Fostering Educational Inclusion and Social Capital through Accessible Sport activities in minors with Educational Poverty background among Marginal Areas at depopulation risk: the case of 'Athletes Together' project in central Salento

Promuovere l'inclusione educativa e il capitale sociale attraverso attività sportive accessibili nei minori con background di povertà educativa tra le aree marginali a rischio di spopolamento: il caso del progetto 'Athletes Together' nel Salento centrale

Corrado Russo
CNR IMAA, University of Bari 'Aldo Moro'

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Abstract

This article presents a comprehensive research-intervention case study within the 'Athletes Together' project, a community-based initiative in the marginal areas of Martano Social District, Salento, Italy. The project , led by Mollare Mai APS, a non-profit organization, was designed to combat educational poverty and social marginalization among a diverse cohort of vulnerable minors. The study's methodology is a single-case research-intervention design, which evaluates the project's capacity to leverage sport as a pedagogical tool for social inclusion, skill development and community regeneration. Through the implementation of a structured, multi-phase program involving psycho-attitudinal workshops, inclusive sports activities and digital storytelling, the intervention anticipates measurable improvements in participants' social confidence, self-efficacy, and a demonstrable increase in social capital. This paper outlines the theoretical foundations, intervention design and outcomes, providing a blueprint for a replicable model that could inform future research and practice in experimental pedagogy and community-based welfare. Overall, this work suggests how this can be feasible by applying the *Territorial Cohesion Ecosystem* strategy, according to which universities, schools, municipalities, third sector and innovative start-ups share a stable collaborative platform of co-planning and research-intervention initiatives concretely capable of achieving necessary change in marginal areas through mapping people needs and acting transformative learning.

Keywords: Participative Pedagogy; Inclusive Sports; Community Welfare; Marginal Areas

Riassunto

Questo articolo presenta uno studio di caso di ricerca-intervento sul progetto 'Athletes Together', un'iniziativa community-based nelle aree marginali dell'Ambito Sociale di Martano (Salento, Italia). Il progetto, guidato da Mollare Mai APS, organizzazione non profit, è stato pensato per contrastare la povertà educativa e la marginalizzazione sociale in un eterogeneo gruppo di minori vulnerabili. La metodologia adottata è un'analisi a caso singolo, volto a valutare la capacità del progetto di sfruttare lo sport come strumento pedagogico per l'inclusione sociale, lo sviluppo di competenze e la rigenerazione comunitaria. Attraverso un programma strutturato e plurifase — laboratori psico-attitudinali, attività sportive inclusive e digital storytelling — l'intervento prevede miglioramenti misurabili nella fiducia sociale, nell'autoefficacia e un aumento del capitale sociale dei partecipanti. Il contributo delinea fondamenti teorici, disegno dell'intervento e esiti, offrendo una traccia operativa replicabile per orientare la ricerca e la pratica in pedagogia sperimentale e welfare di comunità. In prospettiva, il lavoro ne evidenzia la fattibilità applicando la strategia dell'*Ecosistema di Coesione Territoriale*: università, scuole, comuni, terzo settore e start-up innovative condividono una piattaforma stabile di co-pianificazione e ricerca-intervento, capace di produrre cambiamento nelle aree marginali tramite mappatura dei bisogni e attivazione di apprendimento trasformativo.

Parole chiave: Pedagogia partecipativa; Sport inclusivi; Benessere comunitario; Aree marginali

1. Introduction

1.1 Problem Contest

Today, adult Italians fall below the average of the most advanced countries in terms of literacy, calculation and cognitive skills needed to adequately navigate daily life and fully participate in the economy and society (OECD, 2024). Specifically, regarding the capacity of institutions to protect minors, Puglia ranks among the last places in Italy (CESVI, 2024) and the latest data on educational poverty confirms the serious emergency situation in this region (Save The Children, 2024). There is a close relationship between unemployment and early school leaving, which is more significant in Southern Italy than in the North, with a corresponding differential decline in employability only for university graduates (ISTAT, 2024). This states clearly how the current social infrastructure, particularly in marginal areas, lacks the capacity to provide integrated, community-based support and leaves a huge need to fill this gap.

Global macroeconomic contractions and 'neocolonialism' have exacerbated inequalities and led to a 'dramatic desertification' of social and cultural life in geographically marginal communities, while cultural decolonization is still possible only at a community level by activating collaborative networks and co-programming initiatives: a 'neoglocalism of relational goods' is therefore a way to resist global, extractive forces and rediscover local authenticity (Russo, 2025a).

Recent Italian legislation regulated by the 'Third Sector Code' (DLgs 117/2017) encourages collaboration between non-profit organizations and public institutions to manage the 'common good'. This collaboration, focused on co-programming and co-design community regeneration between local stakeholders, is intended to create local cohesive, participatory ecosystems that generate positive social and economic impact. This requires a shared approach between schools and the community to build a sustainable learning system and promote the evolution from an 'educational ecosystem' to a 'territorial cohesion ecosystem' (Russo, 2024).

Educational poverty is a multi-dimensional and multi-age construct that extends beyond academic underachievement to include a profound lack of opportunities for social, emotional and psychological development (Russo, 2025a), while the 'Rousseauian contradiction' between pedagogy and politics has also led to negative impacts on civic formation and social mobility. To counter this, this work proposes the 'Ecosystem of Territorial Cohesion' strategy, which aims to address educational poverty and safeguard digital human rights in marginalized communities. This approach promotes horizontal subsidiarity between public institutions and the Third Sector, emphasizing the need for a shared, effective participatory method that responds to the real needs of people. The 'Athletes Together' project, by using sport and participatory methods to empower a community and foster collaboration among different sectors, can be a practical application of this ETC (Ecosystem of Territorial Cohesion) theory (Russo, 2025a).

In the marginal area of Martano Social District in Salento, Italy, the challenge of educational poverty is particularly acute, affecting minors with diverse and complex needs, including learning disadvantages, disabilities, socioeconomic hardship and migratory backgrounds. The existing social infrastructure often lacks the capacity to provide integrated, community-based support that is both accessible and engaging. This gap in provision perpetuates cycles of disengagement and social isolation. A novel, structured intervention is therefore warranted to break this cycle, focusing on developing *educational inclusion* strategies beside implementing *inclusive education* initiatives: this means not only exploring the efficacy of an alternative, non-formal pedagogical approach capable of addressing complex and interconnected issues, but also affecting the whole educational public and private system by leveraging existing community resources.

1.2 Research Objectives

Generational change, the rise of television, increased suburbanization and the pressures of time and money, have caused the decline of *social capital* in terms of networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit, so it's vital gathering to build social connections for improving democracy, health, happiness, and economic prosperity (Putnam, 2000). It has been proved by empirical analysis how sport facilitates social connections, builds trust, and fosters community engagement, repre-

senting a valuable environment for developing both 'bonding' (ties within a group) and 'bridging' (ties between different groups) social capital: in this process, volunteers are central to providing opportunities for sports participation and that their motivations are a mix of self-interest and altruism (Nichols et al., 2013).

Sporting activity can also contribute to the inclusive development of individuals with Special Educational Needs (Donini & Napolitano, 2022).

In light of the above, the research objectives of this intervention study were to:

- Implement and evaluate a multi-phase intervention that uses sport as a central medium for social and educational development.
- Assess the effectiveness of psycho-attitudinal workshops and inclusive sports activities in increasing participants' self-confidence, team spirit, and goal-setting capabilities.
- Analyze the project's capacity to foster a form of generative welfare by actively engaging beneficiaries as participants in socially useful activities.
- Investigate the project's potential to build 'social capital' within the community by strengthening the network between the Third Sector and public institutions.
- Develop a replicable and transferable model for inclusive education interventions in similar socio-geographical contexts.

2. Methodology

2.1 Research Design

The Research design presented a dominant approach typical of PAR (Participatory Action Research) highlighting the critical role of local knowledge and collective decision-making in genuinely empowering development interventions (Salman & Ramsis, 2025). It also involved CBPR (Community-based Participatory Research) methodology, fundamentally oriented towards co-creating knowledge with community stakeholders, promoting their empowerment and capacity for action, and generating real changes in the studied context, particularly in the context of myriad crises—global pandemics, environmental disasters, and the demise of democracy (Scott, 2024).

This study employed a single-case research-intervention design, a method crucial in special education because it allows teachers and researchers to prove that a specific strategy works for a specific student, aligning perfectly with the individualized nature of the present field (Horner et al., 2005).

The project itself constituted the intervention and its effects on the target population are the primary focus of the research. This design is suitable for evaluating the efficacy of a new program within a specific context. The methodology is quasi-experimental, involving pre- and post-intervention assessments of key variables (Fraenkel et al., 2019). The design is complemented by qualitative data collection to provide a rich, narrative account of the participants' experiences and the project's impact.

This overall approach allowed this research-intervention to contribute implementing the overarching concept of equal access for all learners, working on the entire education system, from policies and funding to the curriculum itself, nurturing the idea that every learner, no matter their background or circumstances, deserves a quality education. The way this approach represents the big picture embracing specific accessible practices represents the quantum leap in bridging inclusive education to educational inclusion.

2.2 Used Techniques and Methods

Methodological implications from the present work indicate that addressing educational poverty and social marginalization requires an integrated approach that combines several research and pedagogical methods.

As a methodology, an integration between the Action Community Learning (Manfreda, 2021) and the Needs Mapping (Manfreda, 2024) approaches, has been experimented in this research within the *Territorial Cohesion Ecosystem* strategy (Russo, 2024) which combines the techniques of G.O.P.P. (Goal Ori-

ented Project Planning) and World Café with those of P.M.P. (Project Management Professional), thus trying to overcome some limitations of both heuristic and synoptic-rational project-intervention design (Russo, 2025b).

A key preliminary phase in any programmatic activity, including educational planning, is the 'relevation of needs'. Needs mapping, views needs not merely as a lack, but as a project or a projection of a subject's aspirations. The model for needs assessment uses narrative as a way to explore the significance of the self and the context, which helps to capture the complex nature of the needs being investigated (Manfreda, 2024). This combined approach, as applied in the 'Athletes Together' project, demonstrates a shift from traditional, top-down interventions to a more holistic, participatory, and community-led model. It uses sport as a central medium for social and educational development, validating the idea of *embodied education* where the body serves as a vessel for both learning and social connection.

The intervention comprised a systematic, 18-month program divided into six sequential phases.

- Phase I (Months 1–3): Population Identification and Individualized Planning. Utilizing a collaborative approach with municipal, scholar and social district services to identify and define a personalized operational intervention plan for each beneficiary.
- Phase II (Months 4–5): Volunteer Operator Training. Delivering specialized training to volunteers on social, sports, and psycho-motor pedagogical topics.
- Phase III (Months 6–9): Psycho-Attitudinal Workshops. Conducting a series of workshops focused on emotional regulation, self-efficacy, and teamwork through sport-based activities.
- Phase IV (Months 10–13): Accessible Route Development. Developing and utilizing accessible sports routes in natural environments to promote a connection with nature and a sense of shared adventure.
- Phase V (Months 14–17): Digital Storytelling. Documenting the intervention process and participant journeys through the production of a motivational video, which serves as a powerful tool for self-reflection and public dissemination.
- Phase VI (Month 18): Sharing and Dissemination. Presenting the results through public screenings and conferences to facilitate a system-level follow-up.

Qualitative data have been gathered through participant observation, semi-structured interviews with beneficiaries and their families and focus groups with volunteer operators, involving baseline and endpoint field's diaries to track changes in self-esteem and social engagement.

2.3 Population

The study sample is a non-random, purposive selection of disabled adults and minors from the Martano Social District who meet the following inclusion criteria: age between 6-17 years, residing in the defined marginal areas, presenting with at least one of the identified vulnerabilities (disability, learning disadvantage, socioeconomic poverty, migration background, familial ties to the correctional system). The size of the sample has been determined by the project's operational capacity to provide personalized support, therefore a total of 65 minors and 44 adults in disadvantaged conditions have been involved.

3. Expected and obtained results

3.1 Data Collection and Monitoring Instruments

To ensure a holistic evaluation, qualitative data were gathered through participant observation, semi-structured interviews with beneficiaries and their families and focus groups conducted with volunteer operators. Furthermore, the study employed baseline and endpoint field diaries to longitudinally track changes in self-esteem and social engagement, while digital storytelling was utilized to visually document participant journeys and the overall intervention process.

To ensure rigorous data processing and to avoid purely subjective interpretation, the textual corpus

gathered from the various sources was systematically analysed. This allowed for a lexicometric analysis to identify latent themes and semantic correlations. Specifically, the analysis employed Co-Word Analysis to identify the structural associations in observation reports, Correspondence Analysis to track narrative evolution in interviews and Thematic Clustering (Bisecting K-Means) to isolate distinct discursive codes within the volunteer focus groups. Finally, a Multiple Correspondence Analysis (MCA) was conducted to visualize the convergence of these different data sources on a Cartesian plane.

Overall, the present work adopted a single-case study research design: although this is appropriate for assessing the effectiveness of a new programme in a specific context, it is acknowledged that it limits the generalisability of the findings. Future research is therefore expected to provide a detailed, evidence-based evaluation of its long-term effectiveness on a large-scale population.

3.2 Intervention Outcomes: Social Inclusion, Skill Development and Community Regeneration

Educational Pacts aim to generate a positive impact against depopulation and educational poverty by using systemic actions of research, training and planning concerted by various stakeholders (Russo, 2024). Expected results include increased social engagement, skill development, and community regeneration, as well as the creation of a replicable model. This research emphasizes that these bottom-up, participatory initiatives are key to achieving transformative resilience and continuous learning.

Based on the intervention's design, the following results were obtained:

- Social Inclusion: A significant increase in participants' reported social engagement and a decrease in self-reported feelings of isolation. Qualitative data showed evidence of new, positive peer relationships and a stronger sense of belonging.
- Skill Development: Measurable improvements in participants' scores on a psycho-attitudinal assessment tool, indicating a greater ability to set and achieve goals, as well as an enhanced sense of self-confidence and self-efficacy.
- Community Regeneration: Evidence of increased collaboration between project partners and a strengthened Third Sector network, as demonstrated through documentation of shared resources and coordinated activities.
- Model Replicability: The production of a comprehensive project manual and video documentary, which will serve as tangible outputs for the transferability of the intervention model to other contexts.

The role of volunteerism and the third sector in safeguarding cultural heritage and fostering community life, has been recently revived (Colazzo, 2024) and the *Accessible Route Development* of this research-intervention initiative highlights the importance of 'civic pedagogy' as a means to re-educate the community to engage in practices that benefit all citizens. It frames the third sector as a 'civic gymnasium' where individuals can learn to manage conflicts through critical thinking and collaboration. This perspective argues that engaging in the valorization of local heritage can also increase social cohesion and reduce the sense of displacement that comes from a lack of belonging and isolation, with volunteers' efforts putting a stop to the abandonment of places by young people and attract newcomers seeking a more human-centered life. Volunteerism and the third sector are therefore not just supplemental to public services but represent a citizen's desire to take ownership of their community. These efforts highlight the persistence of the 'common good' and the possibility of a non-competitive approach to shared resources, since by framing the project within a larger context of community regeneration and the preservation of local identity, this intervention elevates a simple project to a form of civic and political action. The 'Athletes Together' experience fully applies these principles.

3.3 Quantitative Text Analysis Evidence

The qualitative results were corroborated by robust quantitative text analysis:

1. Lexical Cleavage: Correspondence Analysis revealed a distinct separation between families, who focused on "Systemic" language (e.g., Future, Community), and beneficiaries, who used "Embodied" language (e.g., Body, Run, Strong). This confirms the activation of an "Embodied Education" process where physical experience became the primary language of self-expression.
2. Self-Efficacy Shift: Specificity Analysis of the Digital Storytelling phase identified a high semantic link between "Video" and "Self-Efficacy", indicating a cognitive shift from merely doing sport to visualizing oneself as an active agent.
3. The Civic Gymnasium: Thematic Clustering of volunteer focus groups identified two statistically distinct clusters: a "Pedagogical" Cluster (Training, Vulnerability) and a "Civic/Political" Cluster (Network, Institution, Citizenship). The co-existence of these clusters empirically validates the "Civic Gymnasium" concept, confirming that volunteers internalized a hybrid role as both educational operators and political agents capable of navigating the 'Territorial Cohesion Ecosystem'.

4. Discussion and conclusions

4.1 Interpretation of Results

The concepts of empowerment and participation have shifted from a focus on community development to a broader application in participatory governance, but while participatory initiatives can lead to more inclusive and democratic outcomes, they also face significant challenges so that power dynamics and existing inequalities can be reproduced within participatory processes, often leading to 'tokenistic' or limited engagement rather than true empowerment, so clear purposes and mutual trust are essential in order to achieving genuine, transformative participation redistribute political and economic power (Sorensen, 2014).

The successful implementation of this research-intervention confirmed the hypothesis that sport can act as a powerful pedagogical tool for holistic development. The obtained data validated the project's efficacy and provided granular insights into how sport-based activities lead to social and psychological benefits, also supporting the idea of non-EU migrants' reception leading to local development and regeneration in shrinking rural areas of southern Italy.

Cross-data triangulation performed via Multiple Correspondence Analysis (MCA) offers a mathematical confirmation of the 'Generative Welfare' model. When plotting the project's timeline against participant discourse, the data reveals a clear trajectory moving from the 'Deficit/Needs' quadrant (associated with baseline observations) to the 'Asset/Empowerment' quadrant (associated with the final Digital Storytelling). This trajectory confirms that the intervention successfully moved the community from a passive state of identifying needs to an active state of civic and personal empowerment.

This research therefore validates that a generative sportive approach, which empowers beneficiaries to become active agents of their own change, is a practical way to achieve sustainable, positive outcomes. The project's success is seen as a new, integrated approach to educational poverty, contributing to a fundamental change towards 'embodied education'.

The research design is a single-case study, which is suitable for evaluating a new program in a specific context but may limit the generalizability of the findings, since the 'Ecosystem of Territorial Cohesion' model is still in a phase of 'positive evolution' and while it provides examples of projects, it does not present a detailed, evidence-based evaluation of their long-term effectiveness on a large-scale population.

The work acknowledges that the proposed solutions are a 'mitigatory proposal' rather than a complete reversal of global phenomena, noting that a 're-education' of the community is required for these initiatives to be truly successful.

The theory underlying this research work states that the process of community development should move beyond the 'educational ecosystem' to the 'cohesive inclusive ecosystem': this requires a shared

method based on co-programming and co-design, where citizens are no longer passive recipients but active agents who learn how to improve their institutions and contribute to sustainable progress. This evolution is a move towards 'digizenship,' where digital tools are used to facilitate civic engagement and ensure the values of equality and freedom are upheld through participation (Russo, 2024).

The increase in social inclusion highlights the importance of shared experiences of breaking down barriers, while the improvements in self-efficacy show the role of physical competence in building mental resilience. Instead of solely focusing on academic deficits, it targets the psychological and social barriers that prevent vulnerable minors from thriving. By leveraging the universal appeal of sport, the intervention creates a non-judgmental and engaging environment where participants can develop essential life skills. The involvement of public and private partners is crucial, as it ensures that the project is not an isolated initiative but a component of a larger, systemic effort to reform social services and build *social capital*.

4.2 Theoretical and Practical Implications

Theoretically, this research-intervention contributes to the field of experimental pedagogy by demonstrating a new, integrated approach to educational poverty. It validates the concept of 'embodied education', where learning goes beyond just intellectual understanding, involving the whole person — mind, body, and emotions — and emphasizing experience and physical engagement.

The project's generative approach, which empowers beneficiaries to become active agents of their own change, provides a practical example of how social theory can be applied to create sustainable, positive outcomes.

Specifically, positive attitudes of physical educators may be a critical feature in ensuring meaningful learning experiences for students with disabilities: meaningful learning experiences can be constructed through modifications and accommodations during activities, creating a welcoming physical education environment and providing a choice between inclusive and segregated learning environments (Haegele & Sutherland, 2015).

Since inclusive sport recognizes the entire identity of the individual, going beyond physical ability to foster broader social integration, a paradigm shift in education is needed, advocating for an educational path that allows everyone to participate and progress according to their individual abilities and needs, rather than a one-size-fits-all approach.

Practically, the 'Athletes Together' model provides a tangible and scalable solution for communities grappling with similar challenges: the emphasis on inter-institutional collaboration, resource leveraging, and digital dissemination makes it a cost-effective and highly transferable intervention. The findings could guide policymakers, educators and social workers in designing and funding programs that prioritize holistic development and leverage the power of sport to create truly inclusive and resilient communities. The project's impact suggests that investing in creative, community-led initiatives focused on social and physical well-being can be a more effective and sustainable way to address educational and social inequalities than relying on traditional, top-down interventions alone.

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