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ARTICLE

Positive Youth Development: Impact of a Sports Education Program on Ethnic Minority Students within an Academic Environment of Socio-Educational Exclusion

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ABSTRACT: Objectives: There is a growing global concern regarding mental health and well-being in educational settings, especially in contexts of socio-educational exclusion. Active educational interventions offer an effective approach to enhance students' mental health and personal and social well-being. This study aimed to evaluate the effects of a psychosocial intervention program based on the Sports Education model (SEM) on subjective well-being (positive and negative affect) and externalizing problems (aggressiveness, hyperactivity, and behavioral problems) in youth students from a highly vulnerable socio-cultural community belonging to an ethnic minority with significant socio-educational support needs associated with socio-educational exclusion. **Methods:** The intervention took place during school hours, consisting of 17 sessions of 45 min each, at a publicly owned school serving disadvantaged communities. The ethnic minority sample, comprising all preadolescent students, consisted of 28 participants (13 males and 15 females) aged 10 to 15 (Mean = 10.19; SD = 1.39), all of whom were part of the experimental group. The present study employed a single-group pre-test/post-test design due to the unique conditions of the school. **Results:** Subjective well-being was assessed using the PANAS Positive and Negative Affect Scale for Children and Adolescents (PANASN), while the teacher version of the Behavior Assessment System for Children (BASC-2; TRS) was employed to evaluate externalizing problems. The results suggested significant improvements in subjective well-being, with a significant increase in positive affect (d = 0.80) and a significant decrease in negative affect (d = 1.14), both exhibiting large effect sizes. Similarly, aggressiveness (d = 0.62) and behavioral problems (d = 0.79) showed significant reductions, both reflecting medium effect sizes. **Conclusions:** These findings suggest the suitability and effectiveness of this Sports Education program for promoting socio-affective improvements in students from socio-culturally disadvantaged backgrounds and academic environments. SEM-based programs are recommended, as they support mental health and social well-being, offer evidence-based benefits for teachers, and foster holistic student development.

KEYWORDS: Positive youth development; well-being; toxic and friendly environments; sports education model; physical activity; socio-educational exclusion

1 Introduction

1.1 Mental Health and Challenges in Disadvantaged Youth

In recent years, there has been a global rise in mental health [1,2] and well-being issues [3], particularly within educational settings [4–7]. Some authors attribute this trend to increasing sedentary lifestyles [8] and the impact of new social and technological risks on children and adolescents [9]. Inactive lifestyles are seen as a direct contributor to health problems and pose a risk to the personal and social development of young people [10]. Promoting healthy lifestyle habits and well-being within schools is critical to preventing maladaptive behaviors and supporting students' long-term well-being [2,11,12].

There is a growing call for school-based interventions to counteract these trends [6,7,13], with a focus on promoting positive mental health through socio-emotional development [1]. Mental health should be viewed as the creation of environments that support personal and social well-being, fostering healthy lifestyles, optimal emotional functioning, and social inclusion [14]. Mental health problems in children may manifest as (a) externalizing problems [15], (b) negative impacts on emotional development, leading to poor psychosocial adjustment [10], and (c) maladaptive school behaviors, which can result in school abandonment [16].

Students from disadvantaged backgrounds, including those in socio-educational exclusion or facing sociocultural disadvantage, are exposed to a number of associated difficulties, such as behavioral problems or mental health issues [17]. Behavioral problems are understood as observable actions that interfere with learning, classroom functioning, and positive peer interactions, particularly relevant in challenging school contexts, thereby undermining both academic and psychosocial development [18]. Also, these students are at high risk for developing mental health problems, which can further impair their psychosocial adjustment and personal and social well-being [17,19]. Some studies highlight the disproportionately higher prevalence of mental health problems among socially disadvantaged children, who are at least twice as likely to experience mental health issues compared to their peers from higher socioeconomic backgrounds [20]. There is an urgent need for interventions targeting these children and adolescents to help bridge these gaps [2,21], not only because they are the ones who need it most but also those who benefit least from mental health care [7,20].

1.2 Physical Activity and the Sports Education Model (SEM)

Empirical evidence supports the positive impact of physical activity on mental health [2,8]. Sport is increasingly seen as an effective tool for social and educational transformation, benefiting psychosocial adjustment in socio-culturally disadvantaged contexts [19,22]. Educational interventions that promote active practices provide an indispensable guide for researchers and educational professionals as an effective method to improve students' mental health and well-being [2,23]. Authors such as Halliday et al. [11] have established a significant association between mental health and physical sports activity in schools, while Rodríguez-Ayllón et al. [8] have demonstrated significant improvements in mental health associated with youth participation in physical activities. Regular engagement in physical and sports activities is critical for enhancing children's psychosocial health and well-being [24,25].

A key objective of quality education is to create an optimal environment that promotes students' comprehensive development and personality balance [6,26]. While this goal should be addressed across all academic areas, Physical Education plays a particularly crucial role in supporting this development by fostering socio-personal competencies [27]. Proof of this is the proliferation of interventions based on physical and sports practice in children to positively impact their mental health, well-being, and educational

or behavioral challenges [28,29], especially in disadvantaged, socially excluded, or educationally disengaged contexts [17,22,30].

Physical activity and sports can be effectively organized through pedagogical models like the SEM [25,31,32], which contrasts with traditional, decontextualized methods that fail to engage students [33]. In addition, in educational contexts such as schools serving disadvantaged communities, where students with sociocultural disadvantages are schooled, externalizing behaviors are a growing problem, and intervention processes are not always effective [17,34]. Previous studies have highlighted the benefits of SEM in enhancing the students' physical, social, and emotional dimensions, particularly in disadvantaged or intercultural settings [31,35,36].

The SEM is understood within a teaching-learning framework based on physical and sports practices, whose objectives are (a) to live real sports experiences and (b) to achieve competence, enthusiasm, and physical-sports culture [32]. It has generated significant interest in the scientific community [25,33,37,38] and has been promoted as a significant model for socio-affective development in the educational context [35,39,40]. Recent SEM studies have demonstrated improvements in psychosocial indicators, such as (a) enhanced psychosocial adjustment and social competence [40–42] and (b) reductions in passive, aggressive, and violent behaviors [36]. Furthermore, SEM-based interventions have shown positive effects on affective indicators, improving (a) emotional intelligence [43] and (b) subjective well-being [35,43]. Despite these promising results, more research is needed to deepen the analysis of its impact on disadvantaged students in situations of socio-cultural disadvantage and socio-educational exclusion.

1.3 Research Gap and Study Objectives

Despite the promising evidence, there is a lack of research on SEM-based interventions in schools serving highly vulnerable and socio-culturally disadvantaged populations. Little is known about whether SEM can effectively promote well-being and reduce externalizing problems in these contexts, where behavioral and mental health challenges are particularly prevalent.

This study aimed to evaluate the impact of an educational program [39] based on the SEM on youth students at academic environment serving disadvantaged communities, specifically those with educational support needs associated with socio-cultural disadvantage. The overarching objective was to promote the positive development of young students through participation in this structured educational intervention. More specifically, the study sought to examine the effects of the program on two key outcomes: (a) subjective well-being and (b) externalizing problems (aggressiveness, hyperactivity, and behavioral problems). In line with these objectives, we hypothesized that the program would improve subjective well-being (Hypothesis 1) and reduce externalizing problems (Hypothesis 2).

2 Methods

2.1 Design

The present study employed a single-group pre-test/post-test design. This approach was necessary due to the specific characteristics of the school context, which serves a highly vulnerable socio-cultural community and enrolls only 28 students throughout all educational levels at the school, all belonging to an ethnic minority with significant socio-educational support needs associated with socio-educational exclusion (e.g., poverty, family breakdown, disruptive or antisocial behavior, deprivation of basic needs). Under these conditions, it was neither ethically nor practically feasible to establish a comparison group or recruit a larger sample; consequently, all students registered at the educational center participated in the intervention, reflecting the ecological reality of this educational setting. Meta-analyses of Sport

Education Model (SEM) interventions [44] synthesize evidence from studies conducted with small or reduced student samples and have identified positive effects on students' developmental outcomes in authentic school environments. Although causal claims must be made cautiously in the absence of randomization or control groups, these designs can still provide valuable evidence in real-world contexts [45]. One-group repeated measures designs are often necessary in applied educational research where random assignment or the creation of an equivalent comparison group is not feasible, particularly when working with rare or vulnerable populations. In such situations, withholding an intervention may be impractical or ethically problematic. While this design is subject to threats to internal validity, it can nonetheless yield meaningful and contextually relevant evidence [46].

2.2 Participants

The sample was obtained through non-probabilistic incidental sampling and consisted of 28 preadolescent students from an ethnic minority with educational support needs linked to disadvantaged socio-educational contexts. The participants were enrolled in a public school serving disadvantaged communities, which the regional authorities of Castilla-La Mancha officially classified as a *difficult-performance school*. To enhance the study's contextual understanding, the social environment in which it was conducted is characterized by high levels of school absenteeism, families with low or limited formal education, and households with limited or no income. These conditions are compounded by multiple forms of social vulnerability, including high family unemployment, poverty, and job instability. The broader community context is also marked by structural risk factors such as precarious housing, limited access to basic services, exposure to verbal, physical, and psychological violence, substance abuse, racism, social discrimination, and gender inequality, among other contextual challenges [47].

The sample comprised the entire student population of a school officially classified as a difficult-performance school, in which all students belong to an ethnic minority group. This included 15 females (53.57%) and 13 males (46.43%) aged between 10 and 15 years (Mean = 10.19; SD = 1.39). Due to the school's and students' specific socio-educational characteristics, all participants were assigned to the experimental group. None had prior experience with SEM-based interventions. Accordingly, the sample comprises the entire accessible population meeting the inclusion criteria and includes all students enrolled at the participating educational center during the current academic year. The resulting sample size is small due to the center's socio-educational and structural characteristics; however, comparable sample sizes have been reported in sports-based educational interventions conducted in socially disadvantaged contexts [39,43,44].

The inclusion criteria (n = 28) in the study were (1) written informed consent from a parent or legal guardian, (2) regular school attendance (≥80% in-person attendance), and (3) consistent participation in the intervention. The exclusion criteria (n = 3) were (1) more than 20% school absenteeism, (2) lack of written informed consent, and (3) failure to complete pre- or post-intervention assessment tests.

2.3 Instruments

Two instruments with adequate psychometric reliability and validity were used:

(1) Positive and Negative Affect Schedule (PANAS) [48]. The Spanish-validated version by Sandín [49] was used to assess subjective well-being. The PANAS consists of 20 items structured into two subscales: positive affect (e.g., "*I am interested in people or things*") and negative affect (e.g., "*I feel scared*"), each comprising 10 items. Responses are rated on a three-point scale (1 = *never*, 2 = *sometimes*, 3 = *often*). In this study, internal consistency, measured by Cronbach's alpha (α), was α = 0.82 for positive affect and α = 0.76 for negative affect.

(2) Behavior Assessment System for Children (BASC-2)—Teacher Rating Scales (TRS) [50]. The BASC-2 Teacher Report Scale (BASC-TRS) was used to assess externalizing problems. This questionnaire evaluates observable student behaviors, with teachers rating each item based on the student's behavior over the past six months. It consists of 149 items rated on a four-point Likert scale (a = *never*, b = *sometimes*, c = *often*, d = *almost always*). This study specifically used the externalizing problems subscale, which includes the following dimensions: (a) aggressiveness, (b) hyperactivity, and (c) behavioral problems. The instrument has demonstrated robust psychometric properties for the socio-emotional assessment of Spanish children in school settings [51].

2.4 Procedure

This research has been approved by the Social Research Ethics Committee of the University of Castilla-La Mancha (CEIS-2025-108310) as part of a national research project (PID2023-151679OB-I00), which was implemented during the 2025 academic year. The study was conducted in accordance with the ethical guidelines of the University of Castilla-La Mancha and adhered to international ethical principles, including the Nuremberg Code and the Declaration of Helsinki. Given the single-group pre-test/post-test nature of the study in an educational setting, formal approval was obtained from the School Leadership Team, the School Council, and the Faculty Meeting. Participation required informed consent from the school, as well as written authorization from parents or legal guardians. Additionally, continuous communication with the School Leadership Team was maintained to ensure proper supervision and coordination. All ethical confidentiality requirements were strictly followed, guaranteeing the anonymity and voluntary participation of all students in accordance with the American Psychological Association [52].

The study was conducted in four phases. First, the SEM-based educational intervention was designed for the experimental group. Second, a pre-test assessment was administered to collect baseline data. Third, the intervention program [39] was implemented during school hours. Finally, the post-test assessment was conducted at the end of the intervention to evaluate its impact.

The intervention was delivered as a Sports Education didactic unit by two classroom tutor teachers trained in the SEM approach. Both tutors had 15 years of experience in Physical Education and five years of applying SEM-based methodologies. Their qualifications included a degree in Education (specializing in Sports Initiation through SEM) and a PhD in Research and Innovation in Physical Education (focusing on SEM teaching and research). The tutors had regular, sustained, and structured contact with the students. To ensure fidelity, the external research team supervised the program in accordance with Sinelnikov's [53] recommendations. This supervision involved maintaining regular contact—both face-to-face and virtual—to address potential issues, verifying the research process weekly, and making random visits to the school. Before implementing the program, the research team met with the School Leadership Team and the teachers responsible for the intervention to define objectives and align the intervention with the school's curricular framework. These meetings ensured that the research process and educational implementation were well-integrated and adapted to the school's specific socio-educational context.

2.5 Intervention Program

The educational intervention implemented in the experimental group was an adaptation of the program previously published by Luna et al. [39]. It was designed in accordance with the recommendations of Hastie and Casey [54] and structured around the key principles of the SEM [32]. These principles included: (a) a seasonal structure, meaning a longer-term didactic unit compared to traditional Physical Education units; (b) affiliation and cooperative learning, fostering group identity and active participation within a work

group; (c) a formal competition, ensuring engaging, realistic, and meaningful gameplay with comprehensive learning of key content; (d) decision-making and responsibility, incorporating rotating roles such as captain, referee, physical trainer, journalist, and events planning committee member; (e) data logging, evaluating performance, knowledge, and behavior based on fair play and sportsmanship; and (f) a culminating event, a final celebratory activity designed to be both festive and motivating for participants.

Given the school's specific socio-educational context, several adaptations were made. First, sports teams and cooperative work groups included students from different grades in Education, with family involvement encouraged, as the school follows a learning community model based on project-based learning. Second, the selection and distribution of students to the chosen sport (Polish ringo) teams, and the rotation of their responsibility roles, were overseen by teachers to promote fair, respectful, and tolerant sports practice. Third, the Special Educational Needs (SEN) teachers adapted curricular resources to ensure accessibility for all students. On the other hand, during the intervention, managing the season through fair play and respectful, tolerant sports practice played a key role. In this regard, the student assigned the role of referee was responsible for mediating and resolving off-task behaviors. Specifically, they managed timekeeping, match records, and reports, and ensured compliance with the game's regulations, with a strong emphasis on fair play. The referee role was a rotational team responsibility, carried out at least once by each team member during the *season phase*. This role was important for students' active participation, enhancing their understanding of fair play and fostering empathy toward the refereeing team and among the players.

The physical activity intervention program [39] was implemented as a Sports Education didactic unit (season) during school hours, delivered by trained teachers. It consisted of 17 45-min sessions, conducted twice per week (see Table 1).

Table 1: Structure of the sports education program implemented in the academic environment.

Phase	Sessions	Sports Education Model (SEM)
Introductory	1–3	- Audiovisual presentation and theoretical introduction to the Sport Education Model (SEM) and the selected sport (Polish ringo). - Formation of permanent mixed working groups (teams) using a cooperative methodology and rotating responsibility roles with shared objectives. To promote team identity and a sense of belonging, each group: (a) selected a representative name (e.g., names of continents for educational purposes), (b) chose a team color for their shirts, (c) created emblems and mottos, (d) selected songs or anthems to symbolize their identity, and (e) used a distinctive sign to reinforce cooperative learning throughout the season. - Provision of didactic curricular materials, including customized color-coded folders, match reports and records, contingency contracts, and official game regulations. - Theoretical explanation by the teacher, followed by a hands-on activity in which students, organized into cooperative work groups, constructed their own portable ringo rings.
Preseason	4–8	- Practical sessions, each structured to include: a warm-up and cool-down, both led by students assigned as physical trainers; active application of Polish ringo rules during sports activities, ensuring fair play, respect, and tolerance towards opponents, with student referees mediating gameplay; and skill development focused on technical and tactical aspects of the sport (e.g., defense, attack, movement, and serving), taught through a cooperative and autonomous learning approach. - Role-based student activities, enhancing engagement and responsibility: journalists documented match developments and maintained a virtual blog for the school, captains led their teams through training sessions and friendly matches, referees officiated games and ensured adherence to fair play principles. - Post-session reflective assemblies, incorporating positive feedback and active listening, discussion of fair play principles, and trial-and-error learning strategies.

Table 1: *Cont.*

Phase	Sessions	Sports Education Model (SEM)
Season	9–16	- Design and production of rewards, where students created their own trophies, medals, diplomas, and educational prizes, managed by the event planning committee. - Formal educational competition, structured in two phases: Regular phase: A Round Robin league with matches officiated by the student designated as referee. - Final phase: A continuation of the Round Robin league, determining the final standings.
Final Event	17	- Celebratory event linked to a workshop on educational and sports innovation, where students were presented their self-made trophies and awards. - Final evaluation, incorporating a qualitative, formative, and inclusive assessment of students' participation, engagement, and overall learning throughout the intervention.

The sport used in the intervention was Polish ringo, a modified net or split-court game [55]. This innovative team sport, unfamiliar to the participants, is played on a court divided by a volleyball net. Players must throw, catch, and pass a self-built ring over the net, scoring points when the ring lands on the opponent's side (see Fig. 1). Using an unfamiliar sport allowed all participants to start at a similar level of experience. Moreover, alternative team sports such as ringo are highly adaptable to any school context, as they are collaborative, motivating, socially engaging, and flexible in accommodating different skill levels. This active sport promotes full student participation without requiring advanced motor skills. Likewise, the use of simple, self-made equipment (e.g., ring) fosters cooperative learning, improves hand–eye coordination, and reinforces teaching–learning processes grounded in coeducation, respect for materials, and creativity, making the activities accessible to all. Additionally, this experience encouraged active and inclusive participation, as students used self-built resources with no economic cost, which supports diversity and equal opportunities in contexts of socio-educational exclusion [44,56].

Figure 1: Active participation in the self-construction of materials and play in the educational sport Ringo.

2.6 Data Analysis

The data were analyzed using SPSS statistical software (version 30; IBM Corp., Armonk, NY, USA). First, the normality of the variables was assessed using the Kolmogorov-Smirnov test, with the assumption of normality not being met for all variables (analyses were carried out with a 95% confidence interval [CI]). Second, reliability evidence was calculated using Cronbach's alpha (α) to assess the internal consistency of the measures. Third, several statistical analyses were conducted to determine the effects of the educational intervention. To address the proposed objectives, the following analyses were conducted. Descriptive analyses (mean and standard deviation [SD]) were performed for both the pre-test and post-test phases to

summarize the data. In the post-test phase. Wilcoxon's test (Z) was used to evaluate significant changes within the experimental group. Finally, the effect size (Cohen's *d*) of the differences was calculated to assess the magnitude of the intervention effects, following Cohen's [57] guidelines: a small effect for $d < 0.50$, a medium effect for d between 0.50 and 0.79, and a large effect for $d \geq 0.80$.

3 Results

3.1 Effects on Subjective Well-Being

In the post-test phase, the results indicated a significant improvement in subjective well-being. Specifically, there was a significant increase in positive affect, with a large effect size ($d = 0.80$), and a significant decrease in negative affect, with a large effect size ($d = 1.14$) (see Table 2; Fig. 2).

3.2 Effects on Externalizing Problems

Regarding externalizing problems, the post-test results did not reveal a significant overall decrease. However, significant reductions were observed in specific indicators of externalizing behavior. Aggressiveness showed a significant decrease with a medium effect size ($d = 0.62$), while behavior problems also indicated a significant decrease with a medium effect size ($d = 0.79$) (see Table 2; Fig. 2).

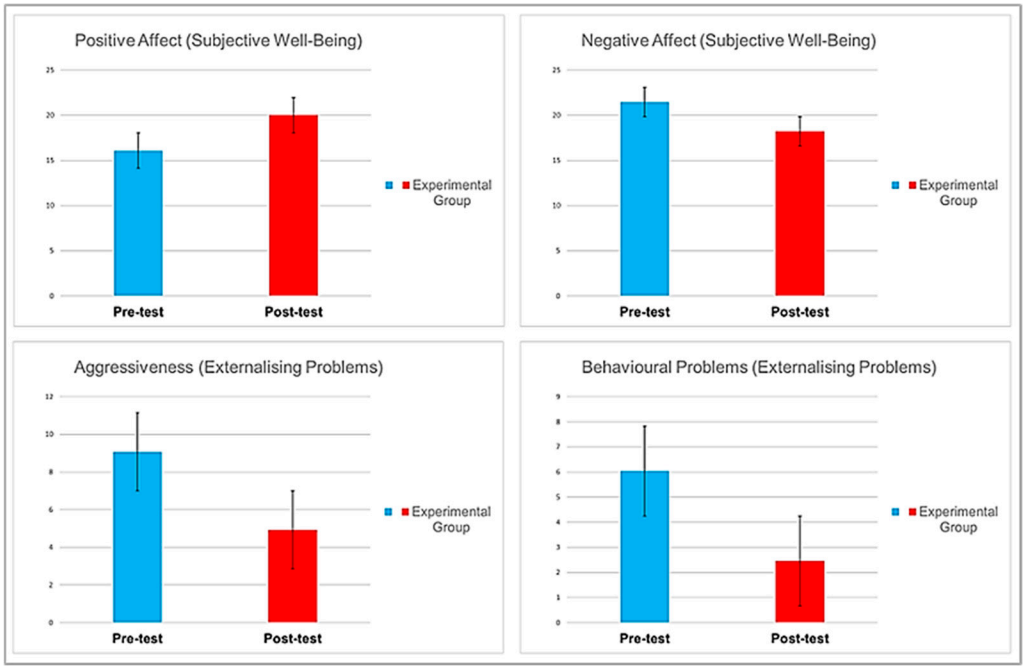

Figure 2: Significant effects of the intervention on the variables under study.

Table 2: Means and standard deviations (SDs) of the pretest and posttest measurements for the experimental group, Wilcoxon test, and Cohen's d-effect size.

Variables/Measures	Pretest		Posttest		Wilcoxon Test (Z)		
	Mean	SD	Mean	SD	*Z*	*p*	*d*
SWB (positive affect)	16.08	2.26	20.00	6.51	2.647	0.008	0.80
SWB (negative affect)	21.46	2.47	18.23	3.15	−3.456	0.001	1.14

Table 2: *Cont.*

Variables/Measures	Pretest		Posttest		Wilcoxon Test (Z)		
	Mean	SD	Mean	SD	*Z*	*p*	*d*
Externalizing problems	160.00	39.45	150.96	42.27	−1.935	0.053	0.22
Aggressiveness	9.71	7.61	4.93	7.74	−3.350	0.001	0.62
Hyperactivity	8.93	8.07	7.89	8.18	−1.603	0.109	0.13
Behavioral problems	6.04	4.25	2.46	4.85	−3.385	0.001	0.79

Note: *Z* = Wilcoxon test; *d* = Cohen's d effect size; SWB = subjective well-being.

4 Discussion

The present study evaluated the impact of an educational program based on the Sport Education Model (SEM) on subjective well-being (positive and negative affect) and externalizing problems (aggressiveness, hyperactivity, behavioral problems) among youth from disadvantaged socio-educational contexts and ethnic minority backgrounds. Overall, the findings indicated significant pre–post improvements in positive affect, negative affect, aggressiveness, and behavioral problems in this sample, while no significant changes were observed in other externalizing problems.

First, the results showed improvements in subjective well-being, reflected in a significant increase in positive affect and a significant decrease in negative affect. Therefore, Hypothesis 1 is confirmed. In practical terms, the large effect size observed for the subjective well-being variable may indicate meaningful changes for educators and policymakers regarding students' affective development. Likewise, the findings suggest meaningful gains that may have implications for curricular development and for initiatives aimed at supporting students' personal and social well-being [7,44,56,58–60]. These findings are consistent with previous studies, which support the effectiveness of SEM-based educational interventions in enhancing the affective dimension of well-being [25], showing improvements in negative affect and emotional intelligence traits [43] as well as positive affect [35]. The promotion of healthy lifestyle habits in childhood through physical and sports-based school experiences should be a key objective for community and educational institutions to foster well-being [2,8,11,12]. Kivimäki et al. [61] emphasize that positive health policies and practices, particularly those incorporating active sports participation within educational contexts, could be effective strategies for improving well-being. Additionally, the present intervention, which incorporated essential elements of the SEM [32], such as real sports experiences, cooperative learning, team affiliation, the assignment of responsibility roles, and a motivating educational environment, could reinforce affective benefits for students from disadvantaged or socio-excluded backgrounds, contributing to positive personal development and, therefore, to their social inclusion [30,40].

Second, although no significant decrease in overall externalizing problems was found, reductions in specific indicators—aggressiveness and behavioral problems—were observed. Therefore, Hypothesis 2 is partially confirmed. Although the effect sizes for specific indicators related to aggressiveness and behavioral problems were moderate (i.e., below 0.80), from a practical perspective, these effects should be considered incipient. In a school context marked by social exclusion, such findings constitute a critical indicator, suggesting that the education system should prioritize improving classroom climate and promote teaching and learning processes that foster active learning, ultimately contributing to high-quality physical education [2,25,58]. A positive adjustment in student behavior or personality would contribute to an optimal school climate, encompassing physical, psychological, social, and affective dimensions [17,26,62]. In line with this, the positive impact of SEM-based educational programs, addressing both social [40–42] and emotional aspects [25,35,43], as well as their role in reducing violent and aggressive behaviors in school

environments [36], can provide positive reinforcement for disadvantaged and socially excluded students, aiding them in developing adaptive coping strategies [10,15,19]. In our view, the intervention's framing within a context of socio-educational exclusion and disaffection means that the observed benefits may hold greater pedagogical significance. Commitment to sports and physical activity is likely to play a positive role in combating socio-educational disconnection or disaffection [2,19,22,30]. Supporting this, previous studies have highlighted that physical and sports activities foster learning social values [19,22,40] and contribute to positive psychosocial health [1,8,11,23,24].

Moreover, externalizing behaviors associated with maladaptive and disruptive conduct [50,51] constitute a growing problem, particularly in disadvantaged or socially excluded school settings within vulnerable communities, where intervention processes are not always effective [17,34]. Similarly, it is important to highlight the difficulty of improving classroom climate in disadvantaged contexts [17,20,21,30]. In this regard, the development of longitudinal studies would be advisable in order to assess the impact of such interventions more effectively in the medium and long term, with the aim of enhancing social cohesion [63]. Another relevant aspect concerns the interpretation of the non-significant findings for the hyperactivity indicator. These results deserve a reflective examination, as sport-based interventions tend to increase rather than reduce activation, and sport does not primarily target impulse inhibition; instead, it promotes motor activation [44,60].

Limitations and Future Lines

Despite these promising results, this study presents the following limitations: (1) the most significant limitation concerns the study design, which lacked a control group. Owing to the specific characteristics of the school context, it was not feasible to establish an active control group without intervention. This design was therefore adopted in response to the constraints of a public-school serving socio-culturally disadvantaged and highly vulnerable communities. The sample size was limited to 28 participants, reflecting the natural composition of the educational setting. The participants comprised the entire student population of the school and belonged to an ethnic minority with substantial educational support needs associated with social exclusion. Although the absence of a control group may weaken the study's internal validity, this design nonetheless provides contextually relevant evidence and meaningful gains in a setting of pronounced social and educational exclusion [40]. (2) The small sample size and the use of convenience sampling represent additional limitations that may restrict the generalizability of the findings. Larger samples would be required to support broader generalization to other populations. However, it should be noted that the experimental group in this study consisted of the entire student population of a school officially classified by the Spanish educational authorities as a *difficult-performance school*, comprising preadolescent students from an ethnic minority. (3) An a priori power analysis was not conducted, as the sample size was determined by the fixed number of students available in the educational context. (4) Contextual factors within the school environment—such as students experiencing significant sociocultural disadvantage and vulnerability (e.g., risk of school dropout, poverty, family violence, and educational disengagement)—may also have contributed to the observed outcomes. (5) Need for social validity evaluation: An initial and procedural evaluation is needed to ensure the social validity and acceptance of the program by both students and teachers [64]. Additionally, a follow-up evaluation is necessary to assess the program's long-term effects. (6) The data on externalizing problems were based exclusively on teacher perceptions. Future research should incorporate self-report measures to gather students' perspectives on these issues. (7) Another limitation that may have affected the attainment of statistically significant results concerns the duration of the intervention. In this regard, several studies suggest that the length of the sports season plays a key role

in student outcomes [44,56,63]. Therefore, this aspect should be carefully considered, as longer intervention periods may enhance and maximize positive findings. (8) A further limitation relates to the absence of specific fidelity assessment data, such as teacher adherence ratings or measures of implementation integrity. This limitation restricts the objective evaluation of the intervention's quality and consistency.

In terms of future research directions, it is recommended that: (a) a waitlist design be adopted; (b) longitudinal studies be conducted with follow-up evaluations to further assess the long-term impact of SEM-based interventions, thus providing stronger empirical support for the pedagogical model of Sports Education; (c) comparative studies be developed in Physical Education classes, particularly with young participants in Education, to compare the SEM with other traditional teaching models, such as the Direct Instruction model [25,63]; and (d) qualitative research be employed to assess the impact of SEM interventions, allowing for a deeper understanding of the underlying processes and outcomes.

5 Conclusions

The results suggest that the intervention may be a promising approach for supporting subjective well-being and certain indicators of externalizing problems in students facing socio-educational exclusion and socio-cultural disadvantage. Based on these findings, educational interventions grounded in the SEM may represent a useful strategy for promoting mental health and personal social well-being. These results may also have relevant pedagogical implications: (a) for teachers, the program may represent a useful educational tool supported by preliminary evidence; and (b) for students, the intervention may contribute to positive mental health and support the holistic development of students in disadvantaged educational contexts and those experiencing socio-educational exclusion.

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Availability of Data and Materials: The data that support the findings of this study are available from the corresponding author, [Pablo Luna], upon reasonable request.

Ethics Approval: This research has been approved by the Social Research Ethics Committee of the University of Castilla-La Mancha (CEIS-2025-108310) as part of a national research project (PID2023-151679OB-I00). The study was conducted in accordance with the ethical guidelines of the University of Castilla-La Mancha and adhered to international ethical principles, including the Nuremberg Code and the Declaration of Helsinki. Given the single-group pre-test/post-test nature of the study in an educational setting, formal approval was obtained from the

School Leadership Team, the School Council, and the Faculty Meeting. Participation required informed consent from the school, as well as written authorization from parents or legal guardians. Additionally, continuous communication was maintained with the School Leadership Team to ensure proper supervision and coordination. All ethical confidentiality requirements were strictly followed, guaranteeing the anonymity and voluntary participation of all students in accordance with the American Psychological Association [52].

Conflicts of Interest: The authors declare no conflicts of interest.

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