Health and Education through Sport for development and peace in extreme development contexts: cases studies from various developing countries

Received: 6
April 2021
For
correspondence:
gadais.tegwen@uqam.ca

Tegwen Gadais¹⁻², Laurie Décarpentrie¹⁻², Patrick Charland¹⁻², Olivier Arvisais¹⁻² & Paquito Bernard¹⁻³

¹Université du Québec à Montréal (Canada)

²Chaire UNESCO de Développement Curriculaire

³Research Center, University Institute of Mental Health at Montreal, Montréal, Quebec, Canada

Please cite as: Gadais, T., Decarpentrie, L., Charland, P., Arvisais, O., & Paquito, B. (2021, April 7). Health and Education through Sport for development and peace in extreme development contexts: cases studies from various developing countries. <https://doi.org/10.31236/osf.io/cau6j>

ABSTRACT

Across the world, young people do not have the same opportunities to develop their potential and become well-rounded adults. The world's population is approximately 1.8 billion young people aged 10 to 24, and about 90% of them live in developing countries within extreme development context. Optimal development of those generations depends on the resources for support, education and health and the means implemented to sustain this development. However, the imbalance of these resources is clearly observable throughout the world. Sport has been use in many developing countries to contribute to health and education for youth following Sustainable Development Goals (SDG) of the United Nations. More especially, sport is use as a leisure to generate resilience, the capacity of a person or group to develop well, to continue to project itself into the future despite destabilizing events, difficult living conditions, and severe trauma. Several authors emphasize the role of recreational activities such as physical activity and sport in the resilience process or for academic perseverance. The chapter explores the perspective and the potential of using sport for the sustainable development for health and education of youth as targeted in the SDG. More especially, we aim to understand how sport can contribute to health and education of youth through cases studies from various developing countries.

Key words: Health, Education, Sustainable Development Goals, Sport for Development and Peace, Resilience

In the last two decades, several authors emphasize the role of recreational activities such as physical activity and sport in the resilience process or for academic perseverance (Mygind et al., 2019). Sport has been used in many developing countries to contribute to health and education for youth following Sustainable Development Goals (SDG) of the United Nations (United Nations Development Program, 2015). Specifically, sport is seen as a vehicle/vector or lever to support health or education as well as an instrument to support resilience of people facing destabilizing events, difficult living conditions and severe trauma (Akiyama, Gregorio, & Kobayashi, 2018; Gadais, 2019).

This chapter explores the perspective and the potential of using sport for health and education for the sustainable development of youth as targeted in the SDG. More especially, we aim to show how sport can contribute to health and education of youth through various case studies conducted in extreme development contexts

1. Unequal Opportunities for Development and SDGs

Across the world, young people do not have the same opportunities to develop their potential and become balanced adults. The world's population is made up of approximately 1.8 billion young people aged 10 to 24, and about 90% of them live in Global South (United Nations, 2018). In particular, the optimal development of this generation depends on the resources in support, education, health and the means implemented to sustain this development. However, the imbalance and disparity of these resources is clearly observable throughout the world. UNICEF (2011) observes, for example, that poor school performance, unemployment, substance use, risk behaviors, crime, poor sexual and reproductive health, self-mutilation, and poor personal hygiene are all possible consequences of a lack of education, but also of untreated mental health problems among adolescents.

SDG agenda towards 2030 was developed in the assessment of the Education for All program (UNESCO, 2015a) that highlighted the fact that millions of children still do not have access to education because of the nature and the scale of crisis that have shaken several educational systems in recent years. "Conflicts remain a major obstacle in regards to schooling and a large and growing proportion of unschooled children live in conflict areas" (UNESCO, 2015c). Half of the unschooled children would live or have lived in a war-affected country (UNHCR, 2015). As a result, the 2030 Agenda for Sustainable Development "broadly recognizes the urgency of responding to the complex educational needs of crisis-affected populations in the current global context where many countries are in conflict, while others face the serious consequences of natural disasters" (UNESCO, 2017). Moreover, "there is an unprecedented number of forced population displacements, which weighs heavily on education systems, considering that about 50% of refugee children and 75% of young refugees in the world are not in school. Marginalized groups, such as girls and people with disabilities, are the most affected" (UNESCO, 2017). In that context, the UN agenda 2030, through SDG #4, not only focus on accessibility of schools to children but the aim to also enhance its quality. In 2015, the UN chose to continue its commitment to global development until 2030, proposing seventeen Sustainable Development Goals (SDGs) as international guidelines for its member states. These goals target various areas such as gender equality, environment, education and health. The latter areas are more specifically targeted by the third SDG and the fourth SDG:

• SDG 3 (*Good health and Well-being*) aims to "enable all people to live in good health and promote the well-being of all people at all ages" (ONU, 2016). Since 1946, the World Health Organization (WHO or OMS) has stated that good health is not only a state of complete physical well-being, but also of mental well-being (OMS, 1946, 2013). Mental health, and particularly mental or psychological well-being, has been conceptualized in the theory of self-determination (TAD) (Ryan & Deci, 2000) which states that psychological well-being varies according to the satisfaction or frustration of three basic psychological needs - (1) autonomy, (2) competence and (3) social belonging. It also and especially emphasizes the crucial role played by the environment or context in the youth's development process and in maintaining their health.

• SDG 4 (*Quality Education*) aims to "ensure equal access to quality education for all and promote opportunities for lifelong learning". By strengthening quality education, it seeks to promote socio-economic mobility, which is a means of escaping poverty in particular (United Nations, 2020). Major progress has been made in improving access to education and increasing enrolment rates at all levels, especially for girls, over the last decade (United Nations, 2020). Nevertheless, more than 260 million children and adolescents were out of school in 2018 - nearly one-fifth of the world's population in this age group. Furthermore, by 2020, the COVID-19 pandemic was spreading around the world and a majority of countries imposed temporary school closures, affecting more than 91% of the world's students (United Nations, 2020). School closures affected nearly 1.6 billion children and youth, 369 million of whom are normally dependent on school meals as a reliable source of daily nutrition. Never before in history have so many children been out of school at the same time; this has disrupted their learning and disrupted their lives, especially for the most vulnerable and marginalized children that are already developing in extreme conditions.

The notion of "extreme situation" was proposed by Bettelheim (1943) at the end of the Second World War to describe several related factors, namely malnutrition, arduous work, lack and deprivation of freedom, lack of access to health care, insecurity and lack of basic resources such as clothing. Contemporary context of children's life can easily be related to these conditions: children living in areas of armed conflict or in conditions of extreme poverty, refugee children, street children, child slaves, child soldiers, child sorcerers, to name only those, are all subjects that echo these extreme living conditions. These contexts of life, qualified as extreme, can cause drastic fluctuations in the level of health and education of an individual, with major consequences for his or her development.

2. Specificities of the extreme development context for health and education

Bettelheim (1943) addresses the psychological consequences of extreme life situations. He speaks of personality disintegration, brutal changes in behaviour, inability to control oneself, pathological lying, etc. These elements have since been reinforced by more recent literature, such as the use of protection mechanisms (Anaut, 2009) or defenses (Mathieu, Jean Jacques, & Dérivois, 2012) that appear when confronted with a traumatogenic situation. Denial, repression of affects, dissociation, sublimation, displacement, projection, acting, passive-aggressive behaviours, cleavage, imagination, humour, somatization are all mechanisms that can be activated by the individual facing adversity (Anaut, 2009; Mathieu et al.,

2012). If such reactions are observed in adults, the consequences of extreme situations can be disastrous for children in the midst of developing and building their identity.

On another hand, extreme life situations may lead to various trauma exposures. Literature in educational sciences is well-defined on their impact children learning and development. Thus, Frieze (2015) remind that academic performance, school attendance, behavior and relationships at school are affected by exposure to trauma. Recent neurobiological, epigenetics, and psychological studies have shown that traumatic experiences in childhood can diminish concentration, memory, and the organizational and language abilities children need to succeed in school (Frieze, 2015; Mygind et al., 2019).

2.1 Trauma related to extreme development contexts

Traumatic contexts (Figure 1) are distinguished by their intensity or expression: massive, brief, intense or cumulative and/or of long duration (Anaut, 2009). There is a distinction between trauma resulting from a brutal and sudden event (type 1) or resulting from repeated exposure to negative events over the long term (type 2). The latter include situations of physical, psychological and sexual abuse, severe neglect during childhood, psycho-emotional deficiencies and many others (Anaut, 2009).

Figure 1. Effects of Extreme development contexts on health and education

In the lives of children living in extreme contexts, the two types of trauma are often cumulative. For example, among street children, one of the recurring observations across different countries is that following a major traumatic event or following a succession of traumatic experiences, often accompanied by significant economic difficulties, a child might flee and join the street (Cénat, Derivois, Hébert, Amédée, & Karray, 2018; Morelle, 2008). These authors explain that this choice often leads the child to expose himself or herself to more traumatic situations, such as prostitution, alcohol and drug consumption, physical and sexual violence, kidnapping, and social stigmatization.

The same type of phenomenon can be observed among child soldiers. While there are many reasons for finding children enlisted in armed forces, they are often related to trauma. The loss and desire to avenge the family, financial

insecurity, and community protection are all reasons that can lead a young person to join a militia, willingly or unwillingly (Daxhelet, 2013). The violence suffered and perpetrated, once integrated into the armed forces, are some examples of additional trauma for the individual. Children working in mines (Sastre & Zarama, 1994), in garbage dumps (Camacho, 1986), as domestic servants (Jacquemin, 2009), or sent to the streets as sex workers (Bhukuth & Ballet, 2009; Brial, 2011; Emmanuelli, 2011) are all situations that are undeniably sources of trauma at many levels. These multi-traumatic situations (Mathieu et al., 2012) refer to several factors identified by Bettelheim (1943) to describe an "extreme situation".

2.2 Trauma, Resilience and leisure activities

Children who experience or have experienced difficult events would be able to use these events and draw from them psychic resources allowing them to continue to develop in a balanced way (Joseph & Derivois, 2016). The concept of resilience is used to explain this process (Cyrulnik & Jorland, 2012).

Resilience can be defined as "the capacity of a person or group to develop well, to continue to project itself into the future in spite of destabilizing events, difficult living conditions and severe trauma" (Manciaux, 2001). Several authors (Cyrulnik & Jorland, 2012; Joseph & Derivois, 2016; Karray, Derivois, Brolles, & Buzaglo, 2017; Ravizza, 2012; Woodhouse, 2019) emphasize the role of arts, creativity and recreational activities such as physical activity and sport in the resilience process. For example, through the symbolization of trauma, artistic expression allows the individual to make a traumatic experience socially shareable (Cyrulnik & Jorland, 2012).

These impacts have notably been observed among street children in Haiti. Through painting workshops, street youths, victims of the deadly earthquake of 2012, had the opportunity to express and transform multi-traumatisms into works of art that could be shared (Joseph & Derivois, 2016). According to these researchers, artistic mediation groups, as a creative space, contribute to the evacuation of the traumatic experience and to the revalorization of the person (Joseph & Derivois, 2016; Sherry, Schulenkorf, & Chalip, 2015). It is up to the human being to find the artistic or athletic expression that suits her or him to carry out this process of resilience (Cyrulnik & Jorland, 2012; Galli & Gonzalez, 2015). These observations reinforce the proposals of major organizations to offer leisure activities to young people to foster their development through extreme events and situations.

3. Leisure activities as a solution to issues in extreme life situations

To improve the life and development of people living in extreme situations, the organization of leisure activities, in formal and non-formal contexts, appears to be a promising avenue. Indeed, in the Global Programme of Action for Youth (ONU, 2010), the UN insists on the universal aspect of leisure activities to promote youth development. Indeed, "all societies recognize the importance of leisure time for the development of young people's psychological, cognitive and physical capacities" (p.44) (ONU, 2010). Emphasis is placed on the usefulness of recreational programs to address social problems and deviant behaviours of youth. Moreover, this recommendation is supported by a wealth of research (Kindelberger, Le Floc'h, & Clarisse, 2007; Mandolesi et al., 2018; Pelletier, Vallerand, Green-Demers, Brière, & Blais, 1995; Redmond, Sumner, Crone, & Hughes, 2019; Sonke, Rollins, & Graham-Pole, 2016; Wiese, Kuykendall, & Tay,

2018) that demonstrate the positive links between the practice of leisure activities and the psychological and cognitive-physical development as well as the psychological well-being of youth (ONU, 2010). The development of a stronger mental wellbeing results in stronger coping strategies, which is envisioned as a protective factor. Indeed, weak coping strategies are linked to risky behaviour such as unhealthy diet, addictive behaviours, substance abuse, early puberty and early risky sexual activity in at-risk children (UNICEF, 2019). All of these behaviours imply health risks for young people and increase the chances of dropping out of school because of sickness, early parenthood, loss of control over one's life for example.

A report of the Quebec Council of Leisure (2012), indicates that participation in leisure activities has a positive impact on factors affecting both psychological well-being (SDG3) and academic perseverance and success (SDG4). Indeed, according to this document, participation in leisure activities promotes personal development, self-esteem, self-assertion, a sense of self-efficacy, a sense of belonging, the development of a personal identity, perseverance and motivation, to just name a few. In this vein, a recent systematic review suggested that body-mind (e.g., yoga) or peer-supported sport and dance intervention could improve or maintain a subjective well-being (Mansfield et al., 2018). High level of evidence supported the effect of sport or physical activity intervention to develop self-esteem (Dale, Vanderloo, Moore, & Faulkner, 2019), prevent or treat mental disorders in children or adolescents (Biddle, Ciaccioni, Thomas, & Vergeer, 2019). However, most of these investigations were carried out in high-income countries. An observational study found that higher daily physical activity was associated with lower risk of depression and anxiety disorders in six middle-income countries (Arat & Wong, 2017). More recently, a scoping review examining sport-based health promotion interventions performed in African countries identified only two experimental studies but, mental health benefits post-intervention were not clear (Hansell, Giacobbi Jr, & Voelker, 2020). Several articles hypothesized possible benefits from sport interventions for youths during or post-extreme situation (Kalaf & Plante, 2019; Massey & Williams, 2020). However, no physical activity interventions were included in reviews examining the effectiveness of interventions for mental health carried out in context of armed-conflict, post-conflict or humanitarian emergency (Jordans, Pigott, & Tol, 2016; Patel et al., 2018; Purgato et al., 2018).

4. Sport as a tool for international development

Sport for Development and Peace (SDP) has been defined as "the intentional use of sport, physical activity and play to achieve specific development goals in low- and middle-income countries and disadvantaged communities in high-income areas", which includes "all forms of physical activity that contribute to fitness, mental well-being and social interaction, such as play, recreation, organized or competitive sport, and indigenous sports and games" (Richards et al., 2013; United Nations Inter-Agency Task Force on Sport for Development Peace, 2003). These definitions have since been widely adopted by SDP actors and researchers (Schulenkorf & Adair, 2014; Webb & Richelieu, 2015). The prevalence of SDP projects is so significant that the United Nations recognized its potential by establishing the United Nations Office on Sport for Development and Peace (UNOSDP) with three main roles: encouraging dialogue, building SDP collaborations

and partnerships, as well as supporting international sports organizations, civil society, the private sector, and the media.

Beyond the descriptions and contributions of the UNOSDP, researchers investigating SDP programming have described benefits of sport participation, such as individual development, health promotion and disease prevention, promotion of gender equality, social integration, peace building or conflict prevention/resolution, and assistance post-disaster/trauma (Chawansky & Holmes, 2015; Kidd, 2008). For example, Kidd (2008) conducted an extensive literature review describing the landscape of the SDP movement. According to the author, SDP initiatives have been prompted by athlete activism, response to the fall of apartheid, and enabled by the openings created by the end of the Cold War, the neo-liberal emphasis upon entrepreneurship and the mass mobilizations to 'Make Poverty History', throughout a major focus of policy development by the United Nations and the SDP International Working Group (Kidd, 2008). From a developmental perspective, the focus of SDP is not on elite competition but on mass participation where sport is used to reach the most underserved, including refugees, children soldiers, victims of conflict and natural disasters, the poor, people with disabilities, as well as victims of racism, stigma and discrimination (Hartmann & Kwauk, 2011; International Working Group Sport for Development and Peace, 2008). According to Lyras and Welty Peachey (2011), sport-based projects use sport as a medium "to exert a positive influence on public health, the socialization of children, youths and adults, the social inclusion of disadvantaged, the economic development of regions and states, and fostering intercultural exchange and conflict resolution" (p. 311).

Parallel to the development of the SDP movement, studies in sociology, anthropology, history, psychology or management have been carried out on this subject. Several studies suggest that it is possible to achieve positive and sustainable development outcomes through sport, while others presents limits or challenges (Darnell, 2018).

4.1 Potential of Sport to achieve SDG

Research in recent years has sought to assess the positive impacts of SDP programs on participants (Table 1). Several studies indicate tangible and interesting results in terms of health and education, particularly in extreme life situations.

Table 1. Examples of positive effects on Health and Education identified by SDP studies

	Positive effect of SDP
SDG#3 Good Health and Well-being	↑ HIV-AIDS awareness ↓ Spread of HIV-AIDS ↑ Communication safe sexual behaviour ↑ Sexual health knowledge and attitudes
SDG#4 Quality Education	↑ Empowerment of women ↑ Creation safe environment ↑ Supporting children in school ↑ Self-determination ↑ Sense of belonging ↑ Autonomy ↑ Relationships ↑ Ability to adapt ↑ Peace building ↑ Conflict resolution ↑ Violence prevention

Regarding Health (SDG3), sport or physical activity has been found to contribute positively to HIV/AIDS awareness and reduce the spread of HIV/AIDS. Studies in Dar es Salaam, Tanzania, indicated that children who participated in sport-based peer education programs for HIV/AIDS were better informed about and more likely to adopt safe behaviors than children who had participated only in national school programs. The authors indicated that sport is an effective way to communicate useful information about safe sexual behavior to a population of at-risk adolescents (Maro, Roberts, & Sørensen, 2009). Indeed, sport-based programs appear to have a positive impact on the fight against the pandemic, linked to the lack of public health infrastructure or the absence of national HIV/AIDS policies.

The development of sport and physical education interventions in extreme life conditions is major challenge. Physical activity has been identified as a psycho-social intervention by Rohingya refugees living in Cox’s Bazar camp (Wells, Némorin, Steel, Guhathakurta, & Rosenbaum, 2019). However, young had limited access to play some outdoor games (e.g., ludo, carom, ball). Access to physical activity spaces is particularly limited for girls due to cultural barriers, lack of support from family and safety issues (Ahmed, Mahmuda, & Alam, 2019).

Another study has assessed sports participation in a football league that provides sexual and reproductive health and rights lessons before each football match strengthened adolescent Zambian girls’ sexual health knowledge, attitudes, and behavior (Duffey, Zulu, Asamoah, & Agardh, 2019). The aim of the programme was to decreasing risky sexual behavior among adolescent girls in sub-Saharan Africa. Results showed that sports-based educational programs might improve sexual health knowledge and attitudes among African adolescent girls, potentially reducing the risk of sexually transmitted disease and early aged pregnancy.

For Education (SDG4), sport has been shown to support the empowerment of women, particularly young women who are marginalized or have limited social, economic and physical development. In these types of sport programs, the transgressive nature of girls' participation in physical activity allows patriarchy or social stereotypes to be challenged in order to contribute to women's empowerment and greater gender equality (Saavedra, 2009). Thus, a study in Delhi, India, of entrenched patriarchal social structures found that sport-based programs offered girls and young women the opportunity to gain important reproductive health knowledge and improve their confidence, social status, and relationships (Kay, 2009). Another study in Colombia showed similar empowerment of young Colombian women in connection with women's soccer programs by creating a safe environment and supporting children in school (Oxford, 2017). But few is mentioned regarding their motivation or success in school.

SDP also showed positive results to improve self-determination among Burmese female youth from refugee backgrounds, forced to migrate and resettle (Farello, Blom, Mulvihill, & Erickson, 2019). Physical activity may pave a pathway to healthy resettlement. Interviews focuses on how sport and physical education experiences relate to their sense of belonging, autonomy, and relationships, as well as their ability to adapt. In Colombia, the ‘Seedbeds of Peace’ programme was used to illustrate how the ‘Seedbeds of Peace’ programme uses football as an analogy to teach life skills and redefine moral values (Hills, Gomez Velasquez, & Walker, 2018). Another illustration from Latin American context, the Belizean Youth Sport Coalition was a two-way coaching exchange project that spanned three years (Wright, Jacobs,

Howell, & Ressler, 2018). The goal of this project was to promote positive youth development and social change through sport in the small Central American nation of Belize. The study assessed the immediate outcomes of the education programme provided to 33 youth sport coaches. Multiple data sources indicate the education programme was effective in terms of participants': (1) satisfaction with the training, (2) content knowledge, (3) attitudes and beliefs, and (4) capacity to implement the contents of the education programme.

Sport has also been used as an effective tool for peacebuilding, violence prevention and conflict resolution (Mandigo et al., 2018). This includes bringing disparate groups together, rebuilding communities in post-conflict situations or integrating former combatants, including child soldiers. Soccer for Peace is a good example that has used soccer as a rallying activity to support intercultural relations and reconciliation in Israel. While recognizing that the peace objective of this program is not automatically adopted by its participants, the initiative was carried out on the premise that well-managed interventions could "make a modest contribution to efforts to promote conflict resolution and peaceful coexistence (Sugden, 2006).

Thus, the creation of programs based on sport or physical activity can have a significant impact on the world's most marginalized people, such as indigenous (Whitau, Ockerby, Stars, Netball, & Australia), refugees (Farello et al., 2019), particularly youth and girls (Hancock, Lyras, & Ha, 2013). As an illustration, Wisniewski (2009) advocated for the introduction of sport into Refugee Camps as a Catalyst for Development. More especially, he affirmed that we can increased educational opportunities resulting from the introduction of sports facilities and equipment in refugee camps. Also, he noted some effects of these increased educational opportunities on gender equality.

In sum, previous studies explored the psychosocial and educational benefits of physical education interventions in children after a traumatic experience or an exposition to an extreme life situation experience. These interventions were examined in context of refugee camps or host country. Football or Capoeira interventions was implemented post-trauma experience in young in Kenya and Australia (Ley & Barrio, 2019; Momartin, Coello, Pittaway, Downham, & Aroche, 2019; Momartin, Miranda, Aroche, & Coello, 2018). Generally, results suggested that interpersonal skills, sense of responsibilities were improved, and school class dropout rate decreased. Furthermore, these adapted sport interventions were associated with higher self-reported well-being and lower perception of daily stress in young refugees with high level of emotion distress (Ley & Barrio, 2019; Momartin et al., 2019).

4.2 Limits and challenges of sport to promote the SDGs

Despite the potential benefits of sport, these positive social impacts do not accrue automatically. Reaching positive impacts requires professional and socially responsible interventions adapted to the social and cultural context that give priority to developmental goals and are carefully designed to be inclusive (Gardam, Giles, & Hayhurst, 2017; Hartmann & Kwauk, 2011; UNOSDP, 2017). Still, some authors note the lack of scientific literature concerning the understanding of the mechanisms by which sport can foster the development of participants (Green, 2008; Hartmann, 2003; Levermore, 2008). Studies have also shown several limitations to SDP, both in its perception and implementation. These limitations therefore pose challenges for the future of this movement, both for actors and researchers.

First, sport is used to attract youth to participate in development programs that include health and education. Therefore, sport or physical activity is utilised to convey health-related messages, to develop physical, cognitive, psychological or social skills related to daily life with an educational purpose. But what about those who don't like sport and who don't get hooked on the physical activity offered in these SDP programs? Could other leisure activities such as theater, music, or traditional games or activities achieve the health and education goals with the same effects? While the promotion of sport for development and peace is sometimes based on the idea that sport is popular around the world, young people may prefer to participate in cultural or recreational activities rather than sports and competitive activities. To be effective, therefore, a program should be able to offer different, varied, and inclusive activities for development, such as painting, drama, music, or other artistic activities. At present, little research has been done to assess the effects of these activities on the development of youth in extreme contexts and to compare them with programs that use sport (Décarpentrie, Bélanger, & Gadais, 2020). Therefore, this is an area that needs to be studied in much more detail.

Second, and related to the first limitation, understanding and assessing sport's contributions to international development is often due to the methods used (Darnell, 2018). Research methods, using pre- and post-test methods, have shown that youth participation in sport programs often improves self-confidence, self-esteem, overall resilience, and a sense of empowerment. However, it is difficult to accurately assess the role that sport plays in these processes of youth health development and education (Coalter, 2013). Indeed, the lives of youth are complex, and even more so for those living in extreme contexts such as poor and marginalized communities. Here, many factors influence the psychological or social development of the young person (e.g., family, school, community, geographic location, culture, etc.). It is therefore extremely difficult to isolate the impact of sport on youth.

Third, sport is a broad term that encompasses many forms (Gadais, 2019), which can have a wide variety of objectives and activities. For example, the SDP may offer elite sport, competitive sport, physical education, physical activity or leisure activities to meet health and education themes. Health can be illustrated by the important fight against doping in elite sport or by the integration of the health education component in national physical education curricula. While education often appears to be the foundation of all SDP programs. At present, too little studies have focused on truly characterizing the forms or types of SDP, i.e., the purposes, objectives and activities proposed by SDP programs. It would be very relevant to ask the question of human development and the young people that one wishes to train through its programming.

Fourth, the issue of the training and qualifications of SDP actors remains under-explored by research (Gadais, 2019). Yet UNESCO (2015b) reminds that it is crucial to have trained and qualified staff to implement a quality intervention, both in health and education. Thus, many questions remain about the people who work with SDP participants, their recruitment, training and qualifications. Only the study by Whitley et al. (2019) has put forward the relevance of this theme without clear answers.

Finally and fifth, another obstacle to the SDP model is that the positive role of sport can neither be guaranteed nor assumed (Darnell, 2018). While it is true that sport programs have contributed to peacebuilding and conflict resolution, sport has also exacerbated conflict and violence, past and present. This is not to say that sport is intrinsically linked to

violence, but neither does it automatically generate peace (Parlavecchio, Moreau, Favier-Ambrosini, & Gadais, Submitted 2020).

5. Future perspectives

Keeping in mind the possibilities of sport, but also its limitations and challenges, we believe that several perspectives need to be discussed for future perspectives. We argue that international reflections on the future of health and education must focus in particular on extreme contexts of development and life, especially on sustainable educational solutions, such as leisure activity programs to be implemented to improve the lives of people living there. These reflections should also consider the multiple issues and challenges associated with their implementation, such as the organization of initiatives with local actors, the bonds of trust to be established with people, the recruitment of volunteers, or structural funding. For example, many recreation programs, particularly those that use sport as a development tool, are not implemented by a national administrative structure, but mostly by small local organizations (Svensson & Woods, 2017). However, these organizations often testify to the difficulties they encounter in setting up sustainable structures and activities. Most of the time, they depend on the orientations and punctual financing set up by international organizations (Lynch & Yerashotis, 2019) and we often observe the disappearance of several of them due to a lack of human or material resources.

Then, we noted a lack of knowledge about the effects of leisure activities in extreme life situations (Décarpentrie et al., 2020). Indeed, studies on the positive links between the practice of leisure activities and psychological development have mainly been conducted in certain regions of the world (e.g., Canada, Northern Europe, United States of America, Australia) (Whitley, Massey, Camiré, Blom, et al., 2019; Whitley, Massey, Camiré, Boutet, & Borbee, 2019). However, these studies account for only 10% of the contexts in which young people live (ONU, 2016). Indeed, research conducted in contexts qualified as extreme in terms of development remain rare and empirical knowledge on the effects of leisure activity programs on the well-being and quality of education of young people is lacking. It is therefore crucial to fill this knowledge gap and to examine the processes underlying the effect of leisure activities on the well-being and quality education of young people developing in such contexts in order to promote the optimal development of each human being.

Finally, to our knowledge, only few SDP organizations consider climate change as a development objective. Indeed, SDP programs have not yet specifically addressed the problems of environmental degradation or climate change. Little number of SDP programs have an ecological mission in relation to SDG. For example, the Futbol Playa association in El Salvador requires a complete cleaning of the beach before the practices, with the participation of young participants. Similarly, the Mathare Youth Sport Association in Nairobi, Kenya, runs youth soccer leagues in which participants earn points in their rankings by collecting garbage and helping clean up Mathare. If the sport sector will to have an impact and make a significant contribution to sustainable development, it will need to increase its focus on environmental issues and reach the gaps between sport and environment (Bernard et al., 2020). SDP organizations could systematically adhere to five following SDGs: 6- sustainable management of water, 7- sustainable energy for all, 9- promote resilient infrastructures, 11- make cities more resilient, and 13- take urgent action to cope with climate change. Among physical

practices, the development of bicycle travel could be preferred. Based on World Bicycle Relief program (2018), an increase of daily frequency of bicycle travels facilitated water accessibility, decreased car use in urban/rural context, and favoured the community resilience post-natural disaster (World Vision, 2007). Consequently, the development of SDP interventions could anticipate the impact of sport practices or infrastructures (e.g., grass surface) on water scarcity (Philipps, 2013). Also, outdoor sport practices could be fostered. Indeed, studies suggested that these activities were associated with higher pro-environmental behaviors and climate change awareness (Rosa & Collado, 2020).

Also, massive migrations based on the projections of the World Bank suggest that climate change will push more than 140 million people to migrate within their country in 2050, particularly in tropical regions. At worldwide scale, 200 millions to one billion humans may become climate change migrants in 2050 (Myers, 2002; Xu, Kohler, Lenton, Svenning, & Scheffer, 2020). In parallel, rising temperature is also expected to increase issues of rising sea level, extremes weather condition and potential increase in the occurrences of devastating weather events in the next years (Cai et al., 2014). Progressive or sudden changes in environment will force climate migrants to temporarily or permanently leave their home. In this perspective, educational and health systems need to be prepared and resilient. In their review, Bernard et al. presented the psychological benefits from sport interventions implemented post-natural disasters for children. They also concluded that sport organizations provided a major social and emotional support post-natural disasters and help to social integration in the context of forced climatic migrations (Bernard et al., 2020). Consequently, physical activity and sport communities should be involved in regional preparedness plan for natural disasters and climatic migrants welcome (Bernard, 2019).

6. Conclusion

This chapter proposed an exploration of the potential of sport as a development and peace tool to help achieve the UN's SDG, particularly health and education. We presented several studies from various developing countries, providing illustrations of how sport has been used to contribute to health or education perspectives. Based on this review, we deeply believe that more connections could be investigated in between sport and SDG 5-Gender equality, 10-Reduced inequalities, 13-Climate action, 16-Peace and Justice, and 17-Partnerships because of potential actions and impacts (UNICEF, 2008; UNOSDP, 2017).

In conclusion, the increasingly developed and institutionalized sector of Sport for Development and Peace suggests that the world of sport has many opportunities to contribute positively to overcoming the most pressing social and environmental problems and thus ultimately to addressing SDGs such as health and education. Current research shows that positive results are far from guaranteed, particularly in relation to the "magic power" of sport. We believe that the time has now come to move beyond the question of whether sport can be used to promote international development and to determine the most equitable and sustainable way to do so.

7. References

Ahmed, M. S., Mahmuda, M., & Alam, A. M. M. (2019). Sports and physical activity in psychosocial

- interventions with adolescent groups of the Rohingya community in Bangladesh: potential, limitations and critical factors for success. *Intervention*, 17(2), 284.
- Akiyama, T., Gregorio, E. R., & Kobayashi, J. (2018). Youth sports activity and young people's well-being after a disaster: a trial with the Mastery Approach to Coaching (MAC) in the Philippines. *BMC research notes*, 11(1), 1-4.
- Anaut, M. (2009). La relation de soin dans le cadre de la résilience. *Informations sociales*(6), 70-78.
- Arat, G., & Wong, P. W.-C. (2017). The relationship between physical activity and mental health among adolescents in six middle-income countries: A cross-sectional study. *Child & Youth Services*, 38(3), 180-195.
- Bernard, P. (2019). Health psychology at the age of Anthropocene. *Health Psychology and Behavioral Medicine*, 7(1), 193-201.
- Bernard, P., Chevance, G., Kingsbury, C., Baillot, A., Romain, A. J., Molinier, V., . . . Dancause, K. N. (2020). *Climate change, physical activity and sport: a systematic review*.
- Bettelheim, B. (1943). Individual and mass behavior in extreme situations. *The Journal of Abnormal and Social Psychology*, 38(4), 417.
- Bhukuth, A., & Ballet, J. (2009). *La traite des enfants à Madagascar*. Antananarivo: Unicef.
- Biddle, S. J., Ciaccioni, S., Thomas, G., & Vergeer, I. (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. *Psychology of Sport and Exercise*, 42, 146-155.
- Brial, F. (2011). *Tourisme international et prostitution féminine: le cas de Nosy-Bé (Madagascar)*. Paper presented at the Annales de géographie.
- Cai, W., Borlace, S., Lengaigne, M., Van Rensch, P., Collins, M., Vecchi, G., . . . Wu, L. (2014). Increasing frequency of extreme El Niño events due to greenhouse warming. *Nature climate change*, 4(2), 111-116.
- Camacho, M. (1986). *Les poubelles de la survie: la décharge municipale de Tananarive*. Paris: Editions L'Harmattan.
- Cénat, J. M., Derivois, D., Hébert, M., Amédée, L. M., & Karray, A. (2018). Multiple traumas and resilience among street children in Haiti: Psychopathology of survival. *Child abuse & neglect*, 79, 85-97.
- Chawansky, M., & Holmes, M. (2015). Sport, social development and peace. *Sport in Society*, 18(6), 752-756. doi:10.1080/17430437.2015.1050264
- Coalter, F. (2013). *Sport for development: What game are we playing?* : Routledge.
- Conseil Québécois du Loisir. (2012). Retrieved from Montréal: http://bel.uqtr.ca/id/eprint/1920/1/Biblio_perseverance.pdf

- Cyrulnik, B., & Jorland, G. (2012). *Résilience connaissances de base*. Paris: Odile Jacob.
- Dale, L. P., Vanderloo, L., Moore, S., & Faulkner, G. (2019). Physical activity and depression, anxiety, and self-esteem in children and youth: an umbrella systematic review. *Mental Health and Physical Activity*, 16, 66-79.
- Darnell, S. C. (2018). Le sport comme moyen pour promouvoir le développement international. Retrieved from <https://www.un.org/fr/chronicle/article/le-sport-comme-moyen-pour-promouvoir-le-developpement-international>
- Daxhelet, M.-L. (2013). *L'étude des processus défensifs, adaptatifs et anti-traumatiques chez des enfants soldats congolais*. Université du Québec à Montréal,
- Décarpentrie, L., Bélanger, C., & Gadais, T. (2020). Les activités artistiques et sportives contribuent au bien-être et à la résilience. *The Conversation - Canada*. Retrieved from <https://theconversation.com/les-activites-artistiques-et-sportives-contribuent-au-bien-etre-et-a-la-resilience-145005>
- Duffey, K., Zulu, J. M., Asamoah, B. O., & Agardh, A. (2019). A cross-sectional study of sexual health knowledge, attitudes, and reported behavior among Zambian adolescent girl participants in a football program. *Journal of Sport for Development*, 7(12), 46-58.
- Emmanuelli, X. (2011). Street children: a universal phenomenon. *Archives de pediatrie: organe officiel de la Societe francaise de pediatrie*, 18(7), 729.
- Farello, A., Blom, L., Mulvihill, T., & Erickson, J. (2019). Understanding female youth refugees' experiences in sport and physical education through the self-determination theory. *Journal of Sport for Development*, 7(13), 55-72.
- Frieze, S. (2015). How Trauma Affects Student Learning and Behaviour. *BU Journal of Graduate Studies in Education*, 7(2), 27-34.
- Gadais, T. (2019). Sport for Development and Peace: Current Perspectives of Research. In *Sports Science and Human Health-Different Approaches*: IntechOpen.
- Galli, N., & Gonzalez, S. P. (2015). Psychological resilience in sport: A review of the literature and implications for research and practice. *International Journal of Sport and Exercise Psychology*, 13(3), 243-257.
- Gardam, K., Giles, A., & Hayhurst, L. M. (2017). Sport for development for Aboriginal youth in Canada: A scoping review. *Journal of Sport for Development*, 5(8), 30-40.
- Green, B. C. (2008). Sport as an agent for social and personal change. *Management of sports development*, 3, 130-145.
- Hancock, M., Lyras, A., & Ha, J.-P. (2013). Sport for development programs for girls and women: A global

- assessment. *Journal of Sport for Development*, 1(1), 15-24.
- Hansell, A. H., Giacobbi Jr, P. R., & Voelker, D. K. (2020). A Scoping Review of Sport-Based Health Promotion Interventions With Youth in Africa. *Health Promotion Practice*, 1524839920914916.
- Hartmann, D. (2003). Theorizing sport as social intervention: A view from the grassroots. *Quest*, 55(2), 118-140.
- Hartmann, D., & Kwauk, C. (2011). Sport and development: An overview, critique, and reconstruction. *Journal of sport and social issues*, 35(3), 284-305.
- Hills, S., Gomez Velasquez, A., & Walker, M. (2018). Sport as an analogy to teach life skills and redefine moral values: A case study of the 'Seedbeds of Peace' sport-for-development programme in Medellin, Colombia. *Journal of Sport for Development*, 6(10), 25-37.
- International Working Group Sport for Development and Peace. (2008). *Harnessing the power of sport for development and peace : recommendations to governments*. Retrieved from https://www.files.ethz.ch/isn/125443/5092_Final%20SDP%20IWG%20Report.pdf
- Jacquemin, M. (2009). «Petites nièces» et «petites bonnes» à Abidjan. *Travail, genre et sociétés*, 2, 53-74.
- Jordans, M. J., Pigott, H., & Tol, W. A. (2016). Interventions for children affected by armed conflict: a systematic review of mental health and psychosocial support in low-and middle-income countries. *Current psychiatry reports*, 18(1), 9.
- Joseph, N., & Derivois, D. (2016). Clinique de la créativité chez les enfants des rues en Haïti. *Neuropsychiatrie de l'Enfance et de l'Adolescence*, 64(5), 324-330.
- Kalaf, L., & Plante, P. (2019). Restoring Lost Resources for Young Refugees: An Integrative Review of the Resilience-Building Potential of Expressive Therapies. *Canadian Art Therapy Association Journal*, 1-12.
- Karray, A., Derivois, D., Brolles, L., & Buzaglo, I. W. (2017). La reconstruction des enveloppes psychiques et environnementales dans les dessins d'enfants des rues en Haïti: une étude post-séisme. *L'Évolution Psychiatrique*, 82(1), 89-103.
- Kay, T. (2009). Developing through sport: Evidencing sport impacts on young people. *Sport in Society*, 12(9), 1177-1191.
- Kidd, B. (2008). A new social movement: Sport for development and peace. *Sport in Society*, 11(4), 370-380.
- Kindelberger, C., Le Floch, N., & Clarisse, R. (2007). Les activités de loisirs des enfants et des adolescents comme milieu de développement. *L'orientation scolaire et professionnelle*(36/4), 485-502.
- Levermore, R. (2008). Sport: a new engine of development? *Progress in development studies*, 8(2), 183-190.
- Ley, C., & Barrio, M. R. (2019). Promoting health of refugees in and through sport and physical activity: a

- psychosocial, trauma-sensitive approach. In T. Wenzel & B. Droždek (Eds.), *An Uncertain Safety: Integrative Health Care for the 21st Century Refugees* (pp. 301-343): Springer.
- Lynch, M., & Yerashotis, G. (2019). Sporting chancers: Three Canadian corporations' representations of sport-for-youth-development. *International review for the sociology of sport*, 54(6), 666-690.
- Lyras, A., & Peachey, J. W. (2011). Integrating sport-for-development theory and praxis. *Sport Management Review*, 14(4), 311-326.
- Manciaux, M. (2001). La résilience. *Études*, 395(10), 321-330.
- Mandigo, J., Corlett, J., Holt, N., van Ingen, C., Geisler, G., MacDonald, D., & Higgs, C. (2018). The impact of the Hoodlinks Programme on developing life skills and preventing youth violence in Guatemala City. *Journal of Sport for Development*, 6(11), 21-37.
- Mandolesi, L., Polverino, A., Montuori, S., Foti, F., Ferraioli, G., Sorrentino, P., & Sorrentino, G. (2018). Effects of physical exercise on cognitive functioning and wellbeing: biological and psychological benefits. *Frontiers in psychology*, 9, 509.
- Mansfield, L., Kay, T., Meads, C., Grigsby-Duffy, L., Lane, J., John, A., . . . Julier, G. (2018). Sport and dance interventions for healthy young people (15–24 years) to promote subjective well-being: a systematic review. *BMJ open*, 8(7), e020959.
- Maro, C. N., Roberts, G. C., & Sørensen, M. (2009). Using sport to promote HIV/AIDS education for at-risk youths: an intervention using peer coaches in football. *Scandinavian journal of medicine & science in sports*, 19(1), 129-141.
- Massey, W. V., & Williams, T. L. (2020). Sporting activities for individuals who experienced trauma during their youth: A meta-study. *Qualitative Health Research*, 30(1), 73-87.
- Mathieu, M. C., Jean Jacques, R., & Dérivois, D. (2012). Résilience et processus créateurs dynamiques : pour une reconstruction des jeunes. In J.-D. Rainhorn (Ed.), *Haïti, réinventer l'avenir* (pp. 229-235). Paris: Éditions de la Maison des sciences de l'homme.
- Momartin, S., Coello, M., Pittaway, E., Downham, R., & Aroche, J. (2019). Capoeira Angola: An alternative intervention program for traumatized adolescent refugees from war-torn countries. *Journal on Rehabilitation of Torture Victims and Prevention of Torture*, 29(1), 85.
- Momartin, S., Miranda, E. d. S., Aroche, J., & Coello, M. (2018). Resilience building through alternative intervention: 'STARTTS "Project Bantu Capoeira Angola"'; On the road to recovery. *Intervention*, 16(2). doi:https://doi.org/10.4103/INTV.INTV_6_18
- Morelle, M. (2008). Les enfants de la rue à Yaoundé (Cameroun) et Antananarivo (Madagascar). *Autrepart*, 45(1), 43-57.

- Myers, N. (2002). Environmental refugees: a growing phenomenon of the 21st century. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 357(1420), 609-613.
doi:<https://doi.org/10.1098/rstb.2001.0953>
- Mygind, L., Kjeldsted, E., Hartmeyer, R., Mygind, E., Bølling, M., & Bentsen, P. (2019). Mental, physical and social health benefits of immersive nature-experience for children and adolescents: A systematic review and quality assessment of the evidence. *Health & Place*, 58, 102136.
- OMS. (1946). *Préambule à la Constitution de l'Organisation Mondiale de la Santé, tel qu'adopté par la Conférence internationale sur la Santé, New York, 19 juin -22 juillet 1946; signé le 22 juillet 1946 par les représentants de 61 Etats. (Actes officiels de l'Organisation mondiale de la Santé, n°. 2, p. 100) et entré en vigueur le 7 avril 1948.* . Retrieved from New York:
- OMS. (2013). *Plan d'action global pour la santé mentale 2013-2020*. Retrieved from Geneva:
- ONU. (2010). *Programme d'action mondiale pour la jeunesse*. Retrieved from New York:
- ONU. (2016). *Bonne santé et bien-être : pourquoi est-ce important?* . Retrieved from New York:
https://www.un.org/sustainabledevelopment/fr/wp-content/uploads/sites/4/2016/10/Why_it_matters_Goal_3_French.pdf
- Oxford, S. (2017). The social, cultural, and historical complexities that shape and constrain (gendered) space in an SDP organisation in Colombia. *Journal of Sport for Development*, 6(10), 1-11.
- Parlavecchio, L., Moreau, N., Favier-Ambrosini, B., & Gadais, T. (Submitted 2020). Principles of action used by an eductrainer to create social bonds through sport in psychosocial intervention program. *Journal of Sport for Development*.
- Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., . . . Eaton, J. (2018). The Lancet Commission on global mental health and sustainable development. *The Lancet*, 392(10157), 1553-1598.
- Pelletier, L. G., Vallerand, R. J., Green-Demers, I., Brière, N. M., & Blais, M. R. (1995). Loisirs et santé mentale: les relations entre la motivation pour la pratique des loisirs et le bien-être psychologique. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 27(2), 140.
- Philipps, P. (2013). Water management in sport. *Sport Management Review*, 17(3), 376-389.
doi:<https://doi.org/10.1016/j.smr.2013.08.002>
- Purgato, M., Gross, A. L., Betancourt, T., Bolton, P., Bonetto, C., Gastaldon, C., . . . Peltonen, K. (2018). Focused psychosocial interventions for children in low-resource humanitarian settings: a systematic review and individual participant data meta-analysis. *The Lancet Global Health*, 6(4), e390-e400.
- Ravizza, D. (2012). We don't play war anymore. Sport and the Reintegration of Former child soliders in Northern Uganda. In K. Gilbert & W. Bennett (Eds.), *Sport for development and peace*. Champaign, IL:

Common Ground.

- Redmond, M., Sumner, R. C., Crone, D. M., & Hughes, S. (2019). 'Light in dark places': exploring qualitative data from a longitudinal study using creative arts as a form of social prescribing. *Arts & health*, 11(3), 232-245.
- Richards, J., Kaufman, Z., Schulenkorf, N., Wolff, E., Gannett, K., Siefken, K., & Rodriguez, G. (2013). Advancing the evidence base of sport for development: A new open-access, peer-reviewed journal. *Journal of Sport for Development*.
- Rosa, C. D., & Collado, S. (2020). Enhancing nature conservation and health: Changing the focus to active pro-environmental behaviours. *Psychological Studies*, 65(1), 9-15.
- Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American psychologist*, 55(1), 68-78. doi:doi:10.1037/0003-066X.55.1.68
- Saavedra, M. (2009). Dilemmas and opportunities in gender and sport-in-development. In *Sport and international development* (pp. 124-155): Springer.
- Sastre, B. C., & Zarama, M. I. (1994). Le travail des enfants dans les mines de charbon en Colombie. *Labour, Capital and Society/Travail, capital et société*, 250-269.
- Schulenkorf, N., & Adair, D. (2014). *Global sport-for-development: Critical perspectives*: Palgrave Macmillan.
- Sherry, E., Schulenkorf, N., & Chalip, L. (2015). Managing sport for social change: The state of play. *Sport Management Review*, 18(1), 1-5. doi:<https://doi.org/10.1016/j.smr.2014.12.001>
- Sonke, J., Rollins, J., & Graham-Pole, J. (2016). Arts in healthcare setting in the United States. In S. Clift & P. M. Camic (Eds.), *Oxford textbook of creative arts, health, and wellbeing: International perspectives on practice, policy and research*. New York: Oxford University Press.
- Sugden, J. (2006). Teaching and playing sport for conflict resolution and co-existence in Israel. *International review for the sociology of sport*, 41(2), 221-240.
- Svensson, P. G., & Woods, H. (2017). A systematic overview of sport for development and peace organisations. *Journal of Sport for Development*, 5(9), 36-48.
- UNESCO. (2015a). *Education for All 2000-2015: Achievements and Challenges*. Retrieved from Paris: <https://en.unesco.org/gem-report/report/2015/education-all-2000-2015-achievements-and-challenges>
- UNESCO. (2015b). *Éducation physique de Qualité*. Retrieved from Paris: https://eps-canada.ca/sites/default/files/content/docs/resources/UNESCO%20-%20QPE_FR.pdf
- UNESCO. (2015c). *Repenser l'éducation. Vers un bien commun mondial?* Retrieved from Paris: <https://www.iau-hesd.net/sites/default/files/documents/232696f.pdf>

- UNESCO. (2017). *Linking education to growth and poverty reduction*. Retrieved from Paris:
<http://uis.unesco.org/sites/default/files/documents/reducing-global-poverty-through-universal-primary-secondary-education.pdf>
- UNHCR. (2015). *UNHCR Global Trends: Forced Displacement in 2014*. Retrieved from Genève:
<http://unhcr.org/556725e69.html>
- UNICEF. (2008). *Introduction To Sport For Development And Peace*. Retrieved from Paris:
<https://www.sportsthinktank.com/uploads/sport-for-international-devt.pdf>
- UNICEF. (2011). *La situation des enfants dans le monde : l'adolescence, l'âge de tout les possibles*. Retrieved from
https://www.unicef.org/french/publications/files/SOWC_2011_Main_Report_FR_02092011.pdf
- UNICEF. (2019). *Play & Resilience: A toolkit for teachers, caregivers, and other stakeholders*. Retrieved from Paris:
<http://www.iicba.unesco.org/sites/default/files/sites/default/files/Play%20%26%20Resilience%28web%29.pdf>
- United Nations. (2018). *Youth 2030 : Working with and for young people*. New York: UN.
- United Nations. (2020). *Objective 4 Quality Education*. Retrieved from
<https://www.un.org/sustainabledevelopment/fr/education/>
- United Nations Development Program. (2015). *Take Action for the Sustainable Development Goals*. Retrieved from
<https://www.undp.org/content/undp/en/home/sustainable-development-goals.html>
- United Nations Inter-Agency Task Force on Sport for Development Peace. (2003). *Sport for development and peace: Towards achieving the millennium development goals*: United Nations Publications.
- UNOSDP. (2017). *Sport and sustainable development goals. An overview outlining the contribution of sport to the SDGs*. Retrieved from
https://www.un.org/sport/sites/www.un.org.sport/files/ckfiles/files/Sport_for_SDGs_finalversion9.pdf
- Webb, A. J., & Richelieu, A. (2015). Sport for development and peace snakes and ladders. *Qualitative market research: an international journal*, 18(3), 278-297. doi:<https://doi.org/10.1108/QMR-01-2014-0011>
- Wells, R., Némorin, S., Steel, Z., Guhathakurta, M., & Rosenbaum, S. (2019). Physical activity as a psychosocial intervention among Rohingya refugees in Bangladesh: a rapid ecological community assessment. *Intervention*, 17(2), 140.
- Whitau, R., Ockerby, H., Stars, S., Netball, E. T., & Australia, G. J. *Journal of Sport for Development*.
- Whitley, M. A., Farrell, K., Wolff, E. A., & Hillyer, S. J. (2019). Sport for development and peace: Surveying actors in the field. *Journal of Sport for Development*, 7(11), 1-15.
- Whitley, M. A., Massey, W. V., Camiré, M., Blom, L. C., Chawansky, M., Forde, S., . . . Darnell, S. C. (2019).

A systematic review of sport for development interventions across six global cities. *Sport Management Review*, 22(2), 181-193.

Whitley, M. A., Massey, W. V., Camiré, M., Boutet, M., & Borbee, A. (2019). Sport-based youth development interventions in the United States: A systematic review. *BMC public health*, 19(1), 89.

Wiese, C. W., Kuykendall, L., & Tay, L. (2018). Get active? A meta-analysis of leisure-time physical activity and subjective well-being. *The Journal of Positive Psychology*, 13(1), 57-66.

Wisniewski, P. (2009). *The Introduction of Sport into Refugee Camps as a Catalyst for Development*. Paper presented at the International Studies Association, University of Southern Mississippi.

Woodhouse, T. (2019). SDP and Peace. In H. Collison, S. C. Darnell, R. Guillianotti, & P. D. Howe (Eds.), *Routledge Handbook of Sport for Development and Peace*. NY: Taylor and Francis.

World Bicycle Relief. (2018). *Mobility and the sustainable development goals*. Retrieved from <https://worldbicyclerelief.org/wp-content/uploads/2019/11/World-Bicycle-Relief-Mobility-and-the-SDGs-3.pdf>

World Vision. (2007). *World Vision Sri Lanka Tsunami Response*. Retrieved from https://reliefweb.int/sites/reliefweb.int/files/resources/A9060DB128A9A71E492573A700080725-Full_Report.pdf

Wright, P. M., Jacobs, J. M., Howell, S., & Ressler, J. D. (2018). Immediate outcomes and implementation of a sport for development coach education programme in Belize. *Journal of Sport for Development*, 6(10), 51-65.

Xu, C., Kohler, T. A., Lenton, T. M., Svenning, J.-C., & Scheffer, M. (2020). Future of the human climate niche. *Proceedings of the National Academy of Sciences*, 117(21), 11350-11355.

Declaration of interest statement

Authors declare no conflict of interest.

Acknowledgments

Authors would like to address a special thanks to all field and research collaborators in our SDP projects.