



Impact of the Dual Career on the perceived employability and intrapreneurial potential of elite student-athletes

Impacto de la Carrera Dual en la percepción de empleabilidad y el potencial intraemprendedor de estudiantes-deportistas de élite

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Abstract

Introduction: Dual Career, which integrates academic training with sports practice, is highlighted as a protective factor for elite student-athletes, aiding in their preparation for a successful transition to the labor market. This study explores the impact of the competencies and intrapreneurial skills developed through Dual Career on perceived employability, emphasizing the critical role of this unique approach.

Objective: This study aims to analyze differences in the perception of employability and the development of Dual Career competencies and intrapreneurial skills based on gender, level of competition, and level of education. Additionally, it evaluates the potential influence of these competencies and intrapreneurial skills on the perception of employability.

Methodology: A quantitative approach was used, through a structured validated survey. The sample was composed of 221 elite student-athletes from the Valencian Community. The data were analyzed with statistical models to determine possible relationships between variables.

Results: Differences were observed in the development of competencies and the perception of employability according to the level of competition, with international athletes standing out. In addition, innovation and career management and planning skills are highlighted as predictors of perceived employability.

Discussion: The findings highlight the importance of incorporating intrapreneurial development strategies in Dual Career programs to strengthen and enhance the ability of future professionals to innovate and adapt to constantly changing work environments.

Conclusions: Dual Career emerges as a distinguishing factor in shaping resilient and innovative future professionals, well-prepared to navigate the challenges of the labor market. It represents an important tool for facilitating their successful transition into professional life.

Keywords

Competencies; dual career; elite sport, employability; intrapreneurship.

Resumen

Introducción: La Carrera Dual, que combina la formación académica con la práctica deportiva, se presenta como un factor protector para los estudiantes-deportistas de élite, que ayuda en su preparación para la transición al mercado laboral. Este estudio explora el impacto de las competencias y habilidades intraemprendedoras desarrolladas a través de la Carrera Dual en la empleabilidad percibida, enfatizando el papel crítico de este enfoque único.

Objetivo: Analizar diferencias según género, nivel de competición y nivel de estudios respecto a la percepción de empleabilidad, el desarrollo de competencias de Carrera Dual y habilidades intraemprendedoras. También se evalúa la posible influencia de dichas competencias y habilidades intraemprendedoras en la percepción de empleabilidad.

Metodología: Se utilizó un enfoque cuantitativo, a través de encuestas estructuradas, participando un total de 221 estudiantes-deportistas de élite de la Comunitat Valenciana. Los datos se analizaron con modelos estadísticos para determinar las posibles relaciones entre las variables.

Resultados: Se observan diferencias en el desarrollo de competencias y la percepción de empleabilidad según el nivel de competición, destacando los deportistas internacionales. Además, se destacan la innovación y las competencias de gestión y planificación de la carrera como predictores de la percepción de empleabilidad.

Discusión: Los hallazgos destacan la importancia de incorporar estrategias de desarrollo intraemprendedor en los programas de Carrera Dual, para fortalecer y potenciar la capacidad de los futuros profesionales para innovar y adaptarse a entornos laborales en constante cambio.

Conclusiones: La Carrera Dual emerge como elemento diferenciador en el desarrollo de futuros profesionales resilientes e innovadores, preparados para superar los retos del mundo laboral, y constituye una herramienta clave para facilitar su transición hacia la vida profesional.

Palabras clave

Carrera dual; competencias; deporte de élite; empleabilidad; intraemprendimiento.

Introduction

High-level student-athletes face a complex reality, in which not only the labour market situation is relevant, but also the great challenge of combining the high demands of an elite sports career with academic or professional training (Belluzzi et al., 2025). This reality, known as Dual Career (DC), seeks to increase the possibilities of labour market insertion after sports retirement (López de Subijana et al., 2015). In this sense, throughout their career, high-level athletes, in many cases, give up education and other jobs because their main occupation is the practice of their sport, so they assume a substantial economic risk (Lindt et al., 2024). At the sport level, a high-performance career places multiple demands on the athlete (Burlot et al., 2021). Among the challenges faced by athletes, a lifestyle that requires the efficient allocation of time as a scarce resource and a high probability of early dropout from academic training because it is excessively difficult to combine sport and work or education stand out (Nikander et al., 2022). Therefore, many athletes choose the single path of sport career postponing the pursuit of a second career until after retirement from sports. This is especially relevant considering that only a small number of athletes are able to turn their sport into a profession that provides sufficient income for a sustainable livelihood (Lindt et al., 2024). Furthermore, it is essential to consider that elite athletes follow diverse athletic career trajectories, which significantly shape their experiences and transitions beyond sport (Pallarés et al., 2011). Although sport initiation is often similar across athletes, once the competitive stage begins, three different career models emerge: (1) linear, where sports receive exclusive dedication; (2) convergent, where sport is prioritized but combined with an alternative education; and (3) parallel, where sport and higher education are equally prioritized (Pallarés et al., 2011). These trajectories, which as Pallarés et al. (2011) describe, are often marked by early specialization, discontinuities, or dual development paths, which can influence the way athletes prepare for post-sporting careers. Integrating this notion of career trajectories offers a more comprehensive understanding of DC, not only as a mechanism to manage current demands, but also as a strategic framework for long-term career planning and adaptation (Stambulova & Wylleman, 2015).

In the context of this study, elite or high-level athlete refers to individuals who have been formally recognized as such by the regional sports authority of the Valencian Community, based on predefined performance criteria. This includes athletes competing at national and international levels, officially listed in the regional elite athlete registry for the years 2022 and 2023. Conceptually, the study adopts the framework proposed by Swann et al. (2015), who emphasize the need to contextualize the term elite in sport research due to its inconsistent use across studies. According to their model, elite athletes can be classified into different subcategories (e.g., semi-elite, competitive-elite, successful-elite, and world-class elite) based on competitive level and recognition (Swann et al., 2015). In the present study, the sample encompasses athletes in the “competitive-elite” and “successful-elite” categories, proposed by Swann et al. (2015), as they have demonstrated sustained performance at the national level or have competed internationally, meeting the institutional criteria of high-level sport.

As reflected by Lindt et al. (2024), the high-performance sports career is a relatively short career from a lifespan point of view and most athletes are not able to earn enough money during their sports career to make a living from it afterwards. Therefore, it is necessary for them to embark on a second career. One of the most common is the academic career that allows them to open multiple possibilities of labour insertion, despite the complexity of combining the formative period with high-level competition (Belluzzi et al., 2025). High-level student-athletes not only face demands at the sporting and academic levels, but also simultaneously face requirements at the psychological, psychosocial and financial levels that can affect their progression in DC (Wylleman & Rosier, 2016). These multilevel demands include, for instance, integrating academic and athletic schedules, moving to play sports and/or study away from family and friends, adapting to new environments, balancing academic, athletic, and social roles, and managing financial problems (Lopez-Flores et al., 2021). However, the demands, both physical and technical as well as psychological and social, of reaching the highest competitive level while pursuing a parallel training path can impact the development of various competencies (De Brandt et al., 2018). According to De Brandt et al. (2018), these competencies include the ability to manage and plan time, set priorities, maintain motivation, develop self-discipline, goal setting, autonomy, adapt to different contexts, be resilient and patient, as well as strengthen interpersonal skills and career planning approaches.

Along the same vein, most athletes who engage in a DC, experience various potential benefits including enhanced employability and financial security, the development of multiple personal identities, reduced life stress, positive effects on socialization, and improved planning for sports retirement (Aquilina, 2013). The skills and competencies developed through a DC are highly transferable and in demand in the labor market. As a result, student-athletes become valuable and versatile potential employees, well-suited for careers across a wide range of sectors (Smismans et al., 2021). This is further complemented by the technical and practical knowledge gained through their university academic or vocational educational training. In addition, the ability to innovate and generate new ideas, even risky ones, within an existing organization or company can provide employees, or future workers, with valuable experience in identifying and taking advantage of job opportunities, which can be fundamental for success in the future career (Aparicio et al., 2020). In this sense, due to the potential developed and the possession of different skills and competencies, student-athletes can become potential intrapreneurs and, consequently, increase the chances of job placement and improve their perceived employability.

Although there is relatively little knowledge on the employability and labour market transition of student-athletes (Reyes-Hernández et al., 2021), interest in the subject has recently grown (Vidal-Vilaplana et al., 2024). In this sense, some research shows that prior preparation and training can prevent both unemployment and precarious employment (Olsthoorn, 2014) and improve self-perceived employability (Sánchez-Queija et al., 2023). This problem of transition to the labour market is not only determined by the lack of academic training; there are other aspects, such as the lack of work experience, that hinder this process, largely because of the impossibility of acquiring this experience due to the dedication involved in reaching high levels of sport (Turick et al., 2019). However, the impact of high-level sports participation on the job search process is an area of ongoing study. Previous studies have analysed aspects such as the advantages and disadvantages of hiring student-athletes (Bopp et al., 2012) or the effects of a high-performance sports career on the job seeker's Curriculum Vitae for potential employers (Lindt et al., 2024).

Regarding the perception of employability, it is defined as “the individual's perception of the opportunities he/she has to get a job of his/her choice or improve the one he/she has, taking into account that these opportunities will depend on his/her characteristics and behaviours and the contextual factors that surround him/her” (Gamboa et al., 2007, p. 8). It is important to take into account the components or factors that define employability, as stated by Thijssen et al. (2008), who consider the central axis to be the person's ability to perform a job (qualification); personal competencies (ability to learn); and contextual factors (knowledge of the market). Focusing the study on the personal competencies or skills displayed by student-athletes that influence their perceived employability, it should be noted that these competencies do not refer only to the technical skills with which student-athletes progress and achieve sporting success or to technical knowledge about their field of study. In this sense, the study focuses on transversal competencies, acquired both through sport and academic training and which have a huge application and role in the labour market (August, 2020).

On the other hand, intrapreneurship refers to the initiatives of employees within the boundaries of already established organizations or companies to launch new ideas or business activities that generate added value to them (González-Serrano et al., 2019), thus existing a close relationship with the possibilities of finding and developing in jobs to student-athletes, that is, their employability. In the business environment, intrapreneurship focuses on the activities of employees to expand and rejuvenate the organization in order to adequately adapt to external and internal developments (González-Serrano et al., 2019), there being some parallelism with the sports career in which the athlete must adapt to changing circumstances and new challenges, persevere in achieving goals and continuously improve to remain in sporting success. In the same way that happens to athletes, organizations and their workers develop in an environment based on dynamism and constant change (at a technological, economic and social level), as stated by de Pablo (2016). According to Barbosa et al. (2007), intrapreneurs show a high innovative capacity and are able to work under pressure, with uncertainty, risk and time constraints, facing these adverse circumstances thanks to high levels of self-efficacy (Mohedano-Suanes & Garzón-Benítez, 2018). These skills are also common in high-level student-athletes, who develop resilience, proactivity, creativity, self-discipline, and planning skills to balance their academic and sporting commitments (Vidal-Vilaplana et al., 2024). Similarly, Hender (2003) highlights that intrapreneurs possess advanced communication and social skills, fundamental to lead multidisciplinary teams and promote ideas within

an organization, competencies that elite athletes also acquire when interacting in diverse and competitive environments (Bessa et al., 2019).

Another key characteristic of the intrapreneur is the propensity to take calculated risks (González-Serrano et al., 2019). In the case of student-athletes, their experience in strategic decision making in the sporting arena contributes to developing this capacity to take risks in a moderate and informed manner (Steinbrink et al., 2020). Govindarajan and Desai (2013), for their part, stress that intrapreneurs are highly committed to their organizations, sincere and congruent in their work, and possess a strategic vision of the internal and external environment. These characteristics find parallels in the profile of elite student-athletes, who must maintain a high level of commitment to their goals and adapt to constant changes in the sporting and academic environment.

Therefore, the present study aims to analyse whether differences exist in the perceived employability of elite student-athletes from the Valencian Community, as well as in their DC competencies and intrapreneurial skills, based on gender, level of education, and level of competition. Additionally, the study examines the extent to which these competencies and skills predict perceived employability. Thus, this study contributes to the understanding of how DC experiences influence future career readiness in elite student-athletes.

Method

This study follows a quantitative, non-experimental design, specifically a correlational and comparative approach, in line with the classification proposed by Creswell and Creswell (2017). This design is appropriate for analysing the relationships between variables without manipulating them, and for comparing pre-existing groups—in this case, elite student-athletes categorised by gender, level of education, and competitive level. After that, a description of the study sample, the instrument used and the data analysis techniques employed to obtain and analyse the results are presented.

Study participants

The sample consisted of 221 elite student-athletes from the Valencian Community, who completed an online questionnaire sent by the authors through the Dirección General de Deporte of the Generalitat Valenciana, for reasons of personal data protection. A non-probabilistic purposive or convenience sampling was used by sending the questionnaire to 2459 elite athletes from 77 different sports, these participants represent the whole population of study as they are qualified as such in the 2022 and 2023 definitive lists of elite athletes of the Valencian Community according to criteria previously established by this governmental sports institution. This sample represents approximately 9% of the total elite athlete population in 2022 and 2023. However, as the available records do not specify how many of those athletes from the total population were enrolled in academic programs at the time of the study, it was not possible to determine the exact percentage of the eligible population (i.e., elite athletes who are also students).

The final sample, composed of 221 elite student-athletes, with a mean age 20.81 years ($SD=4.81$), was divided into 52.5% women, 46.6% were men and 0.9% identified as non-binary gender. Regarding their current level of competition, 70.6% were competing at the national level, and 29.4% were competing at the international level. As for the studies they were pursuing, 76.5% were pursuing university studies and 23.5% were pursuing Vocational Education and Training (VET). Of the 77 sports included in the list of elite athletes in the Valencian Community, 51 were represented in the sample, depending on the sport practised by the student-athletes. In this sense, the sample included a wide representation of elite sports disciplines, with the majority of participants concentrated in a subset of 19 sports: athletics (13.6%), swimming (7.7%), handball and rowing (5.9% each), Valencian pilota (5.0%), rugby and sailing (4.5% each), lifesaving and rescue (3.2%), Olympic weightlifting, wrestling, and shooting (2.7% each), dance sport, hockey and triathlon (2.3% each), and basketball, kayak polo, inline hockey, taekwondo and volleyball (1.8% each).

Procedure

The questionnaires were administered online to athletes classified as elite athletes in the Valencian Community in 2022 and new additions to the final list in 2023. The questionnaire was administered



through LimeSurvey, a survey management platform of the University of Valencia. The Declaration of Helsinki was taken into account, with a preamble in the questionnaire asking about the willingness to participate and informing about the confidential and anonymous treatment of the data (European Union Regulation, 2016/679 and Organic Law 3/2018 on Personal Data Protection and guarantee of digital rights). In addition, it had the approval of the Human Research Ethics Committee of the Ethics Committee in Experimental Research of the University of Valencia (reference UV-INV_ETICA-2557176).

Measures

For data collection, an ad hoc online questionnaire was used with different sociodemographic items and previously validated measurement scales for each of the variables analysed, with a five-point Likert-type response in which one indicated total disagreement and five indicated total agreement with the proposed statements. The measurement scales used were:

- Employability perception scale for students ($\alpha=.83$) by Hernández-Fernaud (2011). This instrument consists of eight items that are rated on a five-point Likert scale (1 = totally disagree, 5 = totally agree). It evaluates students' perceived ability to enter and perform effectively in the labour market after graduation, and higher scores indicate stronger beliefs in one's own employability.
- Dual Career Competence Questionnaire for Athletes ($\alpha=.93$) from De Brandt et al. (2018). This 15-item scale evaluates athletes' perceived ability to manage academic and sporting responsibilities simultaneously. It includes two dimensions: "DC Management" (10 items, $\alpha=.92$), which refers to time management, organisation, and stress coping strategies; and "Career Planning" (5 items, $\alpha=.87$), which assesses goal setting and long-term planning. Responses were collected using a five-point Likert-type scale (1 = totally disagree, 5 = totally agree).
- Intrapreneurial intentions scale ($\alpha=.96$), adapted and validated by González-Serrano et al. (2019). It consists of seven items grouped into two dimensions: "Innovation" ($\alpha=.95$), which captures creativity and openness to change in four items, and "Risk" ($\alpha=.93$), which reflects tolerance for uncertainty and initiative, in three items. Participants responded on a five-point Likert-type scale, where higher scores denote a greater propensity toward intrapreneurial behaviour within structured environments, such as future employment or entrepreneurship.

Data Analysis

The analyses were performed using SPSS v.24 software. First, descriptive statistics were used to characterize the sample in general, and according to the variables in which the sample was to be compared. The Kolmogorov-Smirnov test was used to assess the normality of the data distributions. The results indicated significant deviations from normality in several key variables ($p<.05$), which justified the use of non-parametric tests for subsequent analyses. Consequently, the Mann-Whitney U Test was applied to compare groups (level of competition, gender and level of studies being pursued). In addition, a bivariate Spearman correlation between the variables and a linear regression model were performed to explain perceived employability, and $p<0.05$ was assumed to consider the differences significant.

Results

Statistically significant differences ($p<.05$) are found in the means of perceived employability, innovation and risk-taking. These scores are higher in international level athletes ($M=4.13$, $SD=.74$; $M=3.60$, $SD=1.09$; $M=3.54$, $SD=1.13$, respectively), with respect to athletes competing at the national level ($M=3.97$, $SD=.64$; $M=3.00$, $SD=1.16$; $M=3.10$, $SD=1.18$, respectively). However, according to the gender, no statistically significant differences ($p>.05$) are found in any of the variables studied. Finally, according to the level of studies, statistically significant differences ($p<.05$) are only found in the "DC Management" dimension. The mean is higher in student-athletes with university studies ($M=4.39$; $SD=.58$) compared to those with vocational training ($M=4.19$; $SD=.82$). In the Table 1, these results can be observed.

Table 1. Mean differences in the variables according to the level of competition.

	Level of competition	N	Mean	SD	Z	p (sig.)
Employability perception	National	156	3,97	,64	-2,284	,022*
	International	65	4,13	,74		
DC Management	National	156	4,31	,64	-1,336	,182
	International	65	4,40	,67		
Career Planning	National	156	4,19	,76	-1,023	,306
	International	65	4,28	,75		
Intrapreneurship	National	156	3,05	1,12	-3,360	,001*
	International	65	3,58	1,04		
Innovation (intrapre.)	National	156	3,00	1,16	-3,592	,000*
	International	65	3,60	1,09		
Risk (intrapre.)	National	156	3,10	1,18	-2,596	,009*
	International	65	3,54	1,13		

* Significant differences, $p < .05$.

Concerning the correlation analysis between the variables (see Table 2), it is observed that perceived employability correlates positively and significantly with the dimensions of DC competencies “DC Management” ($r=.47$; $p<.01$) and “Career Planning” ($r=.45$; $p<.01$). Besides, it also correlates with the two dimensions of intrapreneurial intentions, “Innovation” ($r=.37$; $p<.01$) and “Risk” ($r=.34$; $p<.01$).

Table 2. Correlation analysis of the variables studied

Variables	1	2	3	4	5
1. Employability perception	1				
2. DC Management	,465**	1			
3. Career Planning	,445**	,659**	1		
4. Innovation (intrapre.)	,370**	,211**	,143*	1	
5. Risk (intrapre.)	,339**	,211**	,191**	,831**	1

** Significant correlation at the 0,01 level; * Significant correlation at the 0,05 level

Finally, after multiple linear regression analysis to determine the predictor variables of perceived employability, a statistically significant model is obtained ($F(6)=17.62$; $p<.001$), which explains 31.20% of the variance of perceived employability (see Table 3). The variables “DC Management” ($\beta=.25$), “Career Planning” ($\beta=.25$) and Innovation ($\beta=.27$) are the statistically significant predictors of perceived employability ($p<.05$). They make a directly and positively influence on the perceived employability of the elite student-athletes.

Table 3. Multiple linear regression model on perceived employability

	Non-standardized coefficients		Normalized coefficients	t	Sig.	Collinearity statistics	
	B	Standard error	Beta			Tolerance	VIF
(ct.)	1,447	,271		5,454	,000		
DC Management	,261	,079	,249	3,305	,001	,550	1,817
Career Planning	,224	,068	,246	3,274	,001	,556	1,800
Level of studies	-,084	,090	-,053	-,929	,354	,971	1,030
Level of competition	,020	,085	,013	,231	,818	,935	1,070
Innovation	,155	,059	,268	2,612	,010	,296	3,377
Risk	,010	,058	,018	,176	,861	,303	3,297

Note: $F(6)=17,62$; $p<.001$; $R=.58$; $R^2=.33$; $R^2 \text{ adj}=.31$

Discussion

The role of competence and skill development through DC programs is central to enhancing the perceived employability of elite student-athletes in the Valencian Community. This study confirms that the level of athletic competition significantly influences perceived employability, as well as key intrapreneurial dimensions such as innovation and risk-taking. These findings align with previous research by Aquilina (2013) and Vidal-Vilaplana et al. (2024), which highlight that reaching higher levels of competition, particularly at the international level, demands greater commitment and effort, thereby fostering the development of transferable skills relevant to the labour market. These competencies and skills, developed through sports practice and the simultaneous management of DC, include, among others, time management, goal setting, working under pressure, adaptability to changing environments, and

resilience. As highlighted by Steinbrink et al. (2020) and Wylleman and Rosier (2016), these competencies are essential in the highly competitive and ever-changing world of work, often serving as key differentiators among employees or future employable professionals. Furthermore, after observing the correlation between DC competencies and perceived employability, the importance of developing and enhancing these skills during the formative stage of student-athletes is reinforced. These skills enable student-athletes to face the challenges associated with the transition from sport to work in an effective manner, and this contributes to a more successful integration into the labour market (August, 2020; Nikander et al., 2022).

The findings of this research are consistent with international studies that have used the same DC Competence Questionnaire developed by De Brandt et al. (2018) or similar tools with the same purpose. For instance, Grubertt et al. (2024) found that Brazilian student-athletes with stronger DC competencies, particularly in planning and self-regulation, perceived themselves as more employable and adaptable to future work environments. Similarly, Pérez-Rivases et al. (2020) reported that Spanish female student-athletes considered DC competencies such as time management and adaptability crucial for balancing elite sport and academic demands. In a related study, Hallmann et al. (2024) investigated the perceived effectiveness of DC competencies among German elite athletes, as well as their relevance for career transitions. Although their research did not specifically focus on perceptions of employability, their findings support the practical relevance of developing such competencies during an athlete's career. These cross-cultural comparisons reinforce the significance of our findings, indicating a shared international trend: the development of dual-career competencies notably enhances perceived employability and future career preparedness among elite student-athletes.

This research highlights the importance of providing adequate support to student-athletes so that they can develop key competencies, such as creativity, innovation, effective communication, and risk-taking. These competencies can not only influence perceived employability, but also position elite student-athletes as potential intrapreneurs within existing organizations and businesses. In this regard, previous studies, such as those by González-Serrano et al. (2019) and Mohedano-Suanes and Garzón-Benítez (2018), emphasize that an intrapreneurial profile requires a specific set of skills, including autonomy, adaptability, and efficient resource management. These skills, as observed, closely align with the competencies developed by student-athletes through their DC. Consequently, student-athletes who enter the workforce bring added value to companies compared to graduates who have not pursued a sports career. The absence of significant differences in the studied variables based on gender indicates that both men and women elite student-athletes have similar potential for developing these competencies and skills. This underscores the importance of providing equal opportunities for sports and academic training and development. It also highlights the necessity of implementing inclusive and adaptable DC support strategies tailored to the specific needs of student-athletes. Such efforts aim to overcome barriers that hinder the successful combination of academic and sports careers (López de Subijana et al., 2015), while considering the numerous benefits of DC for facilitating a successful transition to the workforce (Smismans et al., 2021). In terms of educational level, although no significant differences were observed in the perception of employability between university and VET student-athletes, it is noteworthy that university students show greater competence in the management of DC. This finding may be related to the skills and competencies they acquire and develop in such an educational environment, where greater autonomy and organizational capacity are fostered (Reyes-Hernández et al., 2021; Sánchez-Queija et al., 2023). Furthermore, this may also be attributed to increased awareness and understanding within the university environment regarding the realities of DC and the importance of balancing sports and studies. This underscores the need to implement targeted programs that support the development of DC and foster these skills among VET (Vocational Education and Training) students as well. Such initiatives are essential to ensure an equitable transition into the labor market after sports retirement, regardless of the field of study pursued. The results obtained in this study have remarkable practical implications, both for educational institutions, sports organizations, business organizations and government agencies responsible for the design and implementation of public policies. Educational institutions should encourage the development of programs that facilitate the combination of both careers and integrate academic training with the development of transferable skills for the world of work. As far as sports organizations are concerned, it is important that they establish synergies and actively collaborate with the business sector in the creation of job opportunities that recognize the added value that athletes can bring to the labour market. At the same time, it is important to make companies aware



of the potential of elite athletes as future workers, highlighting their intrapreneurial capacity. This intrapreneurial capacity, recognized as a significant and distinctive value within any organization, has been shown to be shaped by the development of skills acquired through sports and academic training. As a result, student-athletes emerge as potential intrapreneurs, equipped to lead innovative projects and deliver creative solutions to organizational challenges.

Limitations and future lines of research

It is important to highlight some limitations of the study in order to interpret the results, and the future lines of research that are suggested on the basis of these. On the one hand, using a non-probabilistic sampling technique, limits the generalizability of the results to other geographical or sports contexts. On the other hand, the cross-sectional design of the study does not allow us to establish causal relationships between the variables and to study how the student-athlete himself evolves, since it deals with a specific moment of his DC.

In this sense, future research should expand the sample to include elite student-athletes from different regions and cultures, both in the national and international context, allowing more exhaustive comparisons and obtaining more representative results. It is also suggested that longitudinal designs be applied to analyse how DC competencies and intrapreneurial skills evolve over time, both at the athletic and academic level, and their impact on job transition. Although a questionnaire with validated measurement scales has been used, the combination of this methodology with other approaches should be considered. For example, through individual interviews of a qualitative nature, to obtain a more complete picture of the reality and work potential of high-level student-athletes.

It is interesting to explore in the future and in greater depth the role of DC competencies in specific work contexts, since the perception of employability has been analysed in a generic way. It is also interesting to analyse and develop more effective strategies to enhance these competencies and skills at different educational levels and types of training. In addition, investigating the impact of specific support programs for student-athletes, both at the educational and organizational levels, can provide valuable information for the design of public policies that promote DC and, ultimately, improve the employability of elite athletes.

Conclusions

This study highlights the strategic importance of DC development in enhancing the perceived employability and entrepreneurial potential of elite student athletes. The findings show that athletes competing at a higher level and pursuing more advanced academic training report greater development of DC competencies, particularly in Career Planning and DC Management, as well as higher perceived employability. Furthermore, the positive correlation between DC competencies and intrapreneurial intentions implies that developing these transferable skills could enable athletes to become innovative professionals capable of creating value within organisations.

From a theoretical perspective, this study contributes to the existing literature by empirically validating the relationship between DC competencies, employability and intrapreneurial potential using an integrated model. It adds to the growing body of evidence supporting the multidimensional benefits of DC experiences beyond sport. In practice, the results emphasise the importance of implementing support mechanisms that facilitate the balance between academia and athletics, while also actively developing market-relevant skills such as time management, adaptability, initiative, and innovation.

The study also calls for stronger collaboration between educational institutions, sports organisations and the private sector. Promoting targeted, inclusive and flexible DC programmes could contribute to successful transitions from sport to work, as well as talent retention and innovation in the professional environment. Therefore, DC should be recognised as a socially and institutionally strategic framework that supports the comprehensive development of athletes and enhances their capacity to contribute meaningfully to society and the economy after their competitive careers.

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