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Introduction

Sport for Development and Peace (SDP) refers to the use of sport to promote varied outcomes beyond the playing field and has been defined as “the intentional use of sport, physical activity and play to attain specific development objectives in low- and middle-income countries and disadvantaged communities in high-income settings.”

Stakeholders working in the field for the last two decades include the United Nations, the public sector, the private sector and civil society with an increasing number of SDP initiatives across the globe.

While other disciplines such as health and education have engendered a more critical perspective on the factors causing and constraining development, certain SDP programmes do exhibit an ongoing gap between evidence and practice. In the most pronounced cases this is reflected with somewhat naïve and idealistic notions of the power of sport. Even if sport is applied in the right manner and results in the intended change, there are deeper structural issues that may negate such well-intentioned work. While a focus of many SDP organisations is to develop the individual to realise his/her capacity, there appears to be a genuine lack of initiatives that seek to challenge or reform the societal structures and conditions that caused this ‘underdevelopment’ to occur in the first place.

Wide-ranging, almost-universal claims made by the SDP movement must therefore be treated with caution. While sport can have positive micro-level impact on individuals, this does not necessarily lead to greater outcomes in the community (meso) and society (macro). Many theorists including Darnell, Coalter, Coakley and Sugden contend that the development of social capital or local co-operation cannot nullify greater macro issues, such as a lack of resources, political support and socio-economic realities. Coalter postulates a major weakness of SDP programmes is that they are “seeking to solve broad gauge problems via limited focus interventions.” A comprehensive, multi-sectoral approach is needed in the SDP sector as it tends to function outside other development sectors and the sociology of sport, failing to relate to the broader role of sport within society. For example many sport for development actors do not acknowledge the role sport may play in reinforcing gender stereotypes and rigid masculinities.

It is vital to explore the potential and impact of sport in fostering social change, including tackling deep-seated issues such as poverty and inequality. However, sport cannot solve these problems alone – such issues require improvements in other sectors such as education and health. Furthermore, as Maguire articulates, sport can reinforce existing inequities if it reproduces a sports-industrial complex that privileges competitive and spectator sport over community-based sport and recreation. It is therefore argued that the potential negative impact of sport must be acknowledged and a distinction drawn between elite/high performance sport and SDP initiatives. How do different role players, including the state, private sector and civil society, play a part in an SDP movement that has only recently emerged on the global agenda and has been largely isolated from mainstream development efforts? Furthermore, scholars such as Darnell have identified a range of ethical issues involved in SDP programmes which tend to use a deficit-reduction approach.
Sport and Development Outcomes

While sport evangelists proclaim sport inherently promotes social change, research has shown many factors influence whether sport leads to intended development outcomes, including the following:13

- Type of sport played14-15
- Orientations and actions of peers, parents, coaches, and administrators16
- Norms, class and culture associated with specific sports or experiences17-18
- Social characteristics of sport participants19-20
- Material and cultural contexts under which participation occurs21-25
- Social relationships formed through sport participation26-27
- Meanings given to sport and experiences28-30

Furthermore, the competitive nature of sport may encourage each individual to do their best but it can lead to aggression, cheating and a ‘win-at-all-costs’ attitude. Sport may promote physical dominance (e.g. rugby or boxing) or aggression among spectators (e.g. soccer hooliganism). As George Orwell famously said: “Serious sport has nothing to do with fair play. It is bound up with hatred, jealousy, boastfulness, disregard of all rules and sadistic pleasure in witnessing violence. In other words it is war minus the shooting.” Many critics agree with Orwell and argue professional sport has become another distorted institution of capitalism, serving the needs of big business and elite groups. While many SDP initiatives do not encourage ultra-competitive or serious sport, it is important to note that SDP initiatives are often linked to or funded by sport organisations, which often take an ‘evangelist’ view of sport and tend to reinforce the structural issues described above.

The Commonwealth Advisory Body on Sport (CABOS) acknowledges this paradox stating, “There have been instances where sport has been poorly planned, overly aligned to extreme nationalist, political or economic motives or beset by doping and corruption scandals such that a negative impact on human and social development could be argued.”33 Thus, sport may work against development as may be the case with development initiatives in other sectors.

On a more fundamental level, conflict theory sees sport as reproducing inequalities and class systems, thus serving the needs of the capitalist economy.34 The relationship between sport and business is epitomised in costly mega-events, which critics such as Bond35 argue worsen poverty, while research has shown mega-events tend to exacerbate inequalities in developing countries.36

Feminist sources offer a different critique of sport, adopting a gender-based approach, which argues that women have been systematically devalued, exploited and oppressed through sport.37 More radical researchers have positioned sports within a colonial framework. Giulianotti38 asserts that in some instances, sport institutions have marginalised or even eradicated indigenous games and cultural practices, likening this to a form of “cultural genocide.” Many SDP initiatives have taken deliberate steps to ensure they do not reinforce gender inequities or cultural biases (as has often been the case with traditional sport); however, the arguments above should be heeded by those working in the space.

Furthermore the dominant practice of North-driven organisations dictating the terms of sport for development to South-based communities, using a deficit-reduction model, could be interpreted as deeply paternalistic and self-serving.38-39 This argument is not specific to the SDP field and is by no means all-encompassing. Many SDP actors have challenged this unequal exchange, but it does raise the possibility that certain SDP players may be unintentionally entrenching the very problems they seek to overcome.

A New Playing Field

While acknowledging the limitations of the SDP sector is important, it is equally important to offer robust alternatives. As the overwhelming majority of SDP actors do not address structural factors, incorporating elements of a social justice approach into their work seems an appropriate place to start.40 To date, only a limited number of critical academics, radical organisations and social movements have taken this approach, targeting issues such as corruption and governance in sport federations (FIFA is a clear and often referenced example), and harmful employment practices among sport retailers.41 However these actors remain on the periphery of SDP work and lack a coordinated approach. It is argued that mainstream players may be hesitant to adopt this approach due to concerns over funding and sustainability. Nonetheless, a strong coalition of SDP organisations that promotes ‘fair play’ and social justice would serve as a strength rather than a weakness and would provide space for policy and advocacy that is much needed within the field.

The author has identified another possible way in which the SDP sector can strengthen its impact.
Most organisations have a heavy programmatic focus with an aim to reach more communities with better programmes. Such a method, however, needs to be complimented by higher level policy and advocacy work. Such an approach may involve addressing social justice issues as outlined above, but also influencing policy around health (such as combating Non Communicable Diseases) and education (sport and physical activity can play a major role in schools and have been shown to improve attendance and academic performance in certain cases). While the system of SDP may have various ethical and foundational issues as outlined above, it is vital for SDP stakeholders to work within the current system in order to improve the overall playing field. This includes lobbying for sport and SDP in particular, to be taken more seriously within the Sustainable Development Goals framework and for governments, international agencies, corporations and civil societies to engage with sport more seriously.

Furthermore, sport policy in many countries, both developed and underdeveloped, remains skewed towards elite, organised, competitive, and commercial sport, subsequently creating a double bind. Firstly, sport budgets in most countries are marginal, though sport can be used to promote important outcomes in health, education, community safety, social cohesion and so forth. Secondly, within sport budgets, disproportionate amounts are directed to high performance and elite sport and/or the staging of major events. South Africa and Brazil have among the worst income inequities in the world based on the Gini coefficient but recently directed large amounts of public funding to hosting mega-events.

It must be noted that generally SDP efforts only receive a fraction of the revenue from the globalised sport sector, and this is often used to legitimise corporate activities. Furthermore, the distribution of such resources is skewed, especially in terms of class, race, gender, (dis)ability and geography. In South Africa, this is reflected in the clear inequities in access to sport facilities and opportunities among racial groups, between rural and urban communities, formal and informal settlements and males and females. A clear advocacy issue could be for SDP actors to demand for greater funding to be allocated to sport overall, and based on its potential contribution to social change that a greater share of such funding goes to SDP.

This piece illustrates the need for stronger coalitions and more coordinated and informed policy and advocacy work. There is a conspicuous need for SDP to better integrate with other development sectors such as those addressing public health, education and youth development. A strong SDP coalition could not only formulate norms and standards for programme implementation but could also generate a code of conduct covering broader issues such as funding guidelines, employment practices (especially relevant given the high number of ‘volunteers’ in SDP work) and human rights issues. Giulianotti has already suggested ‘Fair Trade’ guidelines to ensure SDP products and commodities do not reinforce existing inequalities and worker exploitation. Furthermore, while securing funding is vital, particularly for civil society SDP actors, this should not be at the expense of compromising their objectives. Often the need for organisational survival seems to counteract the original intention of such organisations to do social good. Once again, this is not exclusive to the SDP sector since development practitioners need to be both principled and pragmatic.

Finally, the need for more rigorous monitoring and evaluation of SDP programmes has been made ad nauseam, but continues to hamper the sector. There remains an urgent need for research to critically examine, if and how, sport itself is fundamental to achieving development outcomes. For example, Grassroot Soccer, an NGO that uses the power of soccer to educate, inspire and mobilise youth to prevent HIV and take control of their health, recently piloted a ‘Perceived Benefits of Soccer Scale’, testing the assumption that soccer itself contributes to their intended outcomes. Interesting baseline findings indicated that younger girls (mean age 13) showed higher perceived benefits of playing soccer than older girls (mean age 15). This in turn was associated with higher self-efficacy and gender equitable norms among the younger cohort with endline data collection still to occur.

In addition, higher-level research around SDP policies (and their relation to sport policies generally, as well as broader policies in health, education, social development, etc.) is lacking. Impact of SDP is usually framed around the effectiveness of interventions, but as this editorial argues, the debate needs to delve deeper into the ways in which SDP can or cannot contribute to macro outcomes.

Conclusion

Based on the evidence to date, it appears that many SDP actors whether they are NGOs, multinationals, governments or intergovernmental organisations, often reinforce the very systemic problems that they seek to solve. Providing more locally trained coaches, more equipment and more playing fields is a necessary but certainly not sufficient solution.
Until SDP actors understand and challenge the structures and systems that (re)produce inequality, poverty, unemployment and other structural issues, they may be merely scoring their own goal in the fight for social change. Nonetheless, the potential of sport in fostering a range of development outcomes remains and there are ways in which the SDP sector can re-examine its modus operandi and strive for greater coordination, collaboration and ultimately impact. The time to change the playing field is now.

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Exploring stakeholders’ experiences of implementing an ice hockey programme for Inuit youth

Corliss Bean¹, Tanya Forneris¹

¹University of Ottawa, Department of Human Kinetics

Abstract

The Nunavik Youth Hockey Development Program (NYHDP) is a sport-for-development programme designed to provide Inuit youth with opportunities to be physically active and develop life skills. The purpose of this study was to use a utilization-focused approach to conduct a formative evaluation, which explored stakeholders’ perspectives of ongoing successes and challenges of programme implementation. From interviews with 13 stakeholders over the course of one season, as well as document analysis, two main themes emerged pertaining to programme implementation: successes and challenges. Sub-themes related to programme successes included strong programme fidelity due to a well-planned structures, a stable organizational structures, increased local appropriation, increased participation rates, and the NYHDP’s positive impacts on the region. Subthemes related to challenges included the need for more reliable human resources, difficulties in maintaining a formal partnership between the NYHDP and school board, and implementation costs. This paper also includes practical implications, recommendations, and future directions for the programme. Overall, this evaluation represents an important step in responding to calls for increased process evaluations of sport-for-development programmes, particularly in Aboriginal contexts and aids in understanding the successes and challenges of how to deliver a youth hockey programme in a rural context from the perspective of various stakeholders.

Background

Ice hockey (hereafter referred to as ‘hockey’) has been an integral part of Aboriginal culture for decades.¹, ² While Inuit people have been playing this sport for many years, few organized programmes exist for Inuit youth in Canada.³, ⁴ Research has shown that sport has been effective in keeping Aboriginal youth out of trouble.⁵, ⁶ Needs assessments conducted with youth in rural Aboriginal communities have indicated the desire for organized sport and a safe, fun place to be physically active.⁷ However, numerous challenges have been identified pertaining to sport access including facility locations, minimal support staff, and financial costs for programs and equipment.⁸ The Nunavik Youth Hockey Development Program (NYHDP) was established in 2006 with the purpose of utilizing hockey as a vehicle to enhance physical and psychosocial development of Inuit youth⁹ with the goal of minimizing such barriers.

It has been argued that conducting programme evaluations in northern and remote Aboriginal communities is challenging due to issues surrounding accessibility and cost. ⁹ Only a few studies have been conducted in recent years. For example, Halsall and Forneris¹⁰ evaluated a youth leadership programme that was part of Right to Play’s Promoting Life-skills in Aboriginal Youth (PLAY) programme implemented within 57 communities across Ontario, Canada. Results revealed that the mentors perceived the programme as having a positive impact on

Keywords: Sport programming, Utilization-focused evaluation, Youth programming, Mixed-methods, Sport for development, Life skills

¹The Nunavik Youth Hockey Development Program administration waived their right to confidentiality for this study.
youth, enabled personal growth of mentors, and increased community engagement. Moreover Blodgett et al.\textsuperscript{11} partnered with Aboriginal community members to understand the cultural struggle related to retaining Aboriginal youth in sport. Promoting Aboriginal role models and developing a broad volunteer base were identified as useful strategies. Although these two studies are promising, there is much to learn about the implementation of effective programming in Aboriginal youth sport contexts; therefore, this study aims to assist with this gap.

An organization’s ability to effectively deliver sport for development (SFD) programmes with individual and community development outcomes is influenced by many factors, including available human and organizational resources.\textsuperscript{12-15} Researchers have also noted challenges related to sport and programme delivery, monitoring, and evaluation, highlighting concerns regarding the likelihood of achieving various objectives such as building a sustainable and effective programme for youth within communities.\textsuperscript{16} As a result, Skinner and colleagues\textsuperscript{17} discussed the importance of engaging and working collaboratively with multiple partners that support programme goals and outcomes, assist with delivery, and provide funding. Thus, this formative programme evaluation research utilized such an approach whereby the researchers worked in collaboration with NYHDP stakeholders during programme implementation with the aim of understanding and improving the programme for future implementation. To ensure this, a utilization-focused evaluation was employed.

A utilization-focused approach involves researchers and stakeholders working together so that stakeholders can better understand the evaluation process and subsequently use the evaluation findings for future decision-making regarding a programme.\textsuperscript{18, 19} Many SFD researchers have advocated for this approach as they recognize that evaluations are only effective if findings are used in a meaningful way towards programme improvement.\textsuperscript{20, 21} Moreover, utilization-focused evaluations have been successfully applied to various youth programming contexts.\textsuperscript{22-24} For example, research has used a utilization-focused evaluation within youth programming pertaining to physical activity,\textsuperscript{23} conservation education,\textsuperscript{24} and mental health.\textsuperscript{22} Within these studies, researchers were able to meaningfully engage stakeholders in the evaluation process and work with them to adapt programme goals to better meet participants’ needs.\textsuperscript{22, 23} While a utilization-focused approach can involve both formative and summative evaluations, the authors agreed that this study called for a formative evaluation given the lack of research in this area as well as a lack of understanding of the strengths and challenges experienced in NYHDP implementation.

**Programme Description: Nunavik Youth Hockey Development Program**

The NYHDP was established with the purpose of being a crime prevention programme while using hockey as a vehicle to enhance the development of Inuit youth.\textsuperscript{8} The NYHDP was developed by a retired professional hockey player with the overall goal to limit negative behaviours in addition to encouraging youth to be physically active and make positive life choices (e.g. stay in school, put forward their best effort in life) that enable them to succeed in the future.\textsuperscript{5} To accomplish this the NYHDP utilized a strong staff base and intentionally integrated the teaching of life skills and educational activities into various components of the programme. In addition, all programme components and stakeholders involved in programming emphasize and enforce the importance of making positive life choices and are outlined in detail below. Therefore, based on Coalter’s\textsuperscript{25} classification of sport-in-development, the NYHDP is a plus sport programme.

The NYHDP commenced in 2006 and interested youth aged 5 to 17 years of age in all villages within Nunavik were invited to participate. The NYHDP is offered to these youth at no cost, since all programme expenses (e.g. human resources, equipment, travel costs, ice rentals) are covered through various levels of government and private sector funding. One of the key stakeholders involved from programme outset was the regional school board. From 2007-2012, the NYHDP had a formal partnership with the school board, whereby stakeholders (i.e. principals, teachers) at all schools across the region enforced policies related to effort and participation in school, similar to NYHDP goals, to illustrate the direct link between school hockey for youth. These policies included the necessity for youth to attend and put forth their best effort in school if they wanted to engage in the NYHDP. Teachers and principals were responsible for completing a ‘hockey report card’ for individuals involved in the NYHDP which assessed their attendance and effort within the classroom. Prior to the 2012-2013 season, the partnership was formally eliminated because it was discovered that not all schools across the villages were implementing the policy consistently and that some teachers were using the policy as punishment as opposed to encouragement or as a way to further engage youth. Another issue recognized by many
stakeholders was that by having this policy, the programme was excluding some of the most at-risk youth within the villages who were not attending school due to various circumstances (e.g. abuse, neglect). The director wanted to ensure that these youth were not excluded as it is the most at-risk youth who may have the greatest need for such a program. As a result, the coaches across the villages were encouraged to gain an understanding of youth in their respective villages and understand their background and family circumstances. Such an approach would consequently enable coaches to best engage and work with each individual youth to help provide a safe and supportive environment that also encourage youth to make positive life decisions, work hard, and make a commitment to the programme.

The NYHDP is comprised of two main components for youth: recreational hockey and competitive hockey. The rationale for these two components is to be inclusive as the goal of the programme is not to strengthen hockey, but rather to foster the development of youth in these northern villages. Both programmes help to ensure that all interested youth are able to participate while at the same time provide access for youth who want to be involved in a more competitive programme the opportunity to do so; in northern Aboriginal communities, this type of competitive programme is rare. Tied to both of these components is a third element: the certification of Local Hockey Trainers (LHTs). These two components and the certification process are described below.

Recreational hockey. The goal of the recreational component is to provide the opportunity for youth of all ages, genders, and abilities throughout Nunavik to engage in a structured sport programme designed to enhance their overall development. In each village, an indoor arena is open to youth afterschool and in the evenings. Many of the arenas are accessible to youth by foot, minimizing accessibility barriers, and are typically open from October to April. Exact participation rates cannot be recorded in each village because participation varies across villages and from night-to-night, but it can be estimated that an average of 20 to 30 youth attend for all age categories per village each night. Recreational programme delivery differs slightly across villages based on resources (e.g. human, time, space); however, in most communities there are two on-ice sessions per night where girls and boys participate together, yet are divided by age groups. Due to village size and fluctuation in participation, teams are created on a night-by-night basis allowing for structured free-play in the form of scrimmages.

Given that the NYHDP was designed as much more than a hockey programme, the coaches are trained to discuss and also be role models of positive life choices (e.g. never giving up, putting forth their best effort, attending school, avoiding drugs and alcohol). In 2011, regional tournaments were integrated into recreational programming to provide participants opportunities to travel and play hockey with youth from different villages. Five tournaments (one for each of the five age groups described below) are held each season with opportunities for each village to enter a team. These tournaments are used as incentives for youth not involved in the competitive component to continue to attend and put forth effort in school in order to participate as youth are selected based on their commitment to the programme within their village and not solely their hockey skills.

Competitive hockey. This component is comprised of five teams broken down by age: Atom (9-10); Peewee (11-12); Bantam (13-14); Midget (15-17). There are four boys’ teams based on these age groups and one girls’ team, which combines Bantam and Midget. Girls between 9 and 12 are also able to try-out for the boys’ teams; however few do. At the time this study was conducted, each team would participate in two tryout camps and once final rosters were selected, a week-long training camp is held. The tryouts and training camps are held in Nunavik’s largest village and all youth interested in attending tryouts are flown from their respective villages.

As with the recreational component, the focus is not only their improvement of hockey skills because all youth also attend educational sessions as part of the competitive component. These educational sessions are 90 minutes in length and are implemented daily during all try-outs and training camps for the competitive program. A pedagogical coordinator is in charge of the sessions which involve the intentional teaching of life skills (e.g. responsibility, self-control, positive attitude, confidence), activities for team bonding, and lessons related to healthy life habits (e.g. nutrition, drug and alcohol use, sleep, physical activity). Youth are selected for the competitive teams based on their skills on the ice as well as their level of engagement and commitment to the educational sessions during the try-outs and training camps. Youth that are selected then travel with their respective teams to major cities in Québec or Ontario where tournaments are held. Each competitive team participates in one tournament per season, which allows youth to experience different teams and cities. Structured life skills activities remain a primary element and are integrated during the tournaments in which similar activities facilitated during tryouts are run during a 90-minute session each day.
Training and certification of coaches. The final component is the training and certification of LHTs who complete the Hockey Québec Coaching Certification, a provincial training programme that enables individuals to attain knowledge and tools to be able to work effectively with athletes. These individuals are current or past NYHDP participants, ranging from 15 to 35 years old, and are mostly of Inuit descent. Previously, most LHTs were male, yet within the 2012-2013 season females also participated in the training. LHTs serve as village coaches who run practices and are seen as role models for younger participants.

Since its inception, there has been no formal evaluation conducted on the NYHDP. Plans to continue and expand this programme highlighted the need for an evaluation to understand the processes of implementing such a programme. Understanding how a hockey development programme influences the region could provide a reference for other Aboriginal populations to develop similar programmes and also begins to address the lack of research on SFD initiatives implemented with Aboriginal youth in Canada. Thus, the purpose of this study was to use a utilization-focused approach to conduct a formative evaluation by exploring stakeholders’ perspectives of ongoing successes and challenges of the NYHDP implementation.

Method

Context and Participants

The researcher was Caucasian, had an extensive background in hockey and gained an inside perspective of the programme through engaging in 50 days of fieldwork over the course of one hockey season. During this time, she actively participated in on-ice and educational sessions as a coach and was involved at the recreational and competitive levels to thoroughly understand the structure and processes of the programme. Throughout her involvement, she engaged in six competitive tryouts and training camps, spent one week each in three villages learning about the recreational programmes, and spent one week travelling with a competitive team to a tournament.

Thirteen stakeholders participated in the study: one programme director, two coordinators (regional and pedagogical), five coaches, two school principals, two parents, and two youth. The sample consisted of nine male and four female participants and their length of involvement in the programme ranged from one to seven years. Four stakeholders resided outside of Nunavik but were core NYHDP staff. On the other hand, nine participants were Nunavik residents and lived in four different villages. Some participants were directly involved in the programme (i.e. coach, coordinator, youth), while others were more indirectly involved (i.e. parent of youth participant); however, each stakeholder had a sound understanding of the programme.

Data Collection and Procedure

This study used a utilization-focused process approach by examining NYHDP implementation. Transcripts from semi-structured interviews with programme stakeholders, recreational reports, and session log sheets were used as primary sources of data. Logbooks were used as a secondary source of data, providing more background context of the programme’s evolution for the researcher.

Semi-structured interviews. Thirteen semi-structured interviews took place during the 2012-2013 season in-person (11) or via phone (2) with the purpose of understanding stakeholders’ experiences of the NYHDP. In-person interviews took place at convenient locations (e.g. hockey arena, school) and times for participants. One interview guide was created that explored their experiences in the NYHDP; successes and challenges of programme implementation, and suggestions for programme improvements across the region. Moreover additional questions were contextualized to each stakeholder based on their role within the NYHDP and probes were used to further explore participants’ perceptions (e.g. principal: How has the NYHDP been working within your school?; parent: How do you believe the NYHDP has been perceived by your son/daughter?; How have they been impacted by participation?). Interviews ranged from 20 to 100 minutes and were recorded using a digital audio-recorder.

Document analysis. Three types of documents were used, which provided a deeper and complementary understanding of the experiences expressed through stakeholder interviews. First, six existing organizational logbooks (i.e. documentation of processes, on and off-ice plans, outcomes, participation rates, training regimes, emails) of each season since the programme’s inception were provided by the host organization and analyzed to provide a sound historical background on the programme. Second, recreational reports completed by implementation agents over the course of two seasons (2011-2013) were analyzed. A total of 101 reports (74 from 2011-2012; 27 from 2012-2013) were analyzed. The report template was created by the NYHDP Director as a tool to internally evaluate the recreational programme.
component across all villages and consisted of the same six open-ended questions that explored different stakeholder involvement within the programme and processes that took place in each community: What involvement was there from the municipality? (e.g. School? Parents?), What was the condition of the arena?; Can you provide recommendations to improve the programme?). Third, programme session log sheets completed by coaches and pedagogical coordinators throughout the 2012-2013 season during on-ice and educational sessions were examined. The log sheet was specifically designed by the lead researcher to measure programme fidelity, in other words, the extent to which the programme was implemented as planned. The log sheet was completed at the end of every programme session and included five close-ended questions that measured the extent to which the planned activities were implemented, if objectives of the sessions were achieved, the extent to which activities and objectives of the sessions were implemented as planned, and the extent to which the participants were engaged. A total of 141 log sheets (34% on-ice hockey sessions, 66.0% educational sessions) were collected and analyzed.

Data Analysis

Interview transcripts, recreational reports, and session log sheets were used as primary sources of data, and logbooks were used as secondary sources of data that provided researchers with more background context of the programme’s evolution. Data triangulation was employed as multiple stakeholders (coaches, principals, parents) and multiple methods (interviews, log sheets) were used to collect data. Maxwell argued that the use of multiple sources and methods provides a more in-depth and accurate interpretation than solely one source or method. The qualitative data (i.e. interview transcripts and community reports) were analyzed based on previously established guidelines and a collaborative approach to analysis was taken to ensure trustworthiness of the data. Specifically, an inductive thematic analysis was used which allowed themes to be established and further classified into two main categories: successes and challenges. The first author completed the first round of analysis, followed by the second author who verified themes. Researchers discussed and debated discrepancies until they reached agreement. Identification codes were created for quotations as a means to identify participants and ensure anonymity (sometimes limited) and confidentiality. Quotations taken from reports were identified by report dates. Quantitative data (log sheets) were analyzed using SPSS 21.0 and descriptive statistics and frequencies were calculated.

Results

The results are presented in two sections, which outlined the perceived successes and challenges of programme implementation by NYHDP stakeholders.

Successes

This section outlines the identified successes of the NYHDP implementation, which include the following themes: a) Strong programme fidelity due to a well-planned structure, b) Competitive programme structures that were well-planned and implemented, c) Stable organizational structures, d) Increased local appropriation e) Increased participation rates, and f) Perceived positive impact on the region.

Strong programme fidelity due to a well-planned structure. Based on the completed log sheets during the 2012-2013 season, the majority of the time (84%), stakeholders perceived that the planned session objectives were met (e.g. introduce and practice break-out). This indicated that not only were the planned activities implemented, but the overall objectives of those planned activities were also met. The NYHDP staff typically believed that youth were engaged ‘most of the time’ (63%) or ‘all of the time’ (29%) during session activities. When youth were documented as being engaged ‘all of the time,’ it was typically during on-ice sessions whereas youth were engaged ‘most of the time’ during classroom activities. Additionally, during tryouts, there were often wait times between drills as there were several participants on-ice; therefore youth were documented as engaged ‘some of the time’ or ‘most of the time.’

Competitive programme structure well-planned and implemented. From the session log sheet analysis, it was evident that many sessions were thoroughly planned and structured. Staff had outlined goals that they wanted to accomplish at the beginning of each session and had planned activities to support and achieve these goals. For example, during an on-ice session, coaches had the goal of working on breakouts, whereas, the goal of the classroom session was to work on life skills such as goal setting, teamwork, or effort. From the 149 log sheets collected, all of the activities were implemented as originally planned by programme staff 78% of the time. The remaining sessions did not have all activities implemented as planned for various reasons. For instance, many on-ice sessions were structured as a progression of drills. If youth were struggling to accomplish a drill, coaches reported spending
more time on that drill prior to moving to the next drill progression to ensure youth comprehension. Similarly, during the educational component, the Pedagogical Coordinator believed some sessions ran into time constraints when one activity took longer than planned. Some educational activities facilitated lengthy group discussions about life topics (e.g. plans for the future, healthy life habits), which resulted in further planned activities not being accomplished. Overall, the majority of activities were delivered as planned in a given session and in some cases, staff documented that there were “even more activities implemented than planned” (September 25).

### Stable organizational structure.
Over the past years, the NYHDP built a stable and reliable staff team, which included a full-time staff team of 10 individuals with six involved for five years or more. The Regional Coordinator was of Inuit descent and six of the staff have years of experience working in the north prior to working with the NYHDP. The Director stated: “[Having core staff group] helps to highlight the stable organizational structure of the NYHDP, especially the level of dedication and belief in this youth development programme by many people.” Similarly, Principal 2 stated: “Hockey has always been something very popular, but never organized as it is now—the way that it’s organized is very beneficial.” Not only was this stability identified as important for the internal structure of the organization, it has also had a critical impact on youth as they have been able to build reciprocal relationships with the staff who have been able to learn about youth at an individual level and work with them from year to year. Principal 1 highlighted how pertinent coach reliability has been to programme success: “It’s about working together... if there is no coach to send youth to—you’re promising the teachers we’re going to use hockey to modify behaviour—but there’s no coach. The buy-in and effect was instant in [village] because coaching staff were reliable.”

### Increased local appropriation.
Having increased local appropriation refers to the programme becoming more Inuit run by providing opportunities for local individuals to be involved at the organizational level, specifically related to programme delivery. In early years of the program, many staff were from southern parts of Québec and Ontario and travelled to villages to deliver the programme. Over the past years, programme staff have created opportunities which has fostered interest in many individuals within the region. For example, alternative pathways have been provided for youth as they age out of the programme (e.g. opportunities to become LHTs). Several youth still involved in the programme expressed interest in working as LHTs, which has been documented as helping to make the transition easier as they become adults. All interested individuals go through the coaching certification programme as a group at the commencement of each hockey season, which follows the delivery of a standardized provincial training program. The Director vocalized how proud he was of two long-standing participants of the NYHDP: “After many seasons in the programme, [name of youth] are taking it to a higher level; becoming hockey instructors. From 9, playing Atom back, to 16 playing Midget and being hockey instructors on top of it—really nice.” Similar to youth participation rates, the number of LHTs also increased. From 2010 to 2013, this number increased from 15 to 38 across the region, which was the most LHTs the NYHDP had since inception. Having LHTs who went through the NYHDP and were community members helped with programme sustainability, as stated by the Director: “Our LHT quality is better. It’s mostly Midget kids who have grown in the programme. It gives a chance for kids to grow within this structure and learn; this is the key to sustainability of the programme at the instructional level.”

In one of the larger villages (~2200 people), a Coordinator was hired as a full-time NYHDP staff. As the NYHDP was growing at both the competitive and recreational levels, this role was to specifically oversee the recreational programme allowing the director to focus attention towards the competitive component. Because of his involvement, there was a consistent schedule that was implemented throughout the season. Coordinator 2 went on the ice with youth and provided support for LHTs. He stated: “I’ve got time to discipline them and have them pick up their stuff. It is way more than just hockey to pick up their stuff in the dressing room: the respect of the arena—picking up their garbage—and each other. I can see a difference because it’s constant. I’m always there.”

Conversely, in a smaller village (~300 people), an individual took on the role of the Regional Coordinator of the NYHDP, a paid position that was initiated in 2011. Due to his efforts in promoting and recruiting to the programme, eight LHTs were trained and acted as village coaches at the recreational level. Parent 1 spoke of the benefit of having the Regional Coordinator: “He has been a great mentor and provides support and resources to LHTs. He’s at the arena every night with the kids.”

### Increased participation rates.
Participation rates for the recreational and competitive components have grown since programme inception. Table 1 illustrates the participation rates from 2006 to 2013. For the recreational level, although...
no concrete numbers were available as rates of participation vary from one evening to the next within each village, it was documented that an average of 20 youth per evening, per village participated in the programme. Coach 2 talked about this perceived success: “We have around 60 kids playing every day over three hours… 20 kids per session… and it’s getting more.” Villages in Nunavik range from populations of 195 to 2375\(^2\); therefore having an average of 20 youth attend hockey on a given night was considered positive. The Director reinforced the importance of participation rates at the recreational level:

**Over the past years, we have noted in most places that participation rates have been increasing at the community level. Due in part to those rates’ increase, we have noted that the caliber of Nunavummiut youth hockey have also increased from year to year. It seems that we have more and more interest in kids wanting to participate in the NYHDP and be part of Regional Tournaments and various Nunavik Nordiks’ hockey camps hosted in [village] each fall.**

Furthermore, the participation rates have increased for the regional tournaments from Year 1 \( (n = 400 \text{ in } 2011-12) \) to Year 2 \( (n = 425 \text{ in } 2012-2013) \) to Year 3 \( (n = 460 \text{ in } 2013-2014) \). Over the past three years, the highest participation rates have been at the Atom and Pee wee levels, yet Bantam and Midget numbers have also increased over this time, which has been seen as a success, as many youth begin to drop out of sport around this age because of other interests and life demands (see table 2).

**Perceived positive impact on the region.** The NYHDP facilitated the development of the Nunavik region on several levels. Based on recreational reports, it was evident that in the NYHDP’s early years, money was leveraged from the province of Québec to improve conditions of Nunavik’s arenas, including renovating ice surface and boards, repairing Zambonis, and replacing broken light fixtures. Eco-Ice systems were installed in every arena to aid in the commencement of an earlier hockey season and for reliability and consistency of programme delivery. These sustainable changes have positively impacted not only the NYHDP participants, but the region as a whole.

### Table 1: Select Programme Attendance Rates from 2006-2013

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<tbody>
<tr>
<td>Atom Boys</td>
<td>-</td>
<td>17</td>
<td>28</td>
<td>32</td>
<td>39</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Pee wee Boys</td>
<td>30</td>
<td>18</td>
<td>48</td>
<td>36</td>
<td>36</td>
<td>52</td>
<td>66</td>
</tr>
<tr>
<td>Bantam Boys</td>
<td>-</td>
<td>22</td>
<td>32</td>
<td>33</td>
<td>34</td>
<td>50</td>
<td>44</td>
</tr>
<tr>
<td>Midget Boys</td>
<td>-</td>
<td>-</td>
<td>21</td>
<td>27</td>
<td>38</td>
<td>43</td>
<td>55</td>
</tr>
<tr>
<td>Bantam/Midget Girls</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>31</td>
<td>29</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>57</td>
<td>129</td>
<td>159</td>
<td>176</td>
<td>212</td>
<td>233</td>
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### Table 2: Regional Tournament Participation Rates from 2011-2014

<table>
<thead>
<tr>
<th></th>
<th>2011/2012</th>
<th>2012/2013</th>
<th>2013/2014</th>
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<tbody>
<tr>
<td>Atom</td>
<td>105</td>
<td>80</td>
<td>110</td>
</tr>
<tr>
<td>Pee wee</td>
<td>120</td>
<td>140</td>
<td>125</td>
</tr>
<tr>
<td>Bantam</td>
<td>90</td>
<td>105</td>
<td>130</td>
</tr>
<tr>
<td>Midget</td>
<td>85</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>Total</td>
<td><strong>400</strong></td>
<td><strong>425</strong></td>
<td><strong>460</strong></td>
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</table>
Much media attention was garnered within the first two years of programme initiation. Having a retired professional hockey player as a Director helped facilitate initial media attention, yet as the programme became more established, the programme itself helped to bring visibility to the region. This media attention led to hockey equipment donations from all over Canada, which helped youth within Nunavik have the opportunity to play hockey that might not have been able to afford equipment.

This programme not only had a positive impact on the region in terms of physical resources, but also provided opportunities for youth to participate in organized sport and be physically active. Based on the previous theme of ‘Increased Participation Rates,’ providing such an opportunity was successful for youth within Nunavik, as Youth 1 stated: “It gives us something fun to do because we’re in an isolated place and there’s nothing much to do here.” Two stakeholders talked about how programme participation provided a positive outlet for youth: “The kids may struggle or have problems, but when they’re on the ice, they’re the kids who smile and work hard for hockey, they’re like two different kids; it really has positive effects” (Coach 3) and “NYHDP is about much more than hockey. I never needed to be ‘sold’ on the value of what the organization [NYHDP] was trying to accomplish, it has so many benefits for youth” (Parent 2). Moreover, Coordinator 1 stated:

**Being in the programme, that’s what they need. Even if they aren’t doing great in school—it’s really sad that some of the kids have bad family life—even if they have this two weeks of opportunity to be here, that’s really great for them. They’re going to remember that forever…it’s good to have the regional tournaments too because you’d love to keep all 60 kids that come to the tryouts, but at least they get a chance to be involved in the [regional] tournament.**

Lastly, Youth 1 discussed life skills they believed were developed as part of programme participation: “Leadership was a really big one because [coaches] reinforced it every chance they had. Also responsibility, for yourself, your choices; both in and out of hockey,” while Youth 2 spoke of the benefit of engaging in the LHT programme: “Being an LHT has helped me with what I have learned in the programme—like leadership, effort, and responsibilities. Now I can put what I learned into practice with others, like the younger kids.”

The change in partnership with the school board sparked interest in one village’s school, where the programme had been well implemented (e.g. teachers/principals supporting and enforcing the programme, high youth engagement, reliable coaches). The education staff passed a resolution at the municipal level to have recreational hockey tied to youth’s schooling. Specifically, this meant that while schooling was no longer connected to the competitive component, the municipality wanted to enforce the importance of attendance and effort in school through recreational hockey participation. Principal 1 stated: “Since there is no longer a formal partnership with the programme, the local council is reviewing our request to have a partnership with the hockey programme—for local practices and games.” The result of this resolution was documented in an email from the principal to the Director during the 2012-2013 season:

*The resolution for the school/community hockey programme was passed before Christmas. Since then, there have been major improvements in school from: (names 10 students). All of these boys were at risk of trashing their school year. The turnaround has been astounding. I only had to cut hockey for one or two practices and things got back on track. Their attendance has improved, their work in class has improved. Teachers have come to see me because they are so delighted with the improvement…one mother was delighted about the improvement. The boys didn’t end up losing very much hockey, but they gained a lot in school. (January 17)*

This illustrated that while the partnership was not a feasible component of the NYHDP for all villages, the initial partnership worked well enough in certain villages to want to continue this endeavour locally, as it was perceived as having a positive impact on youth involved in hockey.

**Challenges within the NYHDP**

Three themes emerged pertaining to programme challenges: a) Need for more reliable human resources, b) Difficulties maintaining formal partnership with the school board, and c) The high costs associated with the implementation of NYHDP.

**Need for more reliable human resources.** The NYHDP utilized a framework that was implemented at the recreational level, yet each community adapted this framework slightly to best fit within their village. Although one of the strengths was having a stable organizational structure, some villages struggled finding reliable human resources (e.g. LHTs, recreation coordinator, arena manager, volunteers) to successfully implement the programme.
One recurring challenge was to find LHTs who were willing to commit to regularly run practices at the recreational level. Coordinator 1 stated: “Half the time kids will come to the rink and there’s no coach to run the practice…it’s pretty frustrating for the kids.” Although this was not the case for all LHTs it was a common theme, as Principal 2 explained: “He [youth LHT] is reliable, he goes every night. So for us, that’s a big step because other kids his age that are also LHTs, they are hit or miss 50% of the time—sometimes they show, sometimes they don’t.” Two stakeholders seconded this: “It’s hard to find members from the community that are really involved in the programme and that will stay for a while” (Coach 1) and “I want more local people helping out, helping the little people in the dressing room and on the ice…more LHTs on the ice for the younger kids. Parents should help.” (Youth 2)

Another identified challenge related to human resources was securing positions to support programme delivery at the recreational level, such as hockey coordinators, arena managers, and ice resurfacers. These positions extend beyond the NYHDP’s control, but still had an impact on the programme. The programme often struggled at the recreational level because several villages did not have regular arena operating hours or the arena and ice surface was not maintained. As Coach 2 discussed: “They wanted an arena manager, janitor, and security guard, but the municipality said we can’t afford that. [Adults] clean the ice for themselves at night, nevermind kids. There are always places, like in [village], no one takes care of the arena.” Coach 3 discussed the issue of consistency with staff at the local level: “For the most part you get someone great and you lose them; there’s many issues that even having regular hockey seems to be difficult with not having an arena manager”.

A desire for more parental involvement within the programme was also identified by stakeholders. Although there are many parents who support the overall goals of the programme, there was a lack of parental involvement within the program. It was identified from 2 years of community reports that no villages had parents who went on ice during practices, despite efforts made by NYHDP stakeholders to encourage this. Parent 1, who had two children participating in the programme spoke to this:

In the beginning, parents were getting involved, but as usual they slowly disappear, but there are always those few parents who always go and watches and supports, but I think we really need to support more. To make it really work, make it better, the LHTs need support from the parents.

Coach 2 discussed a possible cultural link as to why few parents are involved in the programme: “For a lot of parents the role of being a parent is to bring food on the table and have a place where kids can sleep. So if this is your perception of a parent, you’re far from going on the ice to support your kids learning hockey.”

Difficulties in maintaining formal partnership with the school board. As mentioned, a formal partnership between the NYHDP and the school board was eliminated in 2012 despite the intended goal of involving the school board as a key programme stakeholder. The partnership was eliminated as parties experienced difficulties reaching common ground for two reasons: differing rules and regulations of each organization and a lack of consistent implementation of NYHDP objectives across the village schools. Since this was not consistently carried out across the region, the partnership was formally eliminated. Programme adjustments have been made since the termination of the partnership. Although the programme was adapted based on this change, stakeholders shared mixed opinions on whether this decision was positive or negative for the programme. Principal 1 discussed how the lack of partnership meant youth may not be as motivated to attend school:

When we look at the grade fives and sixes and their hockey boys, we know they have a lot of baggage from home and for them to have hockey—they’re driven by hockey—it’s a sport they love. If I can use hockey as a reward for improvement in school then it means a lot to me as a school principal—if I can’t then there may be a problem.

A teacher-coach discussed his perspective:

It’s like if you play hockey in the south, no one asks you for your report card; it’s the same thing here right now. Last year, we had a bargaining tool. It kept a lot of kids in school. Now it’s a free-for-all. Which isn’t bad, it’s an extra-curricular, kids should be privy to that, but we lost that bargaining tool. (Coach 1)

Coach 2 went on to say:

I would say last year it kept a lot of kids coming more often—it’s not that those kids have dropped out, but it’s more ‘if I don’t show up to these two classes today, I’m not going to lose my hockey tonight so I’ll skip these two classes’, whereas last year, if you skipped you wouldn’t go to hockey that night.
In contrast, Youth 1 talked about how the elimination of the partnership provided opportunities to youth who might not have otherwise had a chance to play hockey: “For the kids that don’t go to school [consistently], it gives them something to do, like a chance. It’s probably not their fault that they’re not going to school because there are social problems so it gives them a chance.” A local coach seconded this when discussing the increase in participation rates since the end of the formal partnership: “There are more kids since the programme is not link directly with school so according to me it’s a good thing for the programme.” (January 12)

The decision to end the formal partnership was a result of inconsistencies in the implementation of the NYHDP policies. Principal 2 talked about how some teachers were using the programme partnership inappropriately: “I think one of the biggest problems is not having a supportive team under you as a principal; just a lot of teachers are not on board with the partnership or they use [hockey] in the opposite way—that it’s a punishment.” Similarly, Parent 2 explained that she had mixed emotions related to the partnership, as she believed there was potential for a successful partnership, yet was not implemented appropriately:

*I think it really helped when it (hockey) was tied to school as long as it’s used right. There are students who struggle and I find they’re not being understood; they have more going on in their lives than people realize. [Teachers] use hockey as a punishment; the kids are struggling in life so they do bad behaviour and get punished and aren’t allowed to do what they love most (hockey). We need to figure out a way to use it properly.*

Parent 1 believed that the decision to end the partnership was premature: “I find it’s too soon to let this programme go out of the schools because it was just starting and it needs to be there for years for the school to really understand how it works. It wasn’t there long enough to make a really strong impact.” It should be noted that some of the communities worked. It wasn’t there long enough to make a really strong impact. A local coach seconded this when discussing the increase in participation rates since the end of the formal partnership: “There are more kids since the programme is not link directly with school so according to me it’s a good thing for the programme.” (January 12)

The NYHDP was expensive to implement. The NYHDP was identified as a costly programme primarily because of the geographical set-up of Nunavik and the transportation costs required to make the programme function. The competitive component and regional tournaments were the most expensive programme elements as youth were flown from their respective villages for tryouts, training camps, and tournaments. For example, in the 2012-2013 season competitive tryouts had 50 to 65 youth and regional tournaments has approximately 100 youth in attendance, which meant all youth who were not from the host village were flown to and from this location. Coach 4 discussed: “The price of plane tickets are really expensive from coast to coast so that’s a main issue…every year it’s a lot of money—it’s really expensive to travel in this area.” A charter was needed for each competitive team to travel to large cities in Ontario and Québec for the end-of-season tournament. Along with the costs for youth travel, there were also travel costs associated with stakeholders for programme implementation (e.g. coaches, coordinators). Additionally, it was noted that hockey was expensive to play and many youth from families living on low incomes could not afford the equipment. The Director noted: “Although hockey equipment availabilities are not always there for kids in all villages, we still see the numbers of participants grow, but equipment needs will continue to be a definite obstacle to allow more children to participate.” However, it was suggested that youth experiences and outcomes exceed the expense, as Coach 1 stated: “I know it’s really expensive, but it’s really fun…the kids go wild every time they go on the ice. It just gives a reason for the kids to play and practice.”

**Discussion**

The purpose of this study was to explore stakeholders’ perspectives of ongoing successes and challenges of implementing the NYHDP using a utilization-focused formative evaluation process. Results from this study indicate that successfully implementing a SFD programme in a northern, remote region requires many elements
including having a well-planned, well-implemented programme framework, a stable organizational structure, and opportunities to increase local appropriation (leadership and coaching opportunities). These elements have helped facilitate increasing participation rates and positive perceptions regarding the programme impact on the region. While the NYHDP has been running for several years illustrating substantial growth and progress, challenges exist including the necessity for more reliable human resources within the programme, the decision to end the partnership with the school board, and the large expense involved in programme implementation. There is still much to be learned and adaptations to be made in order to improve the delivery of the programme to better meet the needs of participants while ensuring programme sustainability.

The capability of organizations to deliver effective sport programmes with individual and community development outcomes is influenced by internal and external organizational factors. The study reinforces this as internal (e.g. organizational structure, staff training) and external factors (e.g. availability of resources, partnerships) have a large impact on programme outcomes and sustainability. Further, researchers indicated that programme coordinators have pivotal roles in programme initiation, development, and maintenance throughout a programme's lifetime, which has been crucial within the NYHDP. Moreover, Child and Faulker identified coordinators are often involved in partner recruitment and training, communication with all stakeholders, programme promotion, and budgeting, which also holds true within the NYHDP. However, while there is one critical director, a core staff team was established over the past years, allowing for delegation and facilitation of local ownership. Fostering such ownership has been known to help reinforce programme sustainability and assist in long-term programme survival.

Within this organizational structure, communication has been identified as a critical element in successful programmes, which in this study positively impacted the programme framework particularly at the competitive level. Researchers have discussed the importance of internal (e.g. between partners) and external (e.g. to parents and youth) communication. Moreover, researchers have also discussed how success of any development-oriented, sport-based programme is dependent upon many types of organizational and human resources, including communication amongst the various stakeholders involved. Therefore, the development of a core staff team as well as quality communication and training enabled opportunities to increase local appropriation such as leadership and coaching within the NYHDP. From this, there was an increase in Aboriginal coaches and LHTs, which not only allowed for easier communication, but also aided programme sustainability and allowed for the director to take on a facilitator role.

Previous research has indicated that Aboriginal youth have vocalized the desire for organized sport participation opportunities. Findings from this study outline that within Nunavik, hockey has been successful in creating this opportunity based on increased participation rates over seven years. Moreover, hockey has not only been identified as of great cultural significance to Canadian Aboriginal populations, but also by other SFD programmes in Canada as an important vehicle for Aboriginal youth participants. Sport has been effective in keeping Aboriginal youth out of trouble, which may be a consequence of NYHDP participation as stakeholders perceived hockey as a positive engagement opportunity for youth to be physically active, have fun, interact with peers and adults, and in some cases remain engaged at school.

While the partnership with the regional school board was identified as a challenge, this shift in the NYHDP allowed for the development of its own curriculum at both the competitive level through establishing a proactive approach that focuses on life skill development (effort, perseverance, teamwork) and recreationally through passing local resolutions. The elimination of the partnership modified NYHDP’s participation criteria, as participation was not linked to school reports. Previously, youth who were most at-risk and may not have been eligible to participate in the NYHDP based on criteria, such as poor school reports, were now given the opportunity to participate, yet education is still greatly encouraged. This allowed the opportunity for NYHDP stakeholders to closely work with these youth and provide a positive environment to participate in sport and work on fostering life skills.

A major component of the facilitation of SFD programmes is the lasting impacts they have on the community. The results of this study revealed that the implementation of the NYHDP led to significant infrastructure changes as arena improvements and purchase of equipment that was perceived as being able to aid the overall region outside of the programme itself and for a long time. Furthermore, the LHT programme component was perceived as enabling opportunities for more trained youth in the region to act as coaches at the local level, which has helped with capacity building, programme sustainability, and additional job opportunities for youth to be in a leadership role in a sport
that they enjoy. Blodgett and colleagues\textsuperscript{34} discussed the importance of Aboriginal role models working towards the same purpose—youth development—enabling the potential for a better future and programme sustainability, as was identified as a critical success within the NYHDP; yet also an area to continue to improve upon.

**Practical Recommendations**

This study used a utilization-focused evaluation approach, which recognizes the important stakeholders who see benefit in using evaluation findings for future decision-making regarding the programme.\textsuperscript{18} The results of this study were disseminated to not only NYHDP stakeholders (e.g., executive committee, school board, regional government, funding organizations) through a written report, but also to the region by way of regional newsletter. Currently the stakeholders are working together to adapt the programme goals to better meet the programme participants’ needs and work towards programme improvement. As noted above, results from this study indicated that while there has been much progress in increasing local appropriation, a need still remains for consistent, reliable, and trained human resources at the recreational level for programme sustainability. While gains have been made at the local level over the past few years (e.g. increase in LHTs), the continuation of LHT and coach recruitment that are provided with in-depth training will allow for local capacity-building and enable more community appropriation within each village. Therefore, it is important to contextualize the programme within each village, as it has been noted that a “one-size-fits-all approach will not meet all community and individual needs.”\textsuperscript{17} It was recommended that the NYHDP work with each municipality to recruit and train arena staff and recreation coordinators to ensure that the arena is regularly maintained. Thus, trained LHTs will have opportunities to facilitate the local hockey programme while having additional human resources to work with them.

While Durlak and Dupree argued that programme adaptations should be related to peripheral and not central programme components,\textsuperscript{35} it was evident from this research that a central programme component, the school board partnership, was not working successfully. Therefore, a decision was made to terminate this partnership. Throughout the study, researchers worked with the organization and made plans to further improve the NYHDP by incorporating life skills activities as a core programme component. As an organization, it was important to recognize challenges within programme delivery and between partnerships and make changes that strengthen the programme, moving further towards programme sustainability. It was also important to use lessons learned from the challenges associated with the partnership with the school board in case this partnership were to be reinstated. Such lessons illustrate that a more formal training process would be needed to ensure that all involved stakeholders understand the purpose and expectations of the partnership.

It should also be noted that flexibility is critical when facilitating youth development programmes,\textsuperscript{36} but even more so is the importance of being flexible when working with Inuit cultures to ensure the programme goals are in line with the culture and are adaptable to the villages’ particular needs and goals.\textsuperscript{37} Since this programme is delivered in 14 different villages, it is critical to contextualize the programme to each individual village because each community has different needs and resources that can be specifically utilized to ensure high quality programming. Therefore, stakeholders are working with villages at the individual level to understand how to best facilitate the programme with the resources available.

One strategy for increasing this effectiveness and ultimately the sustainability of SFD programmes is collaborating with multiple partners that support programme goals and outcomes, assist with delivery, and provide funding.\textsuperscript{17} The United Nations\textsuperscript{33} also recognized this notion by highlighting that such partnerships can facilitate the leveraging of resources, including financial, human, and physical, as well as expertise, training, facilities, and equipment. The NYHDP continues to seek out new partners and has had success in this area. Since this study, funding was attained from the Canadian Tire Jump Start Foundation, which will go towards hockey equipment to maximize programme participation. CBC profiled the NYHDP during CBC’s Hockey Day in Canada in the winter of 2015, garnering much media attention.

Finally, the results of this study indicated that parents are a crucial element to the programme, yet only a small percentage of parents are involved. This is consistent with findings from other studies within the Aboriginal youth sport context.\textsuperscript{34} The finding could be explained by the work of Arsenault\textsuperscript{38} who found that parents perceived their role within a family in Nunavik as one that should focus on providing basic necessities such as food and shelter as opposed to engagement in leisure activities. Moving forward, it would be important to find ways to further engage parents, such as offering youth-parent games.
Limitations

Although this study provides an understanding of the NYHDP processes, it is not without limitations. First and foremost, it is important to recognize the potential bias of this study with the potential of utilizing a Westernized evaluation approach. Although such an approach was used, the study was participatory and involved stakeholders’ perspectives; however, future research can be done to develop and use an Indigenous approach to evaluation. Moreover, future research should include more youth in the evaluation process, since they are the targeted population. Third, interviews were conducted with stakeholders who tended to show an interest and/or were involved in the programme and may have a positive bias towards programme operations. Although recruitment of stakeholders not involved in the NYHDP was attempted, they were not interested in participating in the study. In the future, it would be beneficial to document the perceptions of stakeholders not involved in the programme to better understand the motives behind the lack of involvement. Additionally, there is potential for self-monitoring when participants are aware of programme evaluations. Lastly, data were based on self-reported perceptions through interviews; however programme documents and researchers’ on-site experiences did help to verify findings.

Conclusion

This study represents one of the first utilization-focused programme evaluations conducted of a SFD programme within a Canadian Aboriginal context. Results from this paper show that a well-structured programme that has a stable organizational structure and uses local human resources for implementation and sustainability is perceived as having a positive impact on both the region in which it is implemented and among the participants involved. Moving forward, it is critical to understand how to modify and further develop the programme based on ongoing challenges. Therefore, continuing to recruit reliable human resources and finding a way to best connect a sport-based programs to other systems within the community such as the schools to further integrate the importance of education is important. While there is still much to be learned and adoptions to be made in order to improve the delivery of the programme to better meet the needs of participants and ensure programme sustainability, results from this study have aided in the improvement of the NYHDP. The results may also act as a catalyst for expanding the programme to more participants and can possibly provide a strong framework for other Aboriginal populations interested in implementing a youth SFD programme.

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References


Soccer for Peace in Jordan: A qualitative assessment of program impact on coaches

Jacob W. Cooper¹, Lindsey C. Blom², Lawrence H. Gerstein³, Dorice A. Hankemeier⁴, Tacianna P. Indovina³

¹ Ball State University, School of Physical Education, Sport, Exercise Science & Boston University
² Ball State University, School of Physical Education, Sport, Exercise Science, Sport & Exercise Psychology, Center for Peace and Conflict Studies
³ Ball State University, Center for Peace and Conflict Studies, Department of Counseling Psychology
⁴ Ball State University, School of Physical Education, Sport, Exercise Science, Athletic Training

Corresponding author email: lcbblom@bsu.edu

Abstract

The increased use of sport as a vehicle for development and peace has resulted in the creation and implementation of specific sport-for-peace programmes worldwide.¹ The purpose of this study was to qualitatively investigate the personal and professional impact of a sport for development programme on six Jordanian soccer coaches. The primary objective of the Soccer for Peace and Understanding in Jordan programme was to teach coaches how to develop citizenship behaviours and conflict resolutions skills in their athletes through the game of soccer. Specifically, this study aimed to give a voice to the participants in an effort to better understand their experiences and improve future programming. Through the use of one-on-one interviews and the consensual qualitative analysis method, domains, core ideas, and categories were identified from the shared experiences of the participants. The coded domains of Programme Experience, Programme Impact, Coaching Philosophy, Approach to Diversity, Sub-Cultural Norms, and Programme Evaluation were then cross analyzed and subsequently revealed that the participants felt that they learned skills that they have used and will continue to use related to promoting peace within their sport-based responsibilities.

Background

Over the past two decades reports by the United Nations (UN) inter-agency task force on sport-for-development and peace have led to the remobilization of sport-based strategies and programs aimed at the comprehensive facilitation of sustainable pro-social development.³ Although the style of these programs varies, their primary purpose remains relatively similar: to decrease conflict and increase harmony across the world through the implementation of physical activity.⁴ Some sport-for-development and peace (SDP) programs have achieved this goal by using sport as a way to safely construct and adjust behaviours that take place during athletic competition and every day life.⁵ Other programs have achieved this goal simply by using sport as a form of therapy or taking advantage of the raw convening power athletics to bring awareness to another cause.⁶ Additionally, the growth of the SDP movement has brought with it a number of important theoretical frameworks (e.g., post-colonialism, critical race theory, hegemony theory) that have been widely used as fundamental philosophies within the field. Furthermore, the social and political underpinnings within the SDP movement should be carefully examined before the commencement and evaluation of a specific program.⁷ Therefore, it is important to note that the qualitative analysis of the Soccer for Peace and Understanding in Jordan² (SPUJ) programme put forth in this study was rooted in the framework of hegemonic theory. Hegemonic theory has shown to be a useful infrastructure for the study of sport-for-development as it brings about vital attention to the manner in which the disparity of mobile capital creates impoverished conditions.⁸ This means that the

Keywords: Sport, Conflict, Development, Interviews, Middle-East
well-intentioned and benevolent ‘mission’ of the procedures discussed in this research operated off the idea that in order to better assist the disempowered, an establishment of a dichotomy between those with access to resources (e.g., knowledge, financial capital, proper training) and those without such resources is necessary in order to achieve the greatest outcomes.\(^9\)

Recently, similar frameworks have been utilized to conduct research evaluating SDP programs in South Africa.\(^{10-11}\) These studies have helped shed light on not only methods for evaluating SDP programs but also on the best practices and challenges of current programs. For example, challenges such as insufficient familial support, insufficient infrastructure, and race/class perceptions were discovered and explored as impediments to the attainment of SDP goals within underserved communities.\(^{10}\) These conditions were cited by participants as possible reasons that might impede on programme outcomes because the targeted population was often forced into adult responsibilities despite the absence and lack of support from actual adults.\(^{10}\) Conversely, Gannet et al.’s research has provided a set of suggestions based off of a study conducted at an international soccer tournament in Johannesburg.\(^{11}\) This study successfully investigated the experiences of youth and adults with an SDP model programme. The study concluded the following five recommendations for future programs: a) systematically formulate desired outcomes; b) formalize a curriculum and training plan; c) prioritize social values over match outcomes during implementation; d) conduct pilot projects in a range of settings over an extended period of time; e) emphasize monitoring and evaluation to assess effectiveness and impact. Thus, these suggestions should be considered in the successful implementation of future SDP programs.

In addition to the five aforementioned recommendations, an important component of programme implementation is training the coaches. Over the past four decades, coach education and training programs have been developed to provide practical sport-specific and pedagogical instruction to coaches aspiring to deliver more intentional, holistically positive outcome-based instruction.\(^{12}\) In a similar light, trainings for youth workers involved in Positive Youth Development (PYD) programs have emerged in several varieties. This is due to the fact that the learning needs of coaches can often be heavily contextualized and thus require a versatile curriculum that can create meaningful learning experiences across several levels of competency. Specifically, training programs have prioritized the integration of the democratic exploratory coaching style as it has shown evidence of providing meaningful learning experiences for the adolescents they serve.\(^{13}\) The democratic style of coaching transfers more choice and empowerment to the entire team as opposed to the traditional authoritarian “top down” approach. This dispersal of power then helps facilitate high levels of personal and social responsibility and therefore higher salience of life skills involving conflict resolution, empathy, and self-awareness.\(^{13}\)

Although the aforementioned studies have provided valuable knowledge along with examples to model, the empirical data on SDP programme effectiveness remains limited, specifically with research gaps in programme evaluation, cross-cultural considerations, and long-term societal impact of interventions. The current researchers set out to augment the discoveries found in studies like Whitely et al. and Gannett et al. via qualitatively investigating coach’s perspectives on their experiences within the SPUJ programme along with the impact upon their professional and personal lives.\(^{10-11}\)

**Programme Context**

Of specific interest to this project was the country of Jordan. Jordan is a kingdom on the East Bank of the River of Jordan in Western Asia bordering Saudi Arabia to the southeast, Iraq to the east, and Syria to the north. Jordan is a critical player in regional peace and stability, especially with regard to the Israel and Palestine crisis.\(^{14}\) Jordan provides the U.N. critical military intelligence and assistance in the war on terrorism, is at peace with all of its neighbours, is a favored training site for students in Arabic and Middle Eastern studies, and it is an important contributor in the liberalization of Middle Eastern economics.

Although Jordan contains hundreds of tribes and villages, this study included participants from three areas: Amman, Zarqa, and Ajloun. Amman is the country’s political, cultural and commercial focal point while also being one of the oldest continuously inhabited cities in the world.\(^{14}\) Known as a beacon for growth and understanding in the country of Jordan, Amman has maintained a moderate, non-ideological and revolution-adverse political culture despite the domestic instability that has recently engulmed much of the Middle-East.\(^{14}\) Located to the northeast of Amman, Zarqa remains very conservative and traditional in regards to its political, religious and social climate.\(^{14}\) Although not as conservative as Zarqa, Ajloun is another village deeply rooted in history and tradition and is located even farther north.\(^{14}\) Well known for its impressive ruins throughout the village, Ajloun holds
one of the highest ratios of Muslim populous of all the villages at nearly 95%.\textsuperscript{15}

Overall, the country of Jordan is considered one of the Arab world’s most cosmopolitan and progressive countries.\textsuperscript{14} Jordan’s education and foreign policy systems are arguably some of the strongest in the world.\textsuperscript{14} Jordanian culture is best exemplified through its spoken language, values, beliefs and reputation for stability and tolerance.

Concurrently, and of specific interest to this study, the culture of Jordan was found to promulgate an authoritative coaching philosophy where outcome-oriented goals were emphasized over holistic process goals. Jordan has a history of authoritarian leaders, thus offering a possible explanation for the prevalence of this “command style” of coaching.\textsuperscript{16}

Approximately 150 Jordanian coaches and 300 athletes from the aforementioned villages participated in three primary phases of the SPUJ programme during its two-year duration (2012 – 2014). During these three phases, three training workshops took place (two in Jordan and one in the United States) with the implementation of the curricula through clinics, cultural exchanges, practice sessions and mentoring programs. The program was in its second year of existence and final training workshop when the data collection took place for the current study. Utilizing a “train the trainer” approach, the programme relied on the Human Development (HD) curriculum created by the Indiana Soccer Association. The HD curriculum strives to develop good citizens through the game of soccer by teaching coaches how to use common soccer drills to deliberately emphasize responsibility, respect, leadership, wellness, integrity and honour among their athletes. The SPUJ programme drew from the HD curriculum along with technical and tactical soccer information adapted from the U.S. Soccer Federation “E” coaching license material, which includes information on methods of coaching soccer, technical skills, tactical aspects, strength and conditioning, psychology and nutrition.\textsuperscript{2} The programme also emphasizes techniques on developing peaceful living skills such as empathy, personal responsibility, understanding conflict and communicating effectively.\textsuperscript{2} The programme was run by five specialists from a variety of disciplines: a) the project director, a professor whose background was in sport psychology, coaching and soccer; b) a peace and counseling psychologist; c) a soccer coaching educator with over 30 years of coaching experience; d) a strength and conditioning expert and coaching education professor; and e) a religion professor who had extensive experience with the Jordanian culture. Thus, the purpose of this study was to qualitatively investigate the personal and professional impact of the SPUJ programme on six Jordanian soccer coaches who participated in all three phases of the programme. Specifically, the researchers aimed to give a voice to the participants in an effort to better understand their experiences and improve future programing.

Method

Participants

Ten coaches met the inclusion criteria for this project: a) consider the country of Jordan to be their home, and b) have participated in the majority of all sessions throughout all three phases of the SPUJ programme. The sample included six Jordanian youth soccer coaches: three men and three women, ages 29-44 (see Table 1).

Instruments

In order to answer the research question, Consensual Qualitative Research (CQR)\textsuperscript{17} methodology was implemented, which included a research team and interview guide. A myriad of qualitative methodologies were explored (e.g., comprehensive process analysis, discourse analysis, & focus groups); however, the methodology of CQR was decided upon for the following reasons: a) the collaborative team approach to analysis allowed the data to be coded by individuals from multiple ethnicities and cultural backgrounds, which included individuals with specializations in Jordanian culture and the Arabic Language; and b) the use of an external and internal auditor along with the multitude of triangulation techniques implored by the CQR methodology was determined to be the best way to ensure dependability, transferability and trustworthiness in the studies results.

Research Team

When implementing the methodology of CQR, researchers serve as the primary instrument used in data collection.\textsuperscript{17} The primary investigator (PI), a 24-year-old male graduate student from the United States of America, traveled to Jordan to conduct all of the interviews. He was trained for this research venture over the course of eight months prior to the trip through both exposure to the second phase of the SPUJ programme and the completion of two graduate research methods courses, one of which specifically focused on the understanding of qualitative research and the implementation of the CQR methodology. The PI also conducted a pilot study with U.S. participants in the programme and constructed training exercises for the research team.
**Table One: Participant Information**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Gender</th>
<th>Background</th>
<th>Coaching Level</th>
<th>Future Goals</th>
</tr>
</thead>
</table>
| One         | 44  | Male   | From a rural village  
Coaches male athletes ages 14-17  
Coached for six years | Coached mid-level club based teams | Plans to coach for at least two more years |
| Two         | 29  | Male   | Currently a student at a well-known Jordanian University  
Coaches male athletes between the ages of 12 and 14 in Amman  
Coached for four years | Coached lower level school-based club teams | Plans to coach as long as possible |
| Three       | 33  | Female | From a large city  
Coaches Jordanian female youth at the national level  
Coached for nine years | Coached national level youth teams | Plans to continue coaching for as long as possible |
| Four        | 29  | Female | From a large city  
Teaches and coaches at a small school for male and female athletes ages 12-16  
Coached for two years | Coached lower level school-based club teams | Plans to continue coaching and teaching for as long as possible |
| Five        | 52  | Male   | From a large city  
Coached at the national level | Coached national level youth teams | Plans to continue coaching for the remainder of his professional career |
| Six         | 32  | Female | From a moderate-size village  
Teaches and coaches at a large university with both male and female athletes between the ages of 8 and 12 | Coached mid-level university based club teams | Plans to continue coaching for at least the next two years |
Upon return from fieldwork, the PI was joined by a team of selected individuals who aided in the analysis of the data. The team consisted of the PI, two graduate students with no involvement with the SPUJ programme and two doctoral students with extensive involvement with the SPUJ programme. One of the research team members was also a native Jordanian who was fluent in both English and Arabic.

External and internal auditors were also used during the process of data analysis to ensure objectivity and development that maintained the initial purposes and objectives of the study. The external auditor for this project was the director and founder of the SPUJ programme. The auditor’s experience implementing sport as a tool for peace and development along with her comprehensive understanding of the programme made her an ideal candidate, although with an obvious bias. The strengths of her knowledge of the field and programme offered a perspective that could not have been obtained otherwise. These strengths and biases were considered heavily prior to the implementation of any of the auditor’s suggestions. The internal auditor for this project was a research team member who was a native Jordanian, spoke both English and Arabic and had worked as an interpreter for the SPUJ programme.

Interview Guide. The interview guide consisted of a total of ten primary questions plus probes. The first three questions focused on participants’ personal experiences within the programme and personal and professional impact, while the next five questions were more specific about the details of the potential programme impact. The last two questions were evaluative in nature, focusing on coaches’ challenges and recommended changes to the programme.

Procedure

Data were collected in March of 2013 based on a CQR procedure adapted from Hill et al.\textsuperscript{17} All participants signed an informed consent form in their native language the first day of data collection. The interviews, which included an interpreter, lasted between 28 - 42 minutes and were audio and video recorded. Although translation is clearly vital for the process, it provides opportunities for mistranslation and misunderstanding. To protect the study’s level of trustworthiness, the PI met with the interpreter the day before the interviews to go over the script and discuss the importance of translating the questions and responses verbatim and not changing or adding any of their own insights or opinions. Member checking was also instituted throughout the interview as the PI often summarized the participants’ responses and asked if he was accurately depicting the participants’ experiences.

Research Design and Analyses

CQR involves four steps in data analysis: 1) transcribing and coding of interviews; 2) developing domains constructed using the responses provided in the interviews; 3) constructing core ideas (abstracts or brief summaries) for all the material within each domain for each case; and 4) conducting a cross analysis which involves developing categories to describe consistencies in the core ideas within domains across cases is conducted.\textsuperscript{17} Figure 1 illustrates how this process was applied in this study.

Transcribing and coding of interviews. After the PI returned from collecting data in Jordan, all interviews were transcribed in English by a hired transcriptionist. Each transcript was then emailed to the corresponding participant as a way to member check for accuracy. Five of the six participants responded by agreeing that the transcript reflected their true words, and that they felt comfortable with its accuracy. One coach was non-responsive after four attempts of contact through electronic mail.

Developing domains. During the research teams’ initial meetings, the team established the primary domains or different topic areas observed in the data. Eight domains were identified after the team members rigorously explored several different ways of initially segmenting and organizing the data. The evolution of the domains is documented throughout the following sections, beginning with the independent coding of Interview 1.

During step one of the domain development process (see Figure 2), each research team member took the first interview and independently assigned each piece of data (i.e., everything ranging from a phrase to several sentences all related to the same topic) from the first selected transcript to an independently entitled domain. The research team then met and found that their independently titled domains were quite similar in meaning but often different in verbiage. The team then constructed a master list of domains that combined the essence and meaning of all the independently coded domains into six agreed upon titles. The titles of each domain were debated until a consensus of at least three out of five members was reached.

Once each team member had independently coded the first transcript for a second time, the team met and discussed the codes. At the conclusion of this meeting, the team had a
**Figure One:** Consensual Qualitative Research Data Analysis Progression (*RTM- Research Team Member*)

**Step 1:** Each RTM independently coded first transcript for domains.

**Step 2:** Research team met to discuss their independently identified domains and then constructed a consensually excepted master list. Transcript was then recoded by all RTM’s using only the master list.

**Step 3:** Master list of domains and consensually coded first transcript were brought to the auditor for review and confirmation.

**Step 4:** Research team made necessary adjustments and changes to the domains.

**Step 5:** Each RTM independently coded the second transcript, using the now audited master list.
   Step 4 was repeated for all remaining transcripts.

**Step 6:** Research team discussed the formation of core ideas and began the implementation of consensus on data.

**Step 7:** Core ideas formed for each domain in every transcript and were separated into formerly identified categories. Categories audited by external auditor.

**Step 8:** Research team discussed participant cases and changes made in audit.
   Agreed on the quotes that embody the essence of each category.

**Step 9:** Final themes and “essence quotes” identified and emailed to participants to see if they felt they accurately represent their views/experiences.
Figure Two: Final Categories: General

<table>
<thead>
<tr>
<th>Theme</th>
<th>Quote</th>
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<tbody>
<tr>
<td>Theme 1: Program impacted participants’ professional and personal development. Frequency: General 6/6</td>
<td>“The program provided me with a self-development opportunity and an eye-opening experience regarding conflict resolution among players as well as people in real life. Furthermore, I believe it [the program] added something new…the way I’m being more patient…the way I analyze the information…the way I accept others.”-P5</td>
</tr>
<tr>
<td>Theme 2: Participants experienced an increase in empathy and a deeper understanding of diversity as a result of the program. Frequency: General 6/6</td>
<td>“Thanks to the program I learned to pay more attention to anyone who was being ignored or left out, I would encourage him to become the captain…I support them so that they won’t feel inferior and isolate themselves.”- P4</td>
</tr>
<tr>
<td>Theme 3: Application of conflict resolution skills were a result of participation in the program. Frequency: General 6/6</td>
<td>“The same way, each student should listen to his colleague, with less talking…and when the student, who started the problem, finishes talking, I’ll then talk…when they listen to each other, they can figure out what is the main reason for the problem…they may resolve the conflict between them…in case they couldn’t resolve the problem…if they were willing to resolve the conflict on their own and interfered, they might get upset. So, I give them a chance to solve the problem, if they were successful, this would be good. If not, I’ll help them solve it.” -P6</td>
</tr>
<tr>
<td>Theme 4: The participants were comfortable and enjoyed all phases of the program, especially the exchange trip to the U.S. during phase two of the program. Frequency: General 6/6</td>
<td>“The first phase was about understanding and peace among countries and people…and religions…and accepting each other more…the third phase was all about training,, which was very useful…and even the scientific information…we had some information, but the one we gained was up-to-date…we had an old way of approaching the players; now we have an updated one…even me, I felt much more comfortable. Overall I’m very, very happy from the experience I gained because I learned a lot…for my children.”- P6</td>
</tr>
<tr>
<td>Theme 5: Participants experienced challenges in the application of program curriculum due to national and international differences in cultural norms. Frequency: Typical 4/6</td>
<td>“Our culture reinforces that we should win every time…So we need to admit, we Arab, or Oriental coaches, that we still use “orders” in our coaching styles…we don’t try to learn or teach the kids the “exploring style”. The challenges were related to politics around the world…to be honest with you, being on good terms with the West is not always well received throughout Jordan and that created a challenge for us”- P5</td>
</tr>
<tr>
<td>Theme 6: Cooperation and player enjoyment are strong components of the participants’ coaching philosophy. Frequency: Typical 5/6</td>
<td>“Winning is the basis…we always look for winning…. however, in a legitimate way…everyone who is involved in soccer loves to win…but for me, winning is not just scoring more goals than the other team—winning is to see my players have acquired new skills…and at the same time, to feel that I have accomplished something as a coach. We are reinforcing among players that soccer is not only about winning or losing…sometimes you win…and other times, you lose…however, each time you are learning…and we are trying to teach the players that we are not training you for just one year; we are training you for the future –”P5</td>
</tr>
<tr>
<td>Theme 7: Future programming can be improved Frequency: General 6/6</td>
<td>Refer to 7A, 7B, 7C</td>
</tr>
<tr>
<td>Theme 7A: The participants generally suggested that the program could be improved by extending the time of the exchange trip in the United States United States. Frequency: 6/6</td>
<td>“The phase in the USA was better than the first phase. The first phase gave me the training; but the most benefit was in the USA. And now, we have learnt how to control big group of players”-P2</td>
</tr>
<tr>
<td>Theme 7B: The participants variantly suggested that the program could be improved by specifying the curriculum to the different districts of Jordan. Frequency: Variant 3/6</td>
<td>“I recommend each district be given specific attention for their needs and resources available…because each district is very different and some of things we learned would only work in certain places…and there would be more exchange visits, since such visits are eye-opening”-P1</td>
</tr>
<tr>
<td>Theme 7C: The participants rarely suggested that the program could be improved through increased communication between the participants and the directors of the program. Frequency: Rare 2/6</td>
<td>“To have better communication among us participants and the captains would have been ideal, there were times when it felt like only the captains knew what was going on. This made it so people trailed off or lost out on teachings.”- P4</td>
</tr>
</tbody>
</table>
identified seven categories relating to the impact of the SPUJ programme. The frequency of a category was identified as one of the following: (a) General: category pertained to all participant interviews; (b) Typical: category was relevant to at least four but no more than five participant interviews; (c) Variant: category was found in precisely three interviews; or (d) Rare: category applied to only two participant interviews.

While this study provides evidence for the effectiveness of a SDP programme, it is important to consider the methodological limitations. In this study, the PI was only able to spend one week during the third phase of the programme to collect data. Ideally, qualitative researchers would spend extensive time in the field, conducting several hours of interviews per participant to ensure data saturation and transferability. However, since this was not possible in this study, measures were taken to ensure credibility and transferability as mentioned earlier. A second limitation involves the selection bias present as four of the potential participants did not volunteer to be interviewed; thus, all perceptions and experiences were not represented. The experiences of these individuals may or may not have affected the themes and conclusions that were discovered in this study, but the six individuals who participated may have been more inclined to share the positive impact of the programme than the four who did not.

Category 1: The programme impacted participants’ professional and personal development (General)

Throughout the shared experiences of all participants, examples were given of how the programme impacted their professional and personal development. Personal development is instrumental for all parties involved with the implementation of sport-based development programmes. Coalter also provided reassurance that personal development is one of the most valuable results of participation in an SDP program. However, while discussing this result it is important to provide a specific definition of personal development, as the term can sometimes be rather vague and broad, ranging from outcomes like peace achievement at the local or national level or changed individual approach to diversity via community-level social cohesion. For the purposes of this study, personal development was defined as the facilitation or growth in skills that are linked to positive character traits. This type of development, when transferred to youth, can eventually assist in learning the necessary lessons to becoming a good citizen and responsible adult.
Through the results, it was evident that participation in the SPUJ programme impacted both the professional and personal development of the coaches. The core ideas in this category specifically reflected skill acquisition and increased knowledge of drills and lessons that taught perspective-taking, empathy and conflict resolution. The strongest example of this category could be seen in the shared experience of Participant Four when he described his experience.

The programme provided me with a self-development opportunity and an eye-opening experience regarding conflict resolution among players as well as people in real life. Furthermore, I believe [the programme] helped me to view conflict differently . . . although I never want to start conflict . . . now, when it happen . . . I view conflict as an opportunity to teach . . . to understand . . . and to help others handle it.

This experience also was bolstered by the shared experiences of Participants Five and Three. Both coaches shared stories of how their teams and schools had benefited from the implementation of the learned drills. Participant Five indicated a dramatic quantifiable impact upon his team along with an example of how his personal development was impacted as a result of participation in the SPUJ programme.

After we came back from the U.S., we had a festival and tried to apply the concepts that we learnt . . . we faced many problems with players regarding winning and losing . . . we used to have meetings with them...and we started asking them: you lost the game, but can you play again in the future? . . . they replied: yes, we can . . . and we tell them: just like the other team won, you should try to win next time . . . and it is your natural right . . . so he used to accept the situation, and continue the practice to achieve good results . . . and throughout last year, conflict percentage, in the team that I train, has been reduced 50%. It has even impacted me while dealing with my family . . . I previously had a very passive and rigid personality . . . but now I smile with all my heart . . . I used to be shy to dance, but now, if the situation requires, I dance . . . I didn’t feel that it’s normal to dance!

This category was additionally supported as participants reflected how their experience in their roles as coaches, teachers, family members and citizens were impacted as a result of participation in the programme. Participant Three reflected on how her participation in the programme changed the way she approached problems and conflict throughout her everyday life.

I believe [the programme] added something new . . . the way I’m being more patient . . . the way I analyze the information . . . the way I accept others . . . And an important point is that regardless of linguistic, religious, or racial differences with others, there is definitely something common, and you can exchange points of view with them.

Category 2: Participants experienced an increase in empathy and a deeper understanding of diversity as a result of the programme (General)

Sport has the ability to work as a universal language capable of breaking down divides and cross-cultural boundaries, while also encouraging peaceful interactions when it is deliberately developed and implemented. This category showed how this universal language aspect of athletics was utilized through the SPUJ programme to foster deeper empathy and an understanding of diversity among its participants. Similar evaluations of sport for development programmes also have noted increases in empathy among their participants; furthermore, these increases were sometimes noted as unintentional yet overwhelmingly positive effects within the population.

Specifically, this category revealed that participation resulted in an increased value in empowering marginalized populations. Coaches mentioned being empowered to help Syrians, Iraqis and those living in areas where fewer resources were available, like Al-Risayfeh (near Zarqah). The essence of this category is best exhibited through the words of Participant Two:

Thanks to the programme I learned to pay more attention to anyone who was being ignored or left out, I would encourage him or her to become the captain . . . I support them so that they won’t feel inferior and isolate themselves.

Additionally, this category was supported by more specific examples of actions taken by the coaches to advocate for marginalized individuals. Participants Two and Six shared individual stories that demonstrated increased consideration of others. In the story shared by Participant Two, a student was being belittled in front of his peers by another coach on account of his skin color. He responded to this situation:

Once a teacher called an African American student “a black slave” . . . so I scolded the teacher . . . the teacher got upset . . . and I told him this is a human being regardless of his skin colour . . . although the teacher got upset, I feel I have won the student and prevented a future problem.

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In a similar fashion, Participant Six offered a personal example of increased empathy when she told the story involving the inclusion of one of her disabled students:

The programme had a great impact. . . even that I transferred my thoughts and ideas, not only to my school . . . but to other schools . . . for example, I left the school I was working at . . . I went to another school . . . I faced many challenges . . . there was a disabled girl, with special needs . . . she didn’t play . . . if I didn’t go through this training, I wouldn’t have given her the appropriate attention, I would tell her that “it’s very risky for you to play; you would easily fall. You should sit down” . . . and this will certainly hurt her feeling . . . so I tried to include her, and not make her feel that she is sick . . . she really liked to play with the other girls . . . and she told me: “teacher, this is the first time I play!”

Finally, this category was further exemplified in the way the participants expressed viewing soccer as an international game and as a vehicle for promoting peace regardless of belief and religion. This aspect of athletics has been labeled as convening power, and Green also identified the international reach of sports as one of the most untapped resources in promoting peace in the world today. Participant Five and Six both expressed this potential during their explanation of what they experienced during their time in the programme:

During the programme I witnessed how we must love each other . . . whether we are Muslims or Christian. We should love each other because we all at the end belong to one creator. - Participant Five

I saw the harmony there (in the U.S.) among different religions. There is Christianity, and Islam. They are living together and respecting each other in an impressive way. From human development, yes, we understand, love and respect each other. I ask each member of the team not to intrude in the others’ privacy. - Participant Six

Category 3: The application of conflict resolution skills were a result of participation in the programme (General)

Successful sport for development programmes suggest that direct participation in a SDP programme can increase conflict resolution skills like developing empathy, listening actively, valuing diversity and considering common ground. However, assessing the actual application and result of conflict resolution skills learned can be quite difficult. This study provided qualitative evidence that suggested that programme participants were successfully applying conflict resolution skills taught in the programme. Coalter suggests that conflict resolution and inter-cultural understanding are strong components of peace, and that successful sport for development programmes place importance on developing conflict resolution skills. Specific to this programme, peace is fundamentally described as a positive social condition where destruction is minimized and human well-being is promoted. Furthermore, peace was viewed as a multifaceted phenomenon that can be found in an individual’s state of mind, physical being and societal structure.

While searching for patterns within the core ideas of all participants, it became apparent that each coach had adopted a new perspective when dealing with conflict. Several participants specifically mentioned a newfound emphasis on perspective taking as the primary factor for this association. Participant Six best exemplified this new perspective by sharing about how she went about resolving conflicts with her team based on what was learned in the programme,

The same way, each student should listen to his colleague, with less talking and when the student, who started the problem, finishes talking, I’ll then talk . . . when they listen to each other, they can figure out what is the main reason for the problem. They may resolve the conflict between them. In case they couldn’t resolve the problem. If they were willing to resolve the conflict on their own and interfered, they might get upset. So, I give them a chance to solve the problem, if they were successful, this would be good. If not, I’ll help them solve it.

Not only did coaches note how their approach to conflict resolution changed, they also remarked on the changes they witnessed within their students after the implementation of the conflict resolution techniques they learned in the programme. For example, many participants witnessed a decrease in the amount of conflict among their students. Participant Two shared very specific examples of students committing less destructive acts to public property and being more obedient to teachers as a result of their application of conflict resolution skills:

[The students] are having now fewer problems...especially during P.E. class . . . and even with other teachers . . . they seem more committed . . . they are causing less damage (to any property) . . . they now tend to listen to teachers and coaches much better and consider their commitments as friendly ones.
Category 4: The participants were comfortable and enjoyed all phases of the programme, especially the exchange trip to the U.S. (General)

All six coaches generally shared that they loved being a part of the SPUJ programme and that it was an honor to participate. Thus, the interviews exemplified that coaches had an overwhelmingly comfortable and positive experience throughout all phases of the programme. Participant Six arguably provided the best summary of her experience through all three phases of the programme:

The first phase was about understanding and peace among countries and people . . . and accepting each other more . . . the third phase was all about training, which was very useful . . . and even the scientific information . . . we had some information, but the one we gained was up-to-date . . . we had an old way of approaching the players; now we have an updated one . . . even me, I felt much more comfortable. Overall I’m very, very happy from the experience I gained because I learned a lot . . . for my children. This expressed experience was similar to that of all of the other participants.

Additionally, enjoyment was generally shared about the visit to the U.S. due to the fact that participants felt they were able to best apply the skills learned from the programme in a cross-cultural environment. Participant One and Three spoke in detail about the excitement and privilege they felt in their experience visiting the United States:

Thanks God, they picked me, and I traveled to the U.S. and I was impressed by the country as well as the people’s capabilities. I was even happier when they informed me that if I stand out in the programme, and I have made progress, I was very comfortable and happy with myself throughout this programme. - Participant One

First, they welcomed us very much . . . we were introduced there to different cultures . . . I liked when we went to a mosque and we were engaged there in a discussion with other people from different religions . . . and we liked it also when we went to Ball State University and saw the soccer fields . . . we felt right at home . . . the most wonderful experience in my life was to travel to the States and deal with its people, because they are wonderful. - Participant Three

Overall, the participants expressed experiencing a high level of comfort throughout the programme workshops and events. They also expressed a high level of perceived honour and privilege to be selected for the trip to the United States. Studies comparing physical effort between individuals of moderate and high levels of perceived privilege found support that high levels of perceived privilege positively correlate with individual effort.27 It could be possible that the coaches who were apart of all three phases of the programme were inclined to put forth more effort into the application of the learned skills due to a higher level of perceived privilege than those who participated in only one phase.

Category 5: Participants experienced challenges in applying the curriculum due to discrepancies in resources, community support, and religious variations (Typical)

As found in other international sport for development programmes, cultural differences are sometimes a point of difficulty when transferring the skills taught.10, 22 For example, leaders of The Rugby for Peace programme in South Africa suggested that the different cultures within various tribes in South Africa caused a great number of difficulties when implementing the lessons taught.25 Furthermore, other evaluations of similar programmes have revealed that the non-sport components like educating the community facilitators about personal and social responsibility were sometimes lost in cultural misinterpretations.15 The aforementioned challenges can be exhibited at the macro and micro levels of a given context10 provided evidence of this by exposing program challenges regarding insufficient familial support for each participant (micro level), along with insufficient infrastructure of the given participants community (macro level).

The core ideas of the interviews helped establish that a main philosophy of sport in Jordan involves placing a high emphasis on winning as opposed to holistic player development. Some participants expressed difficulty transferring and applying the programme curriculum due to the challenge of incorporating the mastery of focus and holistic player development in comparison with their cultural norm of winning. More specifically, the participants were challenged in applying the democratic style of coaching. This challenge can best be seen in the words of Participant Five when he discussed the differences between the command and democratic coaching styles:

Our culture reinforces that we should win every time . . . So we need to admit, we Arab, or Oriental coaches, that we still use “orders” in our coaching styles . . . we don’t try to learn or teach the kids the “exploring style” . . . usually . . .
the challenges were related to politics around the world . . . to be honest with you, being on good terms with the West is not always well received throughout Jordan and that created a challenge for us.

Four coaches also expressed challenges when applying the concepts taught in the programme due to the different cultures within Jordan. These challenges were attributed to discrepancies in the extent of resources, communication and the diversity of the population and religious beliefs in different Jordanian villages. Participant Two spoke about a specific example involving the difficulties of coaching in an area with a higher refugee population:

There are some refugee students, like Syrians and Iraqis, whom the Students don’t welcome . . . so it is hard for the students to accept him. While coaching in Jordan, I deal with players of different places and environments . . . most of them tried to separate themselves.

In regards to the discrepancy in the extent of resources, Participant One spoke specifically about the disadvantages of his home district:

I believe after I applied what I learnt in the programme . . . although we have limited resources . . . especially that we are in [my] district...sports is not that advanced . . . we have few facilities . . . as well as few equipment. I believe coaches in a district like [mine] don’t have the same privileges as coaches in [other districts].

Finally, while some coaches talked about the cultural differences of monetary resources between the villages, one mentioned conflicts off the field, rooted in long-standing family tension and religious discrepancies. Participant Four gave a very memorable and detailed example of this kind of cultural difference within the community she worked:

I trained some girls in Al-Risayfeh area, near Zarqah, and the environment there is so much different from here...their parents are kind of closed-minded . . . so the girls themselves, have the same mentality, they are very aggressive . . . so it was a big challenge to bring change. I even talked to their parents . . . Both of the players came from the team I coach at AL-Risayfeh . . . both of them play really well, but they didn't like each other at all . . . so they had problems outside of the team, and they brought these problems along, which had a negative impact on the team . . . so I approached both of them with techniques learned in the programme with the idea to stop the conflict. Hanan accepted that, but Mariana didn’t . . . Mariana became very aggressive . . . me and the other coach had many conversations with her and her parents...we asked her to be friends with Hanan to reduce this conflict . . . I started to give both of them a ride to and from practice so that the would like each other . . . Mariana didn’t react at all . . . after this did not work I talked to her parents . . . I concluded that her parents are the reason behind her behaviour . . . It turned out that Marianas parents don’t like Hanans parents due to their heritage . . . so they conveyed that feeling to Mariana.

Category 6: Cooperation and player enjoyment are strong components of the participants’ coaching philosophies (Typical)

According to Martens, the command style of coaching is characterized by the head coach giving instructions to the athletes who in response, listen and carry out the instructions. This style of coaching is often likened to ‘a dictator’ and is a style that is being used less and less. The command style is useful, however, when establishing rules and safety parameters. On the other hand, the cooperative style of coaching is characterized by giving athletes freedom to share decision-making responsibilities with the coach. The cooperative style resembles a teacher-pupil relationship where feedback given from the athlete can steer the direction of the lesson. One of the underlying assumptions with a command style is that the coach is the only one who knows the correct answers and it is his/her role to tell the athletes what to do. Martens contended that the command style of coaching is often used because it is either the one that coaches have seen modeled by their former coaches or because this authoritarian style helped them conceal self-doubt about their coaching abilities. Jordan has a history of authoritarian leaders, thus offering another possible explanation for the prevalence of a command style of coaching. On the other hand, the assumption underlying the cooperative style is that the coach shares the decision-making with the athletes. Research indicates that athletes flourish best with a cooperative style of coaching and an "athletes first, winning second" objective.

Along with the ability to foster enjoyment among their players, five of the six coaches indicated teaching cooperation as their primary motivation or goal in their coaching philosophy. Coaches typically expressed that through the programme, they learned that winning did not necessary mean success and that goals, such as citizenship development and love of the game were also very important. For example, Participant Five stated,
Winning is the basis... we always look for winning... however, in a legitimate way... everyone who is involved in soccer loves to win... but for me, winning is not just scoring more goals than the other team... winning is to see my players have acquired new skills... and at the same time, to feel that I have accomplished something as a coach. We are reinforcing among players that soccer is not only about winning or losing... sometimes you win... and other times, you lose... however, each time you are learning... and we are trying to teach the players that we are not training you for just one year; we are training you for the future.

This category was further bolstered through examples of how participants developed cooperation and enjoyment on their teams. Participant One provided rich examples of how he emphasized player enjoyment and cooperation in his particular style of coaching.

They line up in two rows before the game... I make sure they shake hands with the coaches, referees, other team’s players and the subs... and then I remind them that both teams are playing for fun and it is just a game. And I want to convey to them that success is not winning the game, but it is to get the utmost potential out of you... And I always tell them [my players] that soccer is based on a team effort; a team that includes 11 players.

This finding suggests further exploration regarding the impact of the cooperative coaching style within traditionally authoritarian cultures, which could prove advantageous on a more macro level.

Category 7: Future programming can be improved

Coalter’s manual noted that one of the most important outcomes of any sport for peace programme evaluation was the identification of best practices and shortcomings. Furthermore, the manual mentioned that changes suggested by evaluations should be seriously considered, but not always automatically implemented. It is important to note, however, that continuous evaluation of sport for peace programmes is vitally important to their overall success in the future. Although rigorous and time-consuming, continuous evaluations are possible by tracking participants both through their participation in the programme and post-programme, which would allow researchers to better document the impact and discover how salient some of the concepts remain with participants.

In the current study examining all six participants’ core ideas, it was discovered that every coach felt the programme could be improved in some way. Due to the vast differences in their suggestions, this category was separated into three sub-categories: a) Extended duration of clinics (General), b) Better specificity of curriculum (Variant), and c) Increased communication (Rare).

The participants, in general, suggested that the programme could be improved by extending the time of the exchange trip in the United States. They also suggested making the workshops in Jordan more similar to the workshops in the United States. Participant Two exemplified this proposed improvement best in the following response:

The phase in the USA was better than the first phase. The first phase gave me the training; but the most benefit was in the USA. And now, we have learnt how to control big group of players.

Three of the participants mentioned that the programme could be improved by tailoring the curriculum to the different districts in Jordan. This suggestion is congruent with the aforementioned Category Five in that all six participants experienced challenges when implementing what was learned in the programme due to international and national differences in culture. Participant One made a very clear suggestion for future programmes when he spoke of the positive outcomes that could result from addressing the cultural differences within Jordan,

I recommend each district be given specific attention for their needs and resources available... because each district is very different and some of things we learned would only work in certain places... and there would be more exchange visits, since such visits are eye-opening and help participants reflect on what they learn.

The participants rarely suggested that the programme could be improved through increased communication between the coaches and the directors of the programme, not just the Jordan coordinators. While reflecting on her experience within the programme, Participant Four felt that confusion could have been decreased and the salience of concepts could have been increased with more effort from both parties:

To have better communication among us participants and the captains (i.e., coaches) would have been ideal, there were times when it felt like only the captains knew what was going on. This made it so people trailed off or lost out on teachings.
In summary, this category revealed that although the participants felt the program had a highly positive impact upon them, they still offered constructive feedback for how it could be improved. Specifically, participants recommended the following steps to improve the program: a) increase the duration of cross-cultural exchanges and programme clinics to be longer than 2 weeks; b) prioritize the tailoring of the curriculum to the specific communities within the targeted population; and c) increase communication between the programme directors and participants. Based on this feedback, the researchers suggest that future programmes consider longer cross-cultural exchanges. Furthermore, weeklong coaching clinics tailored to the individual communities of the targeted population should be conducted followed by weeklong youth-based camps. This extended schedule could allow for the coaches who participate to better learn the concepts, practice them and then implement them with the youth while the programme directors are still present to answer questions and help when necessary.

Conclusions

The researchers in this study aimed to give a voice to the coaches in the Sport for Understanding and Peace in Jordan programme in an effort to better understand their experiences and improve future SDP programming. Several strengths and areas of improvement were shared during participants’ interviews. One of the most impactful findings was the self-report change by the coaches that they began implementing the cooperative style of coaching as opposed to the command style after the programme. Specifically, the implementation of the cooperative style to emphasize player empowerment as opposed to competition was reported as an effective way to teach conflict resolution to youth through the vehicle of sport. Additionally, participants indicated that they felt more accepting of other cultures, willing to collaborate with those who differed from them, better at considering others’ perspectives, wanting to promote acceptance and inter-culture understanding, able and enthusiastically willing to apply their knowledge outside of the programme, and able to negotiate conflicts within themselves and with others as a result of their participation in the program. These personal and professional changes were reported from a successful integration of the non-sport components of life skills with the game of soccer.

This qualitative evaluation revealed evidence that the SPUJ programme resisted the dominant hegemonic relations between multiple cultures by creating a pro-social and reflective dichotomy between two different nations along with hundreds of coaches from different regions throughout the country of Jordan. A newly found awareness of resource disparity among the villages, along with success stories regarding the implementation of program-taught concepts despite these disparities were shared throughout the participant interviews. The apparent awareness, discussion and sharing of resources, according to the hegemonic theory, is imperative in order to achieve the greatest outcomes. Thus, by distinguishing and documenting the successes and shortcomings of the SPUJ programme, the authors hope that future programmes will be better equipped to adapt, grow and succeed in fostering and facilitating conflict resolution around the world.

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The influence of sport participation on quality of life perceptions among inmates in Nigerian prisons

Ayobami Honestus Obadiora¹

¹ Obafemi Awolowo University, Department of Physical and Health Education

Corresponding author email: ayobadiora@yahoo.com

Abstract

The purpose of this study was to investigate the effects of participation in football activities on quality of life perception among randomized inmates of Nigerian prisons, in Ile-Ife and Ilesa in Osun State, Nigeria. The study participants were 180 inmates of Ilesa and Ile-Ife Prisons in Osun State, Nigeria who are within the ages of 21 to 35 years old. Each participant was selected and randomly assigned to experimental (n=90) or control subjects (n=90). The subjects were administered with pre-test instruments through the football participation assessment and Quality of Life (QOL) test after which only subjects in experimental groups participated in football sessions for a period of eight weeks. Subsequently, all respondents were administered with post-test instruments (football proficiency self-assessment, game experience and QOL tests). QOL was measured using the adapted version of World Health Organization’s Quality of Life- Bref (WHOQOL-BREF). Results show that inmates who participated in football activities have higher general quality of life perception than those who did not. However, social wellbeing is improved for both active and passive (spectators) participants. Sport skills acquisition and participation positively affect physical health, psychological and social wellbeing of inmates. Participation therefore affects the general QOL of inmates of Federal prisons in Osun State, Nigeria.

Introduction

There is widespread consensus about the positive relationship between sport participation and health. Research evidences illustrate that physical activity and sports positively affect psychological and mental health conditions such as anxiety, depression, mood and emotion, self-esteem and psychological dysfunction.¹ It has further been discovered that engagement in sport and physical activities offers a multitude of benefits, including enhanced physical fitness, increased social support networks, elevated positive affective states, and the development of perceptions of competence and enjoyment.² Contrasting inactivity and enhancing well-being is usually the first reason given when encouraging sports activities; indeed, there is a large body of literature showing that inactivity is one of the most significant causes of death, disability and reduced quality of life.³ Given these benefits, there is a potential for the development of positive psychological growth through sport and physical activity. For these reasons, sport and physical activity participation has been recommended as a way to enhance overall quality of life in various populations.²-⁶ There has been, unfortunately, limited empirical research focused on understanding how sport and physical activity impacts physical, social and mental health among inmates undergoing correctional and rehabilitation processes in Nigerian prisons. There are, however, research that suggests that stress and coping strategies, social support and general emotional experiences may lead to positive psychological outcomes associated with confinement.⁷-⁹ It has also been observed that physical activity and QOL relationship is positive and consistent across subgroups, activity settings, and activity mode.¹² Prison inmates are important target population for sport activities, since imprisonment is associated with psychological distress, anxiety and poor overall quality of life.⁹-¹¹

Keywords: Football, Sport participation, Well-being, Quality of life, Prison, Inmates
Sports and Quality of Life of General Population

According to findings from a study of community integration, recreational sport for the general population brings about a positive relationship among all four of the domains of QOL, which are physical, psychological, social and environmental. Specifically, football was observed to facilitate compliance and contribute to maintenance of a socially and physically active lifestyle. It was believed that structured football participation for two to three hours per week causes significant cardiovascular, metabolic and musculoskeletal adaptations, independent from gender, age or one’s lack of experience. Individuals who played football were also observed to develop high levels of social interaction and overall flow during the period of active participation, which underlines that they felt motivated, happy and involved to the point where they forgot time and fatigue.

Most previous researchers on effects of sports and physical activities on well-being expressed models to explain the interaction effects of sports skills and participation on quality of life. These conceptual frameworks explained indirect interaction effects of each of the components of quality of life such as social, psychological and physical wellbeing on each other. The model presented in the diagram below forms the significant foundation for this study.

**Figure 1: A model representing direct and indirect links between physical activity and well-being**

![Diagram](source)(15)

Purpose of Study

It has been shown through various studies that participation in physical activities and sports can improve social, physical, mental and psychological health of convalescent patients, adolescents, youth and aged persons. Many studies have also shown that sport activities can improve the self-reported QOL perception of the general population. Little of the research focuses on prison inmates despite the fact that inmates suffer more from poor physical health and low quality of life. The few studies of the effects of physical activities on QOL of prison inmates were done in developed
countries where the prison services observe at least the minimum standard for promoting inmate welfare. Resource-poor prisons in developing countries such as those in Nigeria differ markedly from prisons in developed countries. Therefore, the purpose of this study was to investigate the effect of sport (i.e. football) skills acquisition and participation on the quality of life (QOL) of inmates of Ilesa and Ile-Ife prison yards in Osun State, Nigeria.

**Hypothesis**

Football participation will not have significant effects on the quality of life (physical health, psychological and social well-being) perception by inmates of Nigeria Prisons.

**Methods**

**Participants**

The study took place through an experimental design. Inmates of Ilesa and Ile-Ife prison yards in Osun State, Nigeria were the population for the study. The study methodology was approved by the Department of Physical Education of the Obafemi Awolowo University and the Osun State Command of Nigerian Prison Service (NPS). The researcher engaged four research assistants including two prison officers who assisted the researcher during the administration of the study instruments and sports participation. Willingness to participate (WTP) in the study is 97.2% with a total of 380 out of 391 inmates who were both qualified (between age 20 and 35 years) and volunteered to participate in the study. The 97.2% WTP rate by qualified inmates eliminates possible bias in the self-selection method. The participants were informed about the purpose and methods of the study. They were also informed that their participation in the study is voluntary. This information was considered necessary to enable the respondents to make informed decision to accept or reject their participation in the study. Thereafter, they were asked to complete and sign an informed consent form containing the purpose, descriptions and possible discomforts or risks of the study along with the right of respondents to withdraw their continued participation at any time if they so desired. Open and random selection of 180 respondents for the study was done in the prison playing grounds. 90 participants selected from each of the two prison yards were further randomized to experimental (n=45) and control (n=45) groups respectively. Those selected among the inmates who volunteered for the study were those between the age range of 20 and 35 years old because young adulthood typically covers the period from 20-35 years of age, when both biological function and physical performance reach their peak. Inmates who were certified as medically or mentally unfit by the prisons’ welfare officers were excluded from the study.

**Procedure**

The study’s duration was 10 weeks. The first week was used for the administration of the research instrument to all of the respondents (n=180) and training of participants in experimental group (n=90) on the theory of football including rules and regulations of the games. The study instrument consists of Football Participation Test (FPT) and Quality of Life (QOL) questionnaire. Their scores were recorded as pre-test scores accordingly. Subsequently, only the respondents in experimental groups were further randomized into 10 teams of nine players. Each team ensured the active participation of all of the members of the experimental group during football participation sessions, which were held weekly for a period of eight weeks. Mental skill training was integrated into the football practice and participation sessions as individual subjects and teams were made to set goals for sport achievement. The steps followed during the goal setting include the following: evaluation of players’ current skill and participation experience level; setting of goals to be achieved by individual player or team within the available time; determination of individual or team strengths; determination of skill areas that need development; prioritisation of participant’s skill needs and selection of Two or Three Goals. These goals include short-term and long-term goals (e.g. dribbling skills, endurance fitness and winning the tournament) and setting hard but realistic goals, including a timeline for achievement. Participants or teams also outlined strategy for achieving and evaluating progress every week and few minutes before football sessions.

The study adopted double round robin or league method for football tournament among the experimental subjects to provide subjects with ample opportunities for active participation during football participation session and not for the purpose of separate data analysis. After eight weeks of football participation session, all the respondents in control group (n=90) and experimental group (n=90) were administered with the FPT and QOL questionnaires. The scores were recorded as post-test scores accordingly.

**Study Instrument**

For the purpose of this study, a self-reported football participation assessment questionnaire was developed for
respondents to separately rank their proficiency (passing, shooting, dribbling, tackling) and previous game experience (leisure or past-time, non-formal competitions, formal competitions) between 1 and 5. QOL perceptions of respondents were measured using the World Health Organization Quality of Life-Bref (WHOQOL-BREF) scale, which is a self-reported questionnaire that contains 26 items where each item represents 1 facet. The facets are defined as those aspects of life that are considered to have contributed to a person’s QOL. The WHOQOL-Bref contains 26 items, 24 of them make up the 4 domains of physical health (7 items), psychological health (6 items), social relationships (3 items), and environment (8 items); the other remaining 2 items measure overall wellbeing. WHOQOL instrument’s validity and reliability has been tested through various research and pilot studies and observed to be capable of discriminating between good and poor health along with general QOL.\textsuperscript{20-25} Nigeria studies also showed similar findings.\textsuperscript{20, 26, 27}

**Data Analysis**

Data collected from the two selected prisons were merged and entered to SPSS format using version 15.0. Mean scores were analysed with descriptive and inferential statistics to determine whether differences observed in QOL measurements between the control and experimental groups are significant and can be attributed to football participation. The result was tested with regression analysis. A minimum level of significance of $p < 0.05$ was used as the entry requirement.

**Results**

Socio-demographic characteristics were similar across the study groups at baseline (Table 1). While the mean age for the experimental group was 28.6 years, it was 27.5 years for that of the control group. Although those in the experimental arm were slightly more likely to be artisan and

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variable</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age (Mean ; SD)</td>
<td>(28.6; 20.88)</td>
<td>(27.5; 19.63)</td>
</tr>
<tr>
<td>1</td>
<td>No Formal Education</td>
<td>08%</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>30%</td>
<td>27%</td>
</tr>
<tr>
<td>3</td>
<td>Primary</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>4</td>
<td>Secondary/College</td>
<td>08%</td>
<td>08%</td>
</tr>
<tr>
<td>5</td>
<td>Post-Secondary</td>
<td>04%</td>
<td>03%</td>
</tr>
<tr>
<td>6</td>
<td>Vocational Education</td>
<td>40%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Artisan</td>
<td>40%</td>
<td>35%</td>
</tr>
<tr>
<td>2</td>
<td>Civil Servant</td>
<td>05%</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>Commercial Bus Driver</td>
<td>40%</td>
<td>42%</td>
</tr>
<tr>
<td>4</td>
<td>Farmer</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>5</td>
<td>Professional</td>
<td>04%</td>
<td>04%</td>
</tr>
<tr>
<td></td>
<td>Quality of Life (QoL) Scores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>QoL Scores Psychological (Mean; SD)</td>
<td>2.4 (0.5)</td>
<td>2.3 (0.5)</td>
</tr>
<tr>
<td>2</td>
<td>QoL Scores Social Wellbeing (Mean; SD)</td>
<td>2.4 (0.5)</td>
<td>2.3 (0.5)</td>
</tr>
<tr>
<td>3</td>
<td>QoL Scores Physical Health</td>
<td>2.5 (0.6)</td>
<td>2.4 (0.5)</td>
</tr>
</tbody>
</table>

\textit{n = 90 (Experimental); n = 90 (Control Group).}
famers with lower educational levels, potentially more important are the higher proportions of participants in the experimental group reporting to have vocational education than the control group (Table 1). Furthermore, findings revealed some slight significant differences between the arms in baseline sport participation scores. Findings in baseline characteristics raise concerns about differential consent across the groups in terms of perceived quality of life. These are presented in Table 2 and Table 3.

Table 2: Differences in quality of life perception across groups after intervention

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group</th>
<th>Control Group</th>
<th>% Difference (95% CI)</th>
<th>OR (95% CI)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unadjusted*</td>
<td>59/90 (66% )</td>
<td>51/90 (57% )</td>
<td>-15.0% (-30.8%, 0.1%)</td>
<td>0.535 (0.28, 1.05)</td>
<td>0.067</td>
</tr>
<tr>
<td>Adjusted**</td>
<td></td>
<td></td>
<td></td>
<td>0.455 (0.22, 0.98)</td>
<td>0.045</td>
</tr>
<tr>
<td>Adjusted***</td>
<td></td>
<td></td>
<td></td>
<td>0.455 (0.21, 0.98)</td>
<td>0.043</td>
</tr>
</tbody>
</table>

* QoL analysis based on the 180 Males with known primary outcome status.
** QoL adjusted for age, level of education and occupation (n = 180)
*** QoL adjusted for age, level of education and occupation and sport participation scores (n = 180)

Table 3: Unadjusted and adjusted differences in Psychological, Social Wellbeing and Physical health of experimental group after Intervention

<table>
<thead>
<tr>
<th>Quality of Life Variables</th>
<th>Diff. bet means* (Intervention minus Control) (95% CI)</th>
<th>p-value</th>
<th>Adjusted difference** (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Well being</td>
<td>-0.156 (-0.32, 0.01)</td>
<td>0.06</td>
<td>-0.155 (-0.33, 0.02)</td>
<td>0.08</td>
</tr>
<tr>
<td>Social Wellbeing</td>
<td>-0.08 (-0.24, 0.06)</td>
<td>0.24</td>
<td>-0.101 (-0.27, 0.06)</td>
<td>0.22</td>
</tr>
<tr>
<td>Physical Health</td>
<td>-0.814 (-4.90, 3.27)</td>
<td>0.69</td>
<td>-0.426 (-4.93, 4.07)</td>
<td>0.85</td>
</tr>
</tbody>
</table>

* adjusted for baseline score on the outcome involved.
** adjusted for baseline score, Age, Level of Education and Occupation and sport participation scores (N = 180).

At the end of the sport period, a proportion in the experimental group reported a higher QoL than in the control arm (Table 2). Although, the absolute difference and the (unadjusted) odds ratio were sizeable, however, there was evidence of a difference beyond chance (p=0.067). From the unadjusted figures, the adjustment of the variables related to consent and/or exhibiting any suggestion of baseline imbalance had only a minimal impact on the odds ratio and confidence interval. Likewise, imputing missing values had effect on the results. For instance, the unadjusted results changed to an odds ratio of 0.56 (95% CI 0.29, 1.09), p=0.086.

For the outcomes at the end of sport participation, there was evidence of a beneficial effect of the intervention (Table 3), predominantly on inmates’ psychological score. Again, imputing missing outcome data had an appreciable effect on these results. Consenting participants in the experimental group were assigned to one of the football teams (average of 15 per team). Adjusting for clustering by the experimental group had very little impact on any of the training prior to the primary outcome being ascertained, while 65% of participants in the experimental group attended at least six sessions of sport tournaments. From the instrumental variables regression analyses, the QoL was increased in absolute terms by 2.4 percentage points for each session
attended (95% CI -4.9%, 0.0%, p=0.049). Introducing interaction terms between the control group and age factors, psychological and social wellbeing provided evidence of differential effects of the sport participation on QoL (p values of 0.83, 0.19 and 0.43 respectively).

There was evidence of a beneficial effect of the sport participation in terms of reducing inmate psychological anxiety and enhancing social wellbeing at the end of their soccer participation sessions. The confidence intervals rule out any important deleterious effects of the sport participation but the precision attained leaves equivocal results as to whether there is an important benefit from the sport participation. A reduction of fifteen percentage points in the proportion with good physical health and psychological and social wellbeing at end of the training in favour of the experimental group is close to the target difference of twenty, and the upper confidence limit for this difference reaches 30 percentage points. If there were to be a reduction in risk of two percentage points per session training attended, then it can be concluded that there is the potential for substantial benefits to prison inmates from sport participation.

**Discussion**

The study revealed that participation in sport (football) will develop quality of life (physical, social and psychological wellbeing) perceptions of inmates of Nigerian prisons. These results agree with previous findings that participation in sports inside prison are beneficial to inmate well-being in a number of ways such as reduced stress and frustration, alleviated boredom, increased self-esteem and a healthy routine, and development of social interaction and consequently friendships.\(^9\)\(^\text{-}\)\(^11\) Also, sport has been identified as a viable method of promoting physical, social and psychological wellbeing of general and clinical population and for reducing psychological and physical health risks among the general population.\(^3\)\(^\text{-}\)\(^5\) Some previous findings also showed that participation in outdoor sport among helped enhance inmate adjustment to their social environment and along with their social interactions.\(^9\) This adjustment is essential for achieving rehabilitative objectives during confinement through improvements in four broad areas: enhanced mood, stress reduction, a more positive self-concept, and a higher quality of life, which in turn reduces likelihood of recidivism or re-entry.\(^28\)\(^\text{-}\)\(^33\)

It is therefore maintained that sport activities can be a vehicle for developing wellbeing, inclusion, acceptance and social skills.\(^34\)\(^\text{-}\)\(^36\) Sport involvement can be considered as an asset in rehabilitative programmes. Primarily, sport participation has positive effects on the general well-being of the prison population. Secondarily, providing inmates meaningful sports activities can help to reduce anti-social behaviours, offer a sense of belonging, provide opportunities to learn, reduce distances and increasing cohesion. Thus, by considering a prison like a social organization, sport-based programmes can effectively contribute to the development of the prison community's social capital with a consequent advantage both for the prison community and for inmates as individuals. In conclusion, results of the study identified that improved quality of life is significantly associated to football skill acquisition and participation in the game by inmates of Ilesa and Ile-Ife prisons in Osun State, Nigeria.

**Recommendations**

Since research shows that prison inmates possess emotional, psychological and physical health challenges due largely to their confinement, their involvement in sport activities is therefore considered crucial for their social rehabilitation. Sport helps develop inmate quality of life, which includes physical fitness, self-esteem and healthy personality especially in resource-poor settings like those found in Nigerian prisons.

Sports in prison should provide inmates with years of opportunity for a regular and dedicated regimen of participation alongside recreational tournaments, which can adequately prepare them for post-release empowerment through sports.

There should be the regular organization of sport participation involving prison and the outside community in order to encourage more participation of inmates in community social contacts both inside and outside the prison, which is necessary to facility post-release community re-entry and social integration.

**References**


A systematic review of the mental health impacts of sport and physical activity programmes for adolescents in post-conflict settings

Alexander Hamilton¹, Charlie Foster¹, Justin Richards¹,²

¹ British Heart Foundation Centre on Population Approaches to Non-Communicable Disease Prevention, Nuffield Department of Population Health, University of Oxford
² Prevention Research Collaboration, School of Public Health and Charles Perkins Centre, University of Sydney

Corresponding author email: alexander.hamilton@stx.ox.ac.uk

Abstract

Children and adolescents exposed to violent conflict are at high risk of developing mental health problems. Sport and physical activity is increasingly incorporated in post-conflict assistance for young people. Implementing agencies make a broad array of health claims for which there is currently a fragmented evidence base. The purpose of this review was to summarise the impact evidence for sport and physical activity based programmes on the mental health of adolescents in post-conflict settings, and highlight the limitations of current practice. A systematic review of 12 electronic databases, 12 journals and leading humanitarian websites was conducted in August 2014. Studies were eligible for inclusion if they described a sports or physical activity based intervention for adolescents between the ages of 12-19 in a post-conflict setting. A total of 11,722 publications were initially identified, of which 3 met the inclusion criteria and were included in a narrative synthesis. Two studies described projects in northern Uganda; one reported a decline in intervention in boys' mental health when compared to controls, the other a non-significant improvement. The third study reported continual improvement in symptom presentation in ex-child soldiers in Sierra Leone. Common limitations were short study duration and follow-up, poor or unreported adaptation of methods and a lack of treatment mechanisms research. There is a shortage of high-quality and available information, which limits the strength of conclusions that can be drawn. Despite the international furore surrounding the use of sport for assisting conflict-affected populations, there is not yet convincing evidence of its efficacy as a mental health intervention. Future evaluation and research should aim to identify the mechanisms and processes behind the intended impact of interventions.

Background

Mental illness is recognised as a major contributor to the global burden of disease.¹ The common mental health disorders (for example, depression, generalised anxiety disorder and alcohol and substance abuse) account for 14% of the global burden of disease, about 7.4% of disability-adjusted life years worldwide and roughly a quarter of all health lost due to disability.²-⁴ Mental disorders affect 10-20% of children worldwide⁵ and roughly 20% of children experience a mental health issue in any given year.⁶ Child and adolescent mental health disorders have wide-ranging social and economic impacts on individuals and states.⁷ Research in this area is scant, yet results from longitudinal, clinical and population-based studies indicate that emotional and conduct disorders can impair normal development for age, and can influence subsequent quality of life for those affected and their families.⁷,⁸ Estimating the global burden of child and adolescent mental disorders is complex and there are a number of barriers that
Agencies and practitioners make a diverse array of claims relating to the impacts of SDP programs. Of particular interest are the mental health-related claims of SDP and sport for psychosocial healing organisations. According to Coalter (2008), the majority fail to back up these up with convincing evidence, and the claims appear to outweigh the current evidence base. Indeed, there is a growing body of evidence for various positive impacts of sport and physical activity (PA) on the physical, mental and social wellbeing of young people, including those ‘at-risk’ in developed, peaceful settings. However, it is not certain that these outcomes can be replicated in a post-conflict setting.

There has been a proliferation of SDP projects. Currently, 585 organisations and 213 projects are registered on the International Platform for Development and Peace, a number that has almost tripled since 2008 since the search was conducted on August 23rd, 2014. Consequently, it is necessary to take stock and identify what works, for whom and why. There is a need to evaluate the success and failures of these programmes systematically to consolidate the efficiency, efficacy and sustainability in the face of limited resources.

Cronin et al (2011) discourage the wide-ranging reviews of evidence for SDP programs, since they are unlikely to provide meaningful results given the growth of the field. There are several reviews that point to psychosocial and SDP interventions in general, but none that attempt to isolate the impact of sport and PA specifically. This review was an extension and development of a review performed by Richards that analysed all the health-related outcomes relating to the impacts of SDP programs. Cronin et al (2011) discourage the wide-ranging reviews of evidence for SDP programs, since they are unlikely to provide meaningful results given the growth of the field. There are several reviews that point to psychosocial and SDP interventions in general, but none that attempt to isolate the impact of sport and PA specifically. This review was an extension and development of a review performed by Richards that analysed all the health-related outcomes relating to the impacts of SDP programs.

In academic literature, mental health assistance to conflict-affected populations is often characterised as ‘psychosocial’ or ‘medical.’ The psychosocial approach aims to use non-intrusive methods to assist populations with their recovery. Approaches are both formal (such as school-based cognitive behavioural therapy, narrative approaches and art therapy) and informal (typically education, play or storytelling activities) and aim to empower communities to recover without individual therapy or drug treatments.

Sport is increasingly incorporated into psychosocial assistance programmes for conflict-affected populations and is a sub-category of a wider movement, known as Sport for Development and Peace (SDP). SDP is defined as:

“The intentional use of sport, physical activity and play to attain specific development objectives in low-and middle-income countries and disadvantaged communities in high-income settings...”

SDP and psychosocial healing agencies have commonalities and overlapping methods. SDP covers a broad array of actors such as multilateral organisations (e.g. UN agencies), international non-Governmental Organisations (e.g. Right to Play), private entities and academic institutions, which implement a spectrum of program models and claim manifold cross cutting positive outcomes.
Systematic Reviews and Meta-Analyses (PRISMA) checklist and registered on Prospero (CRD42014010833). A completed PRISMA checklist is attached in Appendix 1.

Articles considered in this study were screened for type, population, intervention, and outcome measure. To ensure that the maximum number of mental health publications was identified, no specific mental health outcome measure search terms were included. All articles found in academic literature and grey literature from international organisation archives were eligible for inclusion in the study. Conference abstracts and posters were not included and were not considered for review. All English publications from January 1980 (if available) to August 2014 were included.

Evidence related to adolescents aged 12-19 years living in a post-conflict region across a school or community setting was included in the study with no exclusion based on gender or ethnicity. The review used the WHO definition of an adolescent. All articles that described an intervention in a post-conflict setting were eligible for inclusion and were not excluded based on study design in anticipation of a shortage of relevant literature. Articles describing interventions in high-income countries or in peaceful settings were excluded on the grounds that the socio-ecological environment influences the outcomes of interest.

Studies were eligible for inclusion if they described an intervention that was sport or physical activity based. For the purpose of this review the WHO definition of physical activity was used. Initially, publications were to be categorised based on the frequency, intensity and type of physical activity or sport that participants engaged in. However, it was clear from early on that this was not possible because many publications provided very little information on the nature of the use of physical activity or sport. There was also a shortage of information on the dose of physical activity or sport that people received in both excluded and included publications. Publications were included if the following criteria were met:

- Type of sport or physical activity clearly stated.
- The duration of the physical activity sessions was stated in the study.
- A minimum of an hour per week of sport or physical activity.

This review included interventions that specifically addressed mental health and those in which mental health was a secondary outcome. As a result, database search terms were broad and incorporated all sports-based programmes that might have mental health impacts in post-conflict settings. The primary outcomes of interest were indicators of negative mental health, such as post-traumatic stress disorder; depression or generalised anxiety disorder; and indicators of positive mental health and wellbeing such as self-efficacy, self-esteem or emotional wellbeing.

**Search strategy**

Academic online databases including Ovid, EBSCOhost, Education Resources Information Centre and PubMed were searched. Manual searches of several selected online journals were conducted including the ‘African Journal of Physical Health Education, Recreation and Dance’ and the ‘Journal of Health and Sports Science and Child and Adolescent Mental Health.’ Additional resources included humanitarian and other grey literature websites, including Google Scholar and Relief Web. Appendix 2 contains a full list of all searched websites and academic databases. All the relevant interventions across review publications were identified and cross-referenced with the primary articles retrieved through the electronic search.

The search terms are outlined in Appendix 3. A single researcher executed the search strategies and all references were stored in Endnote 7.1. Studies were then screened and included/excluded in three stages; based on titles (stage 1), abstracts (stage 2) and full-text articles (stage 3). After duplicate references were removed from the Endnote database, a single researcher reviewed each citation by title and abstract to see if it should be included in the review. After the first reviewer had screened the database, a second researcher reviewed the citations that were deemed ineligible to identify if any potentially relevant articles had been missed.

Humanitarian websites were screened for grey literature and important citations. Grey literature did not always conform to the ‘title-abstract’ format. Likewise, many websites and internal online search engines did not offer the exporting of citations. In this instance, titles and abstracts were screened online. Those that were relevant were imported into Endnote. The abstract/executive summary was reviewed online in later stages of the review process. In the absence of an abstract, the executive summary or introduction was read. All relevant articles that fitted the selection criteria were selected for data extraction.

**Data extraction**

A data extraction form was designed and used to collect
information on the following factors: study design and methodology, sample size, country of origin, age of participants, gender, study aim, programme duration, sport or physical activity type and mental health outcome. Two researchers conducted the data extraction process and compared their results. The bibliographies of those selected for full text review were screened to generate additional references if these were missed in the original searches. In the event that multiple publications on a single intervention were identified, one of the publications was excluded but gleaned for information on the study.

The Effective Public Health Practice Project Tool for Assessing Quantitative Studies’ was used to assess studies. 39 Studies were assessed for study design, confounders, blinding, data collection, withdrawals and dropouts. Two researchers assessed the papers for quality and gave each publication a global rating of strong, moderate or weak. There were no disagreements regarding the quality of the included studies. Qualitative studies were assessed according to the National Institute of Health and Clinical Excellence guidelines for quality appraisal of qualitative studies. 40 Due to the heterogeneity of the studies, a meta-analysis was not possible and studies were included in a narrative synthesis.

Results

Results of the search

Figure 1 depicts the flow of citations throughout the study.
The searches resulted in a total of 11,722 publications. After removing duplicates, 9035 remained. Of these, 9000 were excluded because they did not meet the inclusion criteria. The majority of articles were irrelevant to the review and did not report a sport or physical activity intervention or any mental health outcome. The full text of 35 studies was examined in greater detail. Three studies met the inclusion criteria and were included for narrative synthesis. A list of the excluded studies with reasons for exclusion is available in Appendix 4.

Summary of included studies

A summary of the included studies is in Table 1. The studies are heterogeneous according to design, population and intervention method.

Included studies

Two of the three studies were randomised controlled trials evaluating interventions in Northern Uganda. The third study was a small cohort study assessing the impact of an intervention in Sierra Leone. Three additional publications concerning these projects met the inclusion criteria. These publications were read and any additional information on the intervention was extracted for discussion.

Bolton et al conducted a 16-week three-armed randomised controlled trial designed to assess the impact of different interventions for depression-like symptoms among internally displaced adolescents in northern Uganda. Participants in a ‘Creative Play’ arm of the RCT showed no significant improvement in depression-like symptoms when compared to the wait-list control group (difference in adjusted mean score change -3.90, 95% confidence intervals [-11.7 to 3.37]). There was no significant intervention effect on anxiety like symptoms ($d = 0.2$) or socially unacceptable behaviours ($d = 0.4$).

Richards et al (2014) conducted a 12-week three-arm RCT nested in a prospective observational study. Richards reported that depression and anxiety-like symptoms scores deteriorated for boys in the intervention group, whilst the scores in the boys wait list and control groups significantly improved. For the boys, there were significant small effect sizes when comparing the intervention group to the wait-listed (depression-like symptoms: $ES = 0.67 \ [0.33 \text{ to } 1.00]$, anxiety-like symptoms: $ES = 0.63 \ [0.30 \text{ to } 0.96]$) and control groups (depression-like symptoms: $ES = 0.25 \ [0.00 \text{ to } 0.49]$, anxiety-like symptoms: $ES = 0.26 \ [0.01 \text{ to } 0.50]$).

Girls in both groups appeared to experience improvements in anxiety and depression-like symptoms, but this was only significant for non-registered control group (depression-like symptoms $p = 0.003$, anxiety-like symptoms $p <0.001$). There were small and non-significant effect sizes when comparing the girls for all between group comparisons. Harris (2007) evaluated the impact of a Dance and Movement Therapy (DMT) intervention for 12 former child soldiers in Sierra Leone. Semi-structured interviews established baseline functional capacity indicators along with anxiety, aggression and PTSD symptoms. Repeat interviews were carried out at 1, 3, 6 and 12 months after initial intake. The authors report a continued drop in all outcome measures and the development of coping strategies in participants.

Risk of bias

The studies were assessed using the Effective Public Health Practice Project (EPHPP) Tool for Assessing Quantitative Studies’. Richards et al and Bolton et al scored a strong rating and the Harris study scored a weak rating; see table 2 for a breakdown of the scores. Richards et al and Bolton et al adequately described the method used to generate the allocation sequence. It was not possible to blind participants in these interventions because participation is active. Interviewers and assessors were blinded to participant intervention group and levels of subject retention throughout both RCTs were high, remaining above 80%. There was limited loss-to-follow-up, considering the difficult context.

The Richards et al study did not reach the calculated sample size and it is possible that the sample is non-representative for the outcome of interest. Participants in the Richards et al study were at risk of self-selection bias. As the intervention was sport and physical activity based, it was likely to attract more confident, healthy and fit children than those suffering from mental health issues. In light of this, the external validity of the results is questionable.

Reporting in the Harris study was poor; it is worth noting that this is a rewritten version from a paper presentation; the majority of the details required for calculating an EPHPP score were not reported. The publication made claims that are not supported by any indication to measures, methods, quantitative data or statistical analyses. Further, given the small sample size in this study ($n=12$), statistical analyses would have been of little value. There was no consideration of confounding variables in the study. The lack of repeat measures, a control group, and consideration of
Table 1: Summary characteristics of included studies

<table>
<thead>
<tr>
<th>Study, country and author</th>
<th>Target group</th>
<th>Sample (n)</th>
<th>Screening</th>
<th>Design and intervention</th>
<th>Measures</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention for depressive symptoms among IDPs. Uganda. Bolton et al 2007</td>
<td>Adolescents in an IDP camp. Uganda. 14-17 years</td>
<td>n = 314 (Psychotherapy: boys = 48, girls = 57; creative play: boys = 47, girls = 58; control: boys = 47, girls = 57)</td>
<td>Screened with the Acholi Psychosocial Assessment Instrument (APAI)</td>
<td>Psychotherapy and creative play interventions to improve clinical symptoms. 16 weekly 1.5-2 hour meetings. Sessions lead by panprofessionals. Three arm RCT: Interpersonal group therapy (IPGT), creative play, wait list control. Creative play intervention aimed to develop resilience and verbal/non-verbal expression through creative activity (sport, drama, games)</td>
<td>APAI</td>
<td>Creative play showed no effect on: 1. Depression score 2. Anxiety score Girls in the IPGT showed significant improvement in depression score. Neither intervention improved conduct or function scores. Loss to follow up: psychotherapy = 10.5%, creative play = 6.66%</td>
</tr>
<tr>
<td>SfD intervention for youth in post-conflict setting. Uganda. Richards et al 2014</td>
<td>Able-bodied youth. 11-14</td>
<td>n = 1,462 (intervention: boys = 74, girls = 81; wait list: boys = 72; comparison: boys = 472, girls = 763)</td>
<td>Voluntary participation</td>
<td>SfD football intervention: promoting physical fitness, mental health and community peacebuilding. 1.5 hour training session and 40 min match for 9 weeks. Delivered by locally trained volunteers. Three arm RCT nested in Observational study intervention, wait list and control groups. Follow up after four months.</td>
<td>APAI</td>
<td>Boys: No significant improvement in fitness A negative effect on intervention group depression like syndrome and anxiety like syndrome. Girls No significant change in girls for any outcomes. Loss to follow up: Int = 1.9%; Wait-list = 1.5%</td>
</tr>
</tbody>
</table>

Table 2: Summary table of quality assessment of RCTs according to EPHPP. Scoring: 1 = strong, 2 = moderate, 3 = weak

<table>
<thead>
<tr>
<th>Study</th>
<th>Selection bias</th>
<th>Study design</th>
<th>Confounders</th>
<th>Blinding</th>
<th>Data collection method</th>
<th>Withdrawals and dropouts</th>
<th>Global rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richards et al 2014</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Bolton et al 2007</td>
<td>2</td>
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<td>1</td>
<td>2</td>
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<td>1</td>
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<tr>
<td>Harris</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<td>3</td>
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</table>
confounding factors mean that observed differences over time may not be as a result of the intervention.

Synthesis of results

The studies are not suitable for meta-analyses and so are presented as a narrative synthesis. The studies vary in size, study design, outcome, population, intervention and context. This, along with the lack of included studies, complicates narrative synthesis and limits the strength of the conclusions that can be drawn.

The result of the creative play intervention was equivocal with no significant positive findings reported in the intervention arm of the study. The Sport for Development intervention by Richards et al., reported a significant negative effect on mental health in boys. In contrast, the results of the DMT intervention were positive and reported large reductions in participant symptom expression, as identified by semi-structured interview. The resounding success of the Harris study among adolescent former soldiers should be read with reservations, given the lack of information about the study. The value in the DMT study is the rich programmatic information provided in the additional publication concerning this study. 46

In the included studies, gender may have influenced the strength of the intervention effects. This is in accordance with the results of other reviews that indicate the differential effects of sports and psychosocial programmes on girls and boys. 44, 48-50 Given the lack of included studies, it is not possible to make any assertions at this point.

There were notable differences in project implementation and design. Both the creative play intervention and the dance and movement intervention were psychosocial, curative interventions. The SDP intervention set up a competitive sports league that included skills training, even if this was secondary to the health and social goals. Three paraprofessional psychosocial counsellors delivered the dance intervention in conjunction with a professional DMT counsellor, while the two RCT interventions were delivered by paraprofessionals who had received limited training in relation to mental health. Furthermore, the DMT intervention took place over the course of 28 weeks, markedly longer than either of the other interventions. Perhaps most notable is the difference in group size between the interventions: the DMT intervention consisted of a total of 12 participants and 4 staff while the other interventions were much larger. Given the shortage of included publications, it is not possible to draw any conclusion regarding the impact of design and intervention implementation on the outcomes of interest.

A notable strength of the two RCT studies was the use of a locally developed and validated mental health assessment tool. There is debate as to the validity of using Western psychological assessment tools in different cultural settings. 51

Discussion and comment

The principal finding in this review fails to support the broad claims of the positive effect of sport and physical activity programmes on the mental health of conflict-affected youth. 26, 52 The paucity of available high-quality information and the heterogeneity of intervention methods in this review mean that it is not possible to draw a firm conclusion either way at this time. The field of psychosocial assistance is broad; within it, actors implement related but different programme and intervention models. Sport and games are often involved in psychosocial interventions, but are not described in detail or clearly reported. 53, 54

Neither the creative play intervention nor the sport for development intervention had a significant positive impact on participants’ depression-like symptoms or anxiety-like symptoms when compared to wait-list or control groups. The studies assessing these outcomes were of good quality, suggesting a limited role for sports and physical activity in the reduction of anxiety or depression like symptoms in this context. The Harris study reports significant reductions in all outcomes measured, but the quality of the reporting is too poor to critically assess these claims.

Several publications have been published that review the field of psychosocial assistance for young people in post-war zones. 24, 52, 55-57 Typically, systematic reviews have not attempted to isolate the impact of one particular intervention method, rather addressing the field of psychosocial assistance at-large. 49, 50, 58 There are common problems highlighted by these publications, citing a shortage of evidence, small effect sizes and a lack of treatment modality research.59

Two of the three studies are of good methodological quality. Due to the reporting, it was not possible to assess the quality of the DMT intervention as no information about study design or outcome measures was provided. This illustrates a weakness in the SDP field at-large, in which the majority of evaluations are of poor design and typically implement pre-post methodologies without control populations.28, 60
are notable exceptions to this, but these tend to be clinical studies in different areas, focusing on classroom-based interventions as opposed to physical activity and sport-based methods.53, 54, 61

The findings of this study support those of other reviews assessing mental health interventions for adolescents.58, 62 Gendered differences may be important to consider in future programme designs. Similarly, previous publications have shown age to be an important moderator variable.48 There were insufficient participant numbers in the studies included in this systematic review to independently examine the impact of gender or age on outcomes.

Post-conflict contexts are a difficult setting in which to conduct high-quality research. They are often characterised by instability, a lack of security and human resources and limited infrastructure.63 Participant recruitment, engagement and tracking can be difficult in such settings. This can impede the development and management of evaluations and complicate long-term analyses. Formative and process evaluations are crucial as they help ensure the success of an intervention and provide valuable learning lessons for future practice. Formative evaluation should involve the pre-testing and adaptation of methods to ensure their cultural appropriateness and feasibility in the specific research context.

Best practice advice encourages both interventions and associated evaluations to be long-term to observe intervention effects over time.56 Nesting studies in more permanent structures, such as schools, enables the tracking of participants over time for repeat measures to strengthen study designs and the evidence base. This practice is common in the field of psychosocial assistance.48, 53, 61, 64 There is a lack of process evaluation and treatment mechanisms research in the included studies. Richards et al briefly elude to a process evaluation, but the results and insights of this are elementary and reported elsewhere.65 Process evaluation is essential for identifying the ‘active’ components of the interventions, a key finding for practitioners. This is indicative of the field at large, in which research is typically ‘impact’-oriented rather than process-orientated. This may be a product of asymmetrical donor-recipient relationships, in which donor preferences typically prevail.66

**Limitations**

The study could be criticised on its strict inclusion criteria. There are many borderline publications from which useful methodological information could be gleaned.49, 59, 64 More lenient inclusion criteria may have affected the results of the review, as non-included studies reported improvements in participants’ mental health. We did not contact authors, researchers and interventionists to request relevant literature in this systematic review. As a result, we may have missed important publications reporting the impact of SDP programmes on mental health.

There was significant difficulty in identifying the ‘dose’ of sport that individuals received, resulting in borderline publications that may have been informative being left out. The lack of good-quality evidence meant that the independent impact of sport or physical activity on mental health in post-conflict LMICs could not be identified from this review. Further, the results of this review are skewed geographically and by gender towards Ugandan, male youth. This may limit the generalizability of the review’s findings. It does, however, provide useful reflection on the state of the SFD field at large.

**Future recommendations**

Despite the international furore surrounding the use of sport for assisting conflict-affected populations, there still exists a dearth of convincing evidence of its efficacy as a mental health intervention. Reviews of SDP evidence and best practice guidelines have been published in grey and academic literature. The contents of these review publications need to filter down into practice and be systematically tested. The role of sport in psychosocial assistance is unclear. Certain programmes implement sporting elements, but rarely is the sporting component measured effectively or in detail.

Currently, the majority of SDP evaluations are ad hoc and poorly designed. The SDP evidence base would benefit from more detailed investigations of how intended intervention effects are achieved and maintained over time. Such evaluations will allow the identification of the ‘active’ elements of programmes that can be bolstered and developed. However, in order for this to happen, investment in evaluation is needed at all stages: formative, process and impact.67

Given the results of many psychosocial interventions and reviews, there is a need to examine the differential effects of interventions on children across gender and age groups. Researchers should draw on the successes of other sectors to inform the design and evaluations of sports-based interventions. Sport and physical activity may be an
important tool for social development in post-conflict settings. Many organisations are implementing socially minded sports programmes that were not included in this study. It was not within the scope of this review to assess the broader social outcomes of sports programmes, but the results of such a review would be of considerable academic and practical interest.

In this review, of note is the use of locally validated mental health assessments to evaluate programme impacts in northern Uganda. Improved measurement tools with good psychometric properties that are culturally acceptable may help improve future longitudinal research. Additionally, the use of locally validated tools means that the results are useful for local stakeholders and may capture local idioms of distress more effectively than international mental health assessment tools. It is worth noting that while potentially improving local relevance of studies, the use of emic mental health measures limits the external validity of results.

In summary, there is a shortage of contextually relevant information for sport in the assistance of conflict-affected populations. Future investment in evaluation and research in the area should aim to identify the mechanisms and processes behind the intended impact of interventions to ensure the efficient and effective use of finite resources in challenging settings.

Acknowledgements

We would like to take this opportunity to thank Generations For Peace. They were responsible for funding this systematic review.

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46. Harris, D.A., Pathways to embodied empathy and reconciliation after atrocity: former boys solider in a dance/movement therapy group in Sierra Leone. Intervention, 2007. 5(3).


Appendices

Appendix 1: PRISMA Checklist

<table>
<thead>
<tr>
<th>#</th>
<th>Section/topic</th>
<th>Checklist item</th>
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<tr>
<td></td>
<td></td>
<td><strong>TITLE</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Title</td>
<td>Identify the report as a systematic review, meta-analysis, or both.</td>
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<tr>
<td></td>
<td></td>
<td><strong>ABSTRACT</strong></td>
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</tr>
<tr>
<td>2</td>
<td>Structured summary</td>
<td>Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>INTRODUCTION</strong></td>
<td></td>
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<tr>
<td>3</td>
<td>Rationale</td>
<td>Describe the rationale for the review in the context of what is already known.</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Objectives</td>
<td>Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>METHODS</strong></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Protocol and registration</td>
<td>Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Eligibility criteria</td>
<td>Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Information sources</td>
<td>Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Search</td>
<td>Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.</td>
<td>23</td>
</tr>
<tr>
<td>9</td>
<td>Study selection</td>
<td>State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Data collection process</td>
<td>Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Data items</td>
<td>List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>Risk of bias in individual studies</td>
<td>Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>Summary measures</td>
<td>State the principal summary measures (e.g., risk ratio, difference in means).</td>
<td>N/A</td>
</tr>
<tr>
<td>14</td>
<td>Synthesis of results</td>
<td>Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis.</td>
<td>N/A</td>
</tr>
<tr>
<td>15</td>
<td>Risk of bias across studies</td>
<td>Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Appendix 1: PRISMA Checklist continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Synthesis of results</td>
<td>Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I²) for each meta-analysis.</td>
</tr>
<tr>
<td>15</td>
<td>Risk of bias across studies</td>
<td>Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).</td>
</tr>
<tr>
<td>16</td>
<td>Additional analysis</td>
<td>Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.</td>
</tr>
<tr>
<td></td>
<td><strong>RESULTS</strong></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Study selection</td>
<td>Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.</td>
</tr>
<tr>
<td>18</td>
<td>Study characteristics</td>
<td>For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.</td>
</tr>
<tr>
<td>19</td>
<td>Risk of bias within studies</td>
<td>Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).</td>
</tr>
<tr>
<td>20</td>
<td>Risk of bias within individual studies</td>
<td>For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.</td>
</tr>
<tr>
<td>21</td>
<td>Synthesis of results</td>
<td>Present results of each meta-analysis done, including confidence intervals and measures of consistency.</td>
</tr>
<tr>
<td>22</td>
<td>Risk of bias across studies</td>
<td>Present results of any assessment of risk of bias across studies (see Item 15).</td>
</tr>
<tr>
<td>23</td>
<td>Additional analysis</td>
<td>Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).</td>
</tr>
<tr>
<td></td>
<td><strong>DISCUSSION</strong></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Summary of evidence</td>
<td>Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers)</td>
</tr>
<tr>
<td>25</td>
<td>Limitations</td>
<td>Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).</td>
</tr>
<tr>
<td>26</td>
<td>Conclusions</td>
<td>Provide a general interpretation of the results in the context of other evidence, and implications for future research.</td>
</tr>
<tr>
<td></td>
<td><strong>FUNDING</strong></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Description of funding</td>
<td>Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.</td>
</tr>
</tbody>
</table>
Appendix 2: Database search terms

**Database Search**


**Manual searches**


Appendix 3: Systematic review search terms

<table>
<thead>
<tr>
<th>POP</th>
<th>[ADOLESCENT]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>adolescent*, teen*, youth*, young people, boy, child*, college*, girl*, juvenile*, kid, kids, pube*, school*, student*, young male*, young female*, young person, young men, young people, youngster*, young women</td>
</tr>
<tr>
<td>CONTEXT – POST CONFLICT</td>
<td>conflict* OR post-conflict OR peace OR post-war OR conflict affected OR conflict induced OR internally displaced OR displaced persons</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INT</th>
<th>[SPORT FOR PEACE]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>sport* OR football OR hockey OR tennis OR cricket OR athletics OR rugby OR tag rugby OR swimming OR volleyball OR netball OR basketball OR dodgeball OR boxing OR martial arts OR dance OR baseball OR softball OR rounders OR physical activity OR physical exercise OR recreation OR play OR run OR running</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMP</th>
<th>Any comparator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No search terms included</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>OUT</th>
<th>Any mental health outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No search terms included</td>
</tr>
</tbody>
</table>
## Appendix 4: List of excluded studies

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
<th>Primary reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adeniyi, A.F., Okafor, N. C. and Adeniyi, C.Y</td>
<td>2011</td>
<td>Depression and physical activity in a sample of Nigerian adolescents: Levels, relationships and predictors</td>
<td>No intervention</td>
</tr>
<tr>
<td>Betancourt, T. S., Meyers-Olhi, S. E., Charrow, A.P., and Tol, W. A.</td>
<td>2013</td>
<td>Interventions for children affected by war: An ecological perspective on psychosocial support and mental health care</td>
<td>Review paper</td>
</tr>
<tr>
<td>de Jong, K., Prosser, S., Ford, N.</td>
<td>2005</td>
<td>Addressing psychosocial needs in the aftermath of the tsunami</td>
<td>No sport or PA reported</td>
</tr>
<tr>
<td>Dyck, C. B.</td>
<td>2011</td>
<td>Football and post-war reintegration: exploring the role of sport in DDR processes in Sierra Leone</td>
<td>No MH reported</td>
</tr>
<tr>
<td>Gupta, L., Zimmer, C.</td>
<td>2008</td>
<td>Psychosocial interventions for war-affected children in Sierra Leone</td>
<td>No sport reported</td>
</tr>
<tr>
<td>Harris, D.A</td>
<td>2007</td>
<td>Pathways to embodied empathy and reconciliation after atrocity: Former boy soldiers in a dance/movement therapy group in Sierra Leone</td>
<td>Duplicate study</td>
</tr>
<tr>
<td>Henley, R.</td>
<td>2005</td>
<td>Helping children overcome disaster trauma through post-emergency psychosocial sports programs: a working paper.</td>
<td>No outcomes reported.</td>
</tr>
<tr>
<td>Henley, R., Schweizer, I., de Gara, F., Vetter, S.</td>
<td>2007</td>
<td>How Psychosocial Sport and Play Programs Help Youth Manage Adversity: A Review.</td>
<td>No MH reported</td>
</tr>
<tr>
<td>Kalksma-Van Lith, B</td>
<td>2007</td>
<td>Psychosocial interventions for children in war-affected areas: the state of the art.</td>
<td>Review paper</td>
</tr>
<tr>
<td>Kartakoullis, N. L., Karlis, G., Loizou, C., Lyras, A.</td>
<td>2009</td>
<td>Utilizing sport to build trust-The case of Cyprus.</td>
<td>No MH outcome reported</td>
</tr>
<tr>
<td>Kay, T., Dudfield, O.</td>
<td>2013</td>
<td>The Commonwealth guide to advancing development through sport.</td>
<td>No MH outcomes reported</td>
</tr>
<tr>
<td>Kunz, V.</td>
<td>2009</td>
<td>Sport as a post-disaster psychosocial intervention in Bam, Iran</td>
<td>Population too young</td>
</tr>
</tbody>
</table>
### Appendix 4: List of excluded studies continued

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Title</th>
<th>MH Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ley, C., Rato-Barrio, M</td>
<td>2010</td>
<td>Movement, games and sport in psychosocial intervention: a critical discussion of its potential and limitations within cooperation for development</td>
<td>No MH outcomes reported</td>
</tr>
<tr>
<td>Loughry, M., Ager, A., Flouri, E., Khamis, V., Afana, A. H., Qouta, S.</td>
<td>2006</td>
<td>The impact of structured activities among Palestinian children in a time of conflict</td>
<td>Population too young</td>
</tr>
<tr>
<td>Lubans, D. R., Plotnikoff, R. C., Lubans, N. J.</td>
<td>2012</td>
<td>Review: A systematic review of the impact of physical activity programs on social and emotional well-being in at-risk youth</td>
<td>Not post-conflict context</td>
</tr>
<tr>
<td>Lyras, A</td>
<td>2007</td>
<td>Characteristics and psycho-social impacts of an inter-ethnic educational sport initiative on Greek and Turkish Cypriot youth</td>
<td>No MH outcomes reported</td>
</tr>
<tr>
<td>Biermann, M</td>
<td>2011</td>
<td>Claims and effects of sport-in-development project - A state of the art analysis</td>
<td>Review paper</td>
</tr>
<tr>
<td>Massao, B. P., Straume, S.</td>
<td>2011</td>
<td>Urban Youth and Sport for Development</td>
<td>No MH reported</td>
</tr>
<tr>
<td>Pink, M., Butcher, J. and Peters, C</td>
<td>2011</td>
<td>Psychological perspectives on development in and through community sport: The future in youth Soccer project, Bacau, East Timor</td>
<td>Supplement piece, no data reported</td>
</tr>
<tr>
<td>Purgato, M., Gross, Alden L., Jordans, M. J. D., De Jong, J., Barbui, C., Tol, W. A.</td>
<td>2014</td>
<td>Psychosocial interventions for children exposed to traumatic events in low- and middle-income countries: study protocol of an individual patient data meta-analysis</td>
<td>Proposed project, no outcome data reported</td>
</tr>
<tr>
<td>Richards, J.</td>
<td>2011</td>
<td>Evaluating the impact of a sport-for-development intervention on the physical and mental health of young adolescents in Gulu, Uganda-a post-conflict setting within a low-income country</td>
<td>Duplicate study</td>
</tr>
<tr>
<td>Sport for Development and Peace International Working Group</td>
<td>2008</td>
<td>Harnessing the Power of Sport for Development and Peace: Recommendations to Governments</td>
<td>No MH outcomes reported</td>
</tr>
<tr>
<td>Steyn, B.J.M., Roux, S</td>
<td>2009</td>
<td>Aggression and psychosocial well-being of adolescent taekwondo participants in comparison with hockey participants and a non-sport group</td>
<td>Cross sectional study</td>
</tr>
</tbody>
</table>
Appendix 4: List of excluded studies *continued*

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Title</th>
<th>MH Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugden, J</td>
<td>2010</td>
<td>Critical left-realism and sport interventions in divided societies</td>
<td>No MH outcomes reported</td>
</tr>
<tr>
<td>Van Hout, R.C.H., Young, M.E.M., Basset, S.H., Hooft, T</td>
<td>2013</td>
<td>Participation in sport and the perceptions of quality of life of high school learners in the Theewaterskloof Municipality, South Africa</td>
<td>Population too old</td>
</tr>
<tr>
<td>Zakus, D., Njelesani, D., Darnell, S</td>
<td>2007</td>
<td>The Use of Sport and Physical Activity to Achieve Health Objectives</td>
<td>No MH outcomes reported / Review paper</td>
</tr>
</tbody>
</table>