



COLECCIÓN CONOCIMIENTO CONTEMPORÁNEO

# Propuestas, estrategias y modelos para el desarrollo de la educación física, la salud y el bienestar

Coords.

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**PROPUESTAS, ESTRATEGIAS Y MODELOS PARA EL DESARROLLO DE  
LA EDUCACIÓN FÍSICA, LA SALUD Y EL BIENESTAR**



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FÍSICA, LA SALUD Y EL BIENESTAR

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## PROPUESTAS, ESTRATEGIAS Y MODELOS PARA EL DESARROLLO DE LA EDUCACIÓN FÍSICA, LA SALUD Y EL BIENESTAR

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# INDICE

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INTRODUCCIÓN .....	8
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BARTOLOMÉ PIZÀ-MIR  
ARTURO QUÍLEZ-MAIMÓN  
OLALLA GARCÍA TAIBO  
SALVADOR BONED GÓMEZ  
MARÍA VENTURA MONSERRAT MONSERRAT  
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## SECCIÓN I EDUCACIÓN FÍSICA

CAPÍTULO 1. LA IMPLEMENTACIÓN DE UN PROGRAMA DE EJERCICIO FÍSICO EN LA EMPRESA PARA LA MEJORA DE LA SALUD DE LOS TRABAJADORES .....	11
---	----

SERGI ROSELLÓ MORILLO  
JOSÉ EUGENIO RODRÍGUEZ-FERNÁNDEZ  
SALVADOR BAENA-MORALES  
SALVADOR BONED-GÓMEZ  
OLALLA GARCÍA-TAIBO

CAPÍTULO 2. BREAKOUTS Y EDUCACIÓN: APORTACIONES DESDE LA LITERATURA INTERNACIONAL .....	31
--	----

JAVIER MULA FALCÓN  
SANTIAGO PUERTAS ÁLVAREZ  
JAVIER DE LA HOZ-RUIZ

CAPÍTULO 3. EFECTOS DE LA CARRERA LASTRADA SOBRE LA CINEMÁTICA Y LOS PICOS DE ACELERACIÓN EN DEPORTISTAS JÓVENES.....	51
---	----

MIQUEL LLABRÉS ALEMANY  
BARTOLOMÉ PIZA MIR  
GABRIEL DELGADO GARCÍA

CAPÍTULO 4. EFECTOS DE LA FATIGA NEUROMUSCULAR SOBRE LA VELOCIDAD, PRECISIÓN Y CINEMÁTICA EN LANZAMIENTOS POR ENCIMA DEL HOMBRO .....	71
---	----

MIQUEL LLOMPART SERRA  
BARTOLOMÉ PIZA MIR  
GABRIEL DELGADO GARCÍA

CAPÍTULO 5. EFECTOS DE LA TÉCNICA DE CONTROL DEL ESTRÉS PMI SOBRE EL RENDIMIENTO DEL SAQUE EN TENISTAS AMATEURS .....	94
JOAN MARTORELL RIGO GABRIEL DELGADO GARCÍA	
CAPÍTULO 6. EVALUACIÓN DE UNA PROPUESTA DIDÁCTICA PARA FOMENTAR LA AUTOESTIMA DEL ALUMNADO DE 9-12 AÑOS EN EDUCACIÓN FÍSICA .....	122
PAULA ETAYO-URTASUN	
CAPÍTULO 7. LA INFLUENCIA DE LA FORMACIÓN INICIAL DEL FUTURO PROFESORADO DE EDUCACIÓN FÍSICA EN LA CONFIGURACIÓN DE SU PERFIL PROFESIONAL .....	143
ELOY JOSÉ VILLAYERDE-CARAMÉS	
CAPÍTULO 8. THE INFLUENCE OF SPORTS ON SUSTAINABLE DEVELOPMENT: AN IN-DEPTH EXAMINATION .....	162
SALVADOR BONED-GÓMEZ OLALLA GARCÍA TAIBO JOSÉ EUGENIO RODRÍGUEZ FERNÁNDEZ SALVADOR BAENA-MORALES	
CAPÍTULO 9. ANÁLISIS DE LA CONDICIÓN FÍSICA Y LA SALUD TRAS UN PROGRAMA DE DESCANSOS ACTIVOS DENTRO DE UN AULA DE EDUCACIÓN PRIMARIA.....	178
LLUÍS GARCÍA SATORRES EDGAR DURÁN RODRÍGUEZ JOSE LUIS BERMEJO RUIZ	
CAPÍTULO 10. HÁBITOS SALUDABLES Y USO DE LAS NUEVAS TECNOLOGÍAS EN ALUMNADO DE EDUCACIÓN PRIMARIA .....	201
EDGAR DURÁN RODRÍGUEZ LLUÍS GARCÍA SATORRES JOSÉ LUÍS BERMEJO RUIZ	
CAPÍTULO 11. LINKEDIN USE PATTERNS IN THE UNIVERSITY CONTEXT - A COMPARISON BETWEEN SPORTS SCIENCE AND SPORTS MANAGEMENT STUDENTS .....	224
KELLY CUESTA VÍCTOR JIMÉNEZ DÍAZ-BENITO DEBRA M. VINCI JORGE LÓPEZ FERNÁNDEZ	
CAPÍTULO 12. CONTROVERSIAS EN LA MEJORA DE LAS FUNCIONES EJECUTIVAS POR LA REALIZACIÓN DE ACTIVIDAD FÍSICA EN LA POBLACIÓN INFANTIL Y ADOLESCENTE .....	243
GRACIA CRISTINA VILLODRES MARIELA BUSTOS-ORTEGA	

## THE INFLUENCE OF SPORTS ON SUSTAINABLE DEVELOPMENT: AN IN-DEPTH EXAMINATION

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### 1. SUSTAINABLE DEVELOPMENT AND THE 2030 AGENDA

Sustainable Development and the 2030 Agenda Our planet is finite, and the resources it provides are not infinite, so it is necessary that we use them sustainably. Paradoxically, we find ourselves in a geological era characterized by a series of environmental problems originating from human activity. This fact has led a part of the scientific community to refer to our time as the "Anthropocene" era (Crutzen & Stoermer, 2021; Lewis & Maslin, 2015). The Anthropocene is characterized by pronounced duality, driven by human action, involving rapid changes and often linked to excessive resource use and waste. This situation has resulted in imbalances in natural and socioeconomic ecosystems (Verones et al., 2017; Wiedmann et al., 2020). The Anthropocene reflects a concerning reality in which humanity's influence on the planet is so profound that we are altering natural systems on a global scale (Issberner & Léna, 2018). Unsustainable exploitation of natural resources, air and water pollution, deforestation, and climate change are some of the most evident manifestations of this influence (Singh & Singh, 2017). These environmental issues have a direct impact on people's quality of life and the stability of socioeconomic systems.

In this context, the need to adopt more sustainable practices becomes pressing, and we must rethink and reformulate our relationship with the natural environment to find a balance that allows human development without compromising the health of the planet (Wang, 2020). Sustainable resource management, the adoption of clean technologies, and the promotion of a more conscious lifestyle are some of the measures that can contribute to reversing this negative trend and building a more sustainable future for future generations (UNESCO, 2017).

During the COP26 of the Glasgow Climate Pact, global concern about climate change as a shared challenge for humanity is unanimously recognized. In this context, it is established as a premise that all parties involved in the fight against climate change must take actions that respect, promote, and consider their respective human rights responsibilities (COP26, 2021). Furthermore, the close relationship between global crises, climate change, and biodiversity loss is emphasized. The essential role of protecting, conserving, and restoring nature and ecosystems in adapting to climate change and mitigating its impacts is emphasized. The urgent need for both social and environmental safeguards in this process is highlighted (COP26, 2021).

In a recent session of the United Nations General Assembly, the 2030 Agenda for Sustainable Development was ratified (UNESCO, 2016). This action plan aims primarily to promote people's well-being, preserve the environment, and foster global prosperity while seeking to strengthen global peace and ensure access to justice (UNESCO, 2017). The 2030 Agenda presents a set of 17 Sustainable Development Goals (SDGs) supported by 169 targets characterized by their interdependence and indivisibility, encompassing economic, social, and environmental dimensions (UNESCO, 2016). This innovative strategy will guide global development policies and programs over the next 15 years. States, by adopting it, have committed decisively to mobilizing the necessary resources for its full implementation, with a particular focus on addressing the needs of the most disadvantaged and vulnerable groups through strategic partnerships. As UNESCO (2017) indicates, climate change represents a significant threat to humanity. Additionally, researchers and communities have conclusively demonstrated how



climate change determines areas where it is possible to live, grow food, maintain infrastructure, and preserve health. These observations reinforce the urgency of effectively addressing climate change and its interconnected consequences in society and the natural environment (UNESCO, 2017).

To take action, it is necessary to understand and analyze what the concept of sustainable development (SD) means. If we analyze the literature, we find the first definition of SD in the Brundtland report (1987), where it is described as "meeting the needs of the present without compromising the ability of future generations to meet theirs" (p. 24). Moreover, the report indicates that SD consists of three fundamental dimensions: environmental, social, and economic. In this approach, the interrelationship between environmental and social aspects is addressed comprehensively, recognizing that environmental degradation has social consequences. However, there has been debate about whether the economic dimension represents a goal in itself or rather a means to achieve social objectives. As a result of this analysis, it is concluded that issues related to the environment and society occupy a central place in the pursuit of sustainability, while economic considerations are perceived as instruments to achieve these ends (Arushanyan et al., 2017).

Once the definition and dimensions of SD are analyzed, the next step is to recognize that achieving the SDGs proposed by the 2030 Agenda requires a profound restructuring of our thinking to be aware of the importance of taking action in a timely manner. The main transformation that must occur is within individuals themselves, so that they can become agents of change (UNESCO, 2017). The need to address this aspect from an educational perspective was previously raised during the World Congress of the Association Internationale des Écoles Supérieures d'Éducation Physique (AIESEP) in 2018, where Physical Education emerged as a tool that seemed useful to flourish in school environments and maintain its viability by aligning with broader societal goals. In this context, there is an ongoing assessment of the possibility of establishing connections between the intrinsic attributes of the subject, including motor development, the promotion of justice, equity, diversity, and inclusion, among other aspects, with the aim of encouraging

behaviors among students that promote sustainability. This approach is detailed in the study conducted by Baena-Morales & González-Víllora (2022).

In order to turn all students into active and pioneering agents of sustainable behavior, it is imperative not only to adjust the curriculum but also to adapt teaching methodologies and teacher behaviors (Olsson et al., 2016; Rieckmann, 2017). For example, a constructivist approach in pedagogy could be more effective in stimulating critical awareness in students than opting for a behaviorist approach in the learning process (Serin, 2018). In this way, continuous lifelong learning could be facilitated and actions more easily applicable in various situations. Therefore, a substantial change in attitudes and behaviors is necessary to make progress in achieving the SDGs in this decade (Bali Swain & Yang-Wallentin, 2020).

An additional challenge lies in the inadequate training of educators in general (Washington, 2015), and specifically physical education teachers (PEF) (Baena-Morales, Merma-Molina, et al., 2021). This issue is of fundamental importance, as teachers play an essential role in raising awareness about the relevance of Sustainable Development (SD) for future generations (Rieckmann et al., 2017).

## 2. PHYSICAL EDUCATION AND THE SOCIAL DIMENSION OF SUSTAINABLE DEVELOPMENT

Throughout history, Physical Education (PE) has traditionally been approached from two different philosophical perspectives: one focuses exclusively on physical development, while the other considers the individual as a whole, including aspects such as the mind, spirit, and well-being (Lynch, 2019). The holistic philosophy of health and PE represented by the latter approach has the potential to support the assertion that it can contribute to the achievement of the Sustainable Development Goals (SDGs) through this discipline. Furthermore, sports have held a prominent place in various societies as a tool for promoting social progress. In this context, sports emerge as a valuable resource for advancing the goals set out in the 2030 Agenda (Grynspan et al., 2019).

This is because the benefits derived from sports are numerous, and their influence can extend to multiple areas. However, there is a particularly close connection between sports and the improvement of various social aspects (Iberoamerican Sports Council, 2019). These aspects include promoting physical and mental health and well-being, stimulating education, and developing skills that enhance youth employability, promoting gender equality, facilitating the social integration of people living in marginalized and rural areas, strengthening inclusion and social capital, as well as supporting the construction of peaceful and cohesive societies (Iberoamerican Sports Council, 2019).

## 2.1. SPORT AND THE SENSE OF NATIONAL IDENTITY

Essentially, sports not only promote physical activity and well-being but also significantly contribute to improving key aspects for sustainable development and the achievement of the goals of the 2030 Agenda (Baena-Morales, Jerez-Mayorga, et al., 2021). One of many examples of this is the term "Sport for Development" (SFD), coined as early as 2008. SFD is conceived as a social movement with the purpose of improving the quality of life through sports and physical activity, aiming to promote both sports progress and social development in less privileged communities (Kidd, 2008). Another illustrative example of how sports can fulfill this function can be seen in Fiji, where rugby sevens, a sport that combines collaboration and opposition, has played a fundamental role. This sport has proven to be a powerful unifying element between the two predominant ethnic groups in the nation. Over the years, Fiji has faced racial divisions and social tensions, but rugby sevens has emerged as a cohesive factor, bringing together indigenous communities (Commonwealth, 2020). Rugby sevens has not only served as a means for social inclusion but also as a source of national pride and a platform for Fijians to demonstrate their sporting excellence on an international level (Commonwealth, 2020). This story exemplifies how sports, when used strategically, can be a valuable tool for promoting unity, overcoming divisions, and improving the quality of life in diverse and disadvantaged communities.

However, in recent decades, the organization of large-scale sports events, such as the FIFA World Cup or the Olympic Games, has become highly competitive and extremely complex. Despite the considerable financial costs involved for the host country, many governments view these mega-events as valuable means to promote nationalistic sentiment due to the attention they generate. It is believed that this attention can also have economic and social side effects in the host country (Heere et al., 2013).

Due to questions about the economic benefits, governments have started to make stronger claims about the social impacts derived from mega-sporting events (Heere et al., 2013). In particular, the ability of sports to strengthen social identity at the community level has been investigated. One example of this is a study that explored the interaction between university identity, city identity, state identity, and team identity in a university context. The results of this research empirically supported the idea that sports can influence how people identify with certain communities (Heere et al., 2011). This community identification is assessed through social identity, which originates from certain values and emotional attachment associated with group membership (Heere et al., 2013). One of the most notable examples of how sports can contribute to strengthening national identity took place in South Africa when former President Nelson Mandela used the 1995 Rugby World Cup as a tool to bridge the social and political gap between Afrikaner, black, and colored populations (Steenveld & Strelitz, 1998). Historically, South African rugby was considered a symbol of Afrikaner oppression, and Mandela's gesture of embracing the national rugby team, the Springboks, was interpreted as a symbolic gesture of reconciliation (Heere et al., 2013). This gesture, popularized in the movie 'Invictus,' occurred when Mandela attended the final game proudly wearing a Springboks jersey. This act served as a catalyst that helped the former President gain the support of the Afrikaners and promote political unity in South Africa, creating a sense of national identity in the new 'Rainbow Nation' (Heere et al., 2013). However, questions arise as Mandela's attempts to promote social unity focused exclusively on the national team's performance, not on the event itself. Therefore, it remains

uncertain whether social cohesion could have been achieved without the national team ultimately winning the tournament (Heere et al., 2013). Following this line of argument, Hargreaves and Ferrando (1997) highlighted an interesting perspective when analyzing the 1992 Summer Olympics in Barcelona, where they argued that the successful attainment of gold medals in these games played a crucial role in managing relations between Catalonia and the rest of Spain. In their analysis, they suggested that if successful performance in terms of gold medals had not been achieved, latent tensions between Catalonia, a region with distinctive cultural and political identity, and the rest of Spain could have escalated. This increase in tensions could have led to deeper conflicts and divisions within the host country. The underlying argument here is that sporting achievements, particularly success in the Olympics, often have a significant impact on social cohesion and the perception of national identity (Hargreaves & Ferrando, 1997). In the context of Barcelona, the successful performance of the Spanish national team in the Olympics not only brought national pride but also helped ease regional tensions, promoting a sense of unity and cohesion throughout the country (Hargreaves & Ferrando, 1997).

## 2.2. SPORT AND HEALTH

The effects of sports and exercise on physical and mental health are widely supported in the literature, where evidence suggests a positive correlation between sports and exercise and health, both in terms of primary prevention of certain diseases and secondary prevention (slowing the progression of the disease and providing therapeutic benefits) (Taylor et al., 2015). The health literature provides the strongest evidence in terms of the social impact of participation in sports and exercise. This is one of the most straightforward areas of social impact to research, as historically there has been a greater quantity of quantitative research in this field. Furthermore, the quality of evidence regarding the hierarchy of evidence is stronger, largely due to the significant amount of research conducted by the medical and scientific community. In general, there is stronger and more abundant evidence supporting the physical health benefits of sports and exercise, although there is a growing body of

literature in the field of mental health that reaches similar conclusions (Taylor et al., 2015). One of the challenges in establishing the causal relationship between sports and exercise and health lies in determining causality (McCrory et al., 2013). Many cross-sectional studies examine the relationship between sports and exercise in a sample of individuals at a specific point in time. However, positive relationships can exist because people with better health participate in these activities more regularly (Taylor et al., 2015). Longitudinal and cohort studies provide a better understanding of causality and tend to be more common in the field of physical health. There is a broad consensus in the literature that sports and exercise provide preventive and therapeutic benefits for both adults and children (O'Donovan et al., 2010). Research solidly supports the idea that sports and exercise can contribute to preventing chronic diseases, including premature mortality, cardiovascular diseases (CVD), diabetes, obesity, some types of cancer, strokes, and osteoporosis, as well as reducing the risk of premature death (Taylor et al., 2015). In comparison, the evidence on the effects of sports and exercise on mental health is less abundant. Nevertheless, the evidence base is growing and suggests that sports and exercise can have positive preventive and therapeutic effects on mental health and well-being (Walsh, 2011). There is evidence indicating that sports and exercise can reduce the risk of developing mental health disorders and be beneficial in the treatment of certain mental illnesses (Taylor et al., 2015). Both studies examining the situation at a specific point in time and long-term cohort studies indicate that sports and exercise can reduce the risk of depression and suicide, as well as the development of neurodegenerative disorders such as Alzheimer's Disease (AD) and Parkinson's Disease (PD) (Walsh, 2011). Sports and exercise can also generate therapeutic benefits in the treatment of eating disorders, addictions, and body dysmorphic disorders. Additionally, they can be beneficial in combating age-related cognitive decline and alleviating some symptoms of schizophrenia (Walsh, 2011). Evidence has also been found of associations between sports participation and improved mental health in children (Taylor et al., 2015).

### 2.3. SPORT AND SOCIAL CAPITAL

Most of the reviewed evidence indicates that sports and exercise programs contribute to social capital by promoting social interaction and the development of social relationships and networks (Skinner et al., 2008). However, since it is based on cross-sectional analyses and program evaluations, there is still uncertainty about the direction of causal relationships between sports and exercise participation and social capital (Taylor et al., 2015). In general, the evidence supports the idea that sports enhance both bonding and bridging social capital, although there may be more evidence suggesting that sports participation generates bonding capital by increasing social connectedness and a sense of belonging among fairly homogeneous populations (Skinner et al., 2008). Likewise, several studies demonstrate that sports participation helps bring together people from different backgrounds and can foster mutual understanding, change attitudes, and overcome social barriers (Taylor et al., 2015). However, evidence of deeper and lasting changes in terms of social inclusion and community cohesion is generally more limited, and especially concerning ethnicity, some barriers pose significant challenges and are difficult to overcome (Taylor et al., 2015). Sports participation and sports volunteering are closely related and are generally considered complementary in the literature. Volunteering is perceived as a form of social capital and, as such, shows a positive relationship between sports participation and social capital (Kay & Bradbury, 2009). Reciprocity and trust generated by sports volunteering also play a role in sustainability and the generation of levels of social capital and sports participation. In the literature, there is evidence of a strong positive relationship between sports volunteering and other measures of social capital, although the direction of causality is not established (Elmose-Østerlund & van der Roest, 2017).

### 2.4. SPORT AND EDUCATION

The preponderance of evidence supports a positive relationship between sports and exercise and intermediate and final educational outcomes (intermediate outcomes are factors preceding final outcomes and include, for example, cognitive skills, social skills,

attendance/absenteeism, which are intermediate steps toward final outcomes such as educational achievement and progression to further or higher education) (Taylor et al., 2015).

For example, in Namibia, a prominent case is the "Youth Active" (PAY) program, which was initiated by Donovan Zealand, a member of the University of Namibia faculty (Physically Active Youth Namibia, 2020). This program was designed to address an alarming problem: the high dropout rate that occurs after the tenth grade when a national-level examination is conducted to determine whether students can continue or finish their academic studies. In recent years, the failure rate has reached a concerning 50%, leading many young people to face unemployment and adopt a risky lifestyle, including drug use, unprotected sexual activity, and involvement in criminal activities (Kidd, 2008). PAY was first implemented in 2003 and started with 40 students identified as at-risk for failing this crucial exam. Each of these students received academic counseling and sexual education, in addition to participating in one hour of organized physical activity five evenings a week after school throughout the academic year. Initial results were very encouraging, with 75% of the students passing the tenth-grade exams (Kidd, 2008). Over time, the program has grown and currently has around 100 participants (Physically Active Youth Namibia, 2020). Furthermore, discussions are underway to expand it nationwide. It is important to note that while sports and physical activity are central elements in this program, it does not seek to recruit these students for organized sports. Instead, the short-term focus is on guiding at-risk students through their tenth-grade exams and facilitating their access to further education, while also promoting a strengthened sense of sexual responsibility, especially among young males (Kidd, 2008). In the medium term, the goal is to help these young people secure productive employment, reduce sexual violence perpetrated by men, and decrease the incidence of HIV/AIDS in the community. In the long term, it aspires to demonstrate that this program effectively contributes to sustainable economic growth and social development in the country (Physically Active Youth Namibia, 2020).



Promoting healthy lifestyles is a priority in education, and various strategies can be employed to achieve this, such as physical education, school breaks, interdisciplinary projects, active commuting to school, after-school intervention programs, and tutorial action plans (Chillón et al., 2012; Murillo Pardo et al., 2013; Sevil et al., 2019).

Despite the variety of theoretical and empirical claims about the educational impacts of sports, most of the reviewed evidence suggests that perhaps the most convincing evidence of a positive relationship between sports and exercise and educational effects lies in the affective domain, i.e., through increased self-esteem, perceptions of competence and achievement, among others, and in the cognitive domain, i.e., through improved concentration and thinking skills (Taylor et al., 2015). Additionally, the evidence also suggests that social capital attributed to sports, such as increased social interaction among teachers, parents, and students, is also linked to educational effects (Kay & Bradbury, 2009).

Regarding psychological benefits, there is strong evidence demonstrating the improvement of children's self-esteem through sports participation and physical activity (Ekeland et al., 2004). Many studies have highlighted a positive relationship between sports participation and a variety of self-esteem-enhancing benefits, such as perceptions of competence and achievement, engagement in meaningful activities, and experiencing enjoyment and fun (Taylor et al., 2015). Several studies have reported these positive outcomes for both young people in general and specific groups or populations.

Many of the educational effects attributed to sports participation depend on a range of contextual and pedagogical variables (Bailey et al., 2009). When sports activities are presented in a meaningful and relevant way to students, they are more likely to attract a greater number of students and have positive effects on their educational behavior and attitudes (Taylor et al., 2015). Although the evidence highlights many positive associations between sports activity and affective benefits, less is known about the mechanisms through which this development occurs.

Regarding cognitive benefits, the focus is on the development of cognitive function, learning skills, and academic performance associated with sports participation (Donnelly et al., 2016). The underlying premise is that physical activity stimulates the development of these skills, which in turn improves academic performance (Taylor et al., 2015).

### 3. CONCLUSION

The relationship between sports and sustainable development is multifaceted. Sports not only contribute to physical and mental well-being but also play a significant role in nation-building and the promotion of social cohesion. Examples like the case of Nelson Mandela in South Africa demonstrate how sports can be a powerful tool for reconciliation and the unification of divided communities.

In terms of health, the literature supports the idea that participation in sports and exercise has beneficial effects both in disease prevention and treatment. Sports have been associated with a reduced risk of chronic diseases such as cardiovascular diseases, diabetes, and obesity, as well as improvements in mental health.

Sports are also linked to social capital as they foster social interaction and the development of relationships. While there is evidence that sports can enhance both bonding and bridging social capital, the evidence regarding profound and lasting changes in social inclusion and community cohesion is more limited, especially concerning ethnicity.

In the educational context, participation in sports is associated with positive educational outcomes, both in affective and cognitive terms. Benefits include increased self-esteem, perceptions of competence and achievement, and improved concentration and thinking skills. Furthermore, social interaction among teachers, parents, and students is also linked to positive educational effects.

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