

CIRCUS AND CURRICULAR INNOVATION IN PHYSICAL EDUCATION TEACHERS' EDUCATION (PETE) IN BRAZIL

O CIRCO E A INOVAÇÃO CURRICULAR NA FORMAÇÃO DE PROFESSORES DE EDUCAÇÃO FÍSICA NO BRASIL

EL CIRCO Y LA INOVACIÓN CURRICULAR EN LA FORMACIÓN DEL PROFESORADO DE EDUCACIÓN FÍSICA EN BRASIL

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Keywords:

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Abstract: Circus has become an innovative content for Physical Education (PE) programmes worldwide. In Brazil, various Physical Education Teacher Education (PETE) programs implemented circus instruction in their official undergraduate curricula. Based on a qualitative approach, we analysed professors' experiences in teaching circus at Brazilian universities. Thirty participants from 22 higher education institutions answered a questionnaire and five of them were selected to respond an in-depth interview. The results confirmed that circus is a sustainable pedagogical innovation in PETE, which contributes to increase sociocultural, historical, aesthetic and technical diversity. However, professors' approach focuses on basic skills with little regard to its artistic dimension. Furthermore, we found that circus pedagogy in PE may offer a creative logic to play with body and movement which integrates artistic expression to the development of physical ability and conditioning. We concluded that circus may help PE to enhance interaction with arts education.

Palavras chave:

Capacitação
de professores.
Educação superior.
Arte.
Currículo.

Resumo: Circo se tornou um conteúdo inovador em programas de Educação Física (EF) pelo mundo. No Brasil, diferentes cursos de Formação de Professores de Educação Física (FPEF) implementaram essa arte no currículo de graduação oficial. Em abordagem qualitativa, analisamos as experiências de professores no ensino do circo em universidades brasileiras. Trinta participantes de 22 instituições de ensino superior responderam a um questionário e cinco participaram de entrevistas em profundidade. Os resultados confirmaram o circo como uma inovação pedagógica sustentável, contribuindo para a diversidade sociocultural, estética e técnica na EF. No entanto a abordagem dos docentes se concentra em habilidades básicas com pouca atenção à dimensão artística. Descobrimos também que a pedagogia do circo na EF oferece uma lógica criativa de jogar com o corpo e o movimento que integra expressão artística, habilidades e capacidades físicas. Concluímos que o circo pode auxiliar a EF em sua interação com a arte.

Palabras clave:

Formación de
profesorado.
Educação Superior.
Arte.
Currículo

Resumen: El circo se ha convertido en un contenido innovador en programas de Educación Física (EF) mundialmente. En Brasil, diferentes programas de Formación del Profesorado de Educación Física (FPEF) lo implementaron en el currículo oficial de grado. En carácter cualitativo, analizamos las experiencias de enseñanza del circo en universidades brasileñas. Treinta participantes de 22 instituciones respondieron a un cuestionario y cinco fueron seleccionados participando en entrevistas en profundidad. Los resultados confirman el circo como una innovación pedagógica sustentable para la FPEF contribuyendo para la diversidad sociocultural, estética y técnica. No obstante, el abordaje de los docentes se concentra en las habilidades básicas ofreciendo menor atención a su dimensión artística. Además, descubrimos que la pedagogía del circo ofrece una lógica creativa de jugar con el cuerpo y el movimiento que integra expresión artística a habilidades y condicionamiento físico. En conclusión, el circo puede auxiliar en la interacción entre EF y arte.

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1 INTRODUCTION

Circus is an art form that has gained popularity in Physical Education (PE) over the last 30 years (COASNE, 2013). For a long time, circus has been present in our society as an entertainment rather than a practice accessible to everyone. This has changed radically with the recent worldwide emergence of circus schools, which have broadened access to circus heritage and allowed those from outside the 'circus family' to access circus knowledge (DUPRAT, 2014).

Earlier, circus education was mostly passed down through the generations via an oral-family mode of transmission (ABREU; SILVA, 2009). Establishing a more open interchange with society, contemporary circus is increasing its presence from elementary to higher education (KRIELLAARS *et al.*, 2019). Thus, the recent greater dissemination of circus has brought it into a closer dialogue with PE (SIZORN, 2014).

Although PE has interacted with circus since the second half of nineteenth century, both in Europe and Brazil (HAUFFE; GÓIS JUNIOR, 2014), only in the past few decades has circus become popular among PE teachers (PRICE, 2012; ONTAÑÓN; BORTOLETO; SILVA, 2013). Consequently, further discussion regarding its presence in Physical Education Teacher Education (PETE) is necessary (MIRANDA; AYOUB, 2017).

The popularity of circus among educators, including PE teachers, is noticed in several countries (CHUNG, 2010). Pedagogical research about circus demonstrated productive interactions between art and education, as it is based on diversity, with multicultural and collaborative aspects (WALLON, 2002; COVEZ, 2012). The contribution of circus to teach risk management (GOUDARD, 2010; LEGENDRE, 2016), to develop resilience and physical literacy (KRIELLAARS *et al.*, 2019) and for interdisciplinary work (BOLTON, 2004) encourages further research in this field.

We consider circus to be a pedagogical innovation because its contribution to PE is not limited to widening the repertoire of bodily techniques and culture. Circus pedagogy in PE offers a creative logic to explore body and movement, which integrates artistic expression to discovering physical capacity and ability. In other words, circus seeks to discover 'extraordinary' ways to move and puts the body, its capabilities and skills as protagonists of its poetics on the stage.

Circus studies are expanding and getting legitimized as new – and ancient – relations with PE and education are discovered. The debate about circus instruction in PE and its educational outcomes is under development but, as mentioned above, there is meaningful evidence pointing to its relevance in different PE programs.

As PETE experiences seem to be playing a defining role on popularizing this art in the university, this paper aims to discover how it is approached by professors in Brazil.

2 METHOD

2.1 THEORETICAL FRAMEWORK

This study's theoretical framework comprehends circus as an art form in which body and movement are in the core of the spectacle. Based on Goudard (2010) and Wallon (2002), the artistic nature of circus is based on playing with risk as a fundamental for artistic

expressivity. Risk is one of the main poetic elements that gives artistic potency to performing skills and exhibiting physical capacity. Circus' symbolical interaction includes overcoming human limitations (HOTIER, 2003; MCCUTCHEON, 2003) and the presentation of human diversity (BOLTON, 2004), whether in its fragility (e.g. the clown), eccentricity (e.g. the contortionist) or prowess (e.g. the acrobat).

Furthermore, as Bolognesi (2001) said, there is alternation between the sublime and the grotesque. In the former, the artist masters her/his human condition in flight, slide and grace; in the latter, she/he is subjugated by reality, being exposed to the risk of falling, the imminence of an error or the instability of performing difficult skills. So, circus aesthetics makes up an environment that subverts normality by creating a space proper to the extraordinary. The singularity of 'circus bodies' puts the diversity of the human being on stage.

The theoretical framework and the research method are connected by questioning how circus is taught by PETE teachers. We believe that the core elements of circus's artistic nature play a fundamental role in the educational outcomes found in literature.

The background of this discussion is the plural expressions of PE in Brazil. National law requires an undergraduate diploma in PE for working in schools, sports coaching, fitness and health physical activities, and leisure. Therefore, there are over 1,200 PETE programs in a country with a population of more than 200 million inhabitants, vast geographical dimension and great socioeconomic differences (BRASIL, 2019). This partially describes the complexity and challenges for teacher education in the country. It also points out the diversity of solutions teachers find to adapt their teaching to regional contexts. Circus seems to be a consistent pedagogical innovation, since we found thorough arguments about its inclusion and many different perspectives on how/why to work with this art in PE (MIRANDA; AYOUB, 2017).

2.2 STUDY PARTICIPANTS

The participants are university professors responsible for teaching circus in undergraduate PETE programs. To identify them, we analyzed the curricula of hundreds of PETE programs, which they are legally bound to provide online. In addition, we contacted all the research groups that reported circus as a study subject, which are available in the official directory of the National Council for Scientific and Technological Development (CNPq). We also consulted the authors of articles, book chapters and books published in Brazil in the last ten years in this field, finishing the data collection only when we reached exhaustiveness (FIFE-SCHAW, 2006).

Forty-Two (42) professors were selected but only thirty (30) agreed to participate by responding to a questionnaire. The age-range of the thirty participants was 29 to 70 years (37 ± 10.8), with 1 to 40 years of experience in PETE (8 ± 7.7). Twenty-seven of them (90.5%) had a PE undergraduate diploma. Most of them ($n=22$ 73.3%) worked in public institutions located in the south and southeast of Brazil. Both regions (out of a total five) concentrate over 70% of PETE programs (BRASIL, 2019), indicating sampling coherence.

Twenty-nine participants (96.7%) approached circus as a PETE curricular subject, but only five of them (16.7%) taught specific courses about circus. The participants represented 22 institutions (25 campuses), of which six were private institutions and 19 were public universities (6 state and 13 federal institutions).

The five most experienced participants (experts) were selected for an in-depth interview (2 males; 3 females; aged 40 ± 5.7) and given the following pseudonyms, reinforcing their singular contributions to this study and protecting their real identities: participant 5 is the Clown, 22 is the Juggler, 1 is the Aerialist, 30 is the Contortionist, and 4 is the Acrobat. Two of them worked in private institutions and the others in public universities.

The criteria for being considered experts was to have already conducted in-depth research on circus pedagogy, such as master's or doctoral theses/dissertations, or to coordinate research laboratories. We also considered their professional experiences (lectures, courses, research projects, etc.), technical and scholar works (articles, books, etc.) about circus in PE. In addition, their comprehension about circus was also considered, based on the results of the questionnaire.

Most of the other participants did not qualify as experts because they referred to circus only as a complement to other research topics. Still, they provided many contributions for understanding the ways non-specialized professors use this art in teaching, extension and research.

2.3 DATA COLLECTION

We reviewed the scholar curriculum of all potential participants to confirm their experience, available online at the Brazilian official repository database (Lattes Platform).

An online semi-structured questionnaire was adopted in the first phase (SEBIRE, STANDAGE; VANSTEENKISTE, 2008). Consultation to five researchers holding PhDs, an expert's linguistic review, and a pilot study with one participant were conducted to improve the final version of the questionnaire.

The second phase of the study comprised an in-depth interview (DENZIN; LINCOLN, 2011) with the chosen experts. It included 14 questions analyzed using five thematic categories (chart 1) (KRIPPENDORFF, 2016). The category system was built for systematizing all aspects reported by the participants, based on literature review, which included Goudard (2010), Wallon (2002), Hotier (2003), Bolton (2004) and Bolognesi (2001). We also considered the recommendations about educational practice provided by Schön (1991).

2.4 DATA ANALYSIS

Quali-quantitative analysis was adopted (DENZIN; LINCOLN, 2011). Content Analysis (BARDIN, 2011) was applied on the qualitative data provided by the questionnaire and the interviews. The quantitative data was analysed by Descriptive Statistics (FIFE-SCHAW, 2006).

3 RESULTS

The main findings were organized into five thematic categories to group and systematize professors' statements (Chart 1). Most professors (83.3% $n=25$) support circus as a PETE subject, as it provides a relevant contribution to PE. Twenty-one participants (70%) highlighted that circus is connected to PE contemporary educational challenges. Circus's culture and history ($n=22$) and basic skills ($n=11$) were the most frequent learning objective. Nine participants (30%) mentioned to include circus' artistic dimension.

Chart 1 - The reasons to develop circus as a PETE subject

Thematic Categories	Reasons for implementing circus in PE		Sociocultural and historical aspects of circus		Circus learning objectives in PE		Artistic dimension of circus		Educational contributions of circus teaching	
Participants' responses	25		22		11		9		7	
Units divided by subcategories	21	Circus as PE subject	21	Circus as sociocultural heritage	7	Motor skills	7	Aesthetic education	6	Human development and education
	9	Professional education in PE	9	Widening access to circus knowledge	6	Bodily and motor experiences	4	Artistic initiation	3	Teaching and learning
	5	An alternative to sports	9	Physical Education history	5	Challenges and educational values	2	Physical Education and Art	2	Construction of alternative props and equipment
	4	Curricular innovation	9	Circus history in society	2	Ludic activity	2	Art in the curriculum	2	Reflexivity and critic thinking
	3	A field of research for PE							1	Self-awareness
	1	Social demand for circus							1	Socialization

Source: content analysis of interviews and questionnaire results.

Five professors (16.6%) said that they implemented circus as an alternative to a sports-based curriculum, recognizing the latter as a dominant content in Brazilian PE:

I believe that the circus is a resource to be transformed and perpetuated in PE classes. That's why it's important for the undergraduate student to have this initial contact with this art. Besides, circus is a manifestation of our culture with numerous human values, which may contribute for the overcoming of sport as the main content in the syllabi of PE classes in primary education. By including circus in teacher education, the university raises the possibilities of student development and professional work. This sets a path towards a wider conception of PE. (PARTICIPANT 27, question 3.3, lines 1-5)

Nine professors (30%) highlighted the importance of circus to discuss PE history and to enhance diversity of bodily practices. The participants also mentioned that circus represents an original and ancient knowledge of body expression, as it "contributes to the ontology of human being's body practices/exercises reflections and thoughts" (PARTICIPANT 15, question 3.3, line 1). Other participants said:

Circus practices are part of many human societies and comprise the movement culture, therefore, they are directly linked to the knowledge of PE. (JUGGLER, question 3.3, lines 2-6)

I see circus activities as a set of practices produced by mankind throughout history, which contribute to the comprehension of scientific, aesthetic, artistic and ludic knowledge as constitutive elements of human reality. It also helps to understand the organization of societies represented by this cultural practice. (PARTICIPANT 29, question 3.3, lines 1-6)

In this sense, the main motivation to include circus in PETE (21 participants, 70%) is the understanding of circus as a sociocultural phenomenon and the importance of its heritage to contemporary PE.

I believe there is a very strong relationship between PE and art, much more distinct than with other themes. Circus makes this dialogue possible or at least it prioritizes the dialog of PE with culture and art. That is a great advance and a distinguishing aspect on teacher education. In this perspective, we study circus by itself, art by itself. (JUGGLER, lines 901-905).

Data about the educational and professional profiles of the thirty participants provided 156 records of circus scholar activities:

- 97 (62.2%) communications presented at scientific events (congress, seminars, etc.);
- 12 (7.7%) papers published in scientific journals;
- 40 (25.6%) students' research supervising;
- 07 (4.5%) own research projects;
- 04 (13.3%) research projects collaborations;
- 12 (40%) extension/community projects;
- 05 (16.6%) specific courses/workshops;

Most of the participants conduct introductory studies on circus for enhancing their knowledge. They attend scientific events for sharing their findings. The extension projects are strategies for training undergraduate students and advocating circus practice for both university and external community.

Additionally, all teachers reported inviting circus professionals (artists, trainers, directors and riggers) to participate in their activities. Attendance to circus performances or visits to circus schools were often used for cultural immersion.

Only six institutions have circus as a curricular subject in PETE programs, ranging from 30 to 45 class hours, all as complementary (optional) courses. Another 18 records show circus as part of different subjects that already existed in PETE curriculum, ranging from 4 to 16 hours of activities. Gymnastics was the main subject used to teach circus in PETE. There were six mentions of circus on Leisure, Games and Recreation subjects. There were three records of circus as part of Body Expression subjects, typically related to performing arts (dance and theatre).

In general, circus instruction had a small participation in PETE programs, most often as an introduction to this art (16 out of 24 records – 66.6%). Teachers reported that they taught circus skills with a focus on basic techniques since students have little or no experience with this art. Thematic games (playing with circus techniques and cultural stereotypes) were the main pedagogical resource explored in PETE classes since teachers consider this to be useful for working with PE. Only nine participants mentioned to debate circus artistic dimension (creativity, expression, artistry and aesthetics) in PETE.

Different difficulties in the implementation process were highlighted: limited number of hours dedicated to circus courses; institutional resistance; and lack of training on circus instruction. The most frequently taught circus activities were static trapeze, aerial silks, juggling,

balance and rope-walking (tight wire and slack line), acrobatics (floor exercises) and group acrobatics (pyramids).

Professors' discourses indicated their intention to discuss circus diversity and its educational contribution. "In circus it is possible to create and to improvise. This enriches body education and provides a broader perception of one's relation to the world." (PARTICIPANT 6, question 3.3, lines 1-2). However, we noticed a major focus on developing motor skills and physical conditioning, with little evidence of teaching strategies dedicated to self-expression, movement poetics or circus dramaturgy.

Participants highlighted that the students were highly motivated to participate in circus instructions. All the experts interviewed reported that students practiced circus in the living/ social areas and spontaneously took it to other scholar projects:

[...] the students choose to include circus in their teaching practices and present this content in other places of the university. And how do I know that? Because they ask me: 'Teacher, I'm going to have a class with 35 students, could I borrow us some (juggling and circus) equipment?' But it's not only one person or ten; it's dozens every semester... They are very enthusiastic with circus activities and they take it to formal and informal outreach education projects. This is a way for us to know about the repercussion and success of our work in PETE [...] (ACROBAT, Lines 576-589).

The students actively promote circus learning in PETE, sharing their experiences and knowledge with their colleagues, which reinforces the interdisciplinary potential of these activities.

Sixteen participants (53.3%) mentioned circus as very appropriated for working with PE in schools. All experts developed their own theoretical framework to legitimate circus in PETE, while most of the other participants relate circus as part of PE cultural background (movement culture).

Twenty-three participants (76.7%) teach circus based on their personal experiences and only seven (23.3%) mentioned prior contact with circus education. On the other hand, the experts interviewed had been working with circus for more than ten years, experimenting with it in teaching, extension and research. This effort is also dedicated to consolidating space for circus in the university and gaining recognition by their peers.

The Acrobat's report shows an example of that, as he connects educational values (cooperation, respect, non-violence, resilience) to circus activities. In his opinion, it is very important to merge circus skills with the educational values of its artistic dimension:

We know techniques for throwing hoops, balls, clubs, etc., but we haven't educated teachers' sensitivity and compassion. [...] This awareness is a way of preparing the individual to live in peace, with love, in non-violence, in beneficial action. To live in truth. Circus can also develop sensitivity through games, for example: I'm balancing in two high (on the shoulder of a colleague) and I fall backwards but there are several people in the back to hold me. [...] These human values are amidst circus pedagogy in PE. (ACROBAT, Lines 738-757).

The lack of information (guidelines, references, etc.) and continued education on circus instruction were constantly reported. However, various sources were indicated in order to plan such incursions (Table 1):

Table 1 - Sources more commonly accessed

Sources	Participants	%
Scientific articles	30	100%
Books, manuals and unpublished documentation	30	100%
Videos and images (internet)	22	73%
Short-term courses, camps and informal education	19	63%
Self-practice	18	60%
Lectures and scholar events	17	57%
Specialized websites	15	50%
Observation of circus artists and companies' training	14	47%
Others	2	7%

Source: content analysis of interviews and questionnaire results.

Scholar articles, books and technical manuals are the major source. The experts recommended that taking part in circus artistic workshops and experiences with other performing arts is very important to inspire new ways to teach circus in PETE. In addition, observation of circus artists' training, attendance to circus shows and updated online resources (videos, tutorials, etc.) were also advised. Finally, they suggested regular exchange with other researchers and professionals, not only from PE but from performing arts, history, and pedagogy.

4 DISCUSSION

The number of professors and institutions found teaching circus in PETE is low in relation to the total number of PE higher education courses in Brazil. As a recent working topic at the university (LEROUX; BATSON, 2016), it presents different stages of implementation, from isolated initiatives to consolidated teaching and extension programs. This is common when it comes to curricular innovation (HASANEFENDIC *et al.*, 2017).

Professors' general premise is to innovate in traditional sports-based PETE curricula. These arguments also motivate circus teaching in PE classes in Spain (INVERNÓ, 2003), France (SIZORN, 2014) and Australia (BOLTON, 2004).

Most of the participants include circus not by following established curricular guidelines but their personal experiences and preferences. The Contortionist explained that there are ideological conflicts regarding the implementation of circus in PETE. For her, this is a conflict between the modern concept of science and art and suggests an expansion of PE's framework (technical, moral and ethical perspectives) towards arts and aesthetic education. In addition, she pointed out that even though circus has a strong historical presence in Brazilian society, it is still treated as a marginal culture. There is prejudice towards some aspects of circus knowledge as it enters the university (e.g. the tradition of oral education and knowledge transmission), which influence academic decisions, such as the implementation of circus in PETE curriculum.

Although specific literature has largely increased in the last decade, professors still notice lack of circus pedagogy orientations for teacher education (ONTAÑÓN; DUPRAT; BORTOLETO, 2012; FEDEC, 2017). In addition, as participants also reported lack of opportunities for continued education, this may contribute to keep circus instruction based on sports models.

In fact, Garcia (2013) and Sizorn (2014) report a similar tendency in France. Without specific PE guidelines for circus pedagogy, teachers resort to gymnastics teaching methodology. The historical interchanges between circus and gymnastics (HAUFFE; GÓIS JUNIOR, 2014) facilitate such approaches. Sports pedagogical progressions are valid for circus acrobatic teaching but do not reach the artistic nature of this art. The product of this approach is “circus gymnastics”, a term mentioned by part of the non-expert participants. It represents a gymnastics practice composed of circus apparatus and techniques, with no poetic/artistic features rather than a choreography with demonstrations of abilities.

The undermining of circus artistic dimension can lead to silent ‘sportiation’ of circus instruction in PETE (SIZORN, 2014). One possible consequence is the propagation of a misinterpreted concept of this art in PE service.

The main problem is that while art pushes one to go beyond the restrictions of technical codes in search of poetic self-expression, sport establishes models of operation. Artistic creativity allows different forms of exploring the body and movement possibilities (PEIGNIST, 2009). Circus learning should provide physical literacy and raw material for creation but also teach how to create symbolic meaning (artistic abstractions) for such actions (LEHN, 2016). So, the core of circus pedagogy in PE should teach the students how to combine acrobatic physical abilities and movement artistry with poetics and self-expression, instead of just importing different techniques to gymnastics.

The participants were unanimous about interest and participation of undergraduates in circus classes. They also emphasized gender equality in participation, also observed by Kriellaars *et al* (2019) in analyzing the teaching of circus for children (primary education) in Canada. The Aerialist commented on these educational possibilities of circus practices:

[...] educational principles are present in the circus cultural heritage, on the richness of its imaginary, on the social values developed in the relationships between artists, companies and audience. So, there are many ways to learn about human values, ethics and aesthetics in circus practice. (AERIALIST, lines 485-496).

In PETE, the study of circus may benefit from analyzing the symbolic dimension of its disciplines (TUCUNDUVA, 2015). This could address each practice on how it relates expressive resources to technical movements or the use of specific physical abilities. The expression of each discipline is impregnated by circus culture and other interactions with society. Such analysis stimulates research on different topics of this art to produce more coherent pedagogical resources for working with PE. As a result, the inclusion of circus in PETE would go beyond techniques and gain complexity. Plus, in traditional perspectives of PE, the analysis of motor learning, physical literacy or acrobatic conditioning in circus learning can provide interchanges with other PETE disciplines.

For example, the study of trapeze acrobatics in PETE could debate the possible interactions among students when facing common challenges, the different ways to interact with audience both in traditional (e.g. overcoming challenges) and contemporary circus (e.g. dramaturgy), the mindset analysis of risk taking and performing aerial skills, the physical conditioning prerequisites for trapeze practice or games in which the student can interact with the cultural manifestations of trapeze in circus history (e.g. the history of trapeze artists in different circus companies).

The activities taught by the participants (group, ground and aerial acrobatics, balance and juggling) are the most popular circus practices in Brazil (CORSI; DE MARCO; ONTAÑÓN, 2018). Group acrobatics and juggling are among the most common circus activities in PE classes, due to easier access to equipment and larger participation of children (INVERNÓ, 2003).

Teaching, research and extension projects help professors to consolidate circus studies and engage the university community, a good strategy to show results of an ongoing process of curriculum innovation. In practice, professors promote the involvement of undergraduate students in extension projects instruction, expose results of teaching circus in scientific events, and include this art as part of the syllabi of curricular and extracurricular courses.

5 CONCLUSIONS

Circus is not only a sustainable pedagogical innovation in PETE but also has enough power to stimulate new reflections and interactions with the most elementary foundations of PE. Circus displays the variety of bodies and demonstrates the 'extraordinary' skills one can accomplish. What stands out the most is the ludic dimension of playing with the body and exploring the limits of difficulty for physical abilities, without pre-established paths or regulations. The essence of its creative process lies on finding out what one can do with his/her body and how to create artistic performance with it. In practice, circus combines challenge and skill, whether in flight and safe landing, height and precise balance, propulsion and complex acrobatics.

The educational distinction of circus among other performing arts (and its especial attribute in PETE perspective) is that it puts skill and physical capacity as the main protagonists of performance. Circus expressive, aesthetic and symbolic resources add poetic potency to these protagonists so they can be appreciated as art.

In teacher education, the resultant empowerment when learning the creative process of circus is the most 'extraordinary' aspect of this art. Something that captivates our curiosity is the expression of biodynamic, sociocultural and pedagogical aspects of PE present in circus. So, our findings provide an overview on how this art and its multidisciplinary nature have potential contributions to teacher education.

In PETE, specifically, we found many consistent sociocultural, technical and aesthetic evidences of its role in PE, whether as a record of body and movement knowledge or as a resource for educational exchanges.

With the development of specific pedagogical guidelines this theme can reach larger contributions to the field. This could help teachers to comprehend the historic interactions with PE, the plurality of disciplines that can be explored in classes and how effective such practices are as an alternative to traditional PE activities, and show perspectives of circus research in relation to working with PE.

After our incursion on circus we believe that it can become a promising field of studies in the university by itself. This would contribute to the transmission and recording of circus knowledge for new generations, the education of professionals to act in different spaces of society and, most of all, recognition of the important cultural role of circus in human history.

In PETE, continued education and specific courses are advised. Meanwhile, PE and PETE professors should dialogue with circus professionals and circus family members to get

to know what lies beyond technique or motor learning. This process has helped the diffusion of circus teaching in society for the past 40 years and seems to be a coherent path to set new territories for this art.

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