



# TikTok in Higher Education: A Learning Tool to Connect With Industry and Develop Students' Digital Skills

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Received: 21 December 2024 / Accepted: 2 September 2025  
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## Abstract

TikTok has rapidly become a mainstream social media platform, particularly popular among younger populations. However, young people's perceptions of TikTok's use as a teaching–learning tool remain largely unexplored. To address this literature gap, this study involved an educational intervention in which TikTok was integrated into sport management classes at a Spanish university through active learning methodologies. Specifically, it sought to assess changes in students' perceptions before and after the intervention across three key dimensions: TikTok's usefulness as a teaching tool, its contribution to professional development, and its potential for industry engagement. To assess students' perceptions of TikTok, a pre-test and post-test were conducted with 48 students (71% male, 29% female) enrolled in the course. Quantitative findings revealed statistically significant positive changes across all three dimensions, suggesting that the intervention positively impacted students' perceptions of TikTok's educational, professional, and industry-related value. These findings were reinforced by qualitative data collected through open-ended responses, in which students highlighted TikTok as a creative, motivating, and professionally relevant learning tool. The results of this study offer both theoretical and practical insights that may be valuable to educators and educational institutions considering the strategic integration of social media such as TikTok into higher education.

**Keywords** TikTok · Social media · Sport management education · Educational technology · Digital learning · Active learning · Professional development

## Introduction

In today's increasingly digitized world, the advancement of technologies and technological phenomenon such as Big Data, generative Artificial Intelligence, Virtual Reality, and social media platforms is transforming how we communicate, interact, and work (Behrend et al., 2024; Bygstad et al., 2022; Glebova et al., 2024). Among

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these digital technologies, social media platforms stand out due to their ubiquity and integration into everyday life (Smith & Storrs, 2023). Defined by Kaplan and Haenlein (2010) as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” (p. 61), social media play a central role in everyday interactions by facilitating connections between individuals and entities (Al-Shamaleh, 2018; Einsle et al., 2025).

Social media platforms that focus on short videos, such as TikTok, have recently surged in popularity (Schellewald, 2023). Currently boasting over 1.5 billion monthly active users globally (Dixon, 2025), TikTok is particularly influential among the younger generation (Middleton, 2022), significantly impacting Generation Z (Cervi, 2021). TikTok is distinguished by its engaging, spontaneous, authentic style, often infused with humour, setting it apart from other social media platforms (Carpenter et al., 2024; McDermott, 2024; Meza et al., 2023; Su et al., 2020). According to Schellewald (2023), part of TikTok’s success is attributed to the effectiveness of its algorithm in tracking and reinforcing user preferences, as reflected in the “For You Page” (the app’s algorithmic content feed). Additionally, its emphasis on short video formats, where users can easily incorporate effects and music (Middleton, 2022), has facilitated TikTok’s rapid expansion, enabling more individuals to become content creators. This has given rise to a young generation of “TikTokers” producing audiovisual content with the potential to go viral (Meza et al., 2023). TikTok’s success is further evidenced by how other platforms, such as Instagram and YouTube, have attempted to replicate its formula through Instagram Reels and YouTube Shorts.

As TikTok’s influence has spread, it has become a vital communication tool in many industries, including the sports sector. Sport managers engage with fans and other sporting entities via TikTok (Abeza, 2024; Einsle et al., 2025), and athletes utilize it to share content related to their professional activities and their personal lives (McDermott, 2024; Ning et al., 2024; Su et al., 2020), as well as to capitalize on sponsorship opportunities (Wanzer et al., 2024). Given such uses, future sport managers benefit from learning how TikTok functions and is used in the professional sports sector. Therefore, it could be worthwhile to introduce TikTok into sport management education to equip students with TikTok-management skills and knowledge.

In higher education more broadly, TikTok is also experiencing growth. Studies, such as those by Escamilla-Fajardo et al. (2021), demonstrate that TikTok can boost student motivation and enhance skills like creativity, curiosity, and imagination. Some educators use it for professional or educational purposes, becoming micro-celebrities (Carpenter et al., 2024; Vizcaíno-Verdú & Abidin, 2023). Despite increasing interest, education-focused research into TikTok remains nascent, with calls for more studies on its potential educational applications from multiple scholars (e.g., Carpenter et al., 2024; López-Carril et al., 2024). Furthermore, there are calls for more research into TikTok’s applications within sport management (Abeza, 2023).

Despite the increasing importance of digital and social media competencies in the sport management profession (Abeza, 2023; Pate & Bosley, 2020), higher education curricula often remain anchored in traditional academic paradigms, where such competencies are not systematically addressed. This misalignment creates a gap

between students' academic preparation and the practical demands of the industry (Lebel et al., 2015; López-Carril et al., 2021). Accordingly, there is a growing need for pedagogical innovations that integrate professional digital practices—such as TikTok use—into university teaching. By incorporating this social media platform within an active learning framework, this educational intervention sought to connect students with relevant, industry-aligned learning experiences.

This work also seeks to address gaps in the knowledge base by linking the sports and higher education sectors, focusing on student perceptions of TikTok use as a learning tool to help them engage with industry and develop digital competencies. Therefore, the main aim of this study is:

To evaluate the impact of an educational intervention using TikTok on sport management students' perceptions of the platform as a university learning tool, a means of professional development, and a way to engage with the sports industry.

To address this aim, the following research questions (RQ) guided the study:

**RQ1.** How do sport management students perceive TikTok as a teaching-learning tool before and after the intervention?

**RQ2.** In what ways do students believe TikTok contributes to their professional profile development?

**RQ3.** How do students perceive TikTok's role in facilitating interaction with, and following developments in, the sports industry?

The findings of this study are relevant to higher education faculty and staff, offering insights into the potential of social media platforms as learning tools and as a means to bridge the gap between professional practice and educational settings.

## Literature Review

### The Emergence of TikTok in Higher Education

Higher education has been undergoing a digital transformation, redefining the roles of students and educators to facilitate meaningful learning in digital spaces (Bygstad et al., 2022; Galvis & Carvajal, 2022; Sum & Oancea, 2022). In this context, social media platforms like TikTok, which have captured the interest of many young people (Meza et al., 2023; Middleton, 2022), can be valuable tools for educators seeking to innovate and create engaging and motivating educational experiences (Escamilla-Fajardo et al., 2021; López-Carril et al., 2024).

Carpenter et al. (2024) explored educators' perceptions of TikTok, identifying barriers such as misinformation, disinformation, and a lack of understanding of TikTok's algorithm and underlying interests. Despite such challenges, educators perceived that TikTok also demonstrated potential to enrich classroom experiences, teaching practices, and pedagogical materials (Carpenter et al., 2024). According to the authors, TikTok's video format, coupled with elements of fun and humour, can be highly attractive

to some learners. Vizcaíno-Verdú and Abidin (2023) found TikTok to be a platform for professional learning that can allow educators to become micro-celebrities. They highlight how the use of hashtags like #TeachersOfTikTok and #TikTokTeacher helps generate educational content that transcends individual classrooms, creating interactive digital environments and learning communities that can resonate with students.

Various educational experiences incorporating TikTok have been designed. One pioneering study by Escamilla-Fajardo et al. (2021) introduced TikTok in a body expression course within a bachelor's degree program in Sports Sciences. Students perceived that TikTok fostered creativity, collaboration, and a deeper understanding of course material through practical application and peer interaction. Similarly, López-Carril et al. (2024) described the use of three TikTok-based assignments in a sports science course, highlighting how TikTok increased student motivation and fostered interaction among students. These authors provided some guidelines for educators to successfully incorporate TikTok into their teaching, emphasizing the importance of clear pedagogy, formative assessments, co-assessment, and the use of rubrics. Additionally, Middleton (2022) integrated TikTok into an undergraduate Strategic Management course, using videos to complement lectures and flipped classroom exercises. The author noted TikTok's potential for engaging students with university content, particularly given its appeal to Gen Z, offering flexibility and interaction compared to traditional teaching approaches. In a different context, Benitez-Correa and Gonzalez-Torres (2025) implemented TikTok in an English as a Foreign Language (EFL) programme in Ecuador. Their study found that TikTok videos significantly enhanced students' academic performance, particularly in linguistic and research competencies, while also reporting positive perceptions of the platform's value for learning. Moreover, Yélamos-Guerra et al. (2022) implemented a TikTok-based project in a History class within an English Studies programme. Their findings revealed that students considered the activity highly motivating and that it contributed to the development of their digital competence.

Despite these positive findings and TikTok's rising popularity as one of the most widely used social media platforms globally (Dixon, 2025), its use and research in higher education remain limited. Therefore, it is relevant to conduct further studies exploring the impact of TikTok on the teaching–learning process. This will help the educational community better understand potential benefits and challenges TikTok can present within higher education.

### **TikTok's Role in the Sports Industry**

TikTok's popularity within the sports sector continues to increase, making it a key communication tool that sport managers use to engage with the sports ecosystem (Abeza, 2023, 2024). During the COVID-19 pandemic, the sports sector recognized the potential of this tool, with athletes and sports entities using TikTok to interact with fans and enhance fan engagement (Su et al., 2020).

A pioneering study on TikTok's utility for sport managers during sporting events was conducted by Einsle et al. (2025). From a marketing perspective, they analyzed 136 TikTok videos related to "The Ocean Race," assessing the impact of video

characteristics such as length, music, hashtags, and emojis on user engagement. Short videos (10–20 s) without text achieved more likes, shares, and views. Moreover, videos that combined spoken language with music tended to engage more users than those featuring only spoken language. The authors advocated for TikTok's potential as a marketing tool to engage new generations of sports fans.

From the athletes' perspective, TikTok can facilitate innovative self-representation strategies. For instance, McDermott (2024) analyzed 100 TikTok videos and 1,000 comments concerning how gymnast Simone Biles communicated her withdrawal from the 2020 Tokyo Summer Olympic Games. Findings highlighted how TikTok can serve as a platform for athlete activism, providing new spaces for discussing social issues such as mental health and breaking down related taboos. Additionally, Ning et al. (2024) investigated how 170 Chinese athletes at the same Olympics utilized Douyin (TikTok's Chinese counterpart) to share insights into their professional achievements and personal lives. Their findings revealed that successful athletes posted more frequently, and gender influenced the content shared. Men focused more on sports results, whereas women shared more personal life content.

Economically, TikTok has penetrated the sports industry by sponsoring major events and teams across various sports, such as the Tour de France bike race, the Women's Six Nations rugby competition, UEFA Women's EURO 2022 football tournament, and Wrexham football jerseys (Salao & Whateley, 2022). Moreover, Myers (2023) and Wanzer et al. (2024) highlighted how college athletes in the United States leverage TikTok to develop personal brands and monetize their name, image, and likeness (NIL) through sponsored content. In the sports industry, TikTok's communicative style has been unique, with content creators blending spontaneity, authenticity, and humour, which is particularly appealing to younger generations of consumers (Meza et al., 2023; Middleton, 2022).

In short, TikTok and many individuals in the sports industry mutually benefit from their relationship, fostering growth and profitability. It is therefore important for upcoming sport managers to learn about utilizing TikTok professionally. However, more knowledge is needed to inform what such learning might look like during university coursework and how it can link to professional practice. As noted by Elhajjar and Yacoub (2024), there exists a disparity in the speed at which social media research impacts the professional sphere—studies are often disconnected from the rapidly evolving professional landscape. Similarly, Lebel et al. (2015) stated that there is a disconnect between the professional needs related to social media, students' desires for learning, and actual teaching in the higher education classroom. Reflected in calls by Pate and Bosley (2020) and López-Carril et al. (2021), there is a pressing need for enhanced integration of social media within sport management education.

### **Constructivist Learning Theory and Active Learning as Pedagogical Cornerstones for Introducing TikTok in Higher Education**

Constructivist learning theory provides a strong foundation for the use of TikTok in education. This theory, rooted in the work of prominent philosophers, psychologists, and pedagogues such as Dewey (1938), Piaget (1937), and Vygotsky (1978), posits

that knowledge is actively constructed through interaction with one's environment. Learning is not a passive process but is shaped through experience, reflection, and engagement (Hendry et al., 1999; Mascolo & Fischer, 2004). Furthermore, constructivist learning theory encourages instructors to simulate real-world scenarios that promote discussion, negotiation, idea exchange, and collaborative problem-solving (Palincsar, 1998; Prince, 2004).

Constructivist learning theory has influenced several pedagogical approaches (Mattar, 2018), with active learning being one of the most prominent. Active learning places students at the center of the educational process, enhancing their participation in tasks that require critical thinking, collaboration, and problem-solving (Palincsar, 1998; Walker, 2003). Rather than passively receiving information, students engage directly with content, making meaning through dialogue and action.

The pedagogical foundations of constructivist learning theory and active learning have been successfully applied in online and blended learning environments. For example, Reilly and Reeves (2024) and Ruey (2010) highlight that this combination fosters student engagement, motivation, and participation. Similarly, Charania et al. (2021) and Mattar (2018) emphasize the synergies generated between constructivist pedagogical approaches and the use of educational technology to create interactive learning environments. In the case of TikTok, the literature already highlights how this social media platform can be used to implement educational experiences based on active learning (e.g., Escamilla-Fajardo et al., 2021; López-Carril et al., 2024; Wang et al., 2024).

In the sport management education field, there is a growing need to adapt the curriculum to meet current societal and industry demands. Authors such as Chutiphongdech et al. (2024), Glebova and López-Carril (2023), and Vidal-Vilaplana et al. (2023) emphasize that sport management education should not only address real-world challenges but also equip students with the digital competencies necessary for a dynamic, post-pandemic sports industry. However, the question arises: how can educators create meaningful classroom experiences with social media that cultivate the skills necessary for students' career success? A potential answer lies in pedagogical innovation (Purohit & Dutt, 2024), particularly through the integration of digital technologies like TikTok. Marriott et al. (2024) argue that digital tools should be used to respond to emerging trends, but such integration must be pedagogically grounded. Constructivist learning theory and active learning can provide such a foundation. This paper thus details a TikTok-based educational intervention grounded in constructivist and active learning principles, helping students engage with real-world content and preparing them for the digital demands of their profession.

## Pedagogical Methods

This section addresses the first objective of our work by detailing a pedagogical innovation that incorporated TikTok, designed for active learning among 83 third-year bachelor students in a sport management course at a Spanish university for the 2023–2024 academic year.

The pedagogical innovation was structured around two complementary assignments. Assignment 'A' focused on enabling students to explore how athletes and sports industry entities utilize TikTok for professional purposes. Assignment 'B' aimed to acquaint students with TikTok's technical and communicative capabilities, allowing them to create content that developed their digital skills while integrating specific course content.

The two assignments were graded, collectively contributing one point out of ten towards the final grade of the course. Assignment 'A' was weighted at 30% and assignment 'B' at 70%.

### **Assignment 'A': Exploring TikTok's Professional Use in the Sports Industry**

As a preliminary step to assignment 'A', the instructor held an initial session to contextualize TikTok and show examples of videos generated by sports industry professionals. Subsequently, the assignment was explained to the students. Each student was tasked with analysing the content generated on TikTok by an athlete and a sport entity. This allowed students to gain an initial understanding of how TikTok is currently being used in the sports industry.

To ensure that students chose accounts with sufficient activity, the instructor made a preliminary selection of 10 TikTok accounts of active athletes (5 women and 5 men) and 10 accounts of various sports entities (see Table 1).

To guide and facilitate the analysis of the athletes' and sports entities' TikTok accounts, each student had to answer a series of questions established by the instructor (see Table 2). These questions aimed to stimulate reflection and critical reasoning among the students, encouraging them to think like future professionals in their field.

The students had one month to complete the assignment and were required to submit their responses on the Moodle learning-management platform in a provided Word template.

A self-assessment was included to encourage critical reflection. Each student assigned themselves a score between 0 and 0.3 points, along with a reasoned justification for the grade. An instructor reviewed all self-assessments to ensure the process was carried out correctly and to gain insights into the students' responses.

### **Assignment 'B': Students as TikTok Content Creators**

The focus of assignment 'B' was to have students explore the potential of TikTok for creating audiovisual content. Each student was tasked with developing a TikTok video to explain a concept from among the 120 proposed by the instructors, all of which were linked to one of the ten themes of the course (see Appendix A: Table 6). The goal was to create a "Sport Management TikTok Library", which would serve as complementary study material alongside lecture notes and PowerPoint slides for exam preparation.

Students had one week to decide which concept they wanted to address. They submitted their top five preferences via a Google Forms. The instructor reviewed

**Table 1** TikTok profiles of athletes and sports entities selected by the instructors

Athlete	Sporting discipline	Link to TikTok account	Name of the sport organisation	Type of sport entity	Link to TikTok account
Joaquín Sánchez	Football	<a href="https://www.tiktok.com/@joaquinarte">www.tiktok.com/@joaquinarte</a>	LaLiga	Professional league	<a href="https://www.tiktok.com/@laliga">www.tiktok.com/@laliga</a>
Sergio Ramos	Football	<a href="https://www.tiktok.com/@sergioramos">www.tiktok.com/@sergioramos</a>	Atlético de Madrid	Sport club	<a href="https://www.tiktok.com/@atleticodemadrid">www.tiktok.com/@atleticodemadrid</a>
Alexia Putellas	Football	<a href="https://www.tiktok.com/@alexiputellas">www.tiktok.com/@alexiputellas</a>	FC Barcelona	Sport club	<a href="https://www.tiktok.com/@fcbarcelona">www.tiktok.com/@fcbarcelona</a>
Aitana Bonmatí	Football	<a href="https://www.tiktok.com/@aitanabonmati">www.tiktok.com/@aitanabonmati</a>	RCD Espanyol	Sport club	<a href="https://www.tiktok.com/@rcdespanyol">www.tiktok.com/@rcdespanyol</a>
Carolina Marín	Badminton	<a href="https://www.tiktok.com/@carolinamarin_inamarin_">www.tiktok.com/@carolinamarin_inamarin_</a>	Formula One	Sporting competition	<a href="https://www.tiktok.com/@f1">www.tiktok.com/@f1</a>
Carlos Alcaraz	Tennis	<a href="https://www.tiktok.com/@carloalcaraz">www.tiktok.com/@carloalcaraz</a>	Nike	Sportswear brand	<a href="https://www.tiktok.com/@nike">www.tiktok.com/@nike</a>
Simone Biles	Artistic gymnastics	<a href="https://www.tiktok.com/@simonebilesowens">www.tiktok.com/@simonebilesowens</a>	Valencia Marathon	Sporting event	<a href="https://www.tiktok.com/@maratonvalencia">www.tiktok.com/@maratonvalencia</a>
Fernando Alonso	Motorsport (Formula One)	<a href="https://www.tiktok.com/@fernandoalonso">www.tiktok.com/@fernandoalonso</a>	Spartan Race	Sporting event	<a href="https://www.tiktok.com/@spartan">www.tiktok.com/@spartan</a>
Almudena Cid	Rhythmic gymnastics	<a href="https://www.tiktok.com/@almudenaacid.official">www.tiktok.com/@almudenaacid.official</a>	NBA	Professional league	<a href="https://www.tiktok.com/@nba">www.tiktok.com/@nba</a>
Giannis Antetokoumpo	Basketball	<a href="https://www.tiktok.com/@giannis_an34">www.tiktok.com/@giannis_an34</a>	Spanish Basketball Federation	National sport federation	<a href="https://www.tiktok.com/@baloncesto.esoficial">www.tiktok.com/@baloncesto.esoficial</a>

**Table 2** Assignment 'A' questions for students

Questions

1. What is the main topic of the content published on the analyzed account? Does any other type of content stand out? Is there coherence between the content published and the athlete's personal brand? Justify your answer
2. How does the audience interact with the published content? Does the athlete generate a lot of engagement (comments, likes, shares, saves...)?
3. Do you think the athlete uses any strategies to generate a larger audience (e.g., frequency of posts, collaborations, TikTok challenges, playlists, etc.)?
4. Do you consider that the athlete uses hashtags and/or descriptions appropriately? Is their use linked to and consistent with the type of content they publish?
5. After analyzing the account in depth, why do you think this athlete is on TikTok? What kind of benefits do you think they may be gaining?
6. If you had to give the athlete some advice on how to improve their TikTok account, what would you tell them? Please provide reasoning for your answer
7. What differences do you find between the analyzed account of an athlete and the sports entity you have chosen? Please explain your answer

For illustrative purposes, questions 1 to 6 are written with the analysis of an athlete's account in mind. Students also answered these six questions with appropriate adaptations for the analysis of a sports entity's account. Question 7 was only answered after the first six questions were completed for each TikTok account

the requests and assigned each student a unique concept to avoid repetition. In cases where multiple students selected the same concept, it was assigned by drawing lots.

The assignment included specific guidelines regarding the video format and content, allowing room for creativity. The mandatory format guidelines were as follows:

- Students did not introduce themselves at the beginning of the video, operating under the fictitious scenario that they were established TikTokers in the sports industry. Therefore, they were to start the video directly addressing the assigned concept.
- Each video had to be between 1 and 2 minutes long.
- Students had to appear on camera for at least 1 second at some point in the video. Voice-over-only videos were not acceptable.

Other format elements, such as the use of effects, narration and recording styles, use of original or existing material, music, and the involvement of classmates or family members, were left to the discretion of each student. Figure 1 shows screenshots illustrating the diversity of formats and styles used in the TikTok videos.

Content-wise, each video had to cover three key points:

- Introduction and definition of the concept.
- Explanation of why the concept is important in sport management, supported by justified arguments.
- Proposal of at least 2–3 real-world examples of how the concept is applied in sport management.

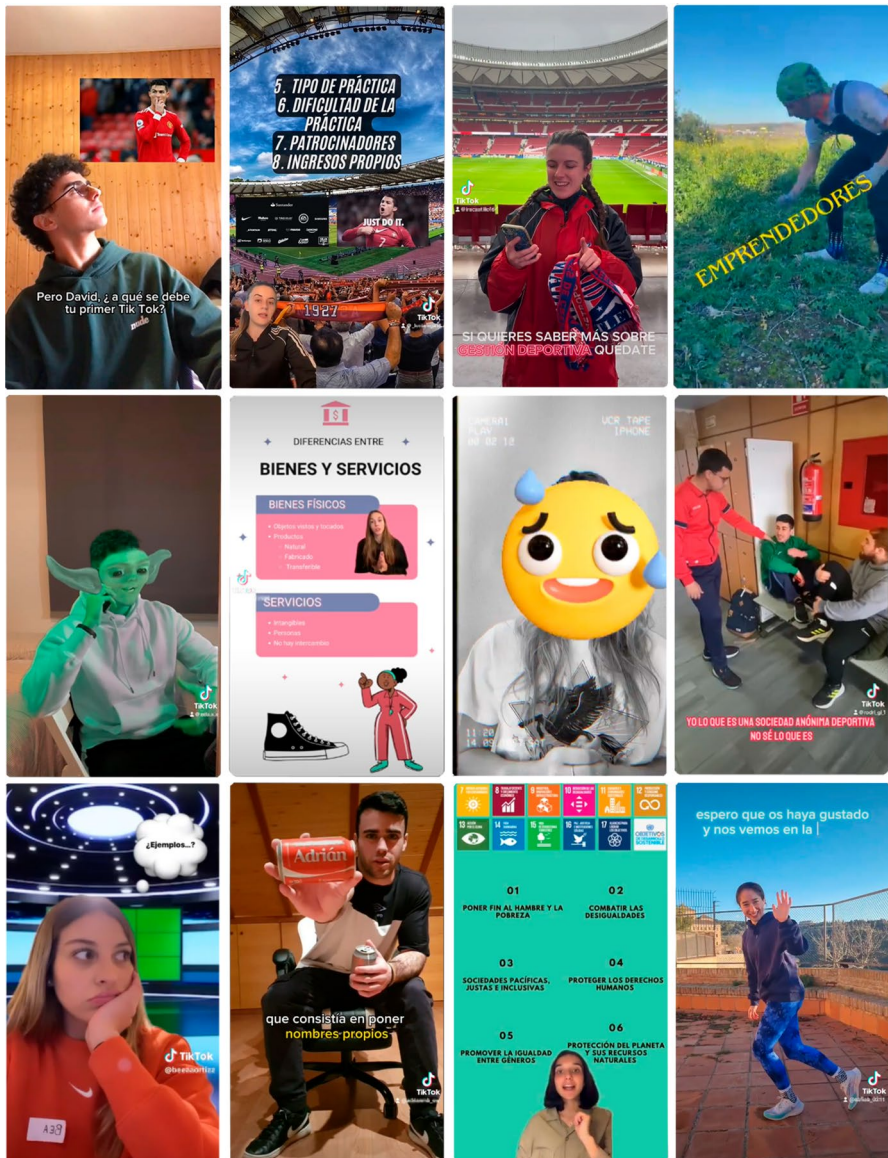


Fig. 1 Image from some of the videos made with TikTok by the students of the course for assignment 'B'. Note: The students appearing in the figure have given their written consent for the inclusion of these images in the article

Students had six weeks from the assignment date of the concept to complete their videos, which they then uploaded to a designated task in Moodle. The instructors organized all the videos in a Google Drive folder with links to each video on Moodle, allowing the entire class to access the other's work.

A peer assessment process was implemented to enhance the formative component. Each student evaluated four videos created by their peers, assigning scores between 0 and 10. The final grade for each student was the arithmetic mean of the four received scores. To standardize the peer assessment process and guide TikTok video creation, the instructor designed a rubric (see Table 3) in collaboration with the students. This involvement aimed to further engage students in the teaching–learning process. The instructor presented an initial rubric outline and facilitated a discussion for students to agree on the distribution of scoring percentages and any adjustments to the assessment criteria.

The instructor was responsible for randomizing the peer assessment assignments and published a list on Moodle with the pairings. A ten-day period was set for students to complete their evaluations and submit grades via Google Forms. The instructor reviewed all peer assessments and video content for accuracy, ensuring no concept was poorly explained or contained incorrect information. This step was crucial since the TikTok videos served as study material for the final exam. Ultimately, no videos needed to be removed.

## Research Methods

This mixed-methods study, primarily quantitative in nature, employed a pre- and post-test design using a non-probabilistic convenience sample. Although the study does not include a control group or randomization, the pre- and post-intervention data collection allowed us to examine changes in students' perceptions over time. The main aspects of the research methodology are detailed below.

## Sample

Of the 83 students who participated in the TikTok-based pedagogical innovation, 48 (57.8%) completed both the pre-test and the post-test, forming the study sample. Of these participants, 34 (70.8%) were male, and 14 (29.2%) were female, with an average age of 22.2 years ( $SD=1.39$ ).

## Instrument

To achieve the second objective of this study, a questionnaire was developed that included demographic questions (e.g., age, gender, nationality) and the “TikTok-SportEdu” scale (see Appendix B: Table 7). Developed and validated by Gálvez-Ruiz et al. (2025) the TikTok-SportEdu scale assesses university students' perceptions of TikTok's inclusion in sports sciences classes. The scale comprises 15 items across three dimensions:

1. TikTok as a university teaching–learning tool (4 items), which explores students' views on TikTok as a relevant and innovative educational resource, and its potential integration into university curricula;

**Table 3** Rubric used by students to assess TikTok assignment "B"

Assessment blocks and percentage weighting	Criteria and percentage weighting in the assessment	Performance level				
		Bad	Fair	Normal	Good	Very good
Content-related Criteria (50% of the total)	<ol style="list-style-type: none"> <li>1. Introduction and conceptualization of the concept (e.g., use of reliable sources, clarity of explanation, accuracy)—20%</li> <li>2. Justification of the importance of the concept for sport management (e.g., solid and elaborated arguments on why the concept is relevant in the sport management context)—15%</li> <li>3. Adequacy, relevance, and coherence of the cases/examples chosen from the sports industry to exemplify the concept—15%</li> <li>4. The basic standards set for the assignment are met: the student appears in the video; the assigned concept is addressed, and the video lasts between 1 minute and 2 minutes—10%</li> <li>5. The student uses effects (e.g., visual, sound/music, transitions) through the editing options offered by TikTok in a well-timed and meaningful way without overloading the video—15%</li> <li>6. The TikTok created has a rhythm and a speech that fits the platform's communication style—15%</li> <li>7. The TikTok is original and creative and incorporates some extra element (e.g. scene setting, use of objects, place of recording, collaborations with others)—10%</li> </ol>	0 p	0.5 p	1 p	1.5 p	2 p
Criteria linked to performance and the use of TikTok features (50% of the total)		0 p	0.4 p	0.7 p	1.1 p	1.5 p
		0 p	0.4 p	0.7 p	1.1 p	1.5 p
		0 p	0.25 p	0.5 p	0.75 p	1 p
		0 p	0.4 p	0.7 p	1.1 p	1.5 p
		0 p	0.4 p	0.7 p	1.1 p	1.5 p
		0 p	0.25 p	0.5 p	0.75 p	1 p

2. TikTok as a professional profile development tool (7 items), which assesses students' perceptions of TikTok as a means to enhance employability, personal branding, entrepreneurship, and professional development; and
3. TikTok as a tool to interact and stay informed about developments in the sports industry (4 items), which evaluates how students perceive TikTok as a platform to connect with key actors and stay updated on trends and innovations within the sports sector.

Participants rated each item on a 5-point Likert scale from 1 (“strongly disagree”) to 5 (“strongly agree”). In addition, an open-ended question was included at the end of the questionnaire that asked: “What did you think of the use of TikTok in the course (justify your answer)?” This qualitative item was intended to complement the quantitative data and provide insights into students' reflections on the learning process.

The instrument's psychometric properties were evaluated through a Confirmatory Factor Analysis (CFA) (Kline, 2005). Model fit was assessed using five indices (TLI, CFI, GFI, NFI, RMSEA) and the chi-square to degrees of freedom ratio, showing a good fit to the data: [ $\chi^2(51)=80.71$  ( $p < .01$ ),  $\chi^2/df=1.58$ , CFI=.96, GFI=.90, TLI=.96, NFI=.92, RMSEA=.07]. All factor loadings exceeded 0.50, indicating that each item was well represented by its associated factor (Hair et al., 2009). Internal consistency was confirmed with Cronbach's alpha values ranging from 0.89 to 0.95, composite reliability ranging from 0.89 to 0.94, significant positive inter-item correlations at the 0.01 level, and average item-to-total correlations of 0.84. Convergent validity was supported by these factor loadings and reliability measures, while discriminant validity was evidenced by average variance extracted (AVE) values greater than 0.66, surpassing the squared correlations between factors (Fornell & Larcker, 1981).

## Data Collection Procedures

To assess students' perceptions of class TikTok use, a pre-test was administered at the beginning of the academic experience in October 2023, followed by a post-test at the conclusion in January 2024. Data were collected using the online platform LimeSurvey.

The study adhered to the ethical guidelines of the Declaration of Helsinki (World Medical Association, 2013). All participants provided informed consent, being fully informed of the study's objectives and assured of their anonymity and the right to withdraw at any time. To correlate pre-test and post-test data while maintaining anonymity, each participant was assigned a unique code.

## Data Analysis Procedures

Descriptive statistics were calculated to examine mean scores and standard deviations of the TikTok-SportEdu scale items before and after the TikTok assignments. CFA was conducted to examine the measurement model, followed by a one-way MANOVA to assess the effect of the educational intervention on students' perceptions of TikTok's educational potential. The time-period effect was considered

an independent variable, and the three dimensions served as dependent variables. Following significant MANOVA results, paired samples ANOVAs were conducted to identify specific differences among the dimensions (Lorde et al., 2011).

In addition, qualitative data from the open-ended item at the end of the post-test were analyzed to complement the quantitative findings. A deductive approach was used, based on the three predefined dimensions of the study: 1-TikTok as a university teaching–learning tool, 2-TikTok as a professional profile development tool, and 3-TikTok as a tool to interact and stay informed about developments in the sports industry. To ensure a relevant and focused representation of students’ views, the first author selected a set of illustrative quotes for each dimension, based on their alignment with these categories. This selection was then triangulated with the second author to ensure accuracy and consistency.

## Findings

### Descriptive Statistics of Dimensions

Table 4 displays the descriptive statistics (means, standard deviations, skewness, and kurtosis) for the pre- and post-assignment tests. As part of the assumption tests, we assessed normality, multicollinearity, and outliers. The overall values of skewness (−0.49 to −1.25) and kurtosis (−0.58 to 2.43) indicate no concerns regarding normality. The boxplot analysis revealed no extreme scores, suggesting an absence of outliers. Correlation analysis results (<0.69) and variance inflation factors (ranging from 1.80 to 2.59) confirm that multicollinearity was not an issue in the data (Hair et al., 2009). All item means for both pre- and post-assignments tests were above the midpoint of the scale, indicating high participant agreement. Descriptive statistics show that the dimension “TikTok as a tool to interact and stay informed about developments in the sports industry” had the highest mean in the post-assignment ( $M_{\text{post}}=4.06$ ), while the dimension “TikTok as a university teaching–learning tool” evidenced the largest increase over time ( $M_{\text{pre}}=3.11$ ;  $M_{\text{post}}=3.81$ ). Similarly, “TikTok as a professional profile development tool” also scored high, moving from a mean of 3.23 in the pre-assignment to 3.69 in the post-assignment. Overall, these high mean scores suggest a positive perception of TikTok as a teaching–learning, professional, and informational tool among the students from pre- to post-assignment.

**Table 4** Mean scores, standard deviations, skewness and kurtosis values

Dimensions	Pre-Assignment				Post-Assignment			
	M	SD	Sk	Kr	M	SD	Sk	Kr
TikTok as a university teaching–learning tool	3.11	.16	-.49	-.58	3.81	.11	-.61	.18
TikTok as a professional profile development tool	3.23	.12	-.61	.36	3.69	.11	-.39	-.22
TikTok to interact and stay informed about developments in the sports industry	3.70	.12	-1.25	2.43	4.06	.10	-.83	1.12

M-mean; SD-standard deviations; Sk-skewness; Kr-kurtosis

## Difference in Student Perceptions From Pre- to Post-assignments

The MANOVA results revealed significant changes in student perceptions between pre- and post-assignment samples (Wilks' lambda=.87,  $F(1,94)=4.47$ ,  $p<.05$ ). Repeated measures ANOVAs were conducted to analyze which dimensions showed significant differences over time. Statistically significant differences were found across the factors (see Table 5).

The results revealed a positive and significant mean difference for the dimensions "TikTok as a university teaching-learning tool" [ $F(1,94)=-3.57$ ,  $p=.001$ ], "TikTok as a professional profile development tool" [ $F(1,94)=-2.76$ ,  $p=.007$ ], and "TikTok to interact and stay informed about developments in the sports industry" [ $F(1,94)=-2.17$ ,  $p=.033$ ].

Table 5 presents the complete results of the paired ANOVAs considering the longitudinal samples.

## Qualitative Findings

The qualitative responses provided further insight into students' perceptions of TikTok's educational potential. In particular, many participants highlighted the platform's value as a novel and dynamic tool to enhance university teaching. Students perceived that integrating TikTok into the classroom helped make learning more engaging and stimulated creativity, as shown in the following quotes:

"I found it quite innovative because no other course had introduced TikTok or used it as a learning tool. In this course, we used it to learn different concepts, and I think it was a success".

"I liked the approach given to it because I think the best way to learn was by being creative and making our own video on a specific topic. Moreover, this way we also learn to express ourselves in front of the camera and to edit".

"I loved this project, as it [TikTok] is a tool I use often in my daily life. Moreover, I consider it a great teaching tool, which helps to acquire knowledge in a dynamic way".

"It was a very good idea to learn course content while enjoying the process. It helps to study in a more fun and visual way, which I found very useful".

Students also recognised that using TikTok in class could support the development of their professional profile. They appreciated the opportunity to engage with the platform from a career-oriented perspective:

"Very interesting and necessary, since in the current times, using TikTok in our career is very useful to make yourself known".

"Even though I had never used [TikTok], I believe I was able to manage myself within this social network. It was the first time I used a social network for a project in my academic career".

"I learned how to communicate professionally on TikTok. It made me realise how important it is to know how to present yourself on social media".

**Table 5** Means and ANOVA results of pre- and post-assignment perceptions

Factors <sup>1</sup>	Means		Mean Difference	F-test	p	95% CI	
	Pre-test (n = 48)	Post-test (n = 48)				Low	Up
	TikTok as a university teaching-learning tool	3.11				3.81	-.70
TikTok as a professional profile development tool	3.23	3.69	-.46	-2.76	.007**	-.79	-.13
TikTok to interact and stay informed about developments in the sports industry	3.70	4.06	-.36	-2.17	.033**	-.68	-.03

\* $p < .001$ ; \*\* $p < .05$ . CI – Confidence Interval

Factors<sup>1</sup> Longitudinal sample. Repeated Measures ANOVA [ $F(1,94) = 10.88, p = .001$ ]

Regarding TikTok's potential as a tool to interact with and stay informed about developments in the sports industry, several students explained that the classroom activities broadened their awareness of how athletes and organisations are already using the platform professionally:

"With this assignment, I saw how TikTok can keep you updated on many aspects of the sports industry, especially through content from clubs and athletes".

"I had never thought that TikTok could be a place to follow trends and ideas in sport. Now I see it differently and can use it to learn from professionals".

"I thought it was a great idea since this social network [TikTok] is practically one of the most recognized worldwide, where it's easy to get noticed because any video can become very visible. Moreover, it's a great information tool since there are millions of professional accounts that might interest us".

However, not all students valued the educational use of TikTok equally. A few participants expressed skepticism or described difficulties when engaging with the platform, citing factors such as a lack of prior experience, technical limitations, or personal disinterest in content creation. These perspectives are illustrated by the following quotes:

"I think it's a good tool for creating content, but I don't like it in the educational field because I see it more as a source of distraction and entertainment".

"From my point of view, I didn't like the use of TikTok in class, not because the professor implemented it poorly, but because I'm not a fan of the platform, and it doesn't interest me when it's used for sport management".

"Honestly, the TikTok creation part didn't seem appropriate to me, as many of us didn't have experience in this area. I would have suggested creating a script and reviewing it in class, then moving on to trying to make a TikTok".

## Discussion

This research was conducted in response to calls from authors such as Carpenter et al. (2024) and Wang et al. (2024), who have underscored the need for educational interventions and empirical studies examining the potential of TikTok in higher education. In line with these calls, the present study implemented a TikTok-based educational intervention in sport management classes, structured through two assignments based on approaches and constructivist learning principles. We explored students' perceptions of TikTok across three key dimensions: 1-as a tool for teaching and learning, 2-for professional profile development, and 3-for engaging with current developments in the sports industry.

The results of the intervention revealed significant differences across all three dimensions, supported by qualitative feedback from students. These findings

suggest that the intervention positively influenced students' perceptions, enhancing their appreciation of TikTok's educational, professional, and industry-related value. However, some students also expressed more skeptical views regarding TikTok's use in educational contexts. These reflections should encourage educators to carefully consider whether and how to integrate TikTok into their teaching practices. Below, each dimension is discussed in detail, highlighting the changes observed in students' perceptions before and after the intervention.

### **TikTok as a University Teaching–learning Tool**

Firstly, students highly valued TikTok as a teaching and learning tool at the university level. We believe that by incorporating two active learning tasks, grounded in constructivist learning theory, students were able to experience firsthand the educational possibilities offered by this platform. Our findings align with those of Escamilla-Fajardo et al. (2021), who emphasized TikTok's potential to motivate students and engage them with course content. Additionally, TikTok fostered creativity and imagination. This was manifested in the diverse and original communication styles students used to convey the theoretical concepts in assignment 'B'. For example, some students involved family and friends in their videos, others travelled to sports facilities related to their TikTok content topic or used music and a variety of effects to personalize and energize their videos (see Fig. 1). Additionally, the students opted for spontaneous, authentic language with a strong humorous element (e.g., some included jokes and playful references to the instructor or classmates), aligning with the findings of authors such as Carpenter et al. (2024), Meza et al. (2023), and Middleton (2022). This choice reflects the distinct communicative culture fostered on TikTok, where users typically adopt a casual, approachable style, as compared to other platforms like Instagram or YouTube. Such a style appears to resonate with the current generation of university students, enhancing their sense of connection and engagement in the learning process.

The use of humour and informality facilitated a more enjoyable and less hierarchical teaching–learning dynamic, benefiting both students and the instructor. These perceptions suggest that, beyond entertainment, TikTok can serve as an effective pedagogical tool by creating an inclusive and motivating learning environment. Given its widespread popularity among young adults (Cervi, 2021; Middleton, 2022), the platform offers higher education instructors a valuable opportunity to innovate in their teaching practice. Furthermore, the “Sport Management TikTok Library” became a valuable and innovative resource for exam preparation. Unlike Middleton's (2022) work, where the instructor generated TikTok videos, our approach allowed students to create the content, reinforcing the active learning perspective that authors such as Wang et al. (2024) have suggested aligns well with TikTok.

## TikTok as a Professional Profile Development Tool

Students recognized TikTok as a tool for developing their professional profiles. This is a significant finding considering that, as noted by Lebel et al. (2015) and López-Carril et al. (2021), the professional use of social media is often underemphasized in the classroom. This is particularly relevant in sport management, where social media is a critical tool for achieving organizational objectives (Abeza, 2023; Pate & Bosley, 2020). Notably, this understanding did not come from direct instruction but from the students' own exploration in the TikTok assignment 'A', where they analyzed TikTok's role in the sports industry (e.g., Einsle et al., 2025; López-Carril et al., 2024; Su et al., 2020). This experiential learning added value to the subsequent assignment 'B', where students applied these insights by creating their own videos. In doing so, students also acquired digital skills related to video editing, music integration, and using TikTok's features—skills that are increasingly important in a post-pandemic world where digitalization has transformed both education and many industries (Glebova & López-Carril, 2023; Vidal-Vilaplana et al., 2023). In addition to our findings' relevance to sport management education specifically, learning how to develop a professional profile via social media through higher education coursework experiences may also be worthwhile in various other fields of study where social media use is common among professionals (e.g., teacher education, Carpenter et al., 2023; medical and nursing education, Lopez & Cleary, 2018; international business education; Wang et al., 2024).

## TikTok as a Tool to Interact and Stay Informed About Developments in the Sports Industry

Finally, this study confirmed that TikTok is a valuable tool for interacting with the sports ecosystem. Several authors (e.g., Abeza, 2024; Ning et al., 2024; Wanzer et al., 2024) have noted that key stakeholders in the sports industry use TikTok daily for professional purposes. TikTok assignment 'A' allowed students to discover, through content analysis of TikTok accounts, how the industry operates and how TikTok can be used for professional interaction, as illustrated by Su et al. (2020). Social media has transformed how we interact with the world, and while students are familiar with these tools in informal contexts, it is crucial that they learn how to leverage these platforms professionally, especially on TikTok, where the communication style is more authentic, spontaneous, and relational (Meza et al., 2023; Middleton, 2022).

Qualitative responses supported this view, reflecting that some students became aware of how active the sport industry is on TikTok, something they might not have discovered on their own. Abeza's (2024) work emphasized the contemporary importance of TikTok in the sport industry, and considering this, offering educational experiences in which students can explore how stakeholders in the sport ecosystem use TikTok appears to be a valuable approach to help them better understand the dynamics and communication strategies within the industry.

## Theoretical and Practical Implications

This work has both theoretical and practical implications that contribute to the literature on TikTok use in higher education. Theoretically, this study demonstrates how TikTok can be integrated into active teaching methodologies and garner positive student feedback, as also seen in Wang et al.'s (2024) research with international business majors. The two assignments presented were grounded in constructivist learning principles, encouraging students to build knowledge through reflection, prior experiences, and interaction with content. The self-assessment in assignment 'A' and the co-assessment in assignment 'B' exemplify how students can be given greater autonomy in the evaluation process, further applying constructivist learning principles. This supports the assertions of Reilly and Reeves (2024) and Ruey (2010), regarding the potential of digital technologies to facilitate effective learning environments. Although these studies were not conducted within sport management education, their findings offer relevant theoretical support that can be adapted to this context. In this sense, the present study helps bridge a gap by applying these frameworks in the sport management domain. Future pedagogical initiatives seeking to incorporate social media in the classroom can build upon these theoretical foundations.

Practically, this study offers a roadmap for university instructors to innovate by incorporating TikTok into their courses. Although the assignments in this study were specific to sport management, they can be adapted to many other disciplines. Thus, this work can assist educators in designing their own social media-based assignments. Additionally, the tasks presented in this work demonstrate how curricula can be adapted to meet the professional needs of industry and align with digital trends. This study addresses the need to redesign university curricula to meet the challenges of an increasingly dynamic, digitalized, and competitive post-pandemic world, as noted by Chutipongdech et al. (2024), Glebova and López-Carril (2023), and Purohit and Dutt (2024).

This study also highlights the importance of narrowing the gap between traditional academic practices and the digital skills increasingly demanded by the sports industry, as noted by authors such as López-Carril et al. (2021) and Vidal-Vilaplana et al. (2023). By incorporating a tool already embedded in many students' daily lives, such as TikTok, this pedagogical approach connects formal learning with real-world digital environments, offering a more aligned and meaningful educational experience.

Although the results, both quantitative and qualitative, reflected a generally positive impact on how students perceived TikTok's value for learning, a few students expressed skepticism or noted specific implementation challenges. Some viewed TikTok as a potentially distracting element, others missed clearer guidance on how to edit videos, and a few simply disliked the platform. Considering these perspectives, we recommend that educators align TikTok-based activities with well-defined learning objectives and provide students with clear technical and ethical instructions. We also suggest ending the activity with a reflective discussion that reinforces the tool's professional relevance and its connection to course content. Where TikTok use is restricted, alternative platforms such as Instagram Reels or YouTube Shorts may be considered. Moreover, incorporating structured reflection tasks could help

students critically engage with the content and connect their learning with real-world practice.

Beyond the sport management field, the implications of this study extend to higher education more broadly. The findings suggest that TikTok could be a valuable pedagogical tool in diverse academic disciplines where digital communication and creativity are relevant, such as business, education, communication, health, and the arts. Many professional domains are increasingly demanding digital fluency and platform-specific communication strategies. As such, educators in a variety of fields may consider adopting TikTok or similar platforms to foster student engagement, promote professional reflection, and align academic content with evolving industry practices. By showcasing a replicable, pedagogically grounded intervention, this study offers a model that can inspire innovation across multiple areas of university education.

To further reinforce the practical relevance of the TikTok intervention shared in this work, we suggest that university institutions provide training and support for faculty interested in adopting platforms like TikTok in their teaching. This includes offering pedagogical development programmes focused on digital storytelling, ethical considerations, and student assessment in creative tasks. Moreover, evaluation frameworks should be adapted to capture the competencies demonstrated in social media-based assignments, such as communication effectiveness, critical thinking, and audience engagement. Finally, the success of this type of intervention calls for a broader institutional commitment to recognising the pedagogical value of emerging digital platforms in formal education.

## Limitations and Future Research

Despite its contributions, this study has several limitations that should be acknowledged. First, the study sample is small and limited to a convenience sample of Spanish sport management students, making the results non-generalizable. Future studies with larger samples and in different geographical contexts are needed for comparative analysis. Second, this study primarily focused on the positive aspects of TikTok use. However, as Carpenter et al. (2024) and Escamilla-Fajardo et al. (2021) have noted, TikTok, like other social media platforms, may have a “dark side” (e.g., fostering addiction, spreading misinformation, reinforcing stereotypes) that could negatively impact learning. Future research should explore such risks to help educators design TikTok-based experiences that minimize potential harm and help learners understand and navigate potential challenges.

Although this study followed a mixed-methods approach, the qualitative data was limited to a single open-ended question. Future research could benefit from incorporating more in-depth qualitative methods, such as interviews or focus groups, to provide a richer understanding of how students, faculty, and industry professionals perceive TikTok’s educational potential in higher education.

Moreover, the reliance on self-reported data introduces potential biases, such as social desirability or response inflation, which may have influenced the students’ evaluations. It is also possible that students’ investment of time and effort in the

TikTok assignments contributed to more favourable perceptions, given the nature of the intervention. While the inclusion of open-ended qualitative responses helped capture a range of views, including some skeptical or ambivalent opinions, future studies should consider the potential influence of opportunity cost and prior familiarity with the platform when interpreting results. Although the data showed consistent and significant improvements, future studies could complement self-report measures with additional forms of data collection (e.g., interviews, behavioural analysis) to triangulate findings. To further mitigate these issues, comparative designs including control groups may be useful for isolating the effect of the intervention itself. Additionally, the relatively small sample size limits the generalisability of the results beyond the specific context of this intervention.

## Conclusions

This study explored higher education students' perceptions of TikTok as a learning tool in university classes using active learning methodologies. The findings suggest that these students viewed TikTok positively as a teaching–learning tool, with potential benefits for professional development, staying informed about sports industry issues, and fostering interactions within the sports ecosystem. Additionally, TikTok's ability to stimulate creativity and humour can contribute to a motivating and enjoyable learning environment.

These conclusions are reinforced by the quantitative results, which revealed statistically significant improvements across all three measured dimensions: 1-TikTok's usefulness for teaching and learning, 2-its contribution to professional profile development, and 3-its role in enhancing industry engagement. These quantitative findings were further supported by the qualitative data, with students describing the experience as “innovative”, “dynamic”, and “relevant to their careers”, while also offering constructive reflections on the challenges and limitations of using TikTok in educational contexts. These findings indicate that, when strategically embedded in active learning approaches, TikTok can effectively enhance students' perceptions of its academic and professional relevance. This highlights the value of integrating innovative digital tools into higher education contexts.

Furthermore, the findings support the application of constructivist learning theory in higher education settings. By engaging in tasks that involved reflection, creation, and contextualisation, students actively constructed knowledge in a participatory and meaningful way. The TikTok assignments allowed learners to internalize and communicate course content by creating their own videos, applying real-world examples and engaging with course concepts in a creative and personally meaningful way. Notably, students created their own TikTok videos after analysing how professionals in the sports industry use the platform, thus applying insights from real-world examples to produce original content that reflected both theoretical and practical understanding.

In light of these results, we encourage university educators to explore the use of social media such as TikTok in their teaching practices, and we call for further research into their impact on the learning process.

## Appendix A

**Table 6** Examples of concepts proposed by the instructor for the students to develop videos for the "Sport Management TikTok Library"

Name of the theme of the course syllabus	Concepts
Theme 1. Introduction to sport management	1. Sport management, 2. Sport manager, 3. Career opportunities for the sport manager, 4. Sport manager competencies 5. Sport manager training in Spain, 6. Sport, physical activity, and physical exercise, 7. European Sports Charter
Theme 2: Typology of sport activities and events	8. Sports event, 9. Punctual sport event, 10. Permanent sport event, 11. Characteristics of sport events, 12. White elephant, 13. Sport events agenda, 14. Spectators, 15. Mass media, 16. Sport impact, 17. Organizing Committee (for sporting events)
Theme 3: Sport markets and trends	18. The sport market, 19. Supply and demand, 20. Goods and services, 21. Trend, 22. Annual sport statistics yearbook, 23. Survey of sport habits in Spain, 24. Sport economy and GDP, 25. Sport stakeholders, 26. ACM Fitness Trends, 27. Euro-barometer on Sport and Physical Activity
Theme 4: Organisation of the sport system and models of sport management	28. Spanish Sport Law of 2022, 29. The Spanish sports system, 30. Direct management model, 31. Indirect management model, 32. Management by local entity, 33. Management by a special administration, 34. Management by a local autonomous body, 35. Major contracts with public administration, 36. Professional leagues (in Spain), 37. Ministry of Education, Vocational Training and Sport of Spain, 38. Higher Sport Council of Spain, 39. Spanish Olympic Committee, 40. COLEF Council, 41. Sports federation, 42. Sport club, 43. Sport Public Limited Company
Theme 5: Material resources and infrastructures for physical and sport practice	44. Sport facility, 45. Sport space, 46. Complementary space, 47. Auxiliary space, 48. Sport equipment, 49. Conventional sport space, 50. Singular sport space, 51. Sport activity areas, 52. Conjunctural areas of physical-sports activity, 53. National Sports Facilities Census, 54. NIDE standards
Theme 6: Human resources. Leadership and talent management	55. Leader vs. boss, 56. Types of leadership, 57. Qualities of a leader, 58. Talent, 59. Human Resources, 60. Organizational climate, 61. Strategic planning, 62. Internal communication tools, 63. Volunteering, 64. SWOT analysis, 65. PESTEL analysis, 66. CANVAS model, 67. Audit
Theme 7: Economic management of sport entities and events	68. Budget, 69. Sponsorship, 70. Patronage, 71. Sponsorship plan, 72. Sponsor activation, 73. Sponsor awareness (including the Sponsorship Awareness Index), 74. Fan zone, 75. Negotiation, 76. Subsidy, 77. Service contract, 78. Service specifications, 79. SICDE

**Table 6** (continued)

Name of the theme of the course syllabus	Concepts
Theme 8: Communication management of sport entities and events	80. Social media, 81. Marketing, 82. Advertising, 83. Marketing plan, 84. Communication plan, 85. Buyer persona, 86. Brand, 87. Personal brand, 88. TikTok, 89. LinkedIn, 90. Marketing models, 91. Branding, 92. Storytelling marketing, 93. Guerrilla and street marketing, 94. Relationship marketing, 95. Content marketing, 96. Neuro-marketing
Theme 9: Digitalisation, entrepreneurship and innovation in sport management	97. Entrepreneurship, 98. Digitalization, 99. Innovation, 100. Metaverse, 101. Artificial Intelligence, 102. Virtual Reality, 103. Big Data, 104. Wearables, 105. Company, 106. Startup, 107. Mission, vision, and values of a company
Theme 10: Sport management in response to the major challenges of the twenty-first century	108. Sustainable Development Goals, 109. Sustainability, 110. LGBTphobia, 111. Gender equality, 112. Gender gap, 113. Glass ceiling, 114. Racism, 115. Accessibility and inclusion, 116. Activism, 117. Technological doping, 118. Mental health, 119. Globalization of sport, 120. Footballization

Note: Some concepts are specific to the field of sport management in Spain

## Appendix B

**Table 7** TikTok-SportEdu scale Gálvez-Ruiz et al. (2025)

Dimensions	Items
TikTok as a university teaching–learning tool	<ol style="list-style-type: none"> <li>1. I believe that TikTok is a positive educational tool for students that should be included more in university classes</li> <li>2. I believe that including TikTok in university classes makes it easier for the university to be more connected to society</li> <li>3. I would like to see more training on TikTok at university</li> <li>4. I see the positive side of the university’s commitment to greater inclusion of TikTok</li> </ol>
TikTok as a professional profile development tool	<ol style="list-style-type: none"> <li>5. I believe that companies today demand knowledge in the use and management of TikTok</li> <li>6. TikTok can help me in my professional development</li> <li>7. Mastering TikTok can increase my chances of finding a job</li> <li>8. Mastering TikTok can make it easier for me to set up a business</li> <li>9. Mastering the management and use of TikTok can help me create and/or enhance my personal brand</li> <li>10. TikTok encourages entrepreneurship</li> <li>11. As TikTok can help develop a professional profile, university teachers should integrate it more into their classes</li> </ol>
TikTok as a tool to interact and stay informed about developments in the sports industry	<ol style="list-style-type: none"> <li>12. TikTok can make it easier for you to connect with sports organisations or sports companies</li> <li>13. TikTok can make it easier for you to connect with athletes, coaches and journalists</li> <li>14. Through TikTok I can keep informed of news and innovations in my professional field</li> <li>15. TikTok can encourage contact with the stakeholders in my professional sector</li> </ol>

**Acknowledgements** The first author would like to acknowledge the support of the postdoctoral contract "Juan de la Cierva-formación 2021" (FJC2021-047779-I) granted by the Spanish Ministry of Science and Innovation and by the European Union through the NextGenerationEU Funds (Plan de Recuperación, Transformación y Resiliencia).

**Authors’ contributions** SLC designed the educational intervention using TikTok, implemented its delivery, collected the data, and drafted the original manuscript. JPC contributed to the conceptualization, data interpretation, and drafting of the original manuscript. NMW supervised the study and contributed to revising the manuscript. TR contributed to the methodology, performed the statistical analysis, drafted the results section, and participated in revising the manuscript. All authors read and approved the final manuscript.

**Funding** Open access funding provided by the Carolinas Consortium. This project is financed by National Funds provided by FCT- Foundation for Science and Technology through project UIDB/04020/2020 and with DOI 10.54499/UIDB/04020/2020.

**Data Availability** The datasets are available upon reasonable request from the corresponding author.

## Declarations

**Ethics** The study involves human participants and therefore procedures used were in accordance with the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards.

**Consent to Participate** Individual participants' informed consent was obtained through the voluntary participation option detailed in the data collection procedures.

**Declaration of generative AI and AI-assisted technologies in the writing process** During the preparation of this work, the authors used ChatGPT (by OpenAI) and Paperpal for proofreading and enhancing the readability of the text. After utilizing these tools, the authors reviewed and edited the content as necessary and take full responsibility for the final version of the publication.

**Conflict of interest** The authors declare no conflicts of interest that could have influenced the design, execution, or reporting of this research.

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**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

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