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Development of prosocial competencies in PETE and Sport Science students. Social justice, Service-Learning and Physical Activity in cultural diversity contexts

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ABSTRACT

Background: The development of prosocial competencies in university students can be attained through the implementation of Service-Learning (S-L) methodology by carrying out a community service to groups of foreign unaccompanied minors (FUM). Physical Education Teacher Education (PETE) and Sport Science (SS) students involved in an S-L experience normally develop a critical way of thinking as they face social conflicts. Besides, social justice education and S-L attempt to help in favour of social inclusion of vulnerable groups.

Purpose: This study aims to assess the development of prosocial competencies in PETE and SS students taking a Dual Degree Program in Physical Activity (PA) and SS and Primary Education. This is done through S-L methodology, by carrying out a community service to groups of FUM.

Method: A total of 21 male and 9 female PETE and SS students participated in this study. The methodology used is of a qualitative nature. Reflective diary is used as an instrument for data collection, and content analysis as an information analysis technique.

Results: It has been observed an improvement in the prosocial competencies of the PETE and SS students involved in the S-L experience. The competencies with the greatest number of references and, therefore, those with a greater presence in their testimonies, include organisation, proactivity and optimism, self-esteem, and tolerance and respect.

Conclusion: The S-L is capable of undertaking a transformative role which enables PETE and SS students to acquire prosocial competencies in contexts relating to cultural diversity and social justice.

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Introduction

Migratory phenomenon is an issue of deep relevance in Europe and, therefore, in Spain. In the last five years, southern Europe has become a receptive area for migrants who come from different regions of Africa, the Near East, and Asia (Fernandez-Ramos 2019). Among the migrants arriving

in Spain, there are foreign unaccompanied minors (FUM) who do not have anyone in charge, or a relative to take care of them. Those FUM who are under 16 years old are under state guardianship. When they turn 18, they lose all support from the state and at this stage they could even be deported if they commit serious infractions; for example, irregular employment, public nuisance, issues of documentation among others (Spanish Government Ministry for Home Affairs 2020). In both situations, migrant children may suffer from high levels of social exclusion. This is the reason why inclusive education should be promoted and focused on increasing social responsibility, improving understanding of diversity and teaching who to avoid stereotypes and eliminate discrimination.

In this sense, an inclusive methodology such as Service-Learning (S-L) helps students to do so while providing community service to a vulnerable group who is at risk and socially excluded (Chiva-Bartoll et al. 2021; MacPhail and Sohun 2019). This methodology allows students to actively participate in the construction of their knowledge, as well as to act autonomously in order to address the shortcomings of our society (Capella-Peris, Zorrilla-Silvestre, and Gil-Gómez 2018). The implementation of this methodology with Physical Education Teacher Education (PETE) and Sport Science (SS) students is a winning combination (Peralta et al. 2016; Ruiz-Montero et al. 2019) as there is no doubt that one of the aims of the current Physical Education lies in responding to the needs of the society of the XXI century (Metzler 2017). PETE students require new methodologies such as S-L that gives them the opportunity to develop academic and professional competencies combining both theory and practice.

Moreover, the contribution of PETE and SS students to multicultural groups is an essential element in guiding strategies aimed at reducing and eliminating social and educational exclusion of these vulnerable groups and to develop prosocial competencies in future PE teachers being the focus of the present study (Baldwin 2015). Thus, this paper aims to assess the development of prosocial competencies in PETE and SS students through the S-L methodology. Guided by Physical Activity (PA), pedagogy for social justice, prosocial competencies, in addition to S-L methodology, the research question driving this paper is as follows:

- Which are the prosocial competencies that PETE and SS students develop through S-L methodology?

In the following sections, we are going to describe the three main frameworks which guide our study on the development of prosocial competencies in a group of PETE and SS students in a cultural diversity context.

Pedagogy for social justice in higher education, in the role of PA

The term social justice in the field of Physical Education (PE) has gained ground over the last 40 years (Walton-Fisette and Sutherland 2018) due to the involvement of PE teachers in a more active and critical educational curriculum (Philpot 2015) or in the rise of S-L methodology and its social and inclusive role in PE (Chiva-Bartoll et al. 2019). Social justice education in PETE students is understood both as an objective and as a process where lecturers usually create a democratic environment. All of this is performed through physical activities that empower the students and commit them to a more critical education (Chiva-Bartoll et al. 2020).

The focus is to get these students involved in social experiences through sport and PA to promote a broader understanding of the four interrelated principles of social justice; equity, access, participation, and rights (Lee and Cunningham 2019).

Also, their sense of responsibility can considerably increase due to the development of social justice values that they carry out through politically active attitudes (Lee and Cunningham 2019).

Development of prosocial competencies in PETE and SS students

Prosocial competencies can be understood as a wide range of abilities on PETE and SS students, motivated by the desire to help others without any expectations of personal gain (Chiva-Bartoll et al. 2020). According to these authors, there are prosocial competencies in the university curriculum that can be used as tools for future professional skills, especially with regard to PETE and SS students such as:

- (A) Designing, developing, and evaluating teaching-learning processes, keeping in mind the individual and contextual characteristics of each individual;
- (B) Encouraging the creation of long-lasting and autonomous PA and sporting habits among those different populations who receive PE lessons;
- (C) Planning, developing, and evaluating the performance of recreational physical activities for diverse vulnerable groups; and
- (D) Selecting and knowing the appropriate use of sports equipment for each recreational PA and personal characteristics.

Regarding the present study, the S-L intervention with FUM entails the promotion of prosocial competencies, civic values, and social responsibilities in university students (Tinkler, McGann, and Tinkler 2017). In this vein, PA can be the ideal link to enhance human well-being and help basic human needs of vulnerable groups (Ruiz-Montero et al. 2019). Therefore, it is essential that PE teachers are the main drivers of prosocial competencies in students (Ruiz-Montero et al. 2020). The emulation of real situations by physical exercise and games with FUM helps the university students to become familiar with the existence of multiple and different contexts (Wehling 2008).

S-L as a social inclusion tool through PA

According to Rauschert and Byram (2018), the participatory and globalising nature of S-L is associated with feelings of solidarity, help, and support to the community or cooperation with vulnerable groups. In this way, it establishes a teaching model in which vulnerable groups and university students nurture each other by generating an experience between them (Yorio and Ye 2012).

S-L, through sport and PA, can be perceived as a favourable opportunity for the development of emotional engagement and cognitive readiness with the community. This is done by combining theory and practice in the same activity (Seban 2013). PETE and SS students learning through S-L with vulnerable groups can help them better understand the social context in which they live (Ruiz-Montero et al. 2020). PETE and SS students can develop a certain sense of belonging when they are given the opportunity to help build their community. Moreover, these experiences help them instilling the belief that they can make a valuable impact in their community through the use of physical activities and sport (Capella-Peris, Gil-Gómez, and Chiva-Bartoll 2020). These physical activities allow both FUM and PETE students to interact with each other strengthening their interpersonal and social skills in using difficult situations to improve their daily lives.

Method

Research design and participants

In order to achieve the intended objective, a qualitative research study with a descriptive design was conducted, using content analysis. This qualitative approach helps to understand the social and educational phenomenon, as well as the transformation of socio-educational practices and the development of knowledge (Johnson, Adkins, and Chauvin 2020).

This study is framed on an educational innovation project, undertaken in a Faculty of Education and SS. A total of 21 male and 9 female PETE and SS students, between 20 and 29 years old, taking a Dual Degree Program in PA and SS and Primary Education (academic year, 2019/2020) participated in this study. In addition, lecturers who were keen to contribute to help in vulnerable contexts were selected to participate in the project and the vulnerable group chosen was migrant children.

For this study, the subject chosen was 'Body Expression and Games' included in the third course of the aforementioned degree. The main components of this subject were children's games, rhythmic games, traditional games, and activities related to body expression. The S-L programme with PETE and SS students aimed to promote social inclusion and healthy habits by means of PA and the promotion of sport within the recipient groups involved in social exclusion. Similarly, the S-L intervention with FUM attempted to remove the possible barriers, and inequality, that this group suffers in daily life. Diversity and inclusion education should be a fundamental pillar of the education system and thus, in the training of future PETE teachers (Tinkler, McGann, and Tinkler 2017).

This study was approved by an Ethical Committee (n°535/CE/2018) with the purpose of ensuring the responsible investigation. It is important to highlight that three members of the research team participated as lecturers in the project. Thus, the absence of research bias was not possible; however, steps were taken in order to reduce the impact of bias in the findings. For instance, reflective diaries were carried out with the supervision of an external lecturer to the course subject involved. A written informed consent document was completed by all participating PETE and SS students. Furthermore, the residence allowed us to use their facilities to undertake the project with the FUM who were living there.

The reflective diary as a data collection and learning assessment technique

The reflective diary is framed within the qualitative paradigm of the assessment approaches. Assessment is understood as a system of common activities for teachers and students during the teaching-learning process (Capella-Peris, Gil-Gómez, and Chiva-Bartoll 2020). According to these authors, the objectives, when evaluating this methodology, are based on the lessons learned (results), knowing the teaching-learning process and trying to improve it (feedback) and accrediting students depending on the lessons learned.

This technique has been selected to evaluate the current S-L experience due to its flexibility in helping to assess the learning process, and results, by students and educators. The diaries are written at the same time as the S-L intervention is carried out, and they refer to aspects observed during it. Specifically, in this case, PETE and SS students reflected on the problems they encountered and unexpected events or incidents that occurred during the development of the intervention with the FUM, and on their ability to react to them. The aim was to introduce resources that help students develop criteria that allow them to make value judgments about the results obtained (Fernandez-Ramos 2019). This was done by means of an explanation of the S-L intervention in addition to five open questions (Deeley 2015):

- (a) an account of an event during the S-L activity,
- (b) a reaction or response to the previous event,
- (c) to choose the best reaction to the first event,
- (d) origin of the first event,
- (e) learning of the first event in order to react to future events. PETE and SS students completed their reflective diaries on a weekly basis and sent them to the lecturer through the university's institutional online platform. A total of 29 reflective diaries were written. A total of 96 pages obtained from the transcription of these reflective diaries in order to assess the development of prosocial competencies in the participants. All these diaries were written in Spanish and then translated to English to be included in this study.

The procedure to transcript the reflective diaries and protect the participants anonymity at the same time was to assign a fictitious name as pseudonym to each student, respecting always the gender.

Procedure of the S-L methodology

The S-L intervention programme was structured in a 45-minute weekly session and was carried out over 16 weeks, during the first semester of an academic year. The PETE and SS students were split into working groups of between three and five members. For the service, three social institutions and non-governmental organisations, dedicated to serving groups with problems of social inclusion low income and other needy groups, collaborated.

The interventions were designed by the PETE and SS students in class prior to carrying them out within the S-L programme with the help of the educators. The contents of the activities performed by these students were similar to contents worked in the course *Body Expression and Games*, previously described. They were adapted to the personal characteristics and limitations of all the FUM who participated in the interventions. FUM living in the residence attended state-run school at morning and received S-L activities on two evenings per week. The minor participants ranged between 6 and 12 years old and all were under the tutelage of the state. Thus, the relationship between the students and FUM was really close after some sessions due to the use of dance and games, as they are activities that foster students' interest.

Data analysis process

This study was carried out through a qualitative content analysis of data, given that it was crucial to capture essential aspects of the social phenomenon presented from the perspective of the study participants (Souza, Ferreira, and Gomes 2017). Content analysis is a suitable set of techniques for the analysis of trends in communication contents, such as the narratives of the study participants (Strauss and Corbin 1990). These techniques allowed us to understand, through the experiences expressed in the participants' diaries, the presence and/or absence of prosocial competencies.

This was made possible through the analysis of their narrative materials which were treated by means of a cyclical process centred around three fundamental stages: discovery, coding, and relativisation of data (Flick 2014).

The first stage allowed us to discover emerging topics in the text by breaking it into relatively small units of content, then submitting them to descriptive treatment (Sparker 2005). This is called condensation. It should be a shortened version of the same text but one which still conveys the essential message of the meaning unit. Sometimes the meaning unit is so compact that no further condensation is required. The following figure is an example of this process: (Figure 1).

The second stage allowed us to carry out a process of categorising and coding this data by employing the N-Vivo qualitative analysis software (version 12). This was in order to determine trends and patterns, the structures and discourses of communication. It was also used to determine their frequency, that is, quantifying the presence of the coding, as well as to show the connection existing between the categories (Mayring 2000; Gbrich 2007).

The original sentence	Condensing the sentence into smaller units
'I will always say that these kinds of actions we offer without receiving anything in return but a smile, thank you and a hug, make you a better person and make you smile'.	Feeling grateful, putting others first and truly caring about the people around them.

Figure 1. Condensation process in the first stage of the content analysis. Source: Prepared by the authors.

This categorisation and coding process was carried out from a deductive-inductive approach. The main source of information to create deductively the four main categories of our study was the literature reviewed related to the research. In addition, the students' narratives were the second main source to create the emerging subcategories inductively.

This categorisation, and subsequent coding, were carried out through the consensus of four experts in qualitative research. This was undertaken in line with the criteria of coherence, relevance, clarity and significance. It, therefore, guarantees the credibility of the analysis process (Holloway and Todres 2003).

Following the example given in the first stage, in [Figure 2](#) the final result of the process of categorising in the second stage of the content analysis can be seen:

Finally, in the third stage, the data are interpreted in order to formulate conclusions. In this stage, all the information has been prepared in order to capture the richness of the data and convert the different interpretations of the researchers into results.

These stages occurred on a recurring basis and overlapped until the definitive category system was achieved. The following table presents the definitive category system which includes the four categories and the subcategories linked to the prosocial competencies: ([Figure 3](#)).

Results and discussion

This section presents an overview of the experiences and perceptions from students of this study around the development of prosocial competencies through the S-L methodology. After carrying out the S-L all students of this study noticed an improvement in their social skills and a change of attitude in relation to their way of perceiving FUM. In order to present these results in an organised way for better understanding, four lines of action have been outlined. These lines correspond to the main categories associated with prosocial competencies.

These categories and subcategories contribute to a better understanding of what prosocial competencies are developed by PETE and SS students during and after implementing the S-L programme. All contribute to creating a positive learning environment (Johnston et al. 2019), as well as promoting social justice within the community.

Category social sensitivity

The *social sensitivity* category is made up of three subcategories: *empathy*, *tolerance and respect*, and *mediation*. This category refers to those competencies that facilitate the creation of a climate conducive to the development of positive interrelationships in PETE students (van Doodewaard 2020), and between the students and the minors (Chiva-Bartoll et al. 2021). It includes assessments which

The original sentence	Condensing the sentence into smaller units	Subcategory	Category
'I will always say that these kinds of actions we offer without receiving anything in return but a smile, thank you and a hug, make you a better person and make you smile'.	Feeling grateful, putting others first and truly caring about the people around them	Generosity and altruism	Social responsibility

Figure 2. Categorising and coding process in the second stage of the content analysis. Source: Prepared by the authors.

Categories	Subcategories
Social sensitivity	1.1 Empathy 1.2 Tolerance and respect 1.3 Mediation
Service implementation	2.1 Organisation 2.2 Determination
Personal well-being	3.1 Self-esteem 3.2 Trust in people
Social responsibility	4.1 Generosity and altruism 4.2 Cooperation, collaboration and social commitment 4.3 Proactivity and optimism 4.4 Disposition towards social justice

Figure 3. Categories and subcategories associated to prosocial competencies. Source: Prepared by the authors.

relate to dealing with situations of contact and relationship with minors while practicing sport. In the analysis of narratives, we have found evidence in this regard.

Specifically, the subcategory or node with the highest number of references found in this aspect has been *mediation* with a total of 28 coded references. Here are some examples that can be seen in the narrative of students:

- Oliver: [On the other hand, we have managed to solve one of the biggest problems we have had, which has been the lack of communication, and thanks to the use of gestures and examples, we have been able to give PE classes with better results.]
- Liam: [Above all, this incident has given me experience in how to handle future similar fighting situations.]

As it can be observed from their reflections, all participating students agree on the value of S-L interventions. This experience has provided students with a broader and diverse vision of the curriculum of PE to manage setbacks and unforeseen situations in diverse educational contexts and with different social groups (King and Travers 2017; Sartore-Baldwin, Das, and Schwab 2020; Ruiz-Montero et al. 2019). Our students were more engaged with the FUM and similarly, these minors with the PA. They achieve this by contributing to respect, equity, and equal opportunities for all individuals. This finding is consistent with the results obtained by Chang, Anagnostopoulos, and Omae (2011), who reported an increase in social awareness of students who learned through multicultural S-L.

The second subcategory with the highest number of references related to the *social sensitivity* category is *tolerance and respect*, which has 24 codifications in total. The students show, through their reflections, the importance of serving everyone on equal terms as an ethical and moral obligation that promotes inclusiveness and social justice:

- Elisa: [I could realise that they are just like us.]

- Dave: [Diversity can never be a problem. It must be a window to unite all civilisations, to understand that we cannot exclude people from progress simply because they come from another country.]
- Michelle: [In the end everything was perfect, a precious final act in which everyone participated, demonstrating to society that we are all equal, regardless of gender, race, or age.]

It is possible to observe, from these references, the process of acceptance and the recognition of the value of all people, regardless of their origin. This process was developed by the opportunity of sharing time with them during the different interventions. Their way of thinking changed when they engaged with the minors and perceived diversity as a source of enrichment. These situations are an example of inclusive education, an education for all, as they are related to human rights and positive social change within the context of socially fair societies (Miller, Roofe, and García-Carmona 2019). After an approach to these minors, students developed an attitude of respect and tolerance towards others, showing acceptance of differences and even encouraging a change in society. Ruiz-Montero et al.'s study ([forthcoming](#)) goes in the same line and shows a considerable increase of tolerance and respect of PETE and SS students in relation to migrant people in an intercultural S-L programme. The development of intercultural competencies is also promoted by the practice of PA and non-discriminatory sports (Hayward and Li 2017; Meaney et al. 2008).

In the subcategory, *empathy*, a total of 10 references were found in the students' narratives. This subcategory refers to the ability to understand, and share, the feelings of others. In the students' narratives, the development of this ability can be observed:

- Mark: [To have empathy, to know where they come from and everything they have experienced to get here. They are looking to entertain, play sports, interact and have a good time.]
- Clara: [We must spend time in their shoes and not force them to participate in something they don't feel totally comfortable with.]
- Dylan: [I went to him and tried to cheer him up, and he just got up and kept playing.]

The participating students agree on the need to try to experience the feelings and emotions that the children feel when they practice sport. This allows them to grow personally and professionally from a collective level (Walton-Fisette et al. 2018). The relationship established between student empathy and the acquisition of prosocial competencies during physical activities is a key element that young people can acquire throughout their lives (MacPhail and Sohun 2019). However, this relationship may be due, to a large extent, to the procedure and empathy measures used (Bush et al. 2016). Thus, for the PETE students involved, the intervention of S-L has been fundamental in the acquisition of deep levels of empathy and social justice (Hill et al. 2018), specifically towards the FUM (Chiva-Bartoll et al. 2021).

Service implementation category

The *service implementation* category is made up of two subcategories: *organisation*, and *determination*. This category refers to those professional abilities of future PE teachers, which allow the students to achieve success on an educational and professional level (Legrain et al. 2019; Ruiz-Montero et al., [forthcoming](#)).

The largest amount of evidence around this category has been found in the *organisation* subcategory, with a total of 32 references. This refers to the ability to develop objectives in order to carry out a task taking into account the deadlines, resources, and the action which has to be taken (Miller, Roofe, and García-Carmona 2019). Some important features when implementing their sessions were highlighted by the students:

- Isaac: [You have to prepare for contingencies and adapt as quickly as possible to reality.]
- Gina: [I learnt that that we will not always be able to carry out the sessions in the way we have prepared them, and that we must be flexible and able to adapt them to the specific needs of each group.]

Through the reflections of the students, we can see the importance they give to both aspects in order to be able to develop their activities successfully after the experience they had with the minors. Similarly, the assessments they make, regarding the need to be flexible in terms of organisation, are clearly visible, since they are aware that adaptive capacity and critical thinking are also key to ensuring the proper development of interventions in the PE field (Capella-Peris, Gil-Gómez, and Chiva-Bartoll 2020). For example, students needed to be flexible when facing conflicts and needed to adapt their sessions to the characteristics of the group and the circumstances. These competencies are key elements in the training of future educators of PE and sport field when planning learning based on a more humanistic and inclusive vision of vulnerable social groups (Whitley et al. 2017).

The second subcategory is *determination*, with a total of 21 references. This subcategory refers to the continued and constant effort to achieve something. This fact helps to explore the possibilities for PETE and SS students to engage with the S-L programme they perform when learning to teach PE (Ovens et al. 2018). These quotations are representatives and show the learning acquired by the students:

- Kate: [I learnt that, as much as it cost us to do something, the effort is rewarded, as for example in this case.]
- Harper: [I noticed that the more diverse people I deal with the more I learn, and I love it]
- William: [Even though, I had to work a lot to plan the classes I could see they were enjoying and that it is really nice.]

The S-L provides the experience of seeing how capacities such as organisation, planning, determination – which are constantly emphasised during the years of study in their degree of PE – are essential when facing reality (Weaver et al. 2018). This is why we could say that S-L adds meaning to the theory by means of its use (Seban 2013). Continuous service work towards, and with, vulnerable groups helps the students involved to acquire a sense of responsibility and social justice, thanks to constantly helping others without expecting anything in return (Johnson and Howell 2017; Whitley et al. 2017).

Personal well-being category

The *personal well-being* category is made up by two subcategories: *self-esteem*, and *trust in people*. This category refers to the state whereby the individual has a feeling of satisfaction and when all their emotions are balanced. According to the participants' discourse, S-L affects the personal well-being of the people who carry it out (Chiva-Bartoll et al. 2020; Ruiz-Montero et al., forthcoming).

The subcategory with the highest number of references is *self-esteem*, with a total of 27 references encoded. Self-esteem can be defined as the perception we have of ourselves, and it can be positive or negative (Haugen, Ommundsen, and Seiler 2013). However, only positive aspects have been found in the analysis of the students' texts, which is highly relevant:

- Lucas: [This week I am very happy and satisfied in getting to take the class and overcome the obstacles we have met.]
- Dave: [This constant change forces you to give your best and sort yourself out, so it is an effective way of learning and, at the same time, you get enjoyment from seeing the children.]

The impact of a more active and participatory PE training is described in the narratives of the students, perceiving the S-L as an open tool for intrapersonal and interpersonal change (Whitley et al. 2017). The S-L, at both academic and personal levels, attempt to create a competency of self-improvement and personal satisfaction in the students involved (Galvan, Meaney, and Gray 2018).

Regarding the second subcategory, *trust in people*, 8 references were detected. This subcategory refers to the link, or bond, that students intended to generate with the minors in order to make them feel more secure. For example, one of the students highlights the fact that he was surprised when he saw two children fighting because the two of them wanted to give him the ball with which they were playing:

- Dylan: [After being surprised by this fact, I told them that nothing was wrong, that both of them could give it to me, and I stood between them and both held my hands.]
- Kate: [Slapping hands with a high-five gesture was the right way, because it created a bond of trust with students.]

The increase in confidence, as an educational value present in educational initiatives, has a great impact in fostering personal well-being of PETE students at the same time that they are prepared for realities of the current society (Wilkinson et al. 2013). This makes the teaching and learning processes less stressful, and promotes an environment of mutual help and reciprocal exchange (Naturkach and Goodwin 2019). Moreover, these authors affirm that PE practices are characterised by promoting these stress-free environments which can empower several vulnerable groups, for example FUM in our study. So, when students spend considerable time helping other people, there is an improvement in the children's trust (Capella-Peris, Gil-Gómez, and Chiva-Bartoll 2020). In this experience it was observed that spending quality time with the children helped the students to feel more comfortable with them. This led them to trust children more.

In the two previous subcategories, it has been observed that S-L acts as a rewarding exercise that reverts to personal well-being not only in the recipients but in the PETE and SS students. It leads us to reflect on the positive impact of PE activities on both individual and community health, on the proactive trajectory of the quality of life, and on the prevention of aversive situations related to mental health (Stoltenberg, Rumas, and Parsi 2012).

Social responsibility category

This category refers to a personal disposition to improve society and four subcategories have been encoded: *cooperation, collaboration, and social commitment; disposition towards social justice; generosity and altruism, and proactivity and optimism*. Much evidence of this has been found in the analysis of the narratives.

The first subcategory, *proactivity and optimism*, gathers a total of 28 coded references. This subcategory is defined as the ability to face and overcome challenges and setbacks, but always trying to carry them out with a positive attitude, as illustrated below:

- Dave: [My reactions were faster and more precise. The climate created in the final part of the gymkhana made everything easier. I admired the behaviour of the participants.]
- Dennis: [You have to face things in a positive way. You don't have to focus on the setbacks.]
- Jayson: [Thanks to this incident I have learned that language is not a barrier when it comes to teaching sport and developing sessions as teachers.]

The students' voices raise the issue of educational reinvention, seeing it as an essential key to overcoming any barrier or obstacle that prevents the best and greatest possible learning (Denson

and Bowman 2013). It is about promoting a stimulating atmosphere of cooperation that responds to the personal and community learning needs of all, without any exception (Chiva-Bartoll et al. 2021). The optimism of the students who carry out PE activities through S-L is latent and encourages positive attitudes of present and future social collaboration as formulas for overcoming challenges (Hayward and Li 2017). In the same way, this optimism helps to achieve a higher awareness of the difficulties experienced by least advantaged individuals (Sultana 2014).

The second subcategory, *generosity and altruism*, presents a total of 16 references. This subcategory refers to a natural disposition to help people without the need to receive anything in return (Chiva-Bartoll et al. 2020). The following quotations are representative:

- Grace: [I appreciate the opportunity to give my best to those girls who are looking forward to having an hour of play, fun and, to a lesser extent, indoor football.]
- Axel: [That way they will always be grateful for what you have done, and you, as a person, will feel fulfilled when you see the smile and the look they give you once the session is over.]
- Heather: [That makes me understand that these people, who are currently socially excluded, need both love and opportunities.]

This experience has offered the students the possibility to improve the understanding of values related to generosity and altruism, patience, caring for others, among many others involved in social justice practices. Through real contact with minors, they have been able to crystallise these values more immediately, and in a real way, rather than through theoretical explanations in the classroom (Johnson and Howell 2017). These solidarity learning spaces of S-L are ideal environments for the transmission of values such as altruism, the ability to share, kindness, make donations, or giving without receiving anything in return (Padilla-Walker and Fraser 2014). This can be understood as a powerful mechanism to reduce inequality and increase the idea of social justice thanks to the opportunity that PA provides in different contexts (O'Sullivan 2018), especially in education or multicultural contexts (Ruiz-Montero et al. 2019).

The third subcategory, *cooperation, collaboration, and commitment*, presents a total of 10 coded references. This subcategory refers to the willingness to act in a group in order to contribute to the proper functioning of the services provided. The following quotations are representative:

- Phoebe: [In the end, we knew how to solve the situation as a group.]
- Robert: [When we saw that it did not work, we made groups to control and so that they were not harmed.]

Joining forces could allow them to contribute in a more satisfactory way to the integral well-being of minors and their possible inclusion in society. Cooperation and social justice responsibility have a high impact on any S-L intervention due to the satisfaction experienced by students when they see that they are able to solve adverse situations and provide help to others (Webster et al. 2017).

According to Héliot, Mittelmeier, and Rienties (2019), educating in values instilled through PA and sport, within the university context, means adopting inclusive pedagogical commitment to innovation and permanent transformation.

The fourth and final subcategory, *disposition towards social justice*, presents a total of seven coded references. This subcategory refers to the willingness to focus on, and encourage, respectful habits towards each and everyone who is around us, as well as to foster acts of rebellion in the face of injustices (Chiva-Bartoll et al. 2021), as illustrated below:

- Dave: [This has taken a step towards a world that is a little more just and a little less selfish.]
- Grace: [There are not many ways in which we can improve humanity, but I think that this type of intervention, with these types of people, is the best combination for working in a more moral way, since lately it is being set aside in our society.]

It can be observed from these testimonies how practicing PA through S-L has helped at certain extend to awaken a critical thinking in them, and a rebellious attitude in the face of injustices. This is because they experience real situations that undoubtedly have a great impact on them (Johnson and Howell 2017). As Galvan, Meaney, and Gray (2018) claim, the relevance of learning constructed in the form of permanent interaction means a pedagogical commitment to an inclusive and innovative praxis. These impacts on the emergence of solidary attitudes and cooperative responsibility for the achievement of common objectives, favouring the establishment of more cohesive, empathetic, and affective and communicative bonds (Marttinen et al. 2020; Denson and Bowman 2013).

The four categories and 11 subcategories associated with the prosocial competencies which have been identified in this study allow us to better understand how the implementation of PE activities through S-L contribute to obtaining a significant learning in addition to connecting the curriculum to the community. Our findings reveal that S-L is a tool for the promotion of social justice when working with PETE and SS students.

Conclusions

The present study aimed to assess the development of prosocial competencies of PETE and SS students through the assessment of their reflective diaries when carrying out a community service to groups of FUM.

The qualitative results indicate that there has been an improvement in four relevant issues: social sensitivity, skills to properly implement the service, personal well-being, and social responsibility. In this vein, it is noted that the students of the present study acquire a greater sensitivity and social awareness, which we relate to social justice and the emerging construction of an intercultural citizenship in the university's own educational context.

The competencies with the greatest presence in their testimonies are related to organisation, proactivity and optimism, self-esteem, tolerance, and respect. This fact highlights the great variety of competencies that students work on when carrying out S-L in PE and SS in interventions with FUM. Moreover, these personal and professional competencies have great relevance for future educators of PE, both in their training stage and within the context of their future careers (Whitley et al. 2017).

This fact demonstrates the need to articulate S-L as a pedagogical vehicle which promotes significant changes in the initial training of future PE teachers and SS students in general (Weaver et al. 2018; Naturkach and Goodwin 2019). Thus, the didactic link between active methodological applications, and the development of inclusion and intercultural values in a context of cultural diversity, represents an opportunity for personal and community growth in addition to a form of empowerment which transcends university classrooms in PE and SS (Domangue, Lee, and Kin-esiology 2008; Rauschert and Byram 2018).

The results of this study must be considered in light of two main limitations. First, the narratives emerged just from the PETE and SS students' diaries, limiting transferability of the results. For instance, the use of the reflective diary by FUM involved in the S-L programme could have brought a new perspective to the study. Second, the study is focused on a S-L programmes carried out with a single vulnerable group. Therefore, we speculate that the results could show higher social impact on PETE and SS students if they were working with more vulnerable groups.

Despite these limitations, the results indicate the potentially significant impact of S-L on PETE and SS students. Such findings suggest that S-L is capable of undertaking a transformative role which enables PETE and SS students to acquire prosocial competencies in contexts relating to cultural diversity and social justice. Moreover, this study has contributed by providing relevant information for all those academics and/or professors of PE interested in S-L applied to groups in social exclusion. In addition, it has contributed to a better understanding of the development of the prosocial competencies of the PETE and SS students involved.

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