental to the construction of a solid entrepreneurial culture. Ou and Kim (2024) and González and Lack (2019), focus their research on the impact of emotional skills on the culture of entrepreneurship. On the one hand, Ou (2024) shows through a study with 327 participants that the integration of psychological principles into business education substantially improves students' cognitive and emotional skills by establishing crucial connections between self-efficacy, student perseverance, and entrepreneurial inclinations.

On the other hand, González and Lack (2019) complement this position with a study of 58 university students aspiring to become entrepreneurs, showing that socio-emotional skills are crucial for managing personal resources in entrepreneurship, considering them key factors for business success, particularly in areas such as communication and happiness. Both studies demonstrate the need to integrate emotional dimensions into entrepreneurship-oriented educational programmes, as educational contexts improve both students' entrepreneurial aspirations and cognitive frameworks, providing empirical evidence on the importance of adopting holistic approaches that strengthen emotional resilience and socio-emotional competencies as fundamental pillars for successful entrepreneurial development.

In the Colombian context, some research focuses on characterising the Colombian entrepreneur, without delving into the sporting context. For example, Corzo and Rey (2020) characterise the Colombian entrepreneur in a way that allows us to understand the conceptual foundations of national entrepreneurship. Their research identifies three entrepreneurial profiles among entrepreneurs: ideators, nascent

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entrepreneurs, and established entrepreneurs. This classification is based on an analysis of organisational competencies that include strategic behaviours that create economic value, personal effectiveness, and leadership behaviours. The organisational competencies identified in the study, such as strategic behaviours, personal effectiveness and emotional leadership, are relevant for application in the field of sport, where these skills are naturally developed during academic training and sports practice.

In their research, González et al. (2019) highlight that, in Colombia, young people with sports degrees face significant challenges in entrepreneurship due to the lack of business training in their academic curricula. However, the National Sports University (IU END) located in the city of Cali, Colombia, has begun to implement activities such as courses, business fairs, and consulting services to promote entrepreneurship. The study shows that family context and access to start-up capital are determining factors in the intention to become an entrepreneur, while the university environment still has a limited impact on the generation of business ideas. These findings reflect the need to strengthen the culture of entrepreneurship in Colombia, especially in the sports sector, through educational policies that integrate business training and social innovation as tools to reduce social and sporting gaps in the country.

## RESULTS

According to Figure 2, the selected search results showed greater relevance in the multidisciplinary databases Springer Nature, Web of Science, Scopus, Ebsco Host, Taylor & Francis Journal, CORE (Connecting Repositories), Emerald Insight, and Google Scholar. Although there are more results in Google Scholar, the selection process is time-consuming due to the lack of precision in its results, according to the search equation entered.

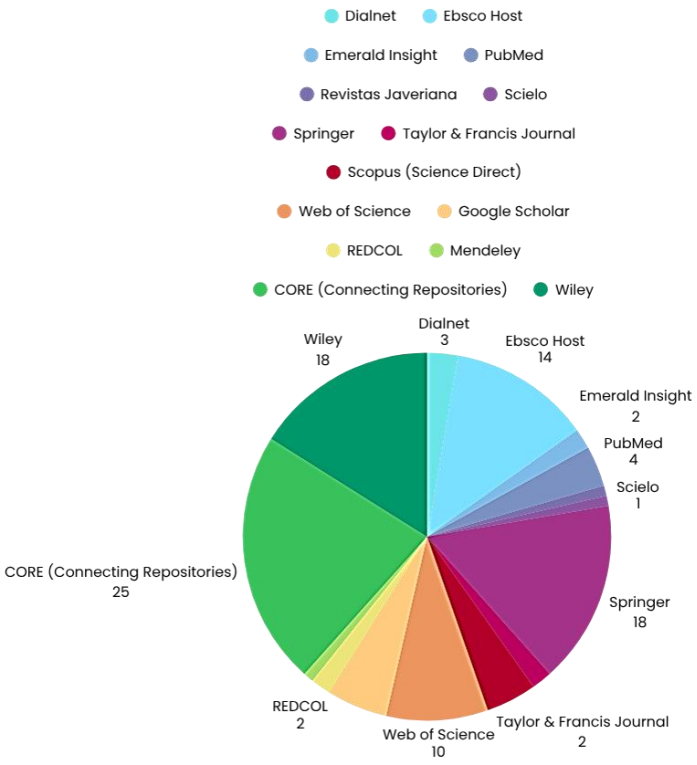



Figure 2. Distribution of results by database.

Some limitations in the searches are determined by the duplication of information in different databases, redundancy and noise in the results. In view of these conditions, rigorous searches, review and selection of the first hundred results were applied, related terms were used and regional databases such as Scielo and REDCOL were taken into account.

The results were mainly concentrated at the international level in countries such as the United States, China, Spain, Portugal, Germany, the United Kingdom, and some African countries. These studies show that the topics of greatest interest are related to the relationship between entrepreneurial culture, the development of soft skills, self-perception and emotional intelligence from an educational, political and cultural context. They also focus on topics such as age and entrepreneurial intention or the skills that young people develop in sporting environments that favour success in their entrepreneurial intentions. On the other hand, there are also studies that highlight the importance of developing soft skills and resilience in university students in a sporting context.

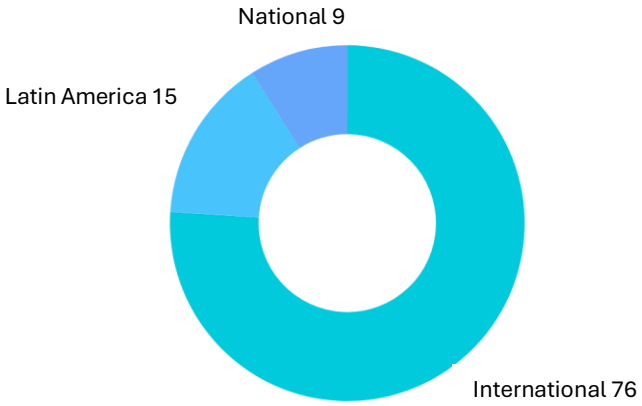



Figure 3. Distribution of results by country.

In Latin America, studies are oriented from a regional perspective that seeks to highlight the characteristics of emerging countries, the particularities of the cultural context, the barriers faced by the working class in the face of neoliberal policies, and the development of skills for entrepreneurship and the search for opportunities.

From a national perspective, studies characterise the Colombian entrepreneur, relating variables such as entrepreneurial culture, higher education, and soft skills in sports contexts.

## DISCUSSION

The findings of this systematic review allow us to affirm that entrepreneurial culture, socio-emotional skills, and self-esteem constitute a dynamic system of factors that significantly influence the entrepreneurial intentions of university students, particularly those involved in sports programmes. This relationship cannot be understood in isolation, but rather as a complex process involving psychological, educational, cultural, and contextual dimensions, as suggested by contemporary approaches to competency-based entrepreneurship and entrepreneurial mindset (Mukhtar et al., 2021; Ou & Kim, 2024).

Firstly, the results confirm that entrepreneurial culture continues to be a central construct in explaining young people's willingness to create business initiatives. In line with Stephan's (2009) approach, entrepreneurial

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culture is expressed through values such as innovation, proactivity, risk tolerance and autonomy, elements that are consistently reflected in the studies analysed. These cultural components not only influence entrepreneurial intention, but also shape the way students interpret failure, manage uncertainty, and perceive opportunities in their environment, aspects that are particularly relevant in sports contexts characterised by competition and constant demands (Ratten & Jones, 2020; Pellegrini et al., 2020).

From a psychological perspective, the findings reinforce the validity of the model proposed by Baron and Markman (1999), by showing that cognitive and emotional mechanisms continue to be decisive in differentiating individuals with greater entrepreneurial potential. However, recent literature broadens this approach by demonstrating that these mechanisms are not static traits, but rather competencies that can be developed through appropriate training experiences and learning contexts (Ou & Kim, 2024). In this sense, sport emerges as a privileged setting for the acquisition of these skills, as it exposes students to situations of pressure, rapid decision-making and emotional regulation, skills that are highly transferable to the business world (Smith & Yang, 2022).

A relevant finding of this research is the mediating role of socio-emotional skills between sporting experience and entrepreneurial culture. Recent studies agree that competencies such as resilience, perseverance, self-awareness and social skills are significant predictors of entrepreneurial intention in young university students (Malete et al., 2022; González & Lack, 2019). In the case of students in sports programmes, these skills are developed intensively throughout their academic and sporting careers, positioning them as a group with high entrepreneurial potential. However, the results also show that this potential does not always translate into concrete business initiatives, due to the absence of institutional structures to support this process.

In line with Steinbrink et al. (2020) and Vidal-Vilaplana et al. (2025), the studies analysed show that athletes, especially those with long or high-performance careers, have psychological profiles aligned with the demands of entrepreneurship. Variables such as low risk aversion, discipline, goal orientation, and resilience in the face of failure partly explain the greater entrepreneurial intentions observed in this group. Likewise, age and sporting experience appear to be modulating factors, suggesting that the emotional and cognitive capital accumulated over time strengthens self-confidence and the perception of entrepreneurial self-efficacy (Kibler et al., 2024).

However, the review highlights a significant gap between the entrepreneurial potential of sports students and the effective implementation of training strategies in higher education institutions. As pointed out by González et al. (2019), Matic et al. (2022) and Da Costa and Miragaia (2024), entrepreneurial education in sports programmes is often insufficient, fragmented or disconnected from the realities of the sector. In many cases, institutional initiatives are limited to isolated courses, business fairs or extracurricular activities, without real integration into the curriculum or a pedagogical approach that articulates theory, practice and socio-emotional development.

In the Colombian context, the results coincide with the studies by Corzo and Rey (2020), who show that youth entrepreneurship faces structural barriers related to access to capital, support networks and business training. In the field of sport, these limitations are accentuated by the historical prioritisation of physical and technical performance over the development of entrepreneurial and management skills. Despite this, emerging institutional experiences, such as those developed in universities with sports programmes, demonstrate that it is possible to strengthen entrepreneurial culture through comprehensive strategies that include academic support, mentoring, partnerships with the productive sector, and spaces for social innovation (Cardella et al., 2021; Sánchez-Oliver et al., 2019).

Self-esteem, for its part, is consolidated as a cross-cutting variable that influences both entrepreneurial intention and persistence in the face of the challenges of the business process. Recent literature indicates that strong self-esteem promotes a sense of control, reduces fear of failure, and strengthens decision-making in contexts of high uncertainty (Ou & Kim, 2024). In sports students, self-esteem is built on the recognition of achievement, personal improvement, and belonging to sports groups, which can become a key psychological resource for entrepreneurship, provided it is accompanied by appropriate training processes.

Finally, there is a clear need to move towards more comprehensive and contextualised approaches to entrepreneurship in sport. Although international scientific output has grown significantly in recent years, there is still limited empirical research in Latin American countries, particularly in Colombia. This gap limits the formulation of evidence-based educational policies and reinforces the importance of studies such as this one, which contribute to raising the profile of sport as a strategic space for training entrepreneurs with social and territorial impact.

In summary, the results of this systematic review support the idea that entrepreneurial culture, socio-emotional skills, and self-esteem not only coexist but also mutually reinforce each other in students enrolled in sports programmes. Strengthening these components in higher education represents an opportunity to train professionals capable of innovating, generating economic and social value, and responding creatively to the challenges of the contemporary work environment.

## CONCLUSIONS

Based on the systematic review, there has been an increase in research seeking to explain the relationship between entrepreneurial culture, socio-emotional skills, and self-esteem as key factors in young people's entrepreneurial intentions. However, there is less research focused on clarifying the influence of these factors on students pursuing a degree in sport. Studies that investigate this relationship agree that athletes develop skills that facilitate the task of starting the path to entrepreneurship.

Entrepreneurial culture, socio-emotional skills and self-esteem are key variables in the training of sports professionals with entrepreneurial skills. This research shows that the academic and sporting environment can become a breeding ground for social leaders capable of making an impact through solid, sustainable and contextualised entrepreneurial initiatives.

Analysis of national and international studies supports the idea that a strong entrepreneurial culture not only drives economic development but also transforms students' vision of their role as agents of change.

## AUTHOR CONTRIBUTIONS

All authors meet the criteria for authorship in accordance with established ethical guidelines. Contributions are specified according to the CRediT (Contributor Roles Taxonomy) as follows:

Conceptualisation: Sandra Parra Hinojosa, Maria Jose Martinez-Patiño. Methodology: Sandra Parra Hinojosa, Maria Jose Martinez-Patiño. Formal analysis: Sandra Parra Hinojosa, Maria Jose Martinez-Patiño. Investigation: Sandra Parra Hinojosa. Data curation: Sandra Parra Hinojosa. Writing – original draft: Sandra Parra Hinojosa. Writing – review & editing: Sandra Parra Hinojosa. Supervision: Maria Jose Martinez-Patiño.

All authors have critically reviewed and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

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## DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

## ETHICAL APPROVAL

This work was approved by the Ethics Committee of the National School of Sports (Escuela Nacional del) University Institution Sports - Minutes # 01 - March 13, 2025, for this scientific article and for carrying out all the necessary procedures in the academic development of the doctoral thesis entitled "*Entrepreneurial Culture and its Link to Socio-Emotional Aspects in Sports Degree Students*."

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