



## ANALYSES OF THE DEVELOPMENT AND CHALLENGES OF PARKOUR COACHES' EDUCATION IN EUROPE

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### ABSTRACT

**Purpose:** Parkour historically developed as an urban community “lifestyle” movement that relied mainly on informal teaching and training methodologies. With formal institutionalization, parkour has transitioned into more formalized structures, including established training academies, coaching certifications, and competitive events. This article presents a structured literature review with the aim of providing an overview of the historical, philosophical/ideological, organizational/institutional, and educational aspects of parkour coach education and knowledge development in Europe. Based on the review, key challenges for future development are also highlighted.

**Method:** For the purposes of a structured literature review, the search and selection process followed the general principles of the PRISMA 2020 statement as a framework, rather than a formal systematic review protocol. Google Scholar was chosen as the primary search platform. Following the initial screening and analysis, 12 relevant sources were included in the in-depth review. In addition to the literature review, online sources from professional international sports organizations involved in education, training, and certification of parkour coaches were also examined.

**Findings:** It can be noted that parkour in Europe is still predominantly developed and understood as a “lifestyle” urban activity with the gradual parallel formation of an institutional, formal sports discipline, which is reflected in the intra-organizational and philosophical-ideological conflict between participants and (opinion) leaders of

*parkour. These conflicts are also evident at the level of training/education of parkour coaches and instructors.*

**Conclusions:** *Recognizing and respecting parkour's roots as a self-organized culture is essential if institutionalization is to enhance rather than diminish the discipline's diversity, creativity, and authenticity.*

**Keywords:** *parkour, education, training, coaches, institutionalization, formalization.*

## ANALIZA RAZVITOSTI IN IZZIVOV IZOBRAŽEVANJA TRENERJEV PARKOURJA V EVROPI

### IZVLEČEK

**Namen:** *Parkour se je zgodovinsko razvil kot gibanje urbanega skupnostnega »življenjskega sloga«, ki se je zanašalo predvsem na neformalne metodologije poučevanja in treninga. S formalno institucionalizacijo se je parkour preoblikoval v bolj formalizirane strukture, vključno z uveljavljenimi akademijami za trening, trenerskimi certifikati in tekmovalnimi dogodki. Ta članek strukturirano pregleda literaturo ter predstavlja zgodovinske, filozofsko-ideološke, organizacijsko-institucionalne in izobraževalne vidike izobraževanja trenerjev parkourja in razvoja znanja v Evropi. Na podlagi pregleda so poudarjeni tudi ključni izzivi za prihodnji razvoj.*

**Metoda:** *Za strukturiran pregled literature je postopek iskanja in izbora sledil splošnim načelom izjave PRISMA 2020 kot okviru in ne formalnemu protokolu sistematičnega pregleda. Kot primarna iskalna platforma je bil izbran Google Scholar. Po začetnem pregledu in analizi je bilo v poglobljen pregled vključenih 12 ustreznih virov. Ob literaturi so bili pregledani tudi spletni viri profesionalnih mednarodnih športnih organizacij, ki se ukvarjajo z izobraževanjem, usposabljanjem in certificiranjem trenerjev parkourja.*

**Ugotovitve:** *Ugotovili smo, da je parkour v Evropi še vedno večinoma razvit in razumljen kot urbana, z življenjskim slogom povezana dejavnost, hkrati pa se postopoma oblikuje kot institucionalna, formalna športna disciplina, kar se izraža v znotraj-organizacijskem in filozofsko-ideološkem konfliktu med udeleženci in (mnenjskimi) vodji parkourja. Tega je mogoče opaziti tudi na ravni usposabljanja/izobraževanja trenerjev parkourja.*

**Zaključek:** *Prepoznavanje in spoštovanje zgodovinskih korenin parkourja kot samorganizirane kulture sta bistvena za zagotovitev, da institucionalizacija krepi ter ne zmanjšuje raznolikosti, ustvarjalnosti in pristnosti te discipline.*

**Ključne besede:** *parkour, izobraževanje, usposabljanje, trenerji, institucionalizacija, formalizacija.*

## INTRODUCTION AND HISTORICAL OVERVIEW

Parkour can be defined as the art of moving in the most fluid and efficient way from one place to another through running, jumping, rolling, and leaping over and across any natural or architectural obstacles such as walls, trees, fences, roofs, or staircases (Ortuzar, 2009; Kidder, 2012). The development of parkour in Europe has gone through several distinct stages, driven by cultural, social, and athletic influences. Parkour originated in France, influenced by the military obstacle course training developed by David Belle and his peers (Tani, 2024). The term *parkour* is derived from the French word *parcours*, meaning “route” or “course”. The discipline was initially referred to as *l’Art du déplacement* (*the Art of Movement*) by the Yamakasi group (Rabaglietti, Mulasso, & Arzenton, 2021). During the late 1980s and early 1990s, practitioners—known as traceurs—developed the foundational movements and techniques primarily in urban environments. As parkour gained momentum in France, it spread to other European countries. The establishment of key organizations, videos, and documentaries—most notably *Jump Britain* in 2003—helped to showcase parkour’s potential and attracted attention worldwide. The late 1990s and early 2000s saw the formation of communities and training groups.

With mainstream exposure during the mid-2000s and 2010s, parkour experienced exponential growth in popularity, driven largely by social media platforms, particularly YouTube, as well as mainstream media coverage. Practitioners shared videos showcasing their skills, inspiring a new generation of traceurs. Competitions began to emerge, providing platforms for traceurs to demonstrate their abilities. With formal institutionalization and professionalization in the 2010s, parkour has transitioned into more formalized structures, including established training academies, coaching certifications, and competitive events. In several countries, parkour has been integrated into cultural or athletic programmes, reflecting its acceptance as a legitimate form of movement and expression.

Today, parkour continues to evolve as a recognized discipline, influencing various forms of art, performance, and fitness. European traceurs engage in international collaborations (institutionally), workshops, and events, further enriching the cultural tapestry of parkour, showcasing its adaptability and transnational development. The European and global evolution of parkour illustrates its dynamic character, reflecting broader societal changes and the continued passion of practitioners across Europe (Puddle & Wheaton, 2023).

During its various stages of development, particularly over the past decade, parkour has been integrated into cultural and athletic programmes in a range of

ways across different countries. Several schools and universities have incorporated parkour into physical education curricula, emphasizing (1) physical fitness benefits, (2) creativity, and (3) problem-solving skills. Instruction typically includes basic techniques, safety practices and the development of physical (motor) skills such as (1) balance, (2) coordination, (3) agility, (4) flexibility, and (5) strength (Dvorak, Eves, Bunc & Balas, 2017). Parkour has also become a widespread and well-developed extracurricular activity. Many schools have established parkour clubs allowing students to practice and learn parkour techniques outside of regular classes (Gilchrist & Wheaton, 2011). These clubs often organize training sessions, workshops, and participation in local competitions, fostering a sense of community among students. In this way, parkour has been linked to broader movement education objectives that emphasize physical literacy. Similarly, workshops and classes often include parkour training as part of broader movement education.

With the rise of digital education, online platforms have also emerged that offer parkour training and educational content. These resources enable students to learn at their own pace, providing instructional videos, safety tips, and methodology for incorporating parkour into personal fitness routines. The integration of parkour into educational programmes highlights its versatility and appeal as a physical activity that promotes fitness, creativity, and personal development, making it an attractive option for schools and youth organizations worldwide.

Dvorak et al. (2017) found that parkour training conducted twice a week over a ten-week period among young males (age 16 years old) can significantly increase (1) peak oxygen uptake, (2) oxygen uptake at anaerobic threshold, (3) explosive and (4) static strength, and significantly decrease (5) oxygen uptake at a standardized submaximal running speed, and (6) heart rate at the anaerobic threshold. Overall, all measured parameters showed significant improvements in participants' fitness as a result of parkour-specific training.

Many cities have established community programmes and centres aimed at youth development through parkour (Toscano, 2020). These initiatives promote (1) physical activity, (2) discipline and (3) teamwork while providing safe environments for practice. Community programmes often aim to build confidence and self-expression through the practice of parkour, frequently targeting at-risk youth. Some centres offer formal training in conjunction with life skills seminars. Metropolises such as Paris, London, and Barcelona have acknowledged parkour's cultural relevance by designing urban spaces conducive to its practice. This includes the creation of parkour parks or the integration of parkour-friendly features in public spaces, reflecting recognition of discipline as part of urban culture and urban environment development (Kidder, 2012).

National and international parkour organizations have been established, building competition systems and organizing events to showcase parkour talent, as well as its individual and social development potential. Events such as the Urban Movement Festival or Parkour World Championships attract participants from multiple countries, fostering a sense of community and offering platforms for recognition and growth within the discipline. Parkour has also influenced various artists, dancers, and performers, and in some countries, it has been incorporated into theatre productions, dance performances and urban art projects, blending movement with storytelling and expression, further enhancing its cultural significance.

Processes of institutionalization and formalization of parkour have also led to professional coaching programmes designed to certify trainers to teach parkour safely and effectively. Organizations offer training courses that emphasize (1) safety, (2) pedagogy, and (3) skill progression for coaches working in schools, recreation centres, urban areas, and gyms. Parkour is also promoted by health organizations and fitness communities, which underline (1) functional movement, (2) coordination, and (3) agility as part of holistic approaches to health and fitness. Extensive global media coverage through documentaries, films, and social media platforms has further raised awareness of parkour's positive aspects, promoting it as a legitimate form of physical activity and artistic expression.

The historical development and integration of parkour across diverse social and public environments illustrate its versatility, demonstrating its capacity to adapt to various cultural contexts while promoting the physical and mental well-being of individuals and diverse communities.

The aims of this article are to provide an overview of the (1) historical, (2) philosophical/ideological, (3) organizational/institutional, (4) and educational aspects of the development of parkour coaches' education and knowledge in Europe, and to identify the key challenges for future development.

## **CHALLENGES OF TRAINING METHODOLOGIES IN PARKOUR TRAINING AND PRACTICE**

Created in a deprived suburb of Paris in the late 1980s, parkour—like other so-called lifestyle sports—is often represented by its participants as a non-competitive, rule-free and referee-free practice, thereby marking its difference from institutionalized, achievement-oriented western sport cultures (Wheaton, 2013). However, as parkour has grown in popularity, processes of

organizational institutionalization have emerged, along with the establishment of a number of international and national competition systems and organized efforts intended to recognize this discipline as a sport, including coaching certifications and the transition to nationally accepted accreditation.

Although these competitions receive media attention and significant corporate sponsorship, they have also been dogged by injuries and a noticeable lack of “fluidity of movement”, which is often described as the main objective of parkour. (O’Loughlin, 2012).

Informal teaching and training methodologies, typical of lifestyle sports such as parkour, are also associated with safety concerns and the incidence of injuries due to improper execution of complex body movements in challenging environments (relatively high in the air), resulting in uncontrolled and unlearned landings or falls on hard surfaces.

Based on a review of several studies by different authors investigating the incidence of parkour-related injuries, Rossheim and Stephenson (2017) concluded that the typical parkour injury involves a teenage male who sustains a fracture following a landing impact, most commonly affecting the distal lower extremities. However, case studies also report more severe injuries affecting various parts of the body, including fractures of the collarbone, spine, and wrist, as well as internal injuries such as a lacerated kidney. Using data from the National Electronic Injury Surveillance System (NEISS), Rossheim and Stephenson descriptively analysed parkour-related injuries presenting to emergency departments in the United States from 2009 to 2015. They found that the most common events causing these injuries were landing and striking objects. The most commonly injured body regions were: foot/ankle/toe, arm/elbow, face/head, finger/hand/wrist, back/ribs, leg/knee/shin, and shoulder/clavicle. The most common diagnoses were fractures, sprains/strains, abrasions/contusions, lacerations, pain, and dislocations.

In addition, analysis of the incidence of injuries in disciplines governed by international gymnastics federations reveals that the incidence of injuries in parkour is four times higher than in seven other disciplines. Grosprêtre and El Khattabi (2022) similarly note that, although parkour training appears well self-organized and overall injury rates may be relatively low, several shortcomings remain, notably in training planning, warm-up, stretching, and conditioning. From this perspective, the development of training and coaching methodologies specific to parkour appears essential.

These findings point to the need for more formalized, methodologically, and didactically grounded approaches to the training of parkour coaches, particularly given their frequent involvement in teaching and preparing, primarily or

exclusively, children and young people. Consequently, consideration of the formalization and certification of trainers is especially important, as better and at least partially comprehensive knowledge of trainers can help prevent the social, psychological, and physical risks associated with the participation of children and young people in parkour training and practice.

## RESEARCH DESIGN AND METHOD

The structured literature review followed the general principles of the PRISMA 2020 statement (Page et al., 2021), serving as a guiding framework rather than a strict systematic review protocol. Google Scholar was selected as the search database in order to ensure the broadest possible coverage of publications, including both academic and practitioner-oriented sources.

Based on the objectives of the study, the following keywords were used: “parkour” AND (“methodology” OR “didactics” OR “teaching technique”) AND (“training for coaches” OR “coaching”). A temporal restriction was applied, covering the period from 1980 to 2025, corresponding to the emergence and development of parkour. The initial search yielded 571 publications.

To refine the results, an additional filter was applied, narrowing the selection to 200 publications based on relevance and citation count. These publications were imported into Rayyan (Ouzzani, Hammady, Fedorowicz, & Elmagarmid, 2016), a tool for organizing and screening literature reviews. Following the removal of 14 duplicates, 193 publications were included in the initial screening, which was conducted in accordance with predefined inclusion and exclusion criteria (Table 1). Two publications were subsequently excluded because they were not openly accessible, despite meeting all other content criteria (Angel, 2016; Chambers, Aldous, & Bryant, 2020). Based on the inclusion and exclusion criteria, 12 publications were ultimately included in the in-depth review.

In addition to the literature review, online sources from professional international sports organizations involved in education, training, and certification of parkour coaches were also examined. The in-depth analysis was conducted following the general principles of thematic synthesis.

*Table 1: Exclusion and inclusion Criteria*

| Exclusion Criteria                     | Inclusion Criteria         |
|----------------------------------------|----------------------------|
| Not related to parkour                 | Organizational perspective |
| Other sports                           | Methodological approaches  |
| Not applicable to the European context | Institutionalization       |
| Personal experience                    | Parkour                    |
| Practitioners' perspective             | European context           |
| Not in English                         | Coaches' perspective       |
| Without public access                  | English language           |
|                                        | Public access              |
| <b>EXCLUDED (N=181)</b>                | <b>INCLUDED (N=12)</b>     |

## MAIN FINDINGS FROM THE LITERATURE REVIEW

The analysis of the included publications followed the principles of thematic synthesis (Thomas & Harden, 2008). Using this approach, five main thematic areas were identified: (1) informal parkour learning and community, (2) formalization and institutionalization of coach education and training, (3) individualization and adaptation of methods, (4) development of coaching competencies, and (5) the role of the coach in the learning/training process. These areas were used to organize and synthesize the findings, providing a structured overview of key methodological, educational, and organizational aspects related to parkour coach training and knowledge development. The thematic areas are presented and described in greater detail in the following sections. The main findings from the literature review are summarized in Table 2.

Table 2: List of included publications and main findings

| No. | Authors/<br>year          | Title                                                                                                     | Country            | Type of<br>research                                    | Research<br>sample                                                                                                                                                                       | Main findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----|---------------------------|-----------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Gilchrist & Wheaton, 2011 | Lifestyle sport,<br>public policy<br>and youth<br>engagement:<br>Examining the<br>emergence of<br>parkour | England<br>(south) | Qualitative<br>(in-depth<br>qualitative<br>interviews) | The sample<br>consisted<br>from persons<br>involved<br>in the: (1)<br>development<br>of parkour<br>in education,<br>(2) sport<br>policy, and (3)<br>community-<br>based<br>partnerships. | <ul style="list-style-type: none"> <li>– The authors discussed how the perceived 'success' of parkour in different contexts is related to the culture and ethos of the activity that is more inclusive, anti-competitive, and less rule bound than most traditional sports; and to its ability to provide managed risk-taking.</li> <li>– More broadly, the paper highlighted and discussed the emergence of lifestyle sports as 'tools' for policymakers, and the potential role these non-traditional, non-institutionalized "lifestyle sports" can make in terms of encouraging youth engagement, physical health, and well-being.</li> <li>– The paper therefore contributes to on-going debates about the ability of traditional sports to meet government targets for sport and physical activity participation.</li> </ul> |
| 2   | O'Loughlin, 2012          | A door for<br>creativity – art<br>and competition<br>in parkour                                           | -                  | Conceptual                                             | -                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>– A sporting definition for parkour would come with risks to its creative future, limiting innovation and artistic development.</li> <li>– Authors draw on the history of vertical skateboarding to see what lessons can be learned there.</li> <li>– Authors also examined how their experiences with the Urban Playground Team and Gravity Style defined their own training regime.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                           |

| No. | Authors/<br>year       | Title                                                                                                                                                                   | Country        | Type of<br>research                                                                                                                                                                           | Research<br>sample                                                             | Main findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3   | Wallace & Kilili, 2015 | Determining<br>the Social and<br>Psychological<br>Reasons for the<br>Emergence of<br>Parkour and<br>Free Running -<br>An Interpretive<br>Phenomenologi-<br>cal Analysis | Turkey         | Phenom-<br>enological<br>(qualitative<br>study) (IPA<br>procedure<br>- in-depth<br>insight<br>into how a<br>person in a<br>particular<br>context un-<br>derstands a<br>given phe-<br>nomenon) | 8 parkour and<br>free running<br>participants                                  | <ul style="list-style-type: none"> <li>- Parkour and free running are newly emerged high-risk ur-<br/>banized activities still relatively understudied.</li> <li>- They do not appear to be subject to rules and regulations,<br/>with aims and objectives being unclear.</li> <li>- The participants perform dangerous gymnastic move-<br/>ments utilizing awkward obstacles without the use of pro-<br/>tective clothing and do not appear to be concerned with the<br/>welfare of people in the vicinity.</li> <li>- The participants explained that they were initially<br/>motivated by thrill seeking, risk, improved health, and<br/>enjoyment.</li> <li>- Regular practice and commitment furnish a participant<br/>with a sense of being in the present and a deepened sense of<br/>spirituality and enjoyment.</li> <li>- The unique characteristics of parkour and free running<br/>(e.g. philosophy, environment, spirituality, perception, and<br/>aesthetics) are linked to the characteristics of extreme sport<br/>which indicates that parkour and free running are part of a<br/>counter culture.</li> </ul> |
| 4   | Greenberg, 2017        | How parkour<br>coaches learn<br>to coach: An<br>exploration of<br>parkour coach<br>learning and<br>development                                                          | Kanada,<br>USA | Qualita-<br>tive study<br>(Interview -<br>basic inter-<br>pretative<br>qualitative<br>methodology - BIQM)                                                                                     | 19 parkour<br>coaches with<br>at least one<br>year of coach-<br>ing experience | <ul style="list-style-type: none"> <li>- The thesis discusses two less-discussed areas of parkour,<br/>each without a consensus among parkour practitioners –<br/>parkour regulation and parkour coaching.</li> <li>- When participants were asked how they learned to coach,<br/>parkour coaches from this study described the influences of<br/>various sources of learning: parkour coaching experience,<br/>previous leadership experience, experience as an athlete in<br/>parkour and other sports, other parkour coaches, non-park-<br/>our coaches, parkour coach education programmes, school,<br/>reflection, and the internet.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| No. | Authors/<br>year             | Title                                                         | Country | Type of<br>research                               | Research<br>sample                                                          | Main findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----|------------------------------|---------------------------------------------------------------|---------|---------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5   | Säfvenbom & Stjernvång, 2020 | Lifestyle sport contexts as self-organized epistemic cultures | Norway  | Qualitative study (Interview and observations)    | 8 participants in interview (30–40 participants observed during activities) | <ul style="list-style-type: none"> <li>– The aim of this study was to understand how a self-organized mixed group of trickers and free-runners facilitate knowledge creation when no instructors guide or control their work.</li> <li>– Authors found out that practitioners' knowledge developed in a continuous and invigorating cycle between the global gymnasium on the internet, where practitioners sought up-to-date knowledge, and the local gymnasium, where they practiced knowledge development as intra- and interdisciplinary embodied interactions.</li> <li>– The object of knowledge that practitioners conveyed as “kinesthetic understanding” was not a fixed a priori product that could be fully achieved, and it seems that practitioners' acceptance of the essential incompleteness of the object of knowledge created a constant desire to glimpse the unattainable.</li> </ul> |
| 6   | Pagnon et. al., 2022         | What makes parkour unique?                                    | -       | Theoretical biomechanical modelling of techniques | -                                                                           | <ul style="list-style-type: none"> <li>– Parkour is well in line with modern lifestyle sports that challenge our traditional view of sports as rule-based, set in a dedicated environment, with specialized equipment.</li> <li>– Precision landing is one of the key components of parkour, which involves adapting posture during later phases of the jump in order to make up for potential errors at take-off.</li> <li>– Parkour adepts (traceurs) are landing experts, and must learn specific ways of softening impacts in order to prevent injury. Incidentally, it makes them particularly good at eccentric exercises.</li> </ul>                                                                                                                                                                                                                                                               |

| No. | Authors/<br>year         | Title                                                                                                                                                          | Country                | Type of<br>research               | Research<br>sample         | Main findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7   | Wintle, 2024             | Implementing<br>Meaningful<br>Physical<br>Education<br>through<br>Lifestyle Sports                                                                             | United<br>Kingdom      | Lecture<br>slides                 | -                          | <ul style="list-style-type: none"><li>– Author presents a study of parkour in physical education.</li><li>– The results show that parkour develops more competencies, is more fun and enjoyable, and is more challenging than regular physical education classes.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 8   | Leeder & Beaumont, 2021  | Lifestyle Sports<br>and Physi-<br>cal Education<br>Teachers’<br>Professional<br>Development<br>in the United<br>Kingdom: A<br>Qualitative Sur-<br>vey Analysis | United<br>King-<br>dom | Qualitative<br>Survey<br>Analysis | 53 UK-based<br>PE teachers | <ul style="list-style-type: none"><li>– The aim of this research was to explore the opportuni-<br/>ties and challenges PE teachers in the UK encounter when<br/>delivering lifestyle sports, in addition to understanding their<br/>current professional development needs to enhance their<br/>practice.</li><li>– Findings showed that participants had different concepts<br/>of lifestyle sports, while also facing logistical, contextual,<br/>and personal factors that influenced their practice.</li><li>– In addition, participants described their preferences for<br/>continuing professional development in lifestyle sports<br/>and challenges that limit their participation in learning<br/>opportunities.</li></ul> |
| 9   | Dumont & Thorpe,<br>2022 | The Profes-<br>sionalization of<br>Action Sports                                                                                                               | -                      | Profession-<br>al book            | -                          | <ul style="list-style-type: none"><li>– This book uncovers the social, political, economic, and<br/>organizational dynamics of action sports (also parkour)<br/>professionalization.</li><li>– Overall, the book reveals how different action sports (i.e.<br/>snowboarding, surfing, kiteboarding, parkour, climbing,<br/>skateboarding), and across countries, are at various stages<br/>in the professionalization process, with local, national, and<br/>international responses and reactions to such trends differ-<br/>ing considerably.</li></ul>                                                                                                                                                                           |

| No. | Authors/<br>year       | Title                                                                                                 | Country | Type of<br>research                                                        | Research<br>sample                                                                                                             | Main findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| 10  | Lamm, 2023             | Gender equality<br>in parkour in<br>Finland                                                           | Finland | Quantita-<br>tive and<br>qualitative<br>(interview)<br>research<br>methods | 4 experienced<br>parkour coach-<br>es (interview)<br>54 parkour<br>practitioners<br>over 15 years<br>of age (online<br>survey) | <ul style="list-style-type: none"> <li>– The purpose of this thesis is to study equality and gender equality in parkour.</li> <li>– The Finnish parkour community is achieving quite good results in gender equality.</li> <li>– Based on the results of the study, females perceive parkour as a more unequal sport than males.</li> <li>– Women's participation could be increased by organizing more low-threshold test days, educating parkour instructors on equality, increasing the visibility and image of women's parkour through marketing, and having more female exam-<br/>ples and role models in parkour to encourage more women to take up the sport.</li> </ul>                                                                                                                                                              |
| 11  | Puddle & Wheaton, 2023 | The Attempted<br>Globalization<br>of Parkour by<br>the Fédération<br>Internationale<br>de Gymnastique | -       | Conceptual                                                                 | -                                                                                                                              | <ul style="list-style-type: none"> <li>– Inclusion of parkour into FIG followed two years of uni-<br/>lateral and ultra vires development of competitive events.</li> <li>– Despite the participation of athletes in FIG-organized parkour competitions, the global parkour community has largely opposed parkour under the auspices of the FIG.</li> <li>– The article illuminates the politics, influences, and power struggles between different stakeholders.</li> <li>– Using Ritzer's theory of globalization (imperialistic goals), it is clear that the FIG is attempting to globalize parkour to increase its power and profit, and the IOC is ena-<br/>bling and, to some extent, complicit in this process.</li> <li>– This has implications for the parkour community and other long-standing gymnastics disciplines.</li> </ul> |

| No. | Authors/<br>year                                                    | Title                                                                                                                                  | Country              | Type of<br>research                                                                                                                                        | Research<br>sample | Main findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| 12  | Crosaby, Sánchez-García & Jenkins, 2024<br>& (Sánchez-García, 2024) | Ethnometh-<br>odological<br>and conversa-<br>tion analytic<br>(EMCA) studies<br>of coaching in<br>sport: a coach-<br>ing special issue | Italy<br><br>(Spain) | Ethnometh-<br>odological<br>study<br><br>(authors<br>mainly<br>refers to<br>the Raul<br>Sánchez-<br>García's<br>article<br>"Coaching<br>parkour",<br>2024) | -                  | <ul style="list-style-type: none"><li>– "Coaching parkour" shifts the coaching practice to parkour, an informal, non-competitive sporting activity known under different labels such as extreme, alternative, whizz, action, or lifestyle sports.</li><li>– The author specifically addresses the emotional dimension of coaching parkour: the tension balance between confidence and fear, expressed in the negotiation of expectancies upon athletes' performances on each occasion.</li><li>– It considers coaching not as a one-way transmission of knowledge from the one who knows (the coach) to the ones who do not (the athletes).</li><li>– Instead, coaching is praxeologically produced through a complex interactional system made of instructions, performances, expectancies, examples, copying, mimicking, and adjusting the personal execution of movements to the solutions found (or not) by the others and the concerted expectancies among participants (coach and athletes).</li></ul> |

## DISCUSSION

Based on the analysis of the selected articles, several key content sets or thematic areas and conclusions can be identified. In general, over the past two decades, parkour has increasingly become recognized as a modern lifestyle sport that is rapidly developing across Europe. It represents a contemporary form of movement that differs markedly from other sports and has become an important part of youth and urban culture. As participation has increased and parkour has become progressively integrated into formal sports structures, questions have arisen regarding effective learning methodologies, institutionalization processes, and the role of coaches in knowledge transfer and community development (Pagnon et al., 2022; Angel, 2016).

A thematic synthesis of the 12 selected publications identified five main thematic areas, which are discussed in the following sub-sections. These themes reflect the diverse ways in which parkour is practised and taught, ranging from collaborative peer learning in public spaces to more structured, institutionalized approaches. In addition to the review of scientific and professional literature, online sources from several international sports organizations involved in the institutionalization and formalization of parkour coach education, training, and certification were examined. These sources contributed to the description of the main thematic areas.

### Informal parkour learning and community

The parkour concept was originally developed by David Belle based on principles about the art of movement laid down by his father, a Parisian firefighter. As teenagers, Belle and his friends from the “Yamakasi group” practised jumping and climbing over stairs, barriers, walls, and other urban fixtures. In doing so, he developed what they called the “art of movement”, taking advantage of all the constructions and obstacles in ways that for which they were not originally designed. For these early practitioners, parkour functioned primarily as a training method for overcoming obstacles in both urban and natural environments, such as forests (Rabaglietti et al., 2021).

Since the 1990s, parkour has been further popularized through its representation in film (International Gymnastics Federation – FIG, 2025). Its development has followed contemporary trends in the development of youth physical activity, where sports participation has gradually moved away from rigidly structured and highly organized practices towards new forms of personal,

social, and environmental engagement through physical activity (Sterchelea & Camoletto, 2017).

Parkour has traditionally developed in informal environments, where community plays a key role in knowledge transfer. Participants primarily learn through (1) observation, (2) imitation, (3) sharing experiences, and (4) peer feedback. Online resources—such as video tutorials, forums, and social media—also play an important role, serving as significant sources of knowledge, especially for beginners. Learning takes place interactively, often involving experimentation and reflection on personal experiences. (1) Local communities, (2) events, and (3) workshops play a crucial role in disseminating innovation and diversifying approaches, while travel and exchanges between communities further contribute to the development of new techniques and methods (Greenberg, 2017; Säfvenbom & Stjernvang, 2020; Wallace & Kilili, 2015).

Parkour communities are primarily traditionally, and widely understood as informal learning environments, and parkour itself is commonly framed as a non-traditional, non-institutionalized and “lifestyle sport” that can encourage youth engagement in physical activity. As a result, the integration of parkour into institutionalized organizational environments involves negotiation between competing discourses, particularly regarding risks and demands for standardized safety regulations, including the introduction of formal coaching qualifications (Wheaton, 2013). The process of institutionalization and formalization of parkour is also becoming a contested area for normative definitions of the practice itself, giving rise to ideological tensions between competing forms and interpretations of parkour (Ferrero Camoletto, Sterchele & Genova 2015).

### **Formalization and institutionalization of coach education and training: a critical perspective**

As parkour has grown in popularity and recognition, formal training programmes—such as the Academy of Development and Performance Training (hereafter: ADAPT)—have emerged. These programmes establish standards for (1) safety, (2) methodology, and (3) the core values of the discipline (Gilchrist & Wheaton, 2011; Greenberg, 2017). More broadly, the formalization and institutionalization of any sports discipline, including parkour, begin with the establishment of formal international sports organizations, whose main authority and responsibility is to establish (1) the basic rules of competition in sports, (2) a system of competitive age categories and (3) sports-competitive disciplines, (4) a competition system, and (5) levels of recognized competitions,

as well as a (6) system of education of coaches and (7) judges. Within the field of parkour, at least five international sports organizations have developed, each intervening in distinct ways to define the field of parkour as a more or less institutionalized sport discipline with formal rules, competition structures, and coach education, training, and licensing.

The World Freerunning Parkour Federation (hereinafter WFPF), established in 2009, positions itself as the world's foremost platform for parkour, bringing the philosophy and sport of parkour to mainstream audiences everywhere. They claim that like anything alive and exciting, parkour is also evolving and that every athlete who posts a parkour video, whether their first or their hundredth, contributes to that process. By bringing together diverse individuals and communities from all kinds of places and backgrounds, each with their own unique mentality, the WFPF's goal is that the voices of the movement will continue to shape that evolution in a positive direction. While operating less as an institutionalized and formal (traditional) sports organization and more as a platform of ideas that supports the development of parkour, it has developed the WFPF Parkour Academy. This coaching Academy as they claim offers the most comprehensive curriculum in the industry, with a progressive eight-step parkour curriculum and lesson plans that take students from basic skills all the way to competitive level parkour. As of 2025, WFPF reports certification of over 3,000 instructors worldwide. They claim that WFPF Certification Programme, the only parkour certification developed in partnership with a major insurance underwriter, is the gold standard for the safe and practical instruction of parkour (World Freerunning Parkour Federation – WFPF, 2025).

The International Parkour Federation (hereinafter IPF), founded in 2014, describes itself as the world governing body for parkour. Its stated objectives are to (1) assist in the formation of National Parkour Governing Bodies (NGB's), (2) mentor young parkour athletes around the world, and (3) support initiatives that exemplify the parkour philosophy, "Be Strong to Be Useful." In recent years, the IPF has been particularly active in the conflict-torn countries of the MENA region (Middle East and North Africa), and together with local athletes in Baghdad helped to open Iraq's first parkour school, which now provides a safe place to train for more than 350 young athletes. The IPF steadfastly supports gender and racial equality and human diversity in all its global initiatives. The Federation claims to be the only competent world-governing body for the sport of parkour and is also recognized by national Olympic committees in many countries. In the field of coaching training and certification, the IPF, in partnership with International Professional Training Certification (IPTC), runs a series of parkour international certifications and seminars. The

IPF also organizes and sponsors championships around the world, using its own gameplay and judging criteria, from regional and national parkour cups to qualifiers for world championships (IPF website, 2025). Sanctioned by the IPF in collaboration with the WFPF, the World Parkour Championship (since 2018) showcases the spectacular discipline of parkour, which redefines the “art of movement”. The IPF has more than 50 affiliated (Parkour) National Governing Bodies across five continents (World Parkour Championship – WPC, 2025).

Following introductory workshops at the 2016 Youth Olympic Games in Lillehammer, the Executive Committee of the International Gymnastics Federation (hereinafter FIG) gave the green light in February 2017 for the development of a new sport discipline (parkour) in the FIG sport disciplines portfolio. The development of parkour under the auspices of the FIG paved the way for the launch of the first series of World Cups within the framework of the FISE (World Festival of Action Sports) in 2018. Following the establishment of the FIG Parkour Commission in 2024, the first Parkour Technical Committee, responsible for overseeing parkour, was set up. The FIG organized the first official World Cup competition in September 2021 in Sofia (Bulgaria) and so far, eight editions of the World Cup have been organized, as well as two World Senior Championships and one Junior World Championship. Under the auspices of the FIG, parkour has also been represented at two World Games. According to the FIG Members Survey Report (2025), parkour is organized as a sports discipline in 21 (out of 50) National Gymnastics Federations (NGFs) in Europe, but in 24 of them it is not or the NGFs are not aware of the existence of parkour in their country. The FIG database currently contains 291 licensed parkour athletes from around the world. Of all licensed parkour athletes, 102 or 35% (average age 22.5 years; 81 or 71.4% men and 21 or 21.6% women) are from 20 European countries (most of them are from the Czech Republic – 12, Switzerland – 11 and Slovakia – 10). In 2002, the FIG established the FIG Coaching Education Academy, which in 2011 was divided into two successive systems, namely the Age Group Programme and the FIG Coaching Academy. The FIG Coaching Education System is intended for the education, training, and certification of coaches in all sports disciplines included in the FIG portfolio, including parkour (FIG, 2025).

The inclusion of parkour as the eighth FIG gymnastics discipline in 2017 was the catalyst for the creation of the International Parkour Earth Federation (Puddle & Wheaton, 2023), the international governing body for the interconnected disciplines of parkour, freerunning, and l’Art du Déplacement, collectively known as parkour. At its core, Parkour Earth is a federation of national representative parkour organizations (community organizations & national

parkour federations), run by a community for a community. In addition to these organizations from around the world, Parkour Earth also works with countries without formal representation to support them in building genuine national community-led organizations, highlighting the organizational specificity of this sport, whose membership structure, expected from international sports governance, may not suit every parkour community, as there are a variety of other options for joining and supporting (Parkour Earth, 2025).

Established in 2005, Parkour Generations is a multi-award-winning global organization that provides training, education, performance, facility design, and consulting for the movement discipline of parkour or freerunning. Parkour Generations focuses primarily on parkour education and training and offers a variety of training programmes (e.g. for schools, fitness, and other programmes) and supports the ADAPT methodology and educational programmes as the foundation for training, certification, and licensing of parkour coaches and professionals (Parkour Generations, 2025).

Based on the newly established institutional and formal organizational forms of the international organization of parkour, many countries have established specialized separate National Parkour Federations or include parkour as a sport discipline within the portfolio of National Gymnastics Federations to connect local communities and collaborate with public institutions. The process of institutionalization has progressed at varying rates in individual countries; for example, in Finland, the national federation was established relatively early on. In France and elsewhere, local groups initially developed independently and later joined together to form national organizations (Lammi, 2023). The organizational institutionalization and formalization of competitive systems in parkour also brings greater control and direction of (1) methodological and didactic approaches to training, (2) structural knowledge, and (3) introduces a transparent and professional way of imparting knowledge to aspiring parkour coaches, which in turn brings greater safety in the implementation of parkour and the framing of its operation in safer and more controlled sports environments.

The literature also highlights some critical aspects of the formalization of parkour. With the institutionalization and organizational formalization of parkour and its inclusion in gymnastics federations and sports policies, debates have emerged regarding the preservation of parkour's original values, such as informality, autonomy, and creativity (Dumont & Thorpe, 2022; Puddle & Wheaton, 2023). While formalization brings greater safety, recognition, and opportunities for collaboration with public institutions, there is a risk that excessive standardization could limit creativity and the original values of parkour. Coaches emphasize the importance of maintaining flexibility and openness

to innovation, even within formal programmes and guidelines (Gilchrist & Wheaton, 2011; O'Loughlin, 2012; Puddle & Wheaton, 2023; Wintle, 2024).

### **Individualization and adaptation of methods**

Parkour learning is highly individualized. Coaches and communities frequently adapt their methods to the physical and psychological characteristics of each participant (e.g. fear of injury, motor skills). Progressions and regressions of exercises are well established, enabling participants to gradually overcome obstacles and fear and to progress safely (Greenberg, 2017; Wallace & Kilili, 2015). In contrast to traditional athletes, self-organized lifestyle sport practitioners (parkour athletes) typically have no podiums to reach or formal grades to attain (Säfvenbom & Stjernvåg, 2020).

Because parkour is so new, and many parkour athletes are not trained by coaches, many traceurs (parkour adepts) learn how to execute various parkour techniques through online tutorials or by training informally with peers (Kidder, 2012). Learning most frequently occurs through mutual exchange and through personal trial and error. When training in groups, participants usually do not seek the presence of a formal coach or instructor. They usually have no authorized instructor available but appear to treat this apparent deficiency as an opportunity to facilitate autonomous learning processes. Instead of instructors, the internet has become a useful resource to learn new techniques and see how others train (Gilchrist & Wheaton, 2011). However, learning by watching videos is impersonal, which means that athletes who rely on these videos as their primary source of learning cannot receive immediate encouragement and feedback from a coach. According to Greenberg (2017), interest in formal coaching and access to parkour coaches only increased with the introduction of competitive systems and rules, although these options are mainly sought by parkour newcomers and those who are not yet experienced in parkour.

Nevertheless, several parkour organizations worldwide have developed coach education programmes designed to teach their participants how to coach parkour in a safe and effective manner (e.g. Parkour Generations ADAPT, 2025). Most parkour coach education, development, certification, and apprenticeship programmes, referred to as parkour coach education programmes, are independently regulated and each organization is likely to train its coaches according to its own standards and philosophy (Greenberg, 2017).

## Development of coaching competencies

As noted earlier, parkour coaches continue to acquire most of their knowledge through (1) personal experience, (2) reflection, (3) collaboration with other coaches, and (4) exchange within the community. Formal education and certifications—such as ADAPT, IPF/IPTC, and the FIG Coaching Education Academy—typically function as supplements rather than the foundation for coaching work (Greenberg, 2017). Given the existence of multiple international federations, each claiming to be representative of global parkour and following different philosophies of parkour development, as well as developing different programmes, knowledge, levels, processes, and durations of parkour trainer and instructor education, two contrasting models are presented here; (1) the ADAPT programme, supported primarily by international parkour organizations that conceptualize parkour as a community-based sports movement, and (2) the FIG coaching educational programme, which frames parkour primarily as a competitive sport discipline.

ADAPT is an international parkour coaching certification programme that provides standardized training in safety, training methodology, and ethical values. Its primary objective is to professionalize parkour coaching in order to improve the quality and safety of training sessions and to facilitate greater institutional recognition of parkour. The programme combines theoretical and practical training with competency assessment. Coaches progress through four hierarchical levels, upgrading their theoretical knowledge, technical proficiency, and practical competencies at each stage (ADAPT Education Pathway, 2025).

The FIG Academy Programme was established in 2002 for coaches from all FIG member federations across its disciplines (Gymnastics for All, Men's Artistic, Women's Artistic, Rhythmic, Trampoline, Aerobic, Acrobatic, and Parkour). Its underlying philosophy is grounded in a comprehensive worldwide review and analysis of the sport science literature related to the growth and development characteristics of a child as it progresses from birth to adulthood and how that knowledge has implications for training. This athlete-centred philosophy informs decisions regarding curriculum content of a coach education programme to assure the safe and systematic training of gymnasts in all disciplines (including parkour) towards high performance. The Academy Programme therefore aims to provide a standardized competency-based coach education system for the development of gymnastics worldwide, built on principles of sport science, health, current training best practice, and current ethical and safeguarding standards. In 2011, the FIG Coaching Education programme was divided into two successive pathways—the Age Group Programme and the

FIG Coaching Academy—each consisting of four progressive levels. Coaches advance by demonstrating increasing levels of competence and may ultimately obtain the FIG Academy Brevet, the highest certification level (FIG, 2025).

The IPF also provides coaching certification programmes and educational resources for coaches at different levels, contributing to the creation of a global standards framework for training and safety quality for the discipline. Across Europe, additional initiatives, projects, and activities have also emerged in the field of education and training of coaches and the organization of competitions at both the pan-European networking and national levels. Mentorship, participation in events (e.g. Coach Europe), and the exchange of best practices at the European level are important for the development of coaching competencies and the dissemination of innovation (Gilchrist & Wheaton, 2011).

Coach Europe is a European event and platform dedicated to knowledge exchange, networking, and the professional development of parkour coaches. It brings together trainers from various countries through workshops, lectures, practical training sessions, and conferences, organized by European parkour organizations such as Parkour Outreach CIC (UK), national associations (e.g. the Finnish Parkour Association and Motion Academy Spain), and in partnership with international federations such as the IPF and WFPF.

In addition, local groups and training centres are often involved in hosting events and contribute to the dissemination of best practices and the professionalization of parkour at the European level (Gilchrist & Wheaton, 2011; Lammi, 2023; Leeder & Beaumont, 2021; Wintle, 2024). In some countries, formal training programmes have already been developed, incorporating practical and theoretical education, reflective practice, and competency assessment. These programmes underscore the importance of safety, lesson planning, communication, and adapting the learning environment. According to the literature, formal parkour coaching programmes have been developed primarily in the following countries: In France, the birthplace of parkour, the formalization of coaching programmes is the most advanced, with integration into gymnastics federations and specialized certification schemes. Moreover, the French Parkour Federation (Fédération de Parkour) offers certification for coaches in France and beyond, focusing on the integration of parkour into physical education and youth programmes. They emphasize the importance of teaching parkour with safety and ethics in mind. Finland is developing training programmes that include both practical and theoretical education, as well as reflective practice. In the United Kingdom, organizations such as Coach Europe offer systematic education and networking through coaching programmes and workshops. Parkour UK also offers a coaching certification pathway that includes theoretical and practical

assessments. The organization emphasizes safety, inclusion, and effective coaching strategies, providing resources for coaches to develop their skills. In other European countries, such as the Netherlands and Germany, formal and semi-formal programmes are also being developed, often in collaboration with gymnastics federations or youth sports organizations; however, these programmes are still in the growth and standardization phases (Gilchrist & Wheaton, 2011; Lammi, 2023; Leeder & Beaumont, 2021; Wintle, 2024).

Collectively, with their educational and training programmes as well as their efforts to bring safety and professionalism to parkour training and development, these initiatives contribute to the professional development of parkour coaches, ensuring a standardized approach to teaching while promoting safety and inclusion within the community. Aspiring coaches are encouraged to seek accredited programmes that best align with their teaching goals and community needs.

Based on a comprehensive review of the knowledge development and qualification models of parkour coaches in Europe, recommendations for the design of parkour coach training programmes are given in Table 3. Each content area is accompanied by a concise explanation outlining the content that should be conveyed to participants in the education process. The proposed competency model should offer future parkour coaches a comprehensive insight into parkour both as a lifestyle physical activity and a sports discipline, while also enabling the acquisition of all fundamental knowledge in the field of didactic-methodological principles and approaches to learning specific movements in parkour, as well as other segments of sports training and the preparation of parkour athletes or traceurs.

Table 3: Recommended content for designing training programmes and a competency model for parkour coaches.

| Content area                                                    | Description and specific content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Historical development of parkour                               | <ul style="list-style-type: none"><li>– The content related to the historical development of parkour should explain the origin of parkour and its development to the present day through the prism of various sociological, cultural, anthropological, and economic perspectives.</li><li>– The content must also provide an insight into the anticipated future development in light of people's increasingly digital lifestyles, individualization, and their dependence on the instant gratification of informational, economic, and social needs.</li><li>– Through learning about the content, future coaches must develop competencies related to understanding the past influences of different environments on the development of parkour, as well as the ability to recognize the interests, desires, and motivations of future traceurs for engaging in this activity.</li></ul>                                                                                                                                                     |
| Institutionalization and formalization of parkour               | <ul style="list-style-type: none"><li>– In this content set, future coaches must learn the reasons for the process of institutionalizing parkour and its formation as a sports discipline with its own international competition system and competitions.</li><li>– Through this content, future coaches must develop the competencies of knowing various organizational forms of global parkour organization and its placement in the global sports-organizational environment, as well as the fundamental orientations of individual global and continental organizations in the field of parkour.</li><li>– This chapter should also equip future coaches with a fundamental knowledge of various competition systems and specific technical-competition rules.</li></ul>                                                                                                                                                                                                                                                                   |
| The role of the coach in parkour training and leadership styles | <ul style="list-style-type: none"><li>– In this content area, it is important to emphasize the role of the coach in the process of practising parkour and, above all, distinguishing it according to the philosophical orientation of the practice (as a sports discipline or as a „lifestyle“ activity).</li><li>– The role of the trainer must be specified both from the perspective of developing his or her organizational and pedagogical development competencies when working with different age categories and different interest orientations of trainees in the training process.</li><li>– In accordance with the different roles of the coach in the parkour training process, leadership styles that best suit the level of training should also be defined.</li><li>– Through this chapter, future coaches must develop the competencies to understand the comprehensive influence of the coach on the development of the fundamental abilities and personalities of the trainees, as well as on the sporting result.</li></ul> |

| Content area                                                                                               | Description and specific content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Basics of sport training in parkour</b>                                                                 | <ul style="list-style-type: none"> <li>– This section should present the definition and fundamental principles of sports training in general (e.g. periodization, holistic approach, processes) and their application to parkour practice and sports training.</li> <li>– The chapter must comprehensively present the structural characteristics of parkour as a physical activity as well as a sports discipline and, most importantly, define the areas of training that form a comprehensive parkour training model.</li> <li>– Furthermore, the content should also define the fundamental characteristics of training cycling and sports exercise programming.</li> <li>– Through this chapter, future coaches must develop competencies for a comprehensive understanding of the process and principles of sports training and exercise.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Special equipment and organizational aspects of preparing the learning environment and/or training.</b> | <ul style="list-style-type: none"> <li>– This content set must be intended for the presentation, technical description, and description of the usability of special training and competition equipment for carrying out activities, training and competitions in parkour.</li> <li>– A special place in this section should be given to the emphasis on safety and the safe use of equipment during the training process. It should also note the risks, dangers, and safety measures for practising parkour in urban areas and on natural obstacles (e.g. walls, buildings, ruins, trees, etc.).</li> <li>– Various organizational aspects of training should also be presented, related to the arrangement and placement of equipment, the number and placement of support personnel and methods of protecting trainees, basic spatial requirements for training, etc.</li> <li>– Through this content set, future trainers must develop comprehensive competencies in safely organizing parkour training using various special training aids and equipment, as well as for training in urban and natural environments.</li> <li>– They should also become familiar with the possibilities and use of modern digital technologies in the training process.</li> </ul> |
| <b>Motor development and physical preparation</b>                                                          | <ul style="list-style-type: none"> <li>– This chapter should comprehensively present the motor development of children, adolescents, and adults, as well as the fundamental structure of human motor and functional abilities, methods of their measurement, and development.</li> <li>– The content must also include an understanding and distinction between general and special physical preparation and its impact on the incidence of injuries, fatigue, and the development of sports performance or parkour practice ability.</li> <li>– By studying these contents, future coaches must develop comprehensive competencies for preparing a plan for general and special physical training at the level of daily, weekly, and long-term training, as well as developing test batteries for determining the condition and progress of trainees from the perspective of physical, motor, and functional development.</li> </ul>                                                                                                                                                                                                                                                                                                                                   |

| Content area                                                | Description and specific content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Technical preparation and skill learning process in parkour | <ul style="list-style-type: none"><li>– The content related to technical preparation must comprehensively present the pedagogical-didactic principles of learning movements, the principles of motor learning, the basic learning methods, and the technical characteristics of movements in parkour.</li><li>– Technical characteristics should be presented through the fundamental biomechanical (kinematic and dynamic) characteristics of individual groups of movements (vaulting, jumping, climbing manoeuvres, etc.) with special emphasis on the biomechanical principles of movements in the unsupported phase (e.g. somersaults) and during landings, which are characterized by the highest incidence of injuries in parkour.</li><li>– By learning this content, future coaches must develop comprehensive competencies in understanding the psychological processes associated with learning motor skills, as well as in planning, leading, and controlling the processes of learning parkour skills.</li></ul> |
| Psychical preparation of parkour athletes                   | <ul style="list-style-type: none"><li>– Content related to the psychical preparation of trainees should largely concentrate on content related to managing fear when performing skills, motivation, and psychological preparation for competition or performing demanding feats (e.g. visualization).</li><li>– By learning this content, future coaches must develop competencies to understand the occurrence of fear and ways to cope with it, the principles and models of motivation, and different approaches to the psychological preparation of athletes to perform various feats (e.g. climbing tall buildings or crossing demanding courses) or to perform a competitive performance as successfully as possible.</li></ul>                                                                                                                                                                                                                                                                                         |

## The role of the coach in the learning/training process

Coaches can be understood as highly trained professionals in the field of high-performance sports who possess specific tertiary education and specialist qualifications, making them domain-specific experts with both training and experience in various facets of the sport (Lyle & Muir, 2020). Ericsson (2018) wrote that an expert is highly skilled and knowledgeable in a particular field or someone who is widely recognized as a reliable source of knowledge, techniques, or skills, whose judgments are recognized as having authority and status in public or by their peers. Experts must have long-term and intensive experience of practice and education in a specific field. He goes on to emphasize that expertise refers to the qualities, skills, and knowledge that distinguish experts from novices and less experienced people.

According to Matveev's (1977) classification of sports, which is based on the structural complexity of movements in sports, parkour can be classified among individual conventional poly-structural sports disciplines, which are characterized by anaerobic energy processes and dominant motor abilities, such as relative strength, coordination, flexibility, and balance. Polistructural sports are also characterized by open or semi-open movement structures that are performed in variable external conditions. The conventional character of parkour means that all movements (elements) must be performed within a specific movement model (prescribed by experts – convention), which could also be called the ideal movement model (hereafter IMM). Martens (2012) defined sport-specific movements as technical skills that are “specific procedures for moving the body to perform the task to be accomplished.” The IMM of the technical skill is defined by a biomechanical model of movement and is predetermined in the evaluation rules (e.g. Parkour FIG Code of Points) prescribed by the international (or national) sport organizations that issued the rules, set the competition system, and licensed and/or organized competitions (Kolar, Biloslavo, Pišot, Veličković, & Tušak, 2025).

Despite the complexity, uncertainty, and increasing demands for excellence in sports training—which necessitate an interdisciplinary approach involving highly trained experts from diverse fields (e.g. physiology, biomechanics, medicine, nutrition, psychology) (Wilson & Kiely, 2023)—the coach remains the central figure in managing the process. Nash and Collins (2006) describe coaches as (1) managers of the coaching process, (2) technical advisors, (3) tacticians, and (4) educators. Coaches are responsible for the following: (1) managing the organizational process, which includes planning, organizing, implementing (pedagogical processes), controlling, and evaluating both the results and the

training process; (2) coordinating all involved experts and athletes, ensuring alignment and collaboration; and (3) delegating tasks and activities effectively to optimize the training process. These three core managerial responsibilities represent the substantive content of a coach's work. However, the fundamental method by which coaches carry out these tasks is decision-making (Abraham, Collins, & Martindale, 2006; Kolar & Tušak, 2022; Wilson & Kiely, 2023).

In the parkour training process, the primary responsibility of coaches is to create a safe, supportive, and adaptable environment that enables participants to experiment, progress, and develop independence. Coaches must recognize individual needs, provide support in overcoming fear, and encourage reflection on personal progress. In formal settings, coaches often collaborate with public institutions, schools, and sports federations, which requires additional competencies in organization, leadership, and communication (Corsby, Sánchez-García, & Jenkins, 2024; Greenberg, 2017; Lammi, 2023; Wallace & Kilili, 2015).

Because parkour exists as both a competitive sport and a lifestyle activity, trainers, instructors, educators, and coaches must lead athletes by employing flexible coaching leadership styles. The selected style and approach to the teaching and leading of participants in a process should be adapted in response to the motivation, goals, and capabilities of participants. Chelladurai and Arnott (1985) describe three different leadership styles for coaching, namely autocratic, participative, and delegative, and suggest that the best decision style in any circumstances relies on the configuration of the attributes of the problem. Coaches with a dominant autocratic style make decisions entirely independently. Those with a prevalent democratic leadership style engage in the entire decision-making process collaboratively with the athlete. In contrast, coaches with a laissez-faire/delegative leadership style make judgments independently but seek the athlete's consent and agreement before finalizing decisions. Kaya (2014) emphasized that the situational leadership style is the most common style for coaches and outlined four subdomains of this style: telling, selling, participating, and delegating. He argues that before a leadership style is implemented, the level of an athlete's acceptance and readiness should be assessed to determine the coach's best-fit leadership style. Elderon (2020) emphasized that a good coach adapts their style to the situation, often favouring the participative approach in contexts that require learning, decision-making, and problem-solving. Similarly, Sherman, Fuller and Speed (2002) recommend flexible use of decision-making and coaching styles and adapting them to match those styles to which the athlete is receptive. Marshall (2006) supports the argument that successful coaching of high-level athletes involves a much more consensual

process than the do-as-I-say approach, while Kolar, Kovač, & Piletič (2006) argue that the relationship between (1) the athlete's biological and sports development phase and (2) the coach's leadership style changes from more autocratic in the period of youth to more participative in the period of growing up and maturing.

Studies of the leadership styles of sports coaches also have another important message. They indicate that a more participative leadership style allows athletes greater autonomy in expressing their opinions and concerns, thereby ensuring coaches obtain more relevant feedback about the impact of training on the development of athletes' careers (Moen, Høigaard & Peters, 2014; Elderon, 2020) and is associated with positive outcomes (Lyle & Muir, 2020). Voight (2002) argues that based on the feedback the coaches receive, coaches can implement the strategies or personal skill development of the athletes effectively.

## CONCLUSIONS

Over the past two decades, parkour has evolved from a grassroots movement into a recognized lifestyle sport across Europe, characterized by a dynamic interplay between informal community-driven learning and increasing formalization. Its unique character lies in its origins as a self-organized epistemic culture, where knowledge, values, and practices are shaped internally by practitioners rather than imposed by external institutions. This community-based approach has fostered creativity, adaptability, and strong peer-to-peer knowledge exchange.

As parkour integrates into formal sports structures, with the emergence of standardized training programmes and national federations, new opportunities for safety, recognition, and institutional collaboration have arisen. This process has largely changed the basic philosophy of parkour from a lifestyle physical activity to a competitive sports discipline. The latent struggle between the two philosophies of parkour has led to fragmented governance structures and competing representations of the different philosophical views on the development, existence, and evolution of parkour, as well as raising the issue of representativeness in a comprehensive global sports organization. Despite the emergence of a large number of international sports organizations with different ideological and philosophical orientations toward parkour, they have all used the process of institutionalization to develop various (in terms of content, duration, levels, approaches, etc.) education, training, and certification programmes and thus the formal regulation of coaches and instructors who ensure the transfer of

knowledge to trainees in the processes of training and learning parkour skills. Regardless of the fundamental orientations of the programme organizers, institutionalization and formalization of the development of teaching staff competencies will bring higher knowledge standards, greater safety in learning and performing parkour, and the development of parkour training methods and methodologies tailored to the goals, needs, and abilities of the trainees. However, this process also presents challenges: excessive standardization risks undermining the creativity, autonomy, and core values that define parkour. Coaches and community leaders emphasize the importance of maintaining flexibility, supporting individual learning needs, and preserving the innovative spirit of the discipline, even within formalized frameworks.

In summary, the future development of parkour depends on achieving a balance between the benefits of formalization and the preservation of its original, community-centered ethos. Recognizing and respecting parkour's roots as a self-organized culture is essential if institutionalization is to enhance rather than diminish the discipline's diversity, creativity, and authenticity.

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