

# Active displacement and sustainable development objectives applied to education

## Abstract

The United Nations (UN) 2030 Agenda for Sustainable Development was unanimously adopted in September 2015. It presents 17 Sustainable Development Goals (SDGs) to eradicate poverty and protect the Earth, as well as ensure peace and prosperity. Among them, the 4th, which refers to education to improve the quality of life (QL) of people, is the basis of this article relating it to the 3rd on health and well-being, and the 11th which tries to make cities and human settlements sustainable. The objective is to demonstrate that active travel, mainly on foot and in cities, is a different, important and necessary form of Physical Activity (PA) that can be accessed through education. The training of Physical Education (PE) teachers in basic education is essential to achieve this objective.

This paper presents the rationale for the practical application of active travel and contains a literature review that provides different city and author perspectives that reinforce the proposal. The research experience of the HUM653 Group, "Innovation in PA", adds educational innovation and leisure time management to the proposed objective, linking PA with teacher training, culture, the environment, and information and communication technologies (ICT) through activity designs, gymkhanas and GPS circuits, and the QL.

**Keywords:** physical exercise, travel, sustainability, education, teacher training

Volume 5 Issue 4 - 2022

Javier Cachón Zagalaz, María Sánchez Zafra, Déborah Sanabrias Moreno, María Luisa Zagalaz Sánchez  
University of Jaén, Spain

**Correspondence:** María Sánchez Zafra, Faculty of Humanities and Education Sciences, University of Jaén, Paraje de las Lagunillas, s/n, 23071 Jaén, Spain, Tel +34 953 212396, Email mszafra@ujaen.es

**Received:** November 08, 2022 | **Published:** November 24, 2022

**Abbreviations:** UN, United nations; SDGs, sustainable development goals; QL, quality of life; PA, physical activity; PE, physical education; ICT, information and communication technologies; RAE, real academia española; UNOSDP, United nations office of sport for development and peace; WHO, World health organization; RSA, royal Spanish academy; UJA, University of Jaén; NYC, New York city; BeFit, be for best or be fit for fitness; UNESCO, United nations educational scientific and cultural organization

## Introduction

This article aims to transfer to society the practical actions of the HUM653 research group on active travel and sustainable development carried out with teacher training students at the University of Jaén (Spain). The title gives an idea of how to raise awareness among students and teachers in particular and the population in general on how they can contribute to improving QL through PA and sustainable sport and thus contribute to the achievement of the SDGs set by the UN for 2015. The SDGs presented in the UN Agenda 2030 to eradicate poverty, protect the Planet and ensure peace and prosperity are 17.<sup>1</sup>

<https://www.un.org/sustainabledevelopment/es/objetivos-desarrollo-sostenible/>

Among them, those most related to the idea of the study are studied: (3) Ensure healthy lives and promote well-being for all at all ages; (4) Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all; (11) Make cities and human settlements inclusive, safe, resilient and sustainable. The 4th refers to education to improve people's Livelihoods, the basis of this work, linking it to the 3rd on health and wellbeing, and the 11th on making cities and human settlements sustainable, which can be supported by active travel. These three SDGs are the ones most closely related to education and teacher training, as well as to PA and sport, the basis for many facets of health, wellbeing and QL, as well as for improving the livability of cities by advising active and sustainable travel that contributes to less pollution.

The objective is to demonstrate that walking in cities is a different, important and necessary form of PA that can be accessed through education and contributes to sustainability, since it improves the environment by using fewer motor vehicles, optimizes social relations by integrating into the environment and brings individuals closer to the culture, learning about other urban aspects through such displacements. In order to contribute to the achievement of this objective, teacher training is decisive and essential.

## Foundation

This section includes a series of key concepts that support the work as a scientific-academic basis for what we want to demonstrate, such as the importance of active travel, based on sport or sustainable PA, for the improvement of livability in cities. In the literature specialized in education, the term active displacements is used to refer to those that make up school roads or routes to reach educational centers on foot. This study includes, following Murua<sup>2</sup> and Murua Group,<sup>3</sup> Active Cities, which facilitate people's mobility, turning their spaces into active commuting enablers. Murua and his group propose a diverse and compact city, designed to people's stature: transparent ground and second floors to see better, with accessibility, safety and short distances. As areas of intervention they point to the development of active mobility, land use, attractive public space, active design of buildings and facilities for activity. On the other hand, we must point out the Smart City or intelligent city, which is the one that applies ICT with the objective of providing it with an infrastructure that guarantees a sustainable development and increase of the citizens' QL. The dictionary of the Real Academia Española de la lengua,<sup>4</sup> explains that the concept of sustainability applies to something that can be maintained over a long period of time. The notion of sustainability has evolved a lot and although it originally appeared only focused on ecology, nowadays it is inseparable from social, economic, environmental, cultural<sup>5</sup> and educational factors, of which sport is a part. That is why this section includes the UN's contributions in this regard, as well as other characteristics and opinions that corroborate the importance of sport and its sustainable nature. Resolution 70/1

of the UN General Assembly,<sup>6</sup> entitled “Transforming our world: the 2030 Agenda for Sustainable Development”, adopted in 2015, recognizes the role of sport in promoting social progress, the basis for sustainable development.

Sport, therefore, contributes to well-being regardless of age, gender or ethnicity (SDG 3), everyone enjoys it and its scope is unparalleled. In this sense, there are sports activities that unite culture and PA, while benefiting tourism, such is the case of the Word Padel Tour, which takes place in strategic areas of cities, having been the Cathedral Square of Jaén one of its venues in 2018 and 2019. Likewise, sport, combined with the school curriculum, is necessary for a complete education and gives schoolchildren great satisfaction (SDG 4). Finally, through the initiatives of UNOSDP (United Nations Office of Sport for Development and Peace) and its partners, sport contributes to making cities and communities more inclusive (SDG 11). Lemke.<sup>7</sup>

In summary, sport is a sustainable activity for the following reasons: (1) it contributes to achieving many of the SDGs proposed by the UN, (2) companies and sponsors are willing to collaborate in the improvement of clothing, footwear and materials for sports development and provisioning, (3) it has been able to integrate into the cities that offer this possibility by highlighting tourist and cultural aspects that otherwise would not be achieved, (4) active travel has become an important PA in the social, educational and cultural spheres. A sedentary lifestyle, which has traditionally been the social way of life of a human community settled in a fixed location, is nowadays known as the lack of regular PA that has led to an increase in vascular and related diseases. On the contrary, physically active lifestyle habits are behaviours that have an impact on health<sup>8,9</sup> and entail healthy lifestyles: walking everywhere. Inserting PA into active cities helps increase brain power, reduces psychological pressure and increases confidence in body image; prevents respiratory problems and improves asthma; reduces cardiac risk, lowers blood pressure and corrects blood cholesterol; improves bone calcification preventing osteoporosis; increases muscle mass and improves posture; promotes immunity; reduces overweight and improves digestion; maintains and improves flexibility; reduces the incidence of diabetes and stroke. Nowadays, young people, adults and even children are “hooked” to all kinds of screens (generation of heads down), to the detriment of PA, we are obliged to offer easy-to-solve activities that allow more time to be spent on tasks that require movement and less on those that lead to a sedentary lifestyle. This is where education in general and PE in particular have a lot to say.<sup>10,11</sup>

PA is bodily movement that provides basal energy expenditure (walking, running, jumping, playing, dancing or sport). If it is intentional, it becomes physical exercise. Practised without planning or in inappropriate doses, it is one of the main causes of injury and a cardiovascular risk factor, as well as boredom at an early age, hence the importance of education and correct training.<sup>44</sup> The objectives of PA are to educate movement and train through it in order to maintain physical and mental health and improve of QL. PE at school age should have an important presence in the school day in order to alleviate sedentary lifestyles. Walking and running are very popular PA in mild weather environments. Although these activities can be done on the treadmill in the gym, they are a perfect exercise to do outdoors, alone or with others, in the countryside, on the beach or in the city. These types of tasks offer benefits such as improving the immune system, strengthening muscles and reducing the risk of diabetes or high cholesterol. These types of moderate and innovative walks and runs can be implemented with schoolchildren in previously determined areas to avoid contingencies, asking students to wear fun

clothes to make them highly motivating activities.<sup>12,13</sup> School-aged children and young people (6-18 years) should engage in at least one hour of moderate or vigorous PA daily, although unfortunately they are moving less and less, the activity proposed as part of PE lessons and walking to school can become an important PA. In many Danish schools, for example, pupils practice “morning runs” before school starts. Other countries have longer breaks to include PA in the playground or in the gym.<sup>14</sup>

These lessons lay the foundation for young people and adults, up to the age they are able, to do at least two and a half hours of moderate exercise per week, spread out over alternate days or less time every day. They can also do half as much vigorous activity. This is possible by walking around cities at a brisk pace. Older people with poor mobility should also do PA to improve themselves and try to stay active as long as they can. Inactive people should approach the practice of PA, little by little. For the World Health Organization (WHO),<sup>15</sup> health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The maintenance of good health entails the performance of PA, which is necessary to maintain health and improve QL, issues directly related to the reduction in health expenditure, cultural influence and social acceptance of PE, which, focused on achieving healthy lifestyles, has become a hot topic, a link between educational and social aspects.<sup>16</sup> The WHO<sup>17</sup> goes on to say that physical inactivity shares third place with hyperglycemia as a risk factor for mortality worldwide (6%) behind tobacco use (9%) and hypertension (13%). Falls and drowning swell the lists of accidental deaths, and PA is also making interventions to mitigate their harmful effects.<sup>18</sup>

Linking the concepts involved in sustainable development and active travel, the sum of education and teacher training would complete the puzzle. On this point, the Royal Spanish Academy (RSA) dictionary of the Spanish language<sup>5</sup> also includes several meanings: Action and effect of educating. Nurturing, teaching and doctrine given to children and young people. Instruction by means of teaching action. It is also a process of transmitting the traditions or culture of a group from one generation to another, to which should be added the importance of innovation considered as a factor that seeks to make it sustainable, especially as far as PA is concerned. Likewise, with the Spanish child population being the 3rd in Europe in terms of obesity rate, with 34% suffering from obesity, according to Vaz de Almeida,<sup>19</sup> physical exercise and a good diet become a priority to solve this problem, however, up to 80% of school-age children only participate in PA at school according to the Eurydice report of the European Commission. The family, through a correct diet and support for exercise, and the administration, together with the school, by increasing the number of hours of PE classes and with a good implementation of PE at school age, are respectively responsible for this problem.<sup>16</sup> At this point we must consider the importance of teacher training, for which, according to Marcelo,<sup>20</sup> there were three factors that influenced and decided on the importance of such training in society at the end of the 20th century and which continue to have an impact in the 21st century: (1) the impact of the information society, (2) the impact of the scientific and technological world, (3) the internationalisation of the economy. It is a question, in our case, of approaching and enthusing the future teaching staff, students of the Degree of Teaching and of Sciences of PA and Sport, as well as the postgraduate students in PA and of the Master’s Degree in Teaching, who will be able to dedicate themselves to primary, secondary and university teaching, to the knowledge of PA related to education, culture and tourism, as well as to the implementation of activities in cities that enable the insertion and understanding of these in the

implementation of PA and the innovation involved in modifying the format of the educational curriculum<sup>3</sup> and introducing concepts of sustainable activities, especially due to their low cost and the PA that they entail. If we analyse PA in the city, the most common is urban walking, which has its origins in protest demonstrations, but which has evolved towards other possibilities due to changes in the way of life that have taken place in our society with the recognition of running and walking in the streets, which, based on and adapting the idea of García-Cock<sup>21</sup> are: 1. You can walk or run anywhere in the world. 2. You don't need to wear a lot of clothes or shoes when you travel. 3. You make new cultural, geographical and social discoveries (museums, monuments, parks, shops, cafés, people...), and you get to know the city much better or differently. 4. It has the power to think about things you never have time for or to listen to music, as you stop thinking about work or daily worries, so that in that time you only live in the present. 5. You don't have to travel to do exercise, you leave the house doing it. 6. You can improvise if you get lost and it is easy to find your way back to the city. 7. If you get too far you can get back by bus. 8. It's fun, cheap and life-changing. 9. It can be done alone or in a group, with the guidance of a coach or on your own. If you go with a coach you can stop to do other types of exercise with or without music and if you go alone you can look for stations with gym equipment if you choose to do so.

However, in many cities, these journeys are also made on roller skates and/or bicycles. And along these lines, imitating Nordic cities such as Copenhagen, Amsterdam and Freiburg, Seville has become the 5th European capital in terms of urban bicycle use. For innovative educational purposes, between urban walking and running, linking tourism, culture and recreation, games such as gymkhanas can be introduced, in which ICT is also used, marking routes and tracks with smart phones. For example, the research groups HUM653 and HUM238, from the universities of Jaén and Granada, respectively, have specialised in organising urban gymkhanas in both cities, using smart phones as a means of controlling the activity with the aim of finding ICT applications related to the practice of PA. The gymkhana includes activities related to art, history and music, combining the practice of PA with historical and artistic knowledge. The value it brings to education and society is to be a PA made from perspectives, utilitarian, cultural and recreational, becoming sustainable (exposed, applied and disseminated in the European Night of UJA (University of Jaén) researchers, 2017, 2018, which after the hiatus of the pandemic have been recovered in 2022). Walking access to culture is a part of education that should be considered by the education system, especially by its teachers. Leisure activities are increasingly influencing the social development and lifestyle habits of the population. According to García-Ferrando,<sup>22</sup> sport and travel are the most important activities in people's idea of leisure. Over the years, these activities have given way to sports tourism (tourist activities of which some sporting activity forms part: travelling around cities, participation in marathons) or assistance to tourist sport (sporting activities susceptible to tourist commercialisation: Olympics, World Cups, etc.).

Urban and environmental policies that are able to turn environments into favourable contexts for physical activity, as well as individual education and community culture in this regard, have a huge potential to increase the PA of the population.<sup>16</sup> The city can be experienced from different perspectives, highlighting the role of PA in most of them (from safety, mobility and freedom). Following the terminology of the i14 Scientific Association,<sup>23</sup> one could speak of different types of cities, highlighting the walkable city, related to modes of transport (on foot). Playful, specifically referring to cultural and sporting leisure

in the city. Silent and sonorous, as a way of accompanying PA in the city, given the assiduous use of headphones by PA practitioners in the urban context. Imagined, which allows students to approach any of the three activities it includes: cinema, literature and the city. A liveable city, since its architecture and urban planning make it possible to move around safely and comfortably. Wise, when it refers to education. Visited, directly related to the approach to student mobility for cultural tourism and PA. Creative, which includes innovation to link education, PA, culture and tourism in the city. And finally Accessible, which integrates disability and movement, around which some companies that offer adapted sports services arise, which propose expert courses in this line. On the other hand, the users of cities for the performance of PA vary according to age and characteristics. The traditional PA activities of walking, running and jumping have been revived and have become innovative.<sup>24-26</sup> With users in mind, some public and private institutions are collaborating to improve life in cities, making PA and active living sustainable (Irun City Council in the Spanish Basque Country, which has created an urban code for the promotion of PA and active living.<sup>2</sup> The Pan American Health Organization, the EMBARQ Network and the Centers for Disease Control and Prevention are organising the Active Cities, Healthy Cities competition, dedicated to sustainable transport, the environment and the creation of a healthy lifestyle for its citizens. In short, the Healthy-Cultural Itineraries to promote a physically active lifestyle for all citizens is a project that creates or configures properly signposted paths or circuits within the urban or peri-urban core of cities to combat sedentary lifestyles and obesity, promoting access to the culture and history of the locality where they are located.<sup>27,28</sup>

## Literature review

The following databases were used: PubMed; Embase, Scencedirect, Scencedirect, Scielo, Lilacs; Google Scholar; CSIC; Redalyl; Dianet; I+D+i 2016-18 on urban vulnerability; Spanish Ministries of Public Works and Housing; Consejo Superior de Deportes. For the search we have kept the keywords used for the Innovation Project Recorridos urbanos culturales a pie;<sup>29</sup> AF used in teacher training, urban walks and runs; culture, teacher training.<sup>11,30</sup> The following lines list 24 activities that aim to facilitate active travel and sustainable development, supported by entities, authors and works that provide the benefits of urban walks or other similar actions carried out with sustainable PA. From general to educational, and from international to national:

1. Studies on daily or forced mobility, developed in Mexico,<sup>31</sup> which are the set of journeys that involve going somewhere and returning to the usual place of overnight stay on the same day.
2. In Mexico, the School Transport Programme is implemented as part of the Mexico City Green Plan, with the objective of reducing the number of private car trips to schools, to free up space on the streets and avoid the emission of pollutants, guaranteeing the safe transport of children and supporting the daily family and urban dynamics. This programme avoids the pollution caused by 25% of the cars that circulate daily during school entrance and exit times.
3. Open Streets Programme in Santiago de Chile, which provides public spaces, freeing a minimum of 2 km from automobile traffic for free access to activities such as jogging, cycling, skating and skateboarding.
4. New York City (NYC) with hundreds of parks, athletic fields and recreation centres, thousands of miles of greenways, walking trails and bike paths, trying to engage citizens in

- PA because nearly 30% of NYC residents admit they do not exercise and physical inactivity kills 6,300 New Yorkers each year. To achieve this, the BeFitNYC (Be for best or be, Fit for Fitness) programme was designed, which is free or very low cost ([www.nyc.gov](http://www.nyc.gov)) and offers more than 180 weekly PA classes that provide movement in a fun and motivating way, and allows you to invite friends via Facebook. There are also other activities such as the Make NYC Your Gym campaign (walk or cycle to work or school, use public transport and get off a stop or two before your destination to walk the rest of the way) and WalkNYC walking clubs, after-work running groups and Shape Up NYC-style fitness classes (including aerobics, yoga, pilates and zumba, incorporating music into PA).
5. The same programme is also applied in Sydney, where practitioners march and run through the streets, stopping in squares or parks to do some form of aerobics or zumba, also to music.
  6. School marches developed in some South American countries that require from children moderate physical effort, adaptation to the musical rhythm and perfection in their movements (Siloé, Chile).
  7. The patterns of change of residence in Bogotá to the interior of the city are collected by Uribe & Pardo,<sup>32</sup> who believe that these moves are related to aspects associated with social mobility, as they seek to improve their residences. This is not a specific study of the use of cities for PA, but it does analyse factors of social and spatial mobility worth considering (gaining time, improving relationships, etc.).
  8. Car Free Cities Club network of cities, to promote sustainable urban mobility by supporting the most environmentally friendly modes of transport (walking and cycling), according to popular clamour, to avoid the abusive use of the car. It was set up under the auspices of the European Commission: <http://www.edc.eu.int/cfc/members.html>
  9. Sustainable Mobility and Public Space Plan in Vitoria-Gasteiz (Spain), European Green Capital 2012, which has very favourable conditions for pedestrians, bicycles and public transport to play an important role in the daily mobility of its citizens. Its aim is to reduce private car journeys and favour pedestrian and cycle journeys with spaces for people. This is how the “superblock” or more humanised urban cell for living.<sup>33</sup>
  10. Closer to the educational sphere is the School Road, a PA developed in Zaragoza (Spain) as a safe itinerary that children can follow on their way to and from school. For its implementation, Román & Salís,<sup>34</sup> developed a guide, subsequently used in Barcelona, Huelva, Córdoba, or San Sebastián. <https://www.zaragoza.es/ciudad/caminoescolar/que.html>
  11. Similarly, in Santander (Spain), the Educational Itineraries are an effective tool for learning about the history of the city in a fun and relaxed way. They were launched by the City Council for students from 3rd to 6th grade of Primary School in 2012, as a regular route through the historic centre of the city. <http://www.20minutos.es/noticia/1245657/0/#xtor=AD-15&xsts=467263>
  12. Along these lines is the Programme on children’s mobility in the city, implemented in Pontevedra (Galicia, Spain), developed by Macenlle,<sup>35</sup> chief intendant of the city’s local police force, based on that devised by the Italian pedagogue Francesco Tonucci. The idea was to promote the personal autonomy of children by offering them a space of their own; to establish alternative models of sustainable mobility from childhood; to promote healthy habits, traffic flow and road safety, but above all social cohesion that points out that children are part of the tribe, of the city, and the city takes care of them. They succeeded.
  13. Walking routes in and around cities, bringing visitors to monuments or parks. Of varying length and duration they include walks, runs, marathons and half marathons in many cities. For example, the famous San Antón race in Jaén (Spain) held in January each year, which will celebrate its 40th edition in 2023. It is considered a festival of tourist interest in Andalusia. <https://carrerasanantonjaen.com/>
  14. PE Day in many Spanish cities, which aims to support the proposal of the Ministry of Health, the European Parliament and the WHO to include more hours of PE in the educational plans of young people, something that has already been achieved in Andalusia. <http://www.marca.com/blogs/espanasemueve/2015/04/20/nueva-edicion-del-dia-de-la-educacion.html>
  15. The Spain Moves programme, promoted by the Supreme Council for Sports, which has been joined by the General Nursing Council and city councils such as Madrid (Madrid moves or Muévete).
  16. Regular and healthy PA programme of the Segovia City Council after finding out about the situation of sport at school age.<sup>36</sup> This programme was coordinated by the PE teachers on the basis of an agreement between the City Council and the University of Valladolid.
  17. With the Itineraries through important Andalusian cities, such as Granada, Seville, Malaga or Cordoba. <http://www.andalucia-web.net/cordoba.htm>, the work “The beautiful face of Andalusia” (Department of Tourism and Trade of the Regional Government of Andalusia) analyses the cities from a cultural and tourist point of view.
  18. In other less important cities such as Martos (Jaén), a street sports programme known as “Martos city of alternative sports”<sup>37</sup> has been set up, which has got people of all ages moving, with the consequent personal, tourist and economic benefits. These sports include: Kin-Ball, Kubb, Tchouckball and Goalball, as well as tennis and cross country on foot or by bicycle. (<http://www.ideal.es/deportes/jaen/martos-consolida-ciudad-20170727001750-ntvo.html>).
  19. Non-architectural cultural aspects can also refer to literature, in such a way that poems containing social or historical aspects deserve to be used to get to know other faces of the cities. Such is the case of the anonymous poetry “Tres morillas me enamoran en Jaén”, in Cancionero de Palacio (15th/16th century), which relates the Arab origins of the city (Xauen). Likewise, some itineraries are completed with traditional songs that bring students closer to the knowledge of the context from other perspectives (<http://lapoesiadelacopla.blogspot.com.es/2011/03/cordoba-de-mis-amores-cordoba-tierra.html>)
  20. Urban Walking Projects in some Andalusian cities, including Cordoba<sup>35</sup> “AF y Patrimonio Histórico. Cordoba et al.”, presented at the II International Congress on Research and Teaching of PE at the University of Granada; or those presented by Cachón et al. La marcha y la carrera urbana”, and Castro et al. (2016) “Un paseo por la Córdoba andalusi”, at the IV Congreso

Internacional Ciudades Creativas de la Facultad de Ciencias de la Información de la Universidad Complutense de Madrid and the Asociación Científica ICONO14, also very celebrated.

21. Urban marches that, in addition to getting to know the city on foot to reach artistic monuments, lead to squares, significant buildings, urban parks or beach areas for other types of exercise, such as those in NYC and Sydney, which can be carried out with our schoolchildren in any city and country, guarantee the sustainability of school sport.
22. Didactic proposal in the Faculty of Humanities and Education Sciences of the UJA in the field of teacher training in Primary Education (Didactics of PE II) and Secondary Education (subject Learning PE I in the Master's Degree in Teaching), from 2011 to 2017, as a didactic innovation project. The methodology starts with a long period of exploratory observation which is completed with the opinions of the participants in the form of a semi-structured interview (social research, carried out before the start and at the end of the march) and ends with the design of two Urban Walks, and their staging, one to get to know the city in general, measure distances, orientation and situations of buildings and monuments and the other to access the city centre by visiting the museums, culminating in a visit to an educational centre.
23. Urban cycling routes, for regular or recreational-cultural use, in which case they give rise to cycle touring.
24. Activity "walk" carried out by Prieto,<sup>38</sup> during several courses with different children with autism in Majadahonda (Madrid), for whom 30 or 40 minutes a day of walking reduce stress and prevent heart diseases. The same is recommended for the elderly or people with reduced mobility, who instead of remaining absolutely sedentary in the day centres set up by the Administration for them, should do this type of activity.

Of the 24 contributions in the review, eight are international and the rest are carried out in Spain. All of them seek to promote active travel for different types of people and with different objectives, however, they all have a common goal, to improve the QL of people in cities using sustainable activities such as PA.

Urban parks and promenades are other social and cultural environments for walking. There are very significant parks such as the Retiro Park in Madrid, the Parque Güell in Barcelona or the Parque de M<sup>a</sup> Luisa in Seville which have distances for walking and running. And there are promenades that have the same advantages, such as those of Malaga, Cadiz or Almeria in Andalusia, San Sebastian in the Basque Country (Spain), Valparaiso and Viña del Mar in Chile, Sydney in Australia, or the Malecon in Havana. In smaller cities there are also urban and/or maritime spaces away from cars that are used for other types of walking routes, even if only to reach and enjoy them.<sup>28</sup>

## Discussion

With the importance currently being given to entrepreneurship and sustainability and their effects on the economic structures of cities, some authors use the concepts that appeared in the first decade of the 21st century around creative cities, knowledge economies or Smart Cities, smart cities with sustainable, innovative and efficient spaces that are more technological, green and walkable.<sup>39</sup> Although others such as Watts & Urry<sup>40</sup> have already shown that, in a walking journey, the chances of unexpected interaction with other people are much higher than in any other mode of transport.<sup>28</sup> With the proposals for rationalising transport in the city (car free Cities Club network; Car

free residential areas, autofrei stadquartiere), which aim to make car use the exception rather than the rule, our proposal to walk in cities to get to any place occupies a prominent role. Sustainable mobility is expressed through the least polluting and least energy-intensive modes of travel, such as walking and cycling.<sup>41</sup> It is an activity that, if learnt and internalised at an early age, becomes essential over time. The concern for different learning in our localities is evidenced by the International Conferences on Learning Cities, organised by United Nations Educational, Scientific and Cultural Organization (UNESCO) (Beijing, 2013 and Mexico City, 2015), whose conclusions praise the proposals in the search for economic-cultural prosperity and sustainable development. Considering the importance of these actions, the direct intervention of teachers and technicians in sport, tourism and culture in this type of event is even more decisive in order to achieve innovative travel and sustainable PA.<sup>42-45</sup>

## Conclusion

Most of the authors reviewed include activities that allow people to move around cities without a motor, bringing their spaces closer to all ages. Technical studies on the most humane use of cities agree on the importance of protecting the urban environment and achieving sustainable mobility, using the least polluting and least energy-consuming modes of transport (walking or electric vehicles). Urban walks are decisive in bringing the population closer to culture and tourism while at the same time carrying out low-cost and sustainable PA. The training of teachers and the transmission of this knowledge to their future students is fundamental to improve the use of cities and the QL, developing PA, culture and tourism with an interdisciplinary and sustainable character.

## Acknowledgments

This article was made possible thanks to the support of the HUM653 research group.

## Conflicts of interest

The authors declare that there are no conflicts of interest.

## Funding

None.

## References

1. Sustainable development goals funds (SDGF). Sustainable Development Goals Fund. New York: UN; 2019.
2. Murua JM. Urban Sasoi Code. Irún City Council: Irún-Gipuzkoa Spain: 2014.
3. Group Murua. Active cities environments for healthy living. Active people-Active places. X NAOS Convention. Madrid; 2016.
4. RAE. Dictionary of the Spanish language. 2019. 2022.
5. Zaragoza E. Sustainable mountain clothing? Five tips to guide you! *Sporting Goods*. 2019;22.
6. UN. 2030 Agenda for Sustainable Development. Sustainable Development Goals. UN General Assembly. 2015.
7. Lemke W. The role of sport in achieving the Sustainable Development Goals. *Unchronicle. Sport aims for the goals*. 2016;53(2).
8. Hernández A, Jurado MI, Viana BH, et al. Readings. *PE and sports*. 2005;90:1-10.
9. Gómez Puerto JR, Da Silva M, Viana BH, et al. The importance of bike fittings in the prevention of cycling injuries: practical applications. *Rev Andal Med Deporte*. 2008;1(2):73-81.

10. Zagalaz ML. Sustainable sport in the face of the objectives of the 2030 agenda, from the perspective of active and cultural displacement. Keynote speech. AFIDE 19 Conventions and IV Sport and Society Workshop. 2019a.
11. Zagalaz ML. Sustainable and educational FA in the face of the objectives of the 2030 agenda. Active and cultural displacements. Paper at the XIII International Congress on Education and Innovation. Association for the Promotion of Education in the Digital Society (PromoEDUCA) and the Department of Didactics and School Organisation. University of Granada; 2019b.
12. Zagalaz ML. Body image from different perspectives. Special attention to medicine, psychology, nutrition and PA. Proceedings of the 13th International Congress on Sport and Health Sciences (CD and online). 2017b.
13. Zagalaz ML. Sustainable Sport. Inaugural Conference. CIEF Congress. 2021.
14. European Commission. EURYDICE Report on PE and Sport in Schools in Europe. Education, Audiovisual and Culture Executive Agency (EACEA). 2011.
15. WHO. Constitution of the World Health Organisation. Ginebra: WHO. 1946.
16. Zagalaz ML, Cachón J, Lara AJ. Fundamentals of physical education programming in primary education. *Síntesis*. 2014.
17. WHO. World Health Report. Ginebra; 2002.
18. Zagalaz ML. Recovering traditional PA: walking, running, jumping, in urban and rural environments. Proceedings of the XII International Congress on Teaching PE and School Sport. Towards an hour of daily PE to generate an active and healthy life and to prevent and intervene in sedentary lifestyles and obesity. Spanish Federation of Associations of PE Teachers (FEADEF), Villena City Council, University of Alicante and Miguel Hernández University; 2017a.
19. Vaz de Almeida MD. University of Navarra International Food and Health Award. 2014.
20. Marcelo C. Teacher Training for Educational Change. EUB. 1995.
21. García Cock H. 5 things I like about running in the city. 2019.
22. García Ferrando M. Tourism-Leisure-Sport and the Spanish Science-Technology-Business System. *Leisure Studies Papers*. 2002;20:31–45.
23. i14 Scientific Association. Proceedings of the IV International Congress on Creative Cities. 2016.
24. Cachón J, Zagalaz ML. Innovation, Practices and Physical Activity (IPAF). Urban cultural walking tours. Innovation. Plan for Innovation and Encouragement of Good Teaching Practices at UJA 2016-2019. 2017.
25. Castro R, Valdivia PA, Zurita F, et al. A stroll through Andalusian Córdoba. Communication. In Proceedings of the IV International Congress on Creative Cities. 2016.
26. Castro R, Zagalaz ML, Villena M, et al. Physical Activity and Historical Heritage. Córdoba. Poster at the II Congreso Internacional en Investigación y Didáctica de la EF (s/p). ADDIJES. 2017.
27. Martínez S. PROARTE Blog. 2017.
28. Zagalaz ML, Cachón J, Sánchez Zafra M, et al. Sustainable and educational physical activity in the face of the goals of the 2030 agenda. *Active and cultural mobility*. 2020;17:229–243.
29. Cachón J, Zagalaz ML, Lara A, et al. Walking in the city. Walking and urban running. Communication in Proceedings of the IV International Congress on Creative Cities. 2016.
30. Cachón J, Lara A, Ubago JL, et al. Walk more towards active Leisure, Tourism, Culture and Education. *Sustainability*. 2019;11:3174–3186.
31. Casado Izquierdo JM. Studies on daily mobility in Mexico. 2015.
32. Uribe Mallarino C, Pardo Pérez C. The lived city: spatial mobility and representations of social stratification in Bogotá. *Universitas Humanística*; 2006;62:169–203.
33. Escudero Achiaga JC. Vitoria Gasteiz: towards a more livable city through a new paradigm of sustainable mobility. 2015.
34. Román M, Salís I. School pathway. Steps towards children's autonomy. Zaragoza: GEA21. Study and alternatives group. Madrid: Ministerio de Fomento. Spanish Government. 2013.
35. Macenlle D. Mobility in the Ciudad de los Niños. Pontevedra: Information dossier. 2013
36. Manrique JC, López VM, Monjas R, et al. Implementation of a social transformation project in Segovia (Spain): development of a city-wide school sports programme. *Apunts EF and Sports*. 2011;105(3):58–66.
37. Lara AJ. Promotion of alternative sports as a means of education. *J Sport Health Res*. 2020;2(1):3–6.
38. Prieto prieto F. As a basis for AF, a walk? 2015.
39. Cebrián I, Ingelmo R, Martínez FJ, et al. Smart Cities White Paper. Madrid: Smart cities. 2012.
40. Watts L, Urry J. Moving methods, travelling times. *Environment and Planning D. Society and Space*. 2008;26(5):860–874.
41. Miralles C, Marquet O. Compact city, the other face of sustainable mobility. *Ambienta Journal*. 2012;100:16–27.
42. WHO. Global Strategy on Diet, PA and Health. 2014.
43. Ministry of Education, Culture and Sport, MECED. Royal Decree 126/2014, of 28 February, establishing the basic curriculum for Primary Education. Madrid; 2014.
44. Zagalaz ML. PE: Different approaches: are PA and CSD a cliché or a reality? In Actas al IV World Congress of Sport in School Age and International Seminar of PE, Sport Schools and Psychomotricity. A Coruña: Sports Training Sport. 2014.
45. Spanish Agency for International Development Cooperation (AECID). V Master Plan for Spanish Cooperation, 2018/2021. Madrid: Ministry of Foreign Affairs, European Union and Cooperation. 2019.