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# Promoting health through a non-competitive after-school sports programme: insights from schoolchildren and coaches

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## ABSTRACT

Physical inactivity among schoolchildren remains a major concern worldwide. This study explores the perceptions of schoolchildren and sports leaders and coaches in a non-competitive after-school sport programme on the promotion of physical activity and active lifestyle using a salutogenic approach. For this purpose, qualitative research was carried out through interviews with 71 informants (63 schoolchildren and 8 sports leaders and coaches). With the information obtained, was analysed using the sense of coherence (SOC) elements as analytical tools. The results identified three themes that captured informants' perceptions: 1) They viewed the non-competitive after-school as a meaningful space that promotes regular physical activity practice due to the short-term benefits; 2) attending weekly sessions leads to learn how to play sports and interact with peers which helps to better comprehend the experience acquired; and 3) constructive social relationships with sports leaders and coaches were an important resource that made the non-competitive after-school sports programme manageable for them. It is concluded that non-competitive after-school sports programme had a positive impact on promoting health and wellbeing among participants by providing meaningful, manageable and comprehensibility experiences that contribute to the creation, preservation, and development of health.

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## Introduction

After-school sport programmes often emphasise the benefits that sport practice provides to their participants (Bailey et al., 2009). These allow school-aged youth to engage in structured and educational activities within the non-school context while contributing to their full development (Marttinen et al., 2020). During the last few years, research on after-school sports programmes has focused on the formative and educational outcomes and benefits obtained by individuals who participate in physical- sports proposals carried out outside school hours (Bailey, 2018; Bailey et al., 2009). These interventions have focused on programmes that develop life skills (Hemphill et al., 2019), positive development (Armour & Sandford, 2013), promotion of healthy habits and increased levels of physical activity practice (Arundell et al., 2015; Cheung, 2019; De Meester et al., 2017; Escaron et al., 2021), the development of values (Latorre-Román et al., 2020; Monjas-Aguado et al., 2015), the development of emotional and social learning (Fredick & Marttinen, 2021) or being a point of connection to culture and community (Carter-Thuillier, 2018; Marttinen et al., 2020). Despite the well-documented benefits of participation in after-school programmes, especially those that impact on health (Katzmarzyk et al., 2016), there are still high levels of physical

inactivity among young people (Martin et al., 2021). This trend continues to worsen, and researchers urge further promotion of activities and interventions that promote healthy habits and physical activity (Gough et al., 2020; Katzmarzyk et al., 2016).

### ***The role of after-school sports programmes in promoting physical activity and healthy lifestyles among youth***

After-school sports programmes have been identified as a critical window for the promotion and encouragement of healthy habits, physical activity and academic and personal enrichment (Dauenhauer et al., 2022; Veldman et al., 2020). But it is precisely in this extra-curricular period that the highest levels of physical inactivity and sedentary lifestyles occur among young people, a situation of particular concern given the correlation between physical inactivity and the development of chronic diseases (cardiovascular diseases, cancer and diabetes) (Booth et al., 2017; Gardsjord et al., 2014). Arundell et al. (2015) reported that 54% of schoolchildren were sedentary in the after-school period, having 96 minutes of sedentary screen time, while those participating in after-school programmes achieved approximately 16–19 minutes of physical activity, finding a positive relationship between participation in sports programmes and attainment of minimum physical activity levels. In this regard, Martin et al. (2021) reported that 80% of young people aged 11–17 are insufficiently active. Similarly, in the Spanish context, Roman-Viñas et al. (2018) revealed concerning levels of physical activity, with only 31% of boys and 14.9% of girls aged 3–18 meeting the recommended 60 minutes of activity per day for five or more days per week. It is well known that PE can play a major role in promoting a healthy lifestyle. However, the mere performance of physical activity in PE classes does not achieve the established minimum recommendations nor does it guarantee a subsequent adherence to physical activity that counteracts sedentary behaviours (Cheung, 2019; Kirk, 2006). Consequently, the participation of young people in extracurricular programs becomes essential.

Given that extracurricular sports activities represent one of the most common forms of active leisure for schoolchildren during non-school hours (Franco et al., 2022), it is essential to provide all children and young people sufficient opportunities for physical activity in their leisure time (Engelen et al., 2015; González-Calvo et al., 2018). However, studies by Pate and O'Neill (2009) and Atkin et al. (2011) questioned the effectiveness of extracurricular sports programmes as a means of promoting and adhering to physical activity and an active lifestyle, as many of the programmes studied did not produce significant changes, revealing the need for these to be carried out within the educational context. In this regard, Holt et al. (2013) concluded that successful programs promoting healthy habits and regular physical activity included activities that both challenged participants and facilitated the development of motor skills transferable to other contexts. Similarly, studies by De Meester et al. (2017) and Lee et al. (2018) revealed a positive correlation between participation in youth sports and extracurricular physical activities and children's overall levels of physical activity. Additionally, their findings indicated that youth engaged in sports were more likely to continue being physically active over time.

Lobo de Diego et al. (2022) argued that non-competitive educational after-school sports programmes promoted healthy habits and the regular practice of physical activity in schoolchildren aged four to 17 years who participated in them. Also, Escaron et al. (2021) concluded that the intervention carried out with primary and secondary school children reported a significant increase in the promotion and practice of physical activity in primary school children, but there were no significant changes in secondary school children, these changes being attributed, in part, to the performance of physical activity supervised by an adult. Marttinen and Fredrick (2017) expressed that after-school programmes present a viable solution to the growing issue of physical inactivity among youth. These programs offer a safe environment for students to engage in 60 minutes of physical activity per day, thereby promoting health and well-being. Additionally, they help schoolchildren develop greater intimacy and confidence, facilitating the acquisition and transfer of

knowledge. From this perspective, Martins et al. (2015) found that positive attitudes towards physical activity, perceived competence, autonomous motivation, influence of friends, family and PE teachers, fun or opportunities for physical activity were among the main facilitators for physical activity in young people.

In this context, Schüller and Demetriou (2018) advocated that extracurricular physical activity interventions should play a key role in fostering physical activity but also social competence, which is integral to both health-related quality of life and the overall well-being of schoolchildren. In this sense, Persson et al. (2020) noted that one of the key benefits of participating in after-school sports programmes was the sense of security it provides within peer groups. They argued that sports involvement fosters social belonging during a period marked by shifting alliances and evolving relationships.

Building on this previous body of research, the aim of this study is to deepen the understanding how participants of a non-competitive after-school sports programme experience and make sense of physical activity in their leisure time. We draw on a salutogenic approach and its concept of sense of coherence (SOC), to explore the perceptions of schoolchildren, sports leaders and coaches regarding an educational and non-competitive after-school sports programme, aligned with PE, specifically focusing on its capacity to generate healthy habits and an active lifestyle among participants. In the next section, we present the salutogenic approach including SOC as the theoretical framework underpinning this paper.

### **The salutogenic approach**

The salutogenic approach, proposed by Aaron Antonovsky (Antonovsky, 1979, 1987), focuses on factors that promote health and well-being, in contrast to the traditional medical model, which has predominantly focused on the mechanisms leading to disease and illness. Therefore, salutogenic approach is opposed to illness and pathogenesis and posits that health is not merely the absence of disease but a dynamic process that involves the individual's ability to cope with stress and adversity (Antonovsky, 1987; Ferreira et al., 2021; Mittelmarm et al., 2016). As a result, the salutogenic approach is not a theory about the nature of health itself, but rather a theory that also emphasises the resources involved in the creation, preservation, and development of health (Lindström & Eriksson, 2005). Although the salutogenic approach transcends the dichotomy between health and disease, it does not dismiss the presence of risks or diseases (Kirk, 2018).

A salutogenic approach reinforces the notion that health can be understood in different ways within PE (Kirk, 2018; Quennerstedt, 2008), and also after-school programmes aligned with PE, rather than being solely defined by the absence of disease or overweight (Mong & Standal, 2022; Quennerstedt, 2019). Thus, health is conceived as a psychological and pedagogical issue, where the prerequisites for learning health encompass physical, psychological, and social resources, as well as different aspects of knowledge (Quennerstedt, 2008). Therefore, instead of asking why people become ill, Antonovsky asked: what creates health? (Antonovsky, 1979, p. 12) And how can this person be helped to move towards greater health? (Antonovsky, 1996, p. 14). In this sense, Antonovsky asserted that the ability to comprehend one's life situation and the capacity to utilise various resources – such as physical, material, cognitive, emotional, attitudinal, relational, and sociocultural – were key in fostering meaningful and coherent life experiences. He proposed that these factors explained why individuals in stressful circumstances were able to maintain their well-being and, in some instances, even improve their health (McCuaig et al., 2013).

As part of the salutogenic approach, Antonovsky introduced the concept of SOC, which encompasses an individual's perception of life and their ability to cope with stressful situations. SOC is what renders the world comprehensible, manageable, and meaningful, thereby establishing a sense of order in our lives (Eriksson et al., 2017; McCuaig & Quennerstedt, 2018). These three dimensions are the core components that operationalise the salutogenic approach (Antonovsky, 1979; Boonekamp et al., 2021). The first concept, *Meaningfulness*, refers to the motivational aspect

and reflects the degree to which life situations are perceived as engaging or deserving of emotional investment (Antonovsky, 1987). The second concept, *Comprehensibility*, relates to the cognitive dimension and is defined as the extent to which events are perceived as structured and coherent, making logical sense rather than appearing random and incomprehensible (Antonovsky, 1987). Finally, the third concept, *Manageability*, pertains to the instrumental or behavioural dimension and is characterised by the perception of being capable of managing life's challenges. A sense of manageability arises when there is a perceived balance between the available resources and the demands or challenges posed by a given situation (Antonovsky, 1979; Cseplö et al., 2022). These resources can include physical or cognitive abilities, social relationships, or tangible assets such as physical tools or equipment (Thedin Jakobsson, 2014).

Salutogenic approach provides an appropriate theoretical framework for exploring non-competitive after-school sports programme's participants opinion. It offers a constructive approach to promoting an active lifestyle and well-being among young people by shifting the focus from the risks associated with sedentary behaviours and physical inactivity to perspectives that highlight participants' strengths and resources. This approach emphasises the assets and resources available in after-school sports programmes to address the everyday demands of young people, rather than concentrating on the risks or stressors in young people lives. We adopt a salutogenic approach in order to study whether and how a non-competitive after-school sports programme creates the conditions within all its participants are able to do so.

## Method

### Design

In this work, qualitative research of a retrospective design and phenomenological nature has been carried out to reconstruct the reality studied and to understand in detail, from the voices and discourses of the participants, the meanings they attribute to the actions and phenomena of that reality (Flick, 2018; Marshall & Rossman, 2016).

### Context

The Comprehensive School Sports Programme of the Municipality of Segovia (PIDEMSG) was an alternative extracurricular sports programme to the traditional model that prevailed in that city, with a clearly competitive and selective approach to sport practice (Jiménez-Herranz et al., 2016; Manrique-Arribas et al., 2011). It was considered a 'sports for all' programme and was developed from 2009 to 2018 in the municipality of Segovia (Spain). It replaced the competitive institutional school sport during that period, eliminated competition between schools and dispensed with rankings (Pérez-Brunicardi et al., 2018). Mixed categories by sex and age and multi-sport practice were generalised, promoting the maximum participation of schoolchildren as opposed to the previous model that sought to select the best to participate in the subsequent provincial and regional phases of the competition. In addition, it was proposed as a complement to PE, establishing processes of collaboration with the teaching staff of the educational centres.

Its methodological approach was based on the application of comprehensive and global models (García & Gutiérrez, 2016; Jiménez-Herranz et al., 2019). In this way, the aim was to provide a person-centred approach with a strong connection to the constructivist approach to learning (Griffin & Butler, 2005). During the academic year, schoolchildren were grouped by age categories: played physical activity (4–6 years), under 8(6–8 years), under 10 (8–10 years), under 12 (10–12 years), under 14 (12–14 years), under 16 (14–16 years) and under 18 (16–18 years); and they learned and practised a multitude of sports (Pérez-Brunicardi et al., 2018). In charge of each group of schoolchildren was a sports leader or coach who had previously been trained at the Faculty of Education in the philosophy and methodology of the Programme and with whom they had

one hour of training two days a week (Lobo de Diego, 2022). Sports and games learning were characterised by the use of modified games to adapt the demands of sports practice to the characteristics and psycho-evolutionary development of all participants (Harvey et al., 2018).

In addition, this programme held sports meetings on Friday afternoons in which schoolchildren from all the centres met to practise the sports content that had been worked on during the week (Jiménez-Herranz et al., 2016). These events were held on Fridays to facilitate the compatibility of participation in federated competitions and thus make it easier for schoolchildren to be enrolled in both, whose purposes could be very different, and which accommodated equally diverse interests. Participation in this Programme was free of charge for schoolchildren. Therefore, it was open to all schoolchildren, regardless of their socio-economic level, type of school, level of motor skills or gender.

### Participants

The research sample consisted of 71 key informants who participated during the 2016–2017 and 2017–2018 school years in the PIDEMSG, of which 63 are primary and secondary schoolchildren aged between eight and 16 years old from public and private schools and institutes in the municipality of Segovia participating in the PIDEMSG, and eight are PIDEMSG sports leaders and coaches (Table 1). These participants were chosen on the basis of non-intentional probability sampling by convenience, considering the accessibility of the main researcher and the regular attendance of participants in the Programme sessions. Regular attendance was verified by sports leaders and coaches at the beginning of each training session. This was registered on a sheet of paper.

A total of 17 interviews were conducted. The criteria for selection and inclusion of participants were : 1) Being a participant in the Programme during the 2016–2017 or 2017–2018 academic year, 2) Regularly attending the Programme’s training sessions and matches, and 3) Participating in the Primary and Secondary Education categories. At all times we tried to choose those participants who wanted to participate voluntarily and who could provide us with the most significant and relevant information for this study.

### Instruments

The information was collected through interviews and focus groups. Eight individual semi-structured in-depth interviews were conducted with the sports leaders and coaches and eight focus group with the schoolchildren, following the script designed and validated by Lobo de Diego (2017). The semi-structured interviews and focus groups allowed us to collect oral and personalised information about facts, phenomena, experiences and opinions of individuals, using language appropriate to the context and participants (Cohen et al., 2018; Kvale & Brinkman, 2014). Participants were presented with an informed consent form prior to the interviews and focus groups. This stated the purpose and objectives of the research, ensured anonymity and confidentiality of the information, contained the right to interrupt or leave the interview at any time, and

**Table 1.** Distribution of study participants.

Agents	Type of participant	Number of participants	
		Men	Women
Professionals of the programme	Sports coaches	2	2
	Sports leaders	3	1
Schoolchildren	Primary Education	22	13
	Secondary Education	0	28
Total by gender		27	44
TOTAL			71

*You are playing in the final of a school championship, but in your team there are two players who are not at the same level and who could have a negative impact on the result. Despite everything, would you count on them to play or would it depend on the result? Why?*

**Figure 1.** Example of a dilemma question asked.

**Table 2.** Coding established for the identification of interviews and focus groups.

Interview/Focus group	Type	Participants	Stage	Number
EN	I: Individual G: Groupal	ES: Schoolchildren MO: Sports leaders and coaches	P: Primary S: Secondary	From 01 to 17

Note. Example of coding an interview: ENGESP01 = Group interview with primary schoolchildren number 01.

explained that the information collected would be used and disseminated in academic and scientific work.

The interviews and focus groups were conducted in the years 2017 and 2018 in the sports facilities where the training sessions took place, as they were close and not very hostile to the informants. They lasted between fifteen and fifty minutes. It included eight sections of questions based on the philosophy and characteristics of the Programme (i.e. respect for rules, participation and equal opportunities, healthy habits, multi-sport character, integration, motor competence self-perception, relationship with studies and transfer for life). In addition, in the case of schoolchildren, each section also included a moral dilemma (Figure 1), which posed a real or hypothetical situation in which participants had to choose a course of action that was acceptable or unacceptable from a moral point of view.

Before starting the interviews and focus groups, the researcher again explained the aim and objectives of the research to the schoolchildren and sports leaders and coaches. After that, the interviews were recorded with a mobile phone and a tape recorder. Both, the interviews and focus groups, began with questions to acquire biographical information about the participants (i.e. school year, age, school and years of participation in the Programme). Afterwards, the questions of the different thematic sections were asked. In the case of the group interviews, an attempt was made to give a voice to all participants. After they were completed, they were transcribed and assigned a coding for their identification for the analysis (Table 2).

### Data analysis

The information obtained from the interviews was transcribed into written text and analysed using content analysis (Bengtsson, 2016) in Atlas.ti. The analysis of the information was based on the fact that the perspectives, interpretations, actions and meanings of schoolchildren and sports leaders and coaches were inseparable (Bourdieu, 1992). Therefore, the analysis focused on the participants' own interpretations based on the context and phenomenon studied. Thus, the guidelines indicated by Berge (2007) were followed in our qualitative analysis.

The information was reduced and grouped using an inductive and deductive analysis (Lincoln & Guba, 1985). Subsequently, the authors of this study conducted a thorough individual review of all interview transcripts and actively participated in the analytical process of coding and categorising as indicated by Gibbs (2018). This step aimed at capturing the perceptions of schoolchildren, sports leaders and coaches of the non-competitive after-school. By means of this inductive analysis, the main and secondary themes of interest to the research were highlighted and listed after several listening and readings of the focus group and interview transcripts. Next, a deductive analysis

guided by the SOC three components of the salutogenic approach (meaningful, manageability and comprehensibility) was conducted. Each theme was then defined to facilitate clarity and coherence in the discourse analysis process. Interesting themes that were not related to the study were eliminated. In relation to the concept of meaningfulness, we searched for data that reflected the participants' perceptions regarding the significance and relevance of the content within the non-competitive after-school sports programme to their personal experiences. With respect to comprehensibility, we sought statements that elucidated the learning outcomes and the development of social interactions. In terms of manageability, we searched for statements that outlined the challenges associated with the non-competitive after-school sports programme, and how they managed these demands and what resources they felt they were available to them in the programme. The categorised information was analysed to discern notable patterns and processes related to the phenomenon being investigated, through the identification of similar phrases and relationships, as well as differences. During the analytical process, we implemented criteria for trustworthiness, including the use of investigator triangulation.

The Atlas.ti software, version 7.5.4, allowed us to establish networks between the participants' discourses and to achieve an in-depth and comprehensive analysis of the discourses and their impact on action. Finally, an analytical summary of the information was drawn from the literature and previous research. For this paper we have utilised two of the eight sections of the script that was employed for the interviews and focus groups, as they were the most appropriate for this work: 1) Promoting physical activity and active lifestyles, and 2) Compatibility of regular physical activity with school studies. This allowed for a detailed analysis of the relationship between participation in a non-competitive after-school sport programme and the promotion of health and wellbeing.

The analysis of the information obtained revealed three themes: 1) Impact on leisure-time physical activity and active lifestyles promotion, 2) Impact of the non-competitive after-school sports programme on schoolchildren's time management and well-being development, and 3) Social relationships, resource accessibility and barriers to physical activity.

## Results

### *Impact on leisure-time physical activity and active lifestyles promotion*

The results showed that there is a variety of opinions as to whether the non-competitive after-school programme is meaningful for schoolchildren to engage in unorganised physical activity in their leisure time. To start with, the majority of informant's identified are often active and freely engage in physical activity in their leisure time without having to be directed by a local authority or a sports club. A sport leader assured that this was *due to the way in which the PIDEMSG promotes it with the collaboration of the University* (ENIMO05, p. 2). They attributed this in part to the application of global and comprehensive models in sports teaching in the non-competitive after-school sports Programme.

Sports leaders and coaches indicated that they activities delivered in the non-competitive after-school sports programme were appreciated by schoolchildren and perceived to be meaningful as *[the games I propose in the sessions] they modify them, so they are their games, they name them, and I personally have let groups play games that they bring and they like to play* (ENIMO26, p. 3). In addition, the statements of the informants expressed that they viewed the non-competitive after-school as a meaningful element that promotes regular physical activity practice due to the short-term benefits such as improving personal health and well-being, improving motor skills and social interactions. Several schoolchildren described the benefit of learning different sports in the programme so that they could play them in their leisure time and keep improving their physical abilities while socialising:

We usually meet up to play volleyball in the afternoons when we have nothing to do, so we get better at it and also, playing sport with friends you have fun and it helps you to improve. (ENGESS11, p. 4)

Most of the informants expressed how the non-competitive after-school sports programme gave rise to pleasurable feelings such as joy, relaxation, happiness, feeling of freedom. Reflecting in this way the meaning the non-competitive after-school sports programme can have regarding aspects of health and wellbeing promotion. However, some sports leaders and coaches are more critical with the programme's capacity to generate regular physical activity habits in the schoolchildren leisure time. One sports leader pointed out that, *'Every afternoon I don't think they go out to play, but it depends a lot on the didactic unit and the content covered'* (ENMO02, p. 2).

All informants perceived the non-competitive after-school sports programme as a meaningful activity due to the perceived long-term benefits, most notably the opportunity to learn new skills that they could use later in PE. While our findings indicate that the non-competitive after-school programme favoured that schoolchildren expressed a desire to engage in unorganised physical activity during their leisure time and to maintain an active lifestyle, the overwhelming presence of other extracurricular commitments may hinder their intention to participate in physical activities. Regarding to this, an 11-year-old schoolboy stated:

When there is not much homework or I have English, I usually play football with my friends in the street. (ENGESS01, p. 5)

Thus, the importance of being physically active with friends was mentioned as a key element in promoting an active lifestyle and wellbeing.

### **Impact of the non-competitive after-school sports programme on schoolchildren' time management and well-being development**

Regarding the non-competitive after-school sports programme participants sense of comprehensibility, the results suggest that understanding the importance of attending regularly weekly sessions assist schoolchildren to better comprehend the experiences acquired in the non-competitive after-school sports programme. Moreover, it seemed to overcome challenges in their time management and planning and activities prioritisation. Some schoolchildren highlighted that sometimes they were too much conditioned by the organisation and structuring of their parents' time, and that was limiting their ability to decide for themselves:

Our parents tell us to do our homework first, and then we play or go to after-school sports. (ENGESP22, p. 8)

However, A 12-year-old boy commented that he would *'find time for everything'*, while another 15-year-old said that *'if you organise yourself, you have time to do everything, like, I do homework, then go to after-school sports and then return to finish homework'* (ENGESS08, p. 4).

The informants generally asserted that attending the after-school sports programme was good for health promotion and expressed that helped to their wellbeing, as the after-school sports programme could be used as a scape from the troublesome thoughts caused by stressors and be a time of relaxation:

Schoolchildren 3: Participation in after-school sports de-stresses

Schoolchildren 4: When you have an important exam, you spend all day studying, and coming to after-school sport it's like, oh I have a moment of rest (ENGESS08, p. 8).

Coach: We live in a society that is becoming very structured, it has changed a lot since I was a child. Maybe we had more freedom when it came to organising our afternoons, we didn't have so much stress [. . .] I see its pros and cons, but it is good in an organisational sense, in the sense that they have a space to free themselves' (ENIMO27, p. 6).

As described by the informants, attending after-school sports programme had a positive impact in the schoolchildren wellbeing, not only in the mental or physical dimension but also in the cognitive dimension and learning outcomes such as knowing the rules, knowledge about sports. To this, one coach expressed that *'as a Physical Education teacher I know well that physical activity favours the development of health and also of the mind, of the brain, because the brain works much*

*better when you are physically active*' (ENIMO27, p. 6). However, the informants mentioned the importance of a balance in the extracurricular commitments. In line with this, most of the schoolchildren agreed they would prioritise schoolwork over sports practice, depending on the difficulty of the subject. They explained that a subject conceived as being of greater importance and curricular demand such as maths, schoolchildren would dispense with physical activity in order to focus more on studying. A 13-year-old boy stated that, *'if I have to study music, yes, I go to after-school sports, but if I have to study four subjects like maths, I don't go'* (ENGES09, p. 5). While another 13-year-old pointed out that, *'if the exam is very important and you are not doing well, I wouldn't go to after-school sports training, I would stay at home studying'* (ENGESS09, p. 5).

### **Social relationships, resource accessibility and barriers to physical activity**

The informants described their constructive social relationships with sports leaders and coaches as an important resource that made the non-competitive after-school sports programme manageable for them. They reflected the importance of practicing physical activity with their friends and programme mates as a resource available to them in their leisure time. However, the participants mentioned a series of limitations and barriers that hinder the practice of unorganised physical activity in their leisure time. A 15-year-old girl stated that *we usually meet up to do sport, but we hardly have places to go and play properly and that sometimes puts us off* (ENGESS11, p. 5).

The informants described how performing activities with peers provided opportunities for physical interaction, facilitated a balance between the demands of a given situation and their perceived capabilities, and made the activities more manageable. For them, practicing physical activity in their leisure time with their friends were perceived as the main resource to handle situations. Informants agreed that attending the non-competitive after-school programme led them to experience physical activity as an enjoyable experience and expressed that the lack of sports facilities to be used in the leisure time for non-unorganised physical activity could compromise the promotion of healthy habits:

They leave the training sessions happy and want more, it seems that they don't get enough of the training. So, for example, my girls say 'let's meet to play in such and such a place', but it is true that there is a lack of pavilions for four girls to go, or places to play in the afternoons or weekends. (ENIMO07, p. 2)

Despite this, informants indicated that the non-competitive sports-programme offered resources to help to manage this type of difficulty. Regarding this, a sports leader commented that *they learn new games that do not require equipment and I have seen that schoolchildren of my groups do play them in their leisure time* (ENIMO02, p. 2). Therefore, the content taught within the programme was believed to have a value of its own, rather than merely serving as a way to spend the afternoon.

Schoolchildren often emphasised the significance of feeling safe and comfortable in the practice of physical activity, attributing this sense of security to their friends and the sports leaders and coaches, who were regarded as friends or as an older brother by many of the schoolchildren. Interactions with others were highlighted as essential for learning activities such as team sports. They recognised that a key aspect of the programme's purpose was fostering engagement in activities that encouraged participation and collaboration. Informants also highlighted the importance of creating a motivational climate that was supportive when practicing sports, making the after-school sports programme being perceived as a place of belonging and acceptance.

### **Discussion**

The aim of this study was to deepen the understanding how participants of a non-competitive after-school sports programme experience and make sense of physical activity in their leisure time. This paper contributes to the existing body of knowledge by exploring how participants perceived an after-school sports programme contributes to generate healthy habits and an

active lifestyle among participants. Specifically, the main argument we make in this paper is that incorporating strengths-based approaches, such as salutogenesis, into after-school sports programmes can enhance health-promoting factors and wellbeing among the schoolchildren that participate in them. In this sense, after-school sports programmes can serve as an excellent space for the promotion and encouragement of healthy habits, practice of physical activity, and wellbeing development (Dauenhauer et al., 2022; Newman et al., 2018; Veldman et al., 2020).

The findings indicated that most schoolchildren, sports leaders and coaches experienced a strong sense of coherence when participating in the after-school sports programme. They perceived sports leaders and coaches were organising the teaching in such a way that it was meaningful, manageable, and comprehensive (Antonovsky, 1987, 1996). More specifically, the results showed that the informants viewed the programme as meaningful activity. Consistent with the findings of Escaron et al. (2021) and Lobo de Diego et al. (2022), participants appeared to recognise the programme's potential to promote health, both in the short and long term. From a short-term perspective, they highlighted the significance of participating in the programme as a means of improving their motor skills, having fun and social interactions, relaxing, and enhancing their physical and mental well-being. In the long term, they also valued the benefits of learning different games and sports in the programme, in part perceiving specially that their improvement in motor skills could be used later in other contexts such as PE, and learning activities and games they could play in their leisure time as a way to maintain an active lifestyle. Besides, is important to take into account that the meaningful experience of being enrolled in this type of programme can contribute to the participants' commitment to be physically active over time (De Meester et al., 2017; Lee et al., 2018).

Some of these findings align with those of Holt et al. (2013) and Martins et al. (2015), who identified enjoyment in physical activity and the connection between programme content and daily life as key factors influencing young people's meaningful experiences. All together these findings underscore the importance of sports leaders and coaches in after-school sports programmes, with input from participants, in organising activities that allow for enjoyment while maintaining a focus on the learning process (Holt et al., 2013; Quennerstedt, 2013). Failing to do so could risk diminishing the overall meaningfulness of the experience (Quennerstedt, 2013). In this regard, the results indicate that the non-competitive after-school sports programme was perceived not only as a means to become or remain healthy through physical activity but also as a space where participants could enhance their well-being and promote sustainable health (Lindström & Eriksson, 2005; Quennerstedt, 2008). In this sense, the results support the idea put forward by Marttinen and Fredrick (2017) that after-school programmes are a viable solution to increase physical activity levels while promoting wellbeing and health. However, the lack of sports facilities for participants to engage in physical activity when they do not have programme sessions could be considered a barrier to health (Mong & Standal, 2022). For this reason, it is crucial to offer all children and young people ample opportunities for physical activity during their leisure time (Engelen et al., 2015; González-Calvo et al., 2018). By focusing on participants' well-being, involvement and joy, and engagement in physical activities that foster social relationships and a critical and democratic approach, it is possible to 'enrich their lives, strengthen them as healthy citizens and contribute to a sustainable (health) development' (Quennerstedt, 2008, p. 280).

Regarding the non-competitive after-school sports programme participants' sense of comprehensibility, the results indicate that attending weekly sessions leads to learn how to play sports and interacting with peers are essential sources of support that help participants gain a deeper understanding of the experiences they acquire through the programme. Simultaneously, it aids them in managing stress, particularly when coping with significant school responsibilities. Sports leaders and coaches are perceived to play a significant role in creating a positive social interaction and motivational climate that supports schoolchildren when practicing and learning how to play sports. From a salutogenic perspective (Antonovsky, 1987; Quennerstedt, 2008), it is crucial for sports

leaders and coaches to allocate time to analyse socialisation processes, including when and how social interactions within the group is either fostered or hindered.

Consistent with the findings of Cseplö et al. (2022), this study emphasises the importance of building constructive social relationships between sports leaders, coaches and schoolchildren to ensure that the non-competitive after-school sports program remains manageable for its participants. Moreover, practicing physical activity in their leisure time with their friends were perceived as the main resource to handle situations. In this sense, creating a motivational and supportive climate in which everyone feels safe and accepted (Persson et al., 2020) is necessary to contribute to the sense of manageability. This highlights the argument of Schüller and Demetriou (2018) that the development of social competence while engaging in physical activity is a key factor in the health-related quality of life and wellbeing of schoolchildren. Thus, socialisation becomes a sustained physical activity participation predictor. From a salutogenic perspective, it is crucial to emphasise the role of social and environmental factors in health so there can be a balance between the available resources and the demands or challenges posed by a given situation (Antonovsky, 1979; Cseplö et al., 2022; Thedin Jakobsson, 2014) Antonovsky's theory posits that a supportive social network, access to resources, and a general sense of community contribute to strengthening an individual's SOC.

## Conclusions

The results showed that non-competitive extracurricular sports programmes with an educational philosophy and an inclusive approach can be configured as a privileged space for the promotion of health and wellbeing through a salutogenic approach. This study highlights the positive impact of non-competitive after-school sports programmes on promoting health and wellbeing among participants by providing meaningful, manageable and comprehensibility experiences that contribute to the creation, preservation, and development of health. This is fundamental for young people to have the predisposition to be active without the need for the activity to be organised.

This study has some limitations that should be acknowledged. On the one hand, the variables that were not considered in this study and which could influence the results, such as participation in federated sports activities, autonomous motivation towards physical activity, the ideology and perception of family members regarding the practice of physical activity or the years of teaching experience of the sports leaders and coaches. Another limitation is the lack of male participation in the training sessions or sporting events on the Secondary Education stage where the interviews were conducted, which could have a considerable influence on the results obtained. Another possible limitation is the fact that focus groups were conducted with a considerable number of students at the same time, which could have led to students' responses influencing the answers of other. Therefore, future lines of research based on this work would be to conduct interviews or focus groups with male students in secondary school, as well as their families and teachers and sports leaders and coaches in order to find out in more detail their perception of the promotion of physical activity and active lifestyles in a non-competitive, educational after-school sports programme. Building on the findings of this paper, we also propose that future research could explore AI-tailored approaches to combating physical inactivity, particularly through individualised motivational strategies designed to enhance intrinsic motivation for physical activity in the after-school period. By combining cutting-edge AI techniques with a deeper understanding of motivational behaviours, it is likely that significant advances could be made in promoting physical activity through after-school sports programmes among schoolchildren, ultimately contributing to long-term improvements in health promotion. Another future line of work would be to implement the after-school sports programme in other localities in order to compare the results obtained.

Regarding the implications of this study, we suggest that strengths-based approaches should be emphasise and incorporated in after-school sports programmes in order to facilitate health promoting factors and wellbeing among participants. This awareness is pivotal to reduce youth

pressure and stress of winning or competing when practicing sports, while encouraging wellbeing and regular physical activity practice. In this way, physical activity in their leisure time will not only be used to prevent health problems such as obesity or cardiovascular disease; but and as advocated in the salutogenesis approach, to maximise its full potential, improve the mental and emotional well-being of youth; favour the creation of links and support networks for proper social development; and promote skills such as self-discipline and self-management in teamwork, among others. In connection with that, a thorough discussion on the impact of developing this type of after-school sports programmes is required. In conclusion, we ask if non-competitive after-school sports programmes are destined to remain a lofty ideal to contribute to health promotion, or if there is a need to recalibrate our scholarly compass, broadening our research horizons to redefine non-competitive after-school sports programmes?

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