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Service-Learning and promotion of physical activity in social centres during the initial training of Physical Education teachers

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KEYWORDS

Active lifestyle Teacher training Healthy habits Active methodology

ABSTRACT

Pre-service teacher training faces the challenge of implementing training models that allow for quality preparation of future Physical Education teachers, so that they can develop professional competences linked to real contexts while promoting regular physical activity and healthy habits in society. The aim of this work is to analyze the experience of Service-Learning in different social centers with the aim of promoting an active lifestyle and generating psychological and interpersonal well-being. To this end, a qualitative methodology has been used through an intrinsic case study in which semi-structured in-depth interviews have been conducted with three teachers in charge of developing Service-Learning projects and three focus groups with ten students aged between 20 and 30 who have taken subjects in the Physical Education section of the Bachelor's Degree in Education. The most relevant findings indicate that Service-Learning interventions involving physical-sport activities in social centers have a positive effect on the development of an active lifestyle, contribute to the development of teaching competencies, and allow students to engage with other non-academic social contexts while fostering civic engagement. The main conclusion drawn is that this model promotes collaboration between the university and other social entities, while encouraging an active lifestyle and promoting regular physical activity among specific groups that do not typically engage in it.

Aprendizaje-Servicio y promoción de la actividad física en centros sociales durante la formación inicial del profesorado de Educación Física

PALABRAS CLAVE

Estilo de vida activo Formación del profesorado Hábitos saludables Metodología activa

RESUMEN

La formación inicial del profesorado se enfrenta al reto de implementar modelos formativos que permitan una preparación de calidad en el futuro profesorado de Educación Física, para que estos puedan desarrollar las competencias profesionales vinculadas a unos contextos reales mientras se promociona la práctica regular de actividad física y los hábitos saludables en la sociedad. El objetivo del trabajo es analizar la experiencia de Aprendizaje-Servicio en diversos centros sociales con la finalidad de promocionar un estilo de vida activo y generar bienestar psicológico e interpersonal. Para ello se ha empleado una metodología cualitativa mediante un estudio de caso intrínseco en el que se han realizado entrevistas semiestructuradas en profundidad a tres profesores encargados del desarrollo de proyectos de Aprendizaje-Servicio y tres grupos focales con diez estudiantes de edades comprendidas entre los 20 y 30 años, que han cursado asignaturas de la mención de Educación Física en el Grado de Educación. Los resultados más relevantes muestran que las intervenciones de Aprendizaje-Servicio de actividades físico-deportivas en centros sociales tienen un efecto positivo en el desarrollo de un estilo de vida activo, se contribuye al desarrollo de las competencias docentes y permite que los estudiantes conozcan otros contextos sociales, no académicos, y adquieran un compromiso conciudadano. La principal conclusión que se extrae es que este modelo promueve la colaboración entre la universidad y otras entidades sociales mientras se favorece un estilo de vida activo y se fomenta la práctica regular de actividad física de determinados colectivos que no la realizan de manera habitual.

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Currently, various organizations and scientific evidence highlight the need for the population to engage in more physical activity in their daily lives (Gough et al., 2020; Roman-Viñas et al., 2018). Although the multitude of benefits associated with physical activity are well-documented (Bailey, 2018; Bailey et al., 2009; Kirk, 2013), the concerning levels of physical inactivity and sedentary behaviour within the population emphasize the importance of physical activity as a fundamental element for maintaining optimal health and personal, physical, and social well-being at any age (Kirk, 2006; UNESCO, 2015; Warburton & Bredin, 2017).

In this regard, physical activity becomes the primary tool for the education and prevention of diseases and complications that may affect individuals' quality of life. According to the World Health Organization (WHO, 2021), physical activity should be practiced at any age, and it provides a set of recommendations to guide this. For children and adolescents, it is recommended to achieve a minimum of 60 minutes per day of moderate or vigorous physical activity, with a particular focus on activities that improve cardiorespiratory and muscular functions, as well as bone health. For adults, WHO recommendations suggest accumulating at least 150 minutes per week of moderate-intensity aerobic activity or 75 minutes of vigorous-intensity aerobic activity, along with activities that enhance muscle strengthening, functional balance, and strength training. Therefore, it seems indisputable that various institutions and society must address this widespread health and social issue and establish strategies to make physical activity a fundamental pillar of health.

From an educational field, physical activity is the primary tool for the education and prevention of conditions that may affect students' development, quality of life, or life expectancy (Pérez-Pueyo et al., 2019). However, in this context, it is more appropriate to link health promotion from a salutogenic approach, where its practice is integrated into students' lifestyles (Antonovsky, 1996). In this way, the school-society partnership can mutually benefit from initiatives that positively impact society (Yook, 2018) and contribute to the holistic development of students. To achieve this, initial teacher training faces the challenge of implementing educational models that ensure high-quality preparation for future physical education teachers. Therefore, it is essential that they develop professional competencies in real-world contexts while promoting regular physical activity and healthy habits within society. One of the most suitable pedagogical models to achieve this is Service-Learning (SL) (Bringle & Clayton, 2021; Chiva-Bartoll & Fernández-Río, 2022; Linker et al., 2019), through which students acquire meaningful curricular knowledge while providing a service to the community with a civic commitment to build a more just society, in this case through physical and sporting activities that positively impact health (Sánchez-Matas et al., 2023) and improve the lives of others (Batlle, 2020).

Service-Learning as an educational model for promoting physical activity

In recent years, education experts have shown a particular interest in the application of training models that foster active,

shared learning experiences among participants, with Service-Learning standing out as a prominent model (Chiva-Bartoll & Fernández-Río, 2022; López-de-Arana et al., 2023; Santos-Pastor et al., 2021). This educational model represents a departure from traditional teaching methods and is characterized by the transfer of academic knowledge to a community context, with the aim of addressing a recognized social need and reflecting on how such interventions generate benefits for society (Buchanan et al., 2002; Chiva-Bartoll et al., 2020; Lobode-Diego et al., 2024). In these interventions, both students and the community receiving the service should benefit, ensuring that they address the professional needs of future physical education teachers while promoting social and civic responsibility in a real-world context (Dharamsi et al., 2010; Santos-Pastor et al., 2018). From this perspective, the implementation of the SL model emerges as an effective strategy in the initial training of Physical Education teachers to tackle public health and social issues, such as physical inactivity (Pérez-Pueyo et al., 2019). Through this SL approach, the aim is to address sedentary behaviors by engaging participants in physical and sports activities (Gómez-Rijo, 2024; Lobo-de-Diego et al., 2024; Pérez-Pueyo et al., 2019).

The SL approach presented in this study aims to promote physical activity and the adoption of an active lifestyle, drawing on the knowledge and skills acquired throughout the initial training of physical education teachers. As future educators provide a service to the community, they will seek to create positive experiences of physical activity while developing professional competencies that are difficult to achieve in other contexts or settings. The impact of SL with various groups in social centres (e.g., older adults, individuals with health conditions) can influence physical, mental, and social well-being, while also offering deep experiences and learning for both university students and the recipients of the intervention (Gómez-Rijo, 2024; Ramis, 2014). The interactions and experiences established between trainee teachers and individuals in social centres can promote and foster the adoption of an active lifestyle, ultimately improving the quality of life of participants (Gómez-Rijo, 2024). In fact, supervised and coordinated physical activity carried out by university students can lead to improvements in self-confidence and self-esteem for these population groups (Carson & Raguse, 2014). For this to be effective, it is essential that both participants and recipients feel valued within the SL intervention. After its implementation and subsequent reflection, behaviour changes may occur, not only in the students but also within the communities of the recipients (Lleixà & Ríos, 2015).

The present study

Previous research on SL with social groups has highlighted emotional and social benefits that can be achieved through this methodology (Gómez-Rijo, 2024; Pérez-Pueyo et al., 2019; Santos-Pastor et al., 2021). Additionally, the involvement of future Physical Education teachers in training processes linked to physical activity promotion projects for older adult populations holds particular significance for two key reasons. First, it fosters the

connection of students to real-world contexts where they can engage in actions related to their profession, including the design, development, and evaluation of physical activity programs tailored to participants' needs. Such experiences not only facilitate student learning but also provide a valuable service to the community (Chiva-Bartoll & Fernández-Río, 2022; Gutiérrez et al., 2019). Essentially, this approach involves applying formal learning in a community context, contributing to the future teachers' civic education. Second, the implementation of educational initiatives that effectively link physical activity and health must be grounded in a thorough understanding of the context in which they are applied, ensuring that they genuinely promote participant adherence to physical activity and the development of active, engaged individuals. As future educators, it is crucial to know how to adapt activities to different contexts, and participating in SL projects with older adults is a highly positive opportunity for teachers to learn how to modify activities for different participants and transfer this approach to any context. This involves critically assessing the use of physical activities to identify what type of activity suits each context and individual, and ultimately, enabling the transfer of this knowledge to the school setting.

Building on this framework and the educational goals of such experiences, the present study has three main objectives:

1) to analyse the impact of developing a SL experience, promoted by both faculty and students of the Bachelor's in Education program; 2) to encourage regular physical activity habits among the recipients and foster an active lifestyle while promoting psychological and interpersonal well-being through the use of physical activity as a means of enhancing social relationships; and 3) to contribute to the learning of future educators regarding the essential considerations when designing educational proposals that incorporate adapted physical activity for participants.

Method

An exploratory and intrinsic case study was conducted with the aim of gaining a deeper understanding of the studied reality, based on the perspectives and voices of the university students and faculty who participated in the SL intervention (Álvarez & San Fabián, 2012; Stake, 2005).

Participants

In this study, the participants included ten students (40% women and 60% men) from the Physical Education specialization of the Bachelor's in Education program at a public Spanish university, aged between 20 and 30 years. These students participated in SL projects with individuals from social centres during the 2022-2023 and 2023-2024 academic years, within two Physical Education specialization courses. The selection of these participants was carried out through a non-probabilistic, convenience sampling method, where subjects were chosen based on their availability and the accessibility of the research team, as well as their fulfilment of the following criteria: 1) being a student in the Physical Education specialization of the Primary Education degree and 2) having participated or

currently participating in SL projects during the 2022-2023 or 2023-2024 academic years. Additionally, three faculty members (100% male) aged between 29 and 62 years participated. These faculty members were involved in the design, implementation, supervision, and assessment of the SL projects within the Physical Education specialization courses. They are university professors with advanced postgraduate degrees and extensive teaching experience in higher education.

Context and beneficiaries of the SL project

The intervention was carried out by physical education students and took place in senior centres (the Assisted Living Residence for the Elderly and the Association of Relatives of Alzheimer's Patients Centre called AFA), which have implemented "active aging" programs. It was also developed with two groups of older adults from the Cáritas and Cruz Roja Segovia associations. A total of 120 individuals from the assisted living centres participated in this project. The proposal included motor activities focused on flexibility, particularly during group sessions, exercises involving throws and catches with soft materials, as well as dances and rhythmic steps. For groups with greater autonomy, a walk around the Segovia area was also organized, and each session ended with simple stretching exercises. The role of the university students varied depending on the session context. Generally, after a couple of days of observation and support, they coordinated the pre-planned sessions, which were later approved by the centre's instructors and university faculty. The group attending the AFA centre only provided support for activities designed by their own instructors. The groups of older adults benefiting from this intervention and participating in the sessions ranged from 15 to 25 participants, depending on their level of autonomy and the duration of the sessions, which lasted approximately 60 minutes.

To ensure the reliability of the SL model followed, the proposal has been designed to meet the following characteristics, in line with the recommendations established by Eyler and Giles (1999), Furco (2001), Lehne et al. (2019), and Meidl and Sulentic (2018): a) clear Learning and Service objectives, b) interaction between participants and the community, c) activities that promote social inclusion, d) critical reflection and learning; e) continuous progress assessment, f) appropriate training for volunteers or students, g) assessment of community impact, and h) focus on sustainability.

Instruments

Two qualitative instruments were used to collect information in this study. On one hand, a semi-structured interview and, on the other, a focus group. The first instrument was applied with university faculty, following a structured guide that covered five dimensions: the role of the teacher, the SL process, relationships with the organizations, emotions, and the perceptions and satisfaction with the experience. Meanwhile, focus groups were conducted with university students who participated in the SL projects during the 2022-2023 and 2023-2024 academic years. A guide consisting of six dimensions was followed, addressing

 Table 1

 Coding established for the identification of focus groups and interviews

Type: Focus group or interview	Type of participant	Identifier no.
Е	University students (ES)	From 1 to 6
	University professors (P)	

Note. Example of coding for a focus group with university students: EES1, p. 1 = Interview 01 with university students, page 1.

the perceived purpose of the project from the students' perspective and initial contact, their decision-making capacity, social and civic responsibility, social awareness: empathy, help, and collaboration, learning outcomes, and the ability to engage in projects that improve society, as well as the project's approach from an academic standpoint. For example, some of the questions addressed in the focus groups with students for the dimension "Learning and capacity to engage in projects that improve society" were: 1) What have you learned from your participation in the project?; 2) What do you think are the benefits of this SL intervention?, Do you believe its impact on society will be lasting?; 3) Do you consider what you've learned to be useful for your professional development as a Physical Education teacher?; and 4) How would you implement what you've learned, if possible, once you have completed your academic training, either in your personal, emotional, or professional life, among other contexts?

Procedure

The semi-structured interviews were conducted by the university faculty responsible for the courses in which the SL projects were carried out. Prior to the interviews, the participants were contacted to invite them to participate in the study. They were informed about the study's objectives and purpose and asked about their availability to participate. Ethical considerations were also taken into account, such as presenting an informed consent form that ensured confidentiality and anonymity, guaranteeing voluntary participation, respecting participants' dignity, providing the right to access results, and requesting permission to record the information, among other matters. Once participants gave their consent, an appointment was scheduled with one of the researchers at a designated university space to conduct the interview. This location was a quiet room, familiar to the participants, ensuring comfort and absence of noise. The duration of the interviews ranged from 40 to 90 minutes.

Regarding the focus groups, these were conducted with groups of 3-4 university students. The same protocol followed for the faculty interviews was applied, and the same ethical considerations were observed. The duration of these focus groups ranged from 40 to 103 minutes. After the interviews and focus groups were completed, the research team transcribed the recordings using the Microsoft Word processor, which were later analysed using the software program Atlas.ti.

Data analysis

The information collected from the interviews and focus groups was initially coded and categorized inductively using the qualitative analysis software Atlas.ti 7.5.4 version Table 1 presents the coding scheme established for identifying the transcriptions of the focus groups and interviews conducted for this research.

Subsequently, an analysis was conducted based on an inductive-deductive procedure that allowed for the necessary adjustments to be made in the information analysis process (Patton, 2002). For this reason, the information was first subjected to open coding, where the researchers identified emerging codes and continuously contrasted them. Following this, the researchers performed axial coding to validate the information categorized in the initial phase, until all possibilities for creating new codes were exhausted, thus establishing a definitive list that facilitated the identification of connections and relationships within the information (Figure 2) (Coller, 2005; Strauss & Corbin, 2002). Finally, the information was grouped and analysed around three main thematic areas that emerged from the application of the interviews and focus groups: 1) the potential of SL to promote an active lifestyle and achieve regular physical activity, 2) the pedagogical value of SL for the development of professional competencies, and 3) knowledge of the social context and commitment to improving society.

Results

The results of this study have been grouped around the three main thematic areas described in Figure 1.

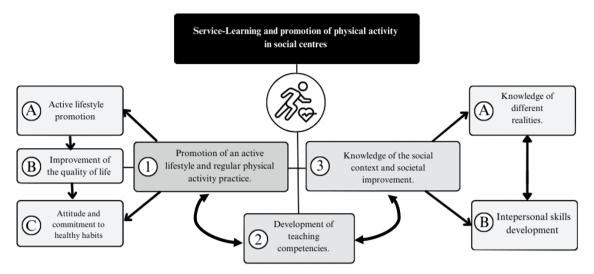
The potential of SL to promote an active lifestyle and achieve regular physical activity

One of the main objectives of implementing SL projects was to promote an active lifestyle and adherence to regular physical activity. In this regard, participants have become aware of the potential of this educational model to support the promotion of healthy habits, as expressed by a university professor: "The strength lies in the motivation of future teachers. Among the competencies to be developed is the ability to provide practical situations that promote increased physical activity, with the aim of establishing work routines that foster lifelong healthy habits" (EP03, p. 4).

Participants also highlight the potential of SL to improve and strengthen emotional bonds while engaging in physical activity, as mentioned by a university student:

The initial expectations were not only to improve his physical condition, as he had stopped exercising due to a serious knee injury. Additionally, last year he ceased going to the

Figure 1Category tree showing the relationships between categories and subcategories



gym because of family issues, including caring for elderly relatives... Therefore, I had a dual objective: to contribute to improving my father's physical health and, on the other hand, to spend time with him, which has been very beneficial for him. He has repeated this to me during our interviews, saying that he now returns home feeling more comfortable, is in better spirits, and that we have rekindled the bond we once had. He was the one who introduced me to the love of sports, and this is my way of giving back to him, especially when he is not feeling emotionally well (EES02, p. 3).

In this regard, participants also indicate that SL interventions contributed to improving the quality of life of the beneficiaries, as "we worked both physically and mentally. In my case, I have noticed improvements in coordination, range of motion, and, above all, I see that he is now motivated to engage in physical activity" (EES02, p. 5). In some cases, the SL intervention has even had an impact on diary habits, as one student stated: "The improvement in physical and emotional well-being has been achieved. There have also been positive changes in his diet, especially since he is celiac" (EES01, p. 12). However, although most of interviewees affirmed that such experiences have helped beneficiaries to change and improve their attitude and commitment to enhancing physical activity habits, some participants are more cautious and emphasize the need for beneficiaries to maintain an active lifestyle after the intervention:

It is possible that progress may not occur as expected, and that in the future, when they have to do it on their own, they may struggle. Often, what is most important is helping them realize that they can engage in physical activity independently, even if it involves simpler activities (EES02, p. 8).

The pedagogical value of SL for the development of professional competencies

For SL interventions aimed at health-oriented physical activity promotion and enable students to develop professional competencies, they rely on continuous supervision and mentoring by university faculty:

They are provided with guidance in programming to ensure it is tailored to the individuals the proposal is directed towards. Subsequently, tutoring sessions are held to address any potential issues that may arise. Finally, a comprehensive assessment of the entire project is conducted, followed by the provision of final feedback (EP01, p. 4).

Thus, participants perceived that during their initial training education, they have acquired sufficient knowledge for developing physical-sport activity interventions, "which involves creating them, presenting them to others, and carrving them out together. After this, when we go to schools, we will have resources to work with children facing issues such as weight problems, lack of motivation, etc". (EES01, p. 7). They also highlight the privileged position of the Physical Education curriculum in "promoting, in your groups, an improvement in students' enjoyment of physical activity and encouraging them to engage in physical activity throughout their lives" (EES01, p. 8). To achieve this, participants mentioned that the professional competencies most developed through the SL project include organization and coordination, an expanded repertoire of resources and pedagogical-didactic strategies, the ability to adapt to different contexts and individuals, resilience, teamwork, designing coherent proposals to achieve established objectives, and critical thinking, analysis, and reflection, all while maintaining the humanizing aspect that must be present in the training of future teachers. In this way, through the SL interventions:

Students have been able to understand that their training is not only directed at a specific group, such as students in Early Childhood and Primary Education, but can be extrapolated to other groups and individuals. The sense of helping others has prevailed over the obligation to learn, which is highly valued by them (EP01, p. 8).

Knowledge of the social context and commitment to improving society

The educational experience in the SL project emphasizes the importance of understanding the social context in which the intervention takes place. This helps foster a sense of commitment among students to improve society as expressed by a university professor:

The aim is to inculcate in students the understanding that they have great potential as agents of change when applying their knowledge for the benefit of those who do not have established physical activity habits. Physical, psychological, and social health are priorities embedded in the competencies acquired during their training process, which they can later apply to disadvantaged groups (EP01, p. 7).

This statement reflects the potential of physical activity and SL to develop experiences in diverse social contexts, as one university student affirmed: "Creating experiences in different contexts and for the person you are working with increases knowledge, quality of life, self-esteem, perception... It's a symbiotic relationship" (EES01, p. 9). This, in turn, has a significant impact on the social relationships and interactions that are developed between the participants and the beneficiaries of the experience. As another student expressed:

It's important to focus on the group or person you're working with. If your relationship improves with someone, it will have a positive impact on those around you. The greatest feedback comes right away, within a day or two, to see if they want to continue. If they send you a message: "Are you coming today? What are we doing today?", that means we're reaching the person. This is the feedback that shows you are achieving what you set out to do (EES03, p. 14).

Furthermore, the SL experience demonstrates how it promotes an active lifestyle and healthy habits, where physical activity plays a fundamental role in the beneficiaries' quality of life. The relationship becomes even more meaningful when it involves individuals from the students' close social circles, which increases their commitment and motivation to the experience, as expressed by the students:

My mother had never exercised and didn't know what a routine was, and seeing how someone starts from scratch and begins to enjoy it brings a lot of satisfaction, knowing that it's something she can continue doing in her future life and that it gives her the opportunity to try new things and improve her relationships (EES02, p. 11).

In addition to adapting, the learning is very social. My university colleague and I are from small towns with limited leisure options, and doing physical activity through SL allows you to see the social repercussions, especially if I can motivate them and make them enjoy doing physical activity in a group. The people we work with can, in turn, apply this to others in their environment (EES02, p. 4).

Discussion

The purpose of this study was to analyse the impact of developing a SL experience, promoted by both faculty and students of the Bachelor's in Education program; to encourage regular physical activity habits among the recipients and foster an active lifestyle, while promoting psychological and interpersonal well-being through the use of physical activity as a means of enhancing social relationships; and to contribute to the learning of future educators regarding the essential considerations when designing educational proposals that incorporate adapted physical activity for participants. The results of this study confirm the positive and potential impact of the SL model in promoting healthy habits and an active lifestyle, where regular physical activity is consistently practiced. These results align with those expressed by Gómez-Rijo (2024) and Pérez-Pueyo et al. (2019), who emphasized the importance of physical activity at any age. It is understood that physical activity serves as an effective educational tool and a means of preventing pathologies, capable of mitigating motor regression, improving quality of life, or increasing life expectancy (Kirk, 2006; Pérez-Pueyo et al., 2019; Warbuton & Bredin, 2017).

Moreover, the findings of this research highlight that SL interventions aimed at promoting regular physical activity can alter the sedentary behaviours and attitudes of beneficiaries, in line with the study by Ruiz and Casimiro (2018). In this regard, as also stated by Calle-Molina et al. (2022), the benefits extend beyond physical condition improvement and the health of the beneficiaries, achieving psychosocial benefits that enhance self-concept and self-esteem, interpersonal and intrapersonal relationships, while also increasing moments of enjoyment.

Additionally, in line with the findings of Sánchez-Matas et al. (2023) and Yook (2018), who highlighted this as one of the key components of a good health, SL had a positive impact on the development of healthy nutritional habits, which should be paired with regular physical activity. This confirms that the implementation of this educational model can serve as a useful mechanism to address a pressing public health and social issue, such as the increase in obesity rates and social isolation, particularly due to a lack of ability to establish positive interpersonal relationships. However, caution is needed when interpreting the results, as, despite the success of the SL model in responding to a detected social need (Buchanan et al., 2002; Chiva-Bartoll et al., 2020), the long-term maintenance of regular physical activity habits by beneficiaries will depend on personal attitudes

such as commitment, willpower, and determination to continue these practices, as well as external factors like social support and access to resources for sustained physical activity.

Regarding the development of professional competencies, participants -students from Education degree programs and Faculty professors- reported that these types of interventions help them to develop teaching competencies such as adaptation, teamwork, the design of coherent proposals, and critical thinking and reflection, in accordance with the findings of Lobode-Diego et al. (2024). Thus, SL interventions for people from social centres support the acquisition of teaching competencies in a real-world context, while still emphasizing the importance of the humanizing aspect gained through the establishment of interpersonal relationships and the links formed between future teachers and beneficiaries. Specifically, the SL proposals related to physical activity that have been planned and implemented have proven to be enjoyable and fun, which, as expressed by Capella et al. (2014), have increased intrinsic motivation among the beneficiaries, encouraging them to continue participating in the experience. Moreover, the implementation of these proposals promotes the learning of didactic strategies by students, which will serve them in developing their teaching practices adapted to diverse contexts and realities.

Furthermore, the statements from the informants in this study highlight the importance of understanding the social context in which SL activities are implemented. This understanding of the reality in which the activities take place fosters greater social commitment to improving society. More specifically, students become agents of change, contributing to the enhancement of quality of life, particularly for elderly individuals (Dharamsi et al., 2010; Santos-Pastor et al., 2018). Therefore, the application of SL enables the understanding of various contexts and realities in which health-oriented interventions, specifically promoting regular physical activity, can be developed. Additionally, as emphasized by Chica and Peña (2024), students in Education degree programs also acquire a stronger commitment to social justice and the global environment. Indeed, the development of this social competency has been a priority throughout the entire experience. The increased commitment of future teachers to improving society, and specifically enhancing the lives of the beneficiaries, is a priority reflected throughout this project, as also identified in the research by Fernández-Bustos et al. (2024).

Regarding the limitations of this study, the first limitation is the small number of people interviewed, among whom there were no participants from the social centres involved in the intervention. This limitation itself presents a future research avenue to explore the feelings of the beneficiaries. Increasing the number of focus groups and/or interviews with participants could help enhance the visibility of this issue. Second, there is a need to increase the number of sessions in the SL intervention. Third, a longitudinal study should be considered to determine if there is adherence to the regular practice of physical activity by the beneficiaries. Finally, although the participants from the social centres have expressed their intention to continue with the habits they have acquired, it would be necessary to conduct another session to assess, after a certain period following the

completion of the project, in order to more objectively confirm whether the promotion of physical activity and the shift to a more active lifestyle have been successful.

It is important to emphasize that the possibility of implementing this type of proposal in other contexts or educational levels should be based on the use of certain strategies, such as: 1) conducting pilot projects that serve as an initial point of contact with the context where the proposals will be applied, providing a basis for expanding the development of such initiatives. In our case, previous years included intergenerational events and occasional visits to the centres to establish key lines of the proposal; 2) using formative and shared assessment, giving voice to all participants in the project to understand firsthand the learning and emotions generated in the contexts where we work, ensuring a positive exchange for everyone involved; and 3) establishing close relationships with the working contexts. allowing all participants to voice their opinions and exchange materials produced through their involvement, such as results, publications, photographs, etc. This approach fosters continuity and builds trust among all participants.

Conclusions

This experience has allowed future Physical Education teachers to better understand and comprehend different realities, recognizing that the promotion of healthy habits and the regular practice of physical activity should be seen as a learning process for their professional and personal development. In this sense, it is essential that positive experiences are tailored to the needs and characteristics of the beneficiaries involved in this process. Thus, SL can serve as an educational model that acts as a vehicle for improving quality of life, demonstrating that physical activity is an excellent means to live and personally experience situations that foster the development of teaching competencies. However, this process must take place in contexts where interpersonal relationships are essential, as well as the need to enhance the critical and reflective capacity of future teachers after engaging in SL interventions.

Author contributions

Conceptualization: F.L.D., J.C.M.A, R.M.A.

Data curation: F.L.D., J.C.M.A, R.M.A.

Formal analysis: F.L.D.

Investigation: F.L.D., J.C.M.A., R.M.A. Methodology: F.L.D., J.C.M.A., R.M.A.

Project administration: F.L.D., J.C.M.A., R.M.A.

Supervision: J.C.M.A., R.M.A.

Writing – Original draft: F.L.D., J.C.M.A., R.M.A. Writing – Review & editing: F.L.D., J.C.M.A., R.M.A.

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Declaration of interests

The authors declare that there is no conflict of interest.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author.

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