The Impact of the Hoodlinks Program to Develop Life Skills and Prevent Youth Violence in Guatemala

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Table of Contents

Abstract ............................................................................................................................................. 3
Executive Summary .......................................................................................................................... 4
Introduction ...................................................................................................................................... 7
Literature Review ............................................................................................................................ 8
Overview of Hoodlinks Program in Guatemala ............................................................................ 11
  Location of Hoodlinks ..................................................................................................................... 11
Overview of Hoodlinks Program .................................................................................................... 11
  Mission ....................................................................................................................................... 12
  Vision ......................................................................................................................................... 12
  General Objective ......................................................................................................................... 12
  Specific Objectives ......................................................................................................................... 12
  Schedule ..................................................................................................................................... 12
  Typical Lesson ............................................................................................................................... 13
  Program Goals ............................................................................................................................. 13
  Olympic Values ............................................................................................................................. 14
  Academic Scholarship Program ................................................................................................. 14
  Training Program ......................................................................................................................... 15
  Tutorials ..................................................................................................................................... 15
Methods .......................................................................................................................................... 16
  Participants ................................................................................................................................. 16
  Hoodlink Coaches Interviews ..................................................................................................... 16
  Athlete and Parental / Guardian Interviews .............................................................................. 16
  Observation Tool .......................................................................................................................... 17
  Athlete Questionnaires ............................................................................................................... 17
Project Timelines ............................................................................................................................ 18
Results ............................................................................................................................................. 20
  Baseline Results .......................................................................................................................... 20
    Athletes’ Experience in Hoodlinks ............................................................................................ 20
      Figure 1: Baseline Means of Athletes’ Experience in Hoodlinks ............................................ 20
    Aggressive Behaviours and Caring/ Cooperative Behaviours ................................................. 21
      Figure 2: Baseline Means of the Number of Athletes’ Aggressive and Caring Behaviours
      Over a 7-Day Period ................................................................................................................. 21
    Life Skills ............................................................................................................................... 22
      Figure 3: Baseline Means of Athletes’ Life Skills ................................................................ 22
Use of Life Skills during Hoodlinks Program

Figure 4: Baseline Means of Coaches’ Ratings of the Use of Life Skills in Hoodlinks.

Pre & Post Questionnaire Analysis

Data Analysis

Figure 5: Pre and Post Means of Aggressive Behaviours and Cooperative Behaviours over 7 Day Period.

Figure 6: Pre and Post Means for Responses to the Youth Experience Survey in Sport.

Figure 7: Pre and Post Means for Responses to Life Skills Questionnaire.

Figure 8: Pre and Post Means of Coaches’ Observations of Overall Use of Life Skills.

Interviews

Baseline Interviews

Six Month Follow-up Interviews

Data Analysis

Themes

Figure 9: Qualitative Themes.

Table 1. Themes and Sub Themes Identified by Group and Time.

Table 2. Percentage of participants who identified types of interpersonal skills.

Table 3. Percentage of participants who identified types of interpersonal skills.

Discussion

Recommendations

Conclusions

References
Abstract
The purpose of this study was to examine the impact of the Hoodlinks program on the development of life skills. Hoodlinks is a sporting program focused on the development of Olympic Values that is run in two of Guatemala City’s most violent zones. A total of 116 (80 males; 36 females) athletes (average age = 13 yrs.) provided written assent and parental consent to participate in this study along with 5 coaches who also provided informed consent to participate. Using a mixed-methods longitudinal design, athletes completed a series of questionnaires in August, 2015 and again in February, 2016 that assessed their level of aggressive and caring behaviours, use of life skills both in and outside the Hoodlinks program, and their overall quality of experience within the program. Interviews with athletes, their parents/guardians, and the program’s coaches also took place at both time periods. Results showed high positive experiences in the Hoodlinks program at both time periods, significant increases in the use of life skills within the Hoodlinks program as assessed by their coaches, and significant increases in overall communication skills. Interviews with the participants highlighted the importance of running the program directly in high risk areas and the positive impact that the program had on the development of life skills for the athletes, the positive changes within the communities where Hoodlinks took place, and the additional levels of support that the Hoodlinks program had provided to athletes and their families. Recommendations for helping athletes transfer the life skills learned within the program to their everyday lives are provided along with recommendations to explore expanding the program to more zones and regions across Guatemala as an effective social approach to addressing youth violence in the country.

Key words: Life skills, youth violence prevention, Olympic Values
Executive Summary
The area of sport for development and peace has been recognized as one of the fastest growing areas of research and development in the sporting literature (Young & Okada, 2014). However, despite a rapid increase of sport for development programs around the world, there is a paucity of behavioural research that has systematically investigated the impact of these programs on its participants. Many programs often report simple metrics such as participation rates. Although important, these metrics often do not tell whether or not the program is impacting the type of behavioural changes the program is claiming to affect. Conducting research on effective, evidence based strategies for Central America are critical given that "...the knowledge base on what works and what does not in terms of youth violence prevention is comparatively thin, and there is comparatively limited awareness of existing or planned impact studies" (Moestue, Moestue, & Muggah, 2013, p. 1).

The Hoodlinks program, located in two of the highest crime areas of Guatemala City, focuses on the development of Olympic Values through sport. In existence since 2012, it focuses on the sports of judo, boxing, taekwondo, gymnastics, athletics, and badminton to help reduce crime and increase life skills. Athletes in the program participate in their sport on a regular basis and also receive academic support in the form of scholarships to help attend school and tutorials to assist them with school work. Coaches focus on a specific Olympic Value each month through a number of strategies that range from group discussions to games that integrate the value.

The purpose of this study was to examine the impact of the Hoodlinks program on the development of life skills. A total of 116 (80 males; 36 females) athletes (average age = 13 yrs.) provided written assent and parental consent to participate in this study along with 5 coaches who also provided informed consent to participate. Using a mixed-methods longitudinal design, athletes completed a series of questionnaires in August, 2015 and again in February, 2016. These questionnaires assessed the athletes’ level of aggressive behaviours and cooperation skills, use of life skills, and experiences in the Hoodlinks program. Coaches also rated each athletes’ use of life skills within the Hoodlinks program. A cohort of 39 athletes and their parents and five of the Hoodlink coaches also agreed to participate in semi-structured interviews that spanned the same time frame as the questionnaires.

Results from the baseline questionnaires revealed that the athletes’ experience in the Hoodlinks program had been positive to date. On average, athletes reported that they had felt that the program had helped them develop personal and social skills, cognitive skills, initiative and goal setting skills quite a bit up to that point. Athletes also reported relatively low levels of aggressive behaviours over a 7-day period with 7 aggressive behaviours and 18 caring and cooperative behaviours during that time period. Athletes’ overall life skills score across 10 different life skills were on average at a Moderate level based upon previously published normative means (Vranda, 2009). Finally, coaches rated the use of various life skills during the Hoodlinks program between “does with some help” to “does with a little help”.


A Repeated Measures Multivariate Analysis of Variance (MANOVA) comparing baseline to 6-month follow-up data found that athletes reported significantly (p < .05) higher levels of communication skills and that coaches rated the participants' use of life skills in the Hoodlinks program higher at the follow-up point in the study. Participant means for positive experiences in the Hoodlinks program remained high six months post baseline and levels of aggressive behaviours and caring/cooperative behaviours drop slightly, but not significantly. Although only the communication life skills was significantly higher at follow-up compared to baseline, the trend for most of the remaining life skills was higher at follow-up.

Results from an inductive analysis of the baseline and follow-up interviews generated five higher ordered themes related to the impact of Hoodlinks: a) safe place to play; b) alternative to delinquent activities; c) teaches values; d) provides other forms of supports; e) has a positive community wide impact. A sixth higher ordered theme related to program recommendations was also generated. Overall, the interviews with the athletes, their parents, and the coaches confirmed many of the assumptions going into the study. First, many of the athletes and their families live in very dangerous neighbourhoods. Parents described their fears of allowing their children to play outside on the streets. Many parents described situations where before Hoodlinks, their children would go to school and then come straight home and had to stay inside the home at all times. Athletes themselves described how they felt “locked up” in their own homes. However, with the arrival of the Hoodlinks program directly in their neighbourhood, parents allowed their children to attend the program because it was supervised by responsible adults and they felt safe allowing their children to attend. Many of the coaches and athletes also described the importance of the Hoodlinks program as providing an alternative to delinquent activities. Prior to the program arriving, there was nothing for the young people to do in the community. As a result, many of the youth turned to delinquent activities such as substance abuse, fighting, and other forms of aggressive behaviours during their leisure time. However, the Hoodlinks program provided a diversion away from these activities and into more pro-social behaviours that encouraged the development of important values. These values consisted of both personal and interpersonal skills. Commonly mentioned interpersonal skills included respect, conflict resolution, and social cohesion. Personal skills such as personal responsibility, self-regulation, confidence, and goal setting were commonly mentioned by participants. The result of developing these life skills was starting to make an impact on the entire community. Parents and athletes commented on how the settlement had become more peaceful and that youth were choosing to join the program and not local gangs. Kids were once again having fun in their communities as well. Other benefits were also identified by the participants. Many parents felt that their children were now performing better at school because of their participation in the program and were very grateful for the additional financial support offered through the scholarship program. Parents were also grateful for the additional support of food provided to their children via a snack program and for the parent workshops that were offered to them to provide parenting tips and strategies. Parents also commented that they felt the program helped them to spend more time together and that their children had started to form an important bond with their coach who acted as a mentor to some. Finally, although most of the participants were very pleased with the program so far, some did offer suggestions such as improved conditions at community facilities, more
equipment, the offering of more sessions, and the importance of convincing other parents of the importance of the program on the overall healthy development of children and youth in the community.

Based upon the results of the study, a number of recommendations are provided. These include: a) continuing to support coaches with training opportunities focused on how life skills and Olympic Values can be integrated and taught through various sport activities; b) providing more time during the lessons to allow athletes to apply the Olympic Values into their day-to-day training; c) exploring ways to actively engage parents more into the program either directly into the activities themselves or providing activities they can do with their children at home, and continuing to provide parent workshops that assist them with not only parenting skills but also helps them to make the connection between what their child is learning in the program an how they can help support their children to apply the values each day; and, d) continue to work within local communities and settlements to ensure facilities are safe and accessible and to also explore new sites that will allow for an expansion of the current programming.

In conclusion, this study has clearly demonstrated the positive impact that the Hoodlinks program has had on the athletes, their families, and their communities. This program not only encourages the development of life skills through sport, but it also uses sport as an avenue to help support athletes and their families in a number of different ways. Athletes, parents, and coaches all reported positive behavioural changes through the adoption of various life skills and communities are starting to feel safer as a result. As one parent pointed out, if the program were to leave, she feared that the area would become violent once again. Ensuring that the Hoodlinks program is sustainable and can be replicated and delivered to more youth across Guatemala appears to be a viable strategy to help combat youth violence throughout the country.
Introduction

Guatemala is a country with almost 16 million people, 56% of which live below the poverty threshold. This brings difficult social problems which require strategic and effective solutions. These problems primarily affect Guatemalan young people because 68% of population is younger than (30) thirty years old.

A report by the Programa de Naciones para el Desarrollo de Guatemala (PNUD, 2011/12) identified that the school dropout rate in Guatemala is 47% and only one (1) of ten (10) teenagers among fifteen (15) and nineteen (19) years old continue with their studies of secondary school and receive a Diploma. This means that one third of the active population of Guatemala has no education beyond elementary school and only 20% of the working population has completed elementary school. Currently, only 14% of young people between fifteen (15) to twenty-four (24) years old have formal employment.

According to the PNUD, in 2012, 27% of the imprisonments for murder were among the young people who were less than twenty-one (21) years old. The most vulnerable age group to be victims of violence is among eighteen (18) and twenty-five (25) years old, which represents 31.8% of those killed. A great number of youth (men and women) integrate gangs or drugs, crime, and violence.

According to a World Bank (2011) report, the homicide rate in Guatemala is 45/100,000 making it the fourth most violent country in Central America and the fifth most violent country in the world. Since 2000, the homicide rate has doubled from 3000 deaths/ year to just over 6000/ year with the vast majority (89%) of the victims (and the perpetrators) being adolescent and adult males under the age of 30. In fact, the homicide rate for males aged 15 to 29 in Central America is four times that for males in this age range living in other regions of the world (United Nations Office on Drugs and Crime, 2013). The World Bank (2011) has estimated the costs associated with violence in Guatemala to be close to $2.2 billion / year or 7.7% of the country’s total GDP. Combined, finding sustainable and cost effective ways to reduce youth violence is one of Guatemala’s most urgent public health and economic issues at the moment.

The purpose of this research project was to examine the impact of the sports-based Hoodlinks program in Guatemala on the development of life skills amongst its athletes and the role that life skills play in helping to reduce levels of youth violence and aggressive behaviours. The Hoodlinks program was started by the Guatemalan Olympic Foundation (GOF) in 2012 to directly address growing concerns around youth violence in Guatemala. Using sports such as athletics, judo, badminton, boxing, gymnastics and taekwondo, various Hoodlinks programs are run in areas of Guatemala City that have a history of high youth crime rates. The various Federations of these sports provide support in the form of equipment and training for Hoodlink coaches. Each Hoodlinks coach receives training related to Olympic Values, technical and tactical overview of each sport they are coaching, sport administration, coaching pedagogy and basic sport science principles. The goal of the program is to: "... place education of Olympic Values and sport at the service of the harmonious development of humankind, with a view to promoting a peaceful society concerned with the preservation of human dignity" (Fundacion
Olimpica Guatemalteca, 2013, p. 1). The Hoodlinks program currently receives financial support from the IOC and several corporate and media organizations. In addition to financial support, Hoodlinks also partners with organizations such as the Guatemalan Olympic Committee, various Sport Federations, the Autonomous Sport Confederation of Guatemala, the Municipality of Guatemala, and the Sports and Arts Ministry who provide in-kind support in the form of training, equipment, and facilities. Many of the Hoodlink coaches come directly from the Olympic Committee in Guatemala and also local Sport Federations.

The Guatemalan Olympic Foundation has done an excellent job of reporting output metrics describing the activities of the program (e.g., participation rates, number of sports offered). They have also reported anecdotally the important success stories of Hoodlinks youth. However, to date, there has not been a formal research study that examines the behavioural outcomes of the program. Such research is important in order to directly assess the development of specific life skills, levels of youth aggression, and attitudes and behaviours associated with violence among youth participants.

This study utilized a mixed methods design intended to provide quantitative insight into the program efficacy while also enriching the qualitative Hoodlinks narrative by giving voice to those participating in the program.

**Literature Review**

The World Health Organization (2010) highlights the importance of developing life skills as an effective way to prevent youth violence: “… interventions for developing life skills can help young people to avoid violence, by improving their social and emotional competencies, [and] teaching them to deal effectively and non-violently with conflict” (p. 29). By developing life skills, students “… learn self-protection, ways to recognize perilous situation, cope and solve problems, make decisions, and develop self-awareness and self-esteem” (Unicef, 2009, p. 30). Violence prevention programs that focus upon the development of life skills cost a fraction of the costs of treating victims of violence and show significant net savings when compared to the costs of treating victims of violence and punishing those who commit acts of violence (Waters et al., 2004).

Participation in sport programs has been linked to the avoidance of criminal activities (Cameron & MacDougall, 2000), risky behaviours (Holt, Scherer & Koch, 2013) and gang membership (Seefeldt & Ewing, 1997) due to their potential in fostering the development of life skills amongst youth (c.f., Young & Okada, 2014). The use of sport programs for this population has been identified by leading organizations such as the International Olympic Committee (IOC) and the United Nations (UN) as one of the most cost effective ways to address major social issues such as conflict and violence. For example, the International Olympic Truce Foundation recognizes the role that sport plays to initiate conflict prevention and resolution. Resolution A/RES/68/9 passed by the United Nations (2014) also recognizes that "sports can foster peace and development and can contribute to an atmosphere of tolerance and understanding." When life skills are intentionally taught through sport, they can result in higher levels of problem solving skills.
(Papacharisis, Goudas, Danish, & Theodorakis, 2005) which in turn form a critical foundation for children and youth to more effectively deal with issues such as conflict and violence (Coakley, 2002; Ewing et al., 2002).

Much of the Sport for Development literature has pointed to the role that appropriately structured sport can play in the development of life skills. Life skills have been defined by the World Health Organization (2002) as: “...abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. In particular, life skills are psychosocial competencies and interpersonal skills that help people make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathize with others, and cope with managing their lives in a healthy and productive manner. Life skills may be directed toward personal actions or actions toward others, or may be applied to actions that alter the surrounding environment to make it conducive to health” (p. 8). However, participation in sport does not automatically guarantee positive outcomes such as the attainment of life skills. A report released by Unicef (United Nations Children's Fund, 2010) points out that sport can be an avenue for bullying and hazing, physical maltreatment, emotional and psychological abuse, sexual violence, and discrimination. This is why many have stressed the importance of developmentally and culturally appropriate sport programs delivered by trained and competent coaches who intentionally teach life skills as the most effective way to foster the development of life skills (e.g., Bailey, 2006; Coakley, 2002; Gould & Carson, 2008). Or stated more succinctly "... life skills must be taught, not caught" (Theokas, Danish, Hodge, Heke, & Forneiris, 2008, p. 78).

Previous research supports the potential role of sport to foster the development of life skills. A common life-skills based program reported within the literature is the Sports United to Promote Education and Recreation (SUPER) program. Similar to the Hoodlinks program, a specific life skill is focused upon during each sport session via a workshop that ranges between 15 to 45 minutes in length. Participants are taught life skills such as goal setting, problem solving, and positive thinking. Goudas and Giannoudis (2008) reported the findings from 17 SUPER sessions (10 to 15 minutes each) integrated into basketball and volleyball lessons. The youth participants in the program reported higher levels of knowledge about using life skills and increased beliefs about their ability to control negative thoughts. Similar to this study, Papacharisis et al. (2005) reported that boys and girls averaging 11 years of age reported significantly higher levels of knowledge about life skills, goal setting, problem solving, and positive thinking following 8 SUPER sessions (15 minutes each) integrated into soccer and volleyball lessons. Brunelle, Danish and Forneris (2007) also used the SUPER program during a one week golf academy with 13 to 17 yr old boys and girls. Their results showed that after receiving 5 SUPER workshops (45 minutes each) during the week, participants reported significantly higher levels of social interest, social responsibility, and goal knowledge. The researchers continued to follow participants and found that six months after the end of the golf academy, participants who had been provided with opportunities to apply the life skills they had learned were more likely to have retained or increased their life skill behaviours. The importance of peer interaction and providing an avenue for the
application of life skills in sport has also been identified as a key feature in their development. Holt, Tamminen, Tink and Black (2009) reported that in both team and individual sports, former competitive athletes identified the role that sport played during adolescence in the development of positive social skills. They also indicated that these skills had carried on into their adulthood. Finally, Mandigo et al. (2014) recently reported the results of a longitudinal study that examined the role of physical education on the development of life skills with Salvadoran students. Their interviews with school principals, PE teachers, and students revealed that all three groups were able to identify specific examples of how PE helped foster the development of life skills amongst students at the school.

At a very basic level, participation in sport can be a diversion from delinquent behaviour. This has been referred to as the averting-mode of crime prevention (Ekholm, 2013). If youth are participating in sport, they are less likely to be "on the streets" and hence are diverted from committing crime. They also are also more likely to be engaged positively with a community's sporting infrastructure that can serve as an alternative to anti-social establishments such as gangs and organized crime (Cameron & MacDougall, 2000). However, Wortly (2010) and Ekholm (2013) challenge the long-term sustainability of sporting programs that are simply designed to avert youth from participating in criminal activities. Rather, the focus should be on if and how sport could encourage behavioural changes by fostering the development of positive values and life skills.

International organizations such as the World Health Organization (WHO) and Unicef have pointed to the role that life skills play in the prevention of youth violence. The WHO (2010) states that "... interventions for developing life skills can help young people to avoid violence, by improving their social and emotional competencies, [and] teaching them to deal effectively and non-violently with conflict" (p. 29). As a result, organizations such as Unicef have supported cost-effective Life Skills Based Education (LSBE) approaches to education because they have found that students "... learn self-protection, ways to recognize perilous situation, cope and solve problems, make decisions, and develop self-awareness and self-esteem (Unicef, 2009, p. 30).

Following a systematic review of 38 peer reviewed international articles examining the relationship between sport participation and crime prevention, Ekholm (2013) concludes that "... sport as a means of crime prevention should emphasize non-sport components such as education in non-violence and moral values, de-emphasize competition, and deploy a rational and explicit development plan" (p. 6). Such approaches are consistent with a social change-mode of crime prevention. Intentionally integrating more pro-social approaches to sport through education is also supported by Bailey (2006) who highlighted that "... appropriately structured and presented activities can make a contribution to the development of prosocial behaviour, and can even combat antisocial and criminal behaviors in youth" (p. 399). However, in order for sport programs to have the kind of impact in the prevention of youth violence, they should focus on both the needs of the community and the individual. For example, sport programs that are highly competitive in nature and only celebrate the successes of "winners" can often serve to perpetuate the cycle of violence. Coakley (2002) instead suggests that
sport programs where participants develop feelings of being physically safe, personally valued, socially connected, morally supported, personally empowered, and hopeful about the future are much more likely to have a positive impact upon the development of all its participants. For example, grassroots sports programs such as Open Fun Football Schools (OFFS) and Football 4 Peace (F4P) highlight the positive impact that programs run by trained local instructors at the community level can have on helping to develop conflict resolution skills between youth from Bosnia and Herzegovina (Gasser & Leivinsen, 2004) and Israel and Palestine (Sugden, 2006) respectively. Such programs highlight the importance of cultural understanding and solving conflict peacefully by fully integrating cultures together through football as opposed to demonstrating cultural superiority in football.

This study will help to address the call for more research examining the role of sport to reduce youth violence (Ekholm, 2013) and evidence-based approaches to developing life skills through sport (Gould & Carson, 2008). The results will play an important role in the growing literature on cost-effective interventions to prevent youth violence and the role that life skills play in its prevention and builds upon a decade of experience and research conducted by the lead collaborator and his colleagues in El Salvador (e.g., Mandigo et al., 2014, Mandigo et al., 2010). Applying this experience and previous research is important within Central American countries such as Guatemala who face extremely high levels of youth violence compared to the rest of the world due to the limited financial resources to manage the costs of high crime rates.

Overview of Hoodlinks Program in Guatemala

Location of Hoodlinks
The Hoodlinks program takes place within the capital of Guatemala. Guatemala City is divided into 22 zones. The Boxing and Taekwondo programs place in Zone 18 while Athletics, Badminton, Boxing, Judo, and Gymnastics take place in Zone 7.

Zone 18 is the most violent area within Guatemala City with 62 homicides reported in the first 5 months of 2014. This represents 25% of all homicides in Guatemala City during that time period. Zone 7 had the fifth highest homicide rate with 16 reported homicides during the first five months of 2014. This represented 6% of homicides. Combined, these two zones where the Hoodlinks programs take place account for close to 1/3 of all homicides in the capital (Grupo de Apoyo Mutuo, 2014).

Overview of Hoodlinks Program
Children and youth living within these two zones are eligible to participate in the following sports offered by the Hoodlinks program: athletics, badminton, boxing, gymnastics, golf, judo and taekwondo. The program is administered by the Guatemalan Olympic Foundation and thanks to the support of the International Olympic Committee and its association with partners and sponsors that provide a sustainable source of income to guarantee the financial stability of the Foundation and its sportive development programs.

The sponsors and collaborating companies are: International Olympic Committee, Banco Industrial, Cofiño Stahl, Pantaleón, McDonalds, Visa net Guatemala, Tigo, Canal 3 y 7 de television, Cervecería Centroamericana, Nuestro Diario, Cementos Progreso, Sonora, Bimbo, Danone, Incaparina, GNC,
Mission
Contribute to the transformation of children and teenagers who live in risk zones of Guatemala through teaching them principles and Olympic Values, and the sportive practice as a tool for the prevention of violence and delinquency with the purpose of promoting a culture of peace and a better society.

Vision
Be a project that can make a change by creating private-public alliances to benefit the developing communities, where citizens are able to participate actively in problems solutions.

General Objective
To apply an integrative socio-sports model in risk zones of the department of Guatemala focusing on children and teenagers which is capable of counteracting the tendencies towards social diffusions and exclusion, generating committed adults with their neighborhood or community.

Specific Objectives
• To provide youth who live in risk zones the opportunity to practice sports in an active way to develop their mind, body, and will in the Olympic spirit during their spare time.
• To promote the practice of the Olympic Values and Principles as a philosophy of life through continuous sportive practice.
• To benefit the involved federations to expand sports and to look for prospective athletes.
• To develop knowledge management programs geared towards: Parents, legal guardians and/or responsible persons; and children and teenagers who are part of the Project in order to form leaders and athletes who transform their lives for the benefit of the community and the Guatemalan society.
• To create a meeting point to share experiences to the local community and the neighbor communities to contribute to the social development.

Schedule
• Settlement Las Torres, Zone 7 (March 2012 - 2016) - 145 Children
  • Badminton 07:00 a 10:00 hrs.
  • Boxing 09:00 a 12:00 hrs.
  • Gymnastic 14:00 a 17:00 hrs.
  • Judo 14:00 a 17:00 hrs.
  • Athletics 14:00 a 17:00 hrs.

• Colony El Limón, Zone 18 (February 2015 - 2016) - 50 Children
  • Taekwondo 09:00 a 12:00 hrs.
  • Boxing 14:00 a 17:00 hrs.
**Typical Lesson**
The following is an example of a typical lesson that lasts approximately three hours each day:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Time</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Training assistance</td>
<td>On time.</td>
<td>Responsibility, discipline and punctuality</td>
</tr>
<tr>
<td>2</td>
<td>Get the group together</td>
<td>10 min.</td>
<td>Friendship</td>
</tr>
<tr>
<td>3</td>
<td>Mark attendance</td>
<td>5 min.</td>
<td>Responsibility, discipline and punctuality</td>
</tr>
<tr>
<td>4</td>
<td>Initial line-up</td>
<td>5 min.</td>
<td>Order</td>
</tr>
<tr>
<td>5</td>
<td>Greeting and slogan</td>
<td>5 min.</td>
<td>Respect to others</td>
</tr>
<tr>
<td>6</td>
<td>Activity / Games of values</td>
<td>30 min.</td>
<td>Learning specific values</td>
</tr>
<tr>
<td>7</td>
<td>Technical training</td>
<td>45 min.</td>
<td>Searching for excellence</td>
</tr>
<tr>
<td>8</td>
<td>Physical training</td>
<td>45 min.</td>
<td>Joy of effort, will</td>
</tr>
<tr>
<td>9</td>
<td>Final part (cooling)</td>
<td>15 min.</td>
<td>Self-control</td>
</tr>
<tr>
<td>10</td>
<td>Analysis and feedback</td>
<td>10 min.</td>
<td>Balance among body, will, and mind</td>
</tr>
<tr>
<td>11</td>
<td>Class dismissed</td>
<td>5 min.</td>
<td>Respect to others</td>
</tr>
<tr>
<td>12</td>
<td>Record when leave</td>
<td>5 min.</td>
<td>Responsibility, discipline and punctuality</td>
</tr>
</tbody>
</table>

**Program Goals**
The following represent the type of goals set out throughout the duration of the program:

a) Technical: Goals on learning and performance of motor skills to practice sports.

b) Tactics: Goals for knowledge of when and how to apply the different techniques.

c) Regulatory: Goals for knowledge of the basic rules and arbitration proceedings.

d) Physical: Goals on education and training of athletes, so they are physically ready for training and competition.

e) Mental: Goals on education and training of athletes, so they are psychologically prepared for trainings and competitions.

f) Principles and Olympic Values: Goals on teaching athletes in terms of principles and values, and their responsibilities to others.
Olympic Values
Each month, the program focuses upon one of the Olympic Values and corresponding virtues.

<table>
<thead>
<tr>
<th>OLYMPIC VALUES</th>
<th>Joy of Effort</th>
<th>Fair Play</th>
<th>Respect</th>
<th>Search for Excellence</th>
<th>Mind, Body And Will Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Virtues</strong></td>
<td>Self discipline</td>
<td>Integrity</td>
<td>Courtesy</td>
<td>Teamwork</td>
<td>Self control</td>
</tr>
<tr>
<td></td>
<td>Perseverance</td>
<td>Honesty</td>
<td>Friendship</td>
<td>Cooperation</td>
<td>Self knowledge</td>
</tr>
<tr>
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<td>Determination</td>
<td>Loyalty</td>
<td>Tolerance</td>
<td>Solidarity</td>
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<td>Honesty</td>
<td>Obedience</td>
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These Olympic Values are taught in a number of different ways:

a) Talk: A talk is given to athletes where the importance of implementing the value and benefits that it entails.
b) Tale: Traditional or universal stories are used to teach a lesson from the application of values.
c) Video: Videos are used for athletes to observe situations where values are applied and serve as learning.
d) Game: There are used games where it is needed to implement values that achieve the main objective to be raised.
e) Task: The coach leads tasks such as research, draw, or make an essay of a certain number of words, write a story or tell a personal experience with issues related to values.
f) Plays: The coach indicates the theme based on a value or Olympic principle, and athletes can develop a play in which they can exemplify through action and express themselves creatively.

Exhibition: The Coach assigns the topics to be developed by the athletes, who present the group using the materials needed to get the message of the exhibition.

Academic Scholarship Program
Athletes in the Hoodlinks program are eligible to receive a scholarship to help support their primary or secondary education. Each scholarship has an average value of USD 600.00 a year per youth and is used to help cover the costs of school tuition, school supplies, and school uniforms.

The requirements to receive a scholarship include:
a) Being a prominent member of Hoodlinks Project who complies with the regulations of the Project and be identified and live the Olympic principles and values.
b) Fill out the application of academic scholarship, with the information requested.
c) To be approved successfully the previous school year.
d) Commitment form of parents or guardians and children.
e) Photocopy of identification document of parents or guardians.
f) Letter of good conduct from previous educational establishment.
g) A recent birth certificate.
To maintain the scholarship, athletes must:

a) Be punctual on daily workouts (in the morning or afternoon), in the sport concerned.
b) Participate in competitions and camps requested by the coach.
c) Participate in activities organized by Hoodlinks Project and Guatemalan Olympic Foundation.
d) Comply with regulations Hoodlinks Project and educational establishment to the scholarship assigned.
e) Obey with 95% attendance to the educational establishment.
f) Graduate with a minimum average of 70 points per subject each school year.

Parents must also:
a) Ensure their child's attendance to educational establishment and Hoodlinks.
b) Attend all meetings convened by the assigned educational establishment.
c) Attend all meetings convened by Guatemalan Olympic Foundation.
d) Supervise child’s homework delivery.
e) Review and sign every day agenda provided by the educational establishment.
f) Deliver a copy of report card grades bimonthly to Guatemalan Olympic Foundation.

Athletes are also eligible to receive Technical Scholarships. This program is addressed to teenagers who have already finished middle school but are not able to continue paying for their high school tuition. The Guatemalan Olympic Foundation gives them the opportunity to study a technical career to be prepared to find a job in companies that offer better working conditions.

Training Program
In addition to providing sporting programming for athletes, the Hoodlinks program also offers regular workshops for parents, coaches and athletes. The following is a list of workshop topics that have been conducted since 2015:

2015
1. Work plan (February)
2. Sport and peace (March)
3. Presentation System Performance Athlete Hoodlinks and personal growth (June)
4. The inspiration of the Olympic movement (July)
5. System Performance Athlete Hoodlinks and personal growth (October)

2016
1. How to be a positive leader for our children (February)
2. The mission of parents as educators of their children (March)
3. Sport and peace (April)

Tutorials
According to the dropout rate, only one (1) out of ten (10) young people between fifteen (15) and nineteen (19) years old continue their Middle School and receive a diploma. To address this need the Hoodlinks program implemented a school support program where children and youth of Hoodlinks have an adequate and properly equipped space to they can do their homework under the supervision of a tutor.
Methods
This longitudinal study used a mixed-methods approach to investigate the impact of the Hoodlinks program on the development of life skills and its relationship to the reduction of youth violence and aggression. According to Cresswell et al (2011), a mixed-methods approach is an effective way to examine real world issues because it "... focuses on research questions that call for real-life contextual understandings, multi-level perspectives, and cultural influences ... employs rigorous quantitative research assessing magnitude and frequency of constructs and rigorous qualitative research exploring the meaning and understanding of constructs ... utilizes multiple methods (e.g., intervention trials and in-depth interviews) ... and... integrates or combines these methods to draw on the strengths of each" (p. 4).

Participants
A total of 116 (80 M; 36 F) athletes participated in the study. Informed consent for athletes was provided by his/her parent/guardian. Athletes also provided informed assent to participate in the study. This represents 77% of all athletes registered in the Hoodlinks program. Athletes ranged in age from 9 – 19 years (average age = 13 yrs.). Of the 116 athletes, 62 (53%) have been in the program for less than 1 yr. and 54 (47%) for more than 1 year. Sports represented include: athletics, badminton, boxing, judo, gymnastics, and Taekwondo.

In addition to the athletes, five of the coaches provided informed consent to participate in the study. The five coaches were all males and represented the sports of badminton, boxing, judo, gymnastics, and Taekwondo.

Hoodlink Coaches Interviews
In-depth semi-structured interviews with Hoodlink Coaches took place in August, 2015 and then again in February/March, 2016. The in-depth interviews with the coaches gathered insight into:

a) Hoodlink coaches’ experiences of teaching for non-violence.
b) Their perceptions of the impact that the Hoodlinks program has had upon athletes such as noticeable changes in behaviour both within and outside the Hoodlinks program.
c) The role of the Hoodlinks program to foster the Olympic Values such as: Joy of Effort, Fair Play, Respect for Others, Searching for Excellence, and Balance among Body, Will, and Mind.

Athlete and Parental / Guardian Interviews
Semi-structured interviews with athletes and their parents/guardians also took place during the same time period as the coaches. The purpose of these interviews was to explore the impact that the Hoodlinks program has had upon the athletes both inside and outside of the program. For example, these interviews explored:

a) why their son/daughter joined the program
b) any noticeable behaviour changes since starting the program
c) the development of life skills both within and outside the program
d) any examples of how they have applied what they have learned in the program
into their everyday life

e) The role of the Hoodlinks program to foster the Olympic Values such as: Joy of Effort, Fair Play, Respect for Others, Searching for Excellence, and Balance among Body, Will, and Mind.

All interviews took place directly at the Hoodlinks site and were conducted in Spanish by a research assistant hired in consultation with our local partner, the Guatemalan Olympic Foundation. With the participants’ permission, interviews were digitally recorded to ensure that the interviewer was able to accurately capture the participants’ ideas and opinions. All digital files were transcribed verbatim and then translated into English for analysis.

Observation Tool
Hoodlink coaches completed the Life Skills Assessment Scale (Kennedy, Pearson, Brett-Taylor, & Talreja, 2014) for each athlete at the beginning and end of the study. Hoodlink coaches assessed each athletes’ level of interaction with others, ability to overcome difficulties and solving problems, initiative, ability to manage conflict, and ability to understand and follow instructions (total of 5 items). An overall Life Skill Score was then obtained. Only those athletes who provide informed consent were assessed with this tool.

Athlete Questionnaires
Students were asked to complete the following battery of questionnaires that assess their development of life skills and levels of aggression (total of 145 items). These questionnaires were administered at the beginning and end of the study period (i.e., August, 2015 and March, 2016):

a) **Part A: Aggression and Caring and Cooperation Scale** (Orpinas & Frankowski, 2001 and Bosworth & Espelage, 1995 both cited in Dahlberg et al., 2005). Nineteen items measuring the self-reported frequency of self-reported aggressive behaviours (e.g., hitting, pushing, name-calling, threatening) and the frequency of caring and cooperative skills over a 7-day period. There are no additional permissions required to use this scale. Dahlberg et al. (2005) have reported its internal consistency to range from .88 - .90 for this scale.

b) **Part B: Life Skills Scale** (Vranda, 2009). 115 items that provide an overall Life Skills score and sub-scale scores measuring levels of: i) decision making skills; ii) problem solving skills; iii) empathy; iv) self-awareness; v) communication skills; vi) interpersonal relationship skills; vii) coping with emotions; viii) coping with stress; ix) creative thinking skills, and x) critical thinking skills. A copy of the scale was purchased from Dr. Vranda and permission was been granted by Dr. Vranda to use the scale for research purposes. The scale purchased from Vranda states an overall internal consistency alpha coefficient of .94 for the overall life skill score and test-retest reliability coefficients ranging from .70 to .95.

c) **Part C: Youth Experience Survey – Sport** (MacDonald, Côté, Eys, & Deakin, 2012). This 27 item questionnaire assesses the degree to which the Hoodlinks program developed the following skills: i) Personal and Social Skills; ii) Cognitive Skills; iii) Goal Setting; and, iv) Initiative. Permission by Dr MacDonald was provided to use this survey and Dr. MacDonald is a member of the research team to help provide oversight and advice. MacDonald et al
(2012) report strong internal consistency scores using Cronbach Alpha which ranged from .82 to .94 for the various subscales.

All questionnaires were administered directly by the research assistants directly at the Hoodlink program site. All research protocols were approved by the Brock University Research Ethics Board (file 14-161) and approved by the Scientific Review Committee from the Universidad Pedagogica in El Salvador.

### Project Timelines

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| February, 2015| • Research approved by Brock University Research Ethics Board (14-161)  
• Notice of successful grant received from IOC |
| March, 2015   | • All research tools were translated into Spanish by a former research assistant at Universidad Pedagogica who specializes in English translation and has been hired as a research assistant on the Salud Escolar Integral project in El Salvador |
| June, 2015    | • In the absence of a University partner in Guatemala, we asked our partner University in El Salvador, Universidad Pedagogica, to review the ethics proposal to ensure that it was consistent with research ethics and standards in Central America. Their Scientific Review Committee reviewed the proposal and submitted a letter indicating that it met existing ethical standards for research within Central America. |
| August, 2015  | • Hired research assistants in Guatemala. They will work out of the Guatemalan Olympic Foundation office and will be supervised by the principal investigator, Dr. James Mandigo, and the Director General of the Guatemalan Olympic Foundation, Maria Paiz  
• Dr. James Mandigo conducted training with the research assistants in Guatemala over a 3 day period to review all protocols and responsibilities. Training also included reviewing the questionnaires for clarity as well as practicing interview techniques.  
• Dr. Mandigo also gave a presentation to members of the Olympic Academy in Guatemala regarding the project.  
• Dr. Mandigo gave a presentation to the Olympic Studies Centre via Skype.  
• Informed consent forms distributed and collected  
• Administration of questionnaires and interviews with those who had provided informed consent  
• Data collection completed by mid-September |
| October, 2015 | • Data input of the questionnaires completed  
• Interview transcription and translation started  
• Dr. Mandigo presented initial baseline data to Mr. Diego Pulido Aragón, President of the Guatemalan Olympic Foundation, and Mr. Willi Kaltschmitt, IOC Member. |
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<th>Date</th>
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<tr>
<td>November, 2015</td>
<td>• Dr. Mandigo submitted interim report to Olympic Studies Centre</td>
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<tr>
<td>December, 2015</td>
<td>• Dr. Mandigo presented initial results at the OVEP launch in Lausanne and met with members of the Olympic Studies Centre and the IOC’s Department of Public Affairs and Social Development through Sport</td>
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<td>January, 2016</td>
<td>• Baseline interviews fully transcribed, translated, and analyzed</td>
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| February, 2016   | • Time 2 data collection started  
• All coaches re-interviewed and targeted 20 athletes to be re-interviewed based upon their baseline questionnaire data  
– above average and below average scores – equal representation of males/ females and across sports |
| March, 2016      | • Time 2 data collection finished  
• Questionnaire data received and analyzed                                                                                               |
| April, 2016      | • Received all interview transcripts                                                                                                       |
| May, 2016        | • Data Analysis                                                                                                                           |
| June, 2016       | • Final Report submitted  
• Presentation to key stakeholders in Guatemala regarding research findings (June 25 – 30)                                     |
Results
Baseline Results
Athletes’ Experience in Hoodlinks
Measured through the use of the Youth Experience Survey – Sport (MacDonald et al., 2012). Assesses the degree to which athletes feel that the Hoodlinks program has developed the following skills: i) Personal and Social Skills; ii) Cognitive Skills; iii) Goal Setting; and, iv) Initiative

Figure 1: Baseline Means of Athletes’ Experience in Hoodlinks
Aggressive Behaviours and Caring/Cooperative Behaviours
Measured the frequency of self-reported aggressive behaviours and frequency of self-reported caring/cooperative behaviours during the past week (e.g., hitting, pushing, name-calling, threatening) (Orpinas & Frankowski, 2001 as cited in Dahlberg et al., 2005; Bosworth & Espelage, 1995 as cited in Dahlberg et al., 2005).

Figure 2: Baseline Means of the Number of Athletes’ Aggressive and Caring Behaviours Over a 7-Day Period
Life Skills
Self-reported measure of the use of 10 different life skills: i) decision making skills; ii) problem solving skills; iii) empathy; iv) self-awareness; v) communication skills; vi) interpersonal relationship skills; vii) coping with emotions; viii) coping with stress; ix) creative thinking skills, and x) critical thinking skills (Vranda, 2009)

Vranda also provides comparative means based upon normative data by adding up all of the various life skill measures for a maximum score of 575 (i.e., 115 items x 5 point Likert scale). The mean total score across all athletes at baseline was 414.4 (SD = 50.9) which would place them in the Moderate Life Skill category according to Vranda’s normative data.

Figure 3: Baseline Means of Athletes’ Life Skills
Use of Life Skills during Hoodlinks Program

Hoodlink coaches completed the Life Skills Assessment Scale (Kennedy et al., 2014) for each athlete. Coaches assessed each athletes' level of interaction with others, ability to overcome difficulties and solving problems, initiative, ability to manage conflict, and ability to understand and follow instructions (total of 5 items). An overall Life Skill Score is also obtained.

*Figure 4: Baseline Means of Coaches' Ratings of the Use of Life Skills in Hoodlinks*
**Pre & Post Questionnaire Analysis**

A total of 86 (62M; 24F) athletes completed both the pre and post questionnaires. This represents 73% of all athletes in the study. Possible reasons for attrition (i.e., not completing the post questionnaire) include relocation, change in school schedule (e.g., now attend school during the same time as the program is offered), being absent on the day of the post-questionnaire, etc.

Data was then screened to ensure accuracy of data input and for outliers to ensure that each variable was normally distributed. All of the skewness levels were within acceptable ranges of +/- 2.0 thereby conforming to assumptions of normal distribution required for analyses of variance (Hannerman, Kposowa, & Riddle, 2013). However, five (4 pre measures and 1 post measure) of the total 54 variables had kurtosis levels that exceeded the recommended levels of +/- 3.0. However, due to the relatively small sample size of 86, the adequate skewness levels for each variable, the strong psychometric properties of the questionnaires, and the robustness of multivariate analyses, no data was eliminated or transformed in future analyses.

**Data Analysis**

Figures 5 to 8 provide the mean values of each of the dependent variables at both Time 1 (pre) and Time 2 (post). A Repeated Measures Multivariate Analysis of Variance (MANOVA) was used to test for possible changes from time one to time two. A significant multivariate effect for the within subject variable of time was found: [\( F(18, 67) = .519; \ p < .001, \ eta^2 = .48 \)]. Subsequent univariate analyses indicated significant within-subject effects for Communication Life Skills \( [F(1, 84) = 8.83, \ p < .01, \ eta^2 = .095] \) and the Coach’s overall rating of athlete’s Life Skills \( [F(1, 84) = 27.14, \ p < .001, \ eta^2 = .244] \). In both cases, the mean score at Time 2 was significantly higher than the reported score at Time 1.

Repeated MANOVA’s were also conducted to explore the potential impact of Sex, Type of Sport (combative vs non combative), Location (Zone 7 vs Zone 18) and Years in the Program (Less than 1 yr, More than 1 Yr). There were no significant multivariate or univariate interactions between Time and Sex and Time and Years in Program. However, there was a significant univariate interaction effect for Time x Location for the Coach’s Life Skill ratings. \( [F(1, 84) = 4.65, \ p < .05, \ eta^2 = .053] \). Follow-up Pairwise T-tests revealed that the Coaches overall Life Skill ratings of athletes in Zone 7 significantly increased from Time 1 to Time 2 \( [t(1, 68) = 5.76; \ p < .001] \) while Coaches overall Life Skill ratings of athletes in Zone 18 did not significantly change \( [t(1, 17) = 0.49; \ p > .05] \).

Significant univariate interactions for Time x Type of Sport for the Coach’s Life Skill ratings \( [F(1, 84) = 4.14, \ p < .05, \ eta^2 = .047] \) and Critical Thinking Life Skills \( [F(1, 84) = 4.83, \ p < .05, \ eta^2 = .055] \) variables were also found. Follow-up Paired T-tests revealed that while Coaches’ overall Life Skills ratings significantly improved for
those in both non-combative sports $[t(1, 32) = 4.13; p < .001]$ and combative sports $[t(1, 52) = 3.61; p < .01]$, subsequent One-Way ANOVA’s demonstrated that at Time 2, Coaches’ ratings of Overall Life Skills were significantly higher for those in non-combative sports compared to those in combative sports $[F(1, 84) = 0.22, p > .05]$. These differences did not exist at Time 1 $[F(1, 84) = 4.11, p < .05]$. Paired t-tests revealed that Critical thinking skills significantly improved from Time 1 to Time 2 for those in combative sports $[t(1, 52) = 3.61; p < .01]$ but not for those in non-combative sports $[t(1, 32) = 0.76; p > .05]$.

*Figure 5: Pre and Post Means of Aggressive Behaviours and Cooperative Behaviours over 7 Day Period*
Figure 6: Pre and Post Means for Responses to the Youth Experience Survey in Sport

![Graph showing pre and post means for responses to the Youth Experience Survey in Sport. The graph compares personal and social skills, cognitive skills, goal setting, and initiative across pre and post-test stages. The data indicates improvement in all areas post-test.]
Figure 7. Pre and Post Means for Responses to Life Skills Questionnaire

** p < .01
Figure 8: Pre and Post Means of Coaches’ Observations of Overall Use of Life Skills

** p < .01
Interviews

Baseline Interviews
Semi-structured interviews were conducted with five of the Hoodlinks coaches (all male) and with 39 athletes (24 Males; 15 Females) and at least one of their parents/guardians (n = 39). The ages of the athletes who were interviewed ranged from 6 to 17 yrs with an average age of 12.5 yrs. With respect to parent/guardian participation, 27 interviews were with mothers only, 5 with fathers only, 5 with fathers and mothers together, one with a grandparent, and one with an older sibling. The average time of the interviews with the athletes and their parents was 21 minutes while the average time of the interviews with the coaches was 26.5 minutes. All of the Hoodlink sports were represented by the athletes and coaches and interviews were conducted between August 4\textsuperscript{th}, 2015 and September 29\textsuperscript{th}, 2015.

Six Month Follow-up Interviews
Semi-structured interviews were once again conducted with five of the Hoodlink coaches (all male) and with 20 athletes (11 Males; 9 Females) and at least one of their parents/guardians (n = 20). The ages of the athletes who were interviewed in this phase of the study ranged from 9 to 17 yrs with an average age of 12.7 yrs. With respect to parent/guardian participation, 17 interviews were with mothers only, 1 with father only, 1 with father and mother together, and one with a grandparent. The average time of the interviews with the athletes and their parents was 17.7 minutes while the average time of the interviews with the coaches was 25.8 minutes. All of the Hoodlink sports were represented by the athletes and coaches and interviews were conducted between February 24\textsuperscript{th}, 2016 and March 18\textsuperscript{th}, 2016.

These 20 athletes were part of the original cohort of 39 who were originally interviewed at baseline. Due to time constraints, it was not possible to re-interview all 39 athletes. The 20 athletes were chosen based upon their scores from the questionnaire data collected at baseline. Scores for each variable were converted into a z-score. Z-scores reflect the number of standard deviations away from the group mean. The higher the z-score (either positive or negative) the further away from the group mean for that particular variable. Z-scores from each of the variables were then added together to produce an overall z-score. Using this as a general guideline, an equal representation of athletes who had a high overall positive z-score and a high overall negative z-score was identified. In addition, an equal representation of males and females and equal representation from each of the Hoodlink sport was attempted. The intention of this selection criteria was to attempt to re-interview athletes who initially scored high on the baseline questionnaire and low on the baseline questionnaires to produce a more heterogeneous sample. In some cases, equal representation was not possible due to factors beyond the control of the study (e.g., athlete had dropped out of the program or the study).

Data Analysis
All interviews were digitally recorded at the interview site. Each interview was subsequently transcribed word for word into Spanish and then translated into English. All English transcripts were subsequently uploaded into the Dedoose software package which allows for analysis of mixed-methods data. Using a coding system, data was identified as coming from either the athlete, parent/guardian, or coach. Data was also coded as Baseline and Follow-up interview. An inductive approach was then used to explore common themes amongst the data. Relevant interview excerpts were tagged for possible themes that began to emerge from the
data. Once all the data was reviewed and possible themes were identified, the data was re-examined for possible duplicate themes within participant data sets and also re-examined to ensure consistency in themes across participant data sets.

What emerged were five core themes related to the impact of the Hoodlinks program: i) safe place for youth to play; ii) provides an alternative to delinquent behaviours; iii) teaches values (both interpersonal and personal); iv) provides other forms of support; and v) has a broader community impact. A sixth theme of program recommendations was also identified. These themes were consistent from the Baseline interviews and 6 month Follow Up Interviews.

A summary of these themes can be found in Figure 9. Table 1 also provides a breakdown of the occurrence of each sub-theme based upon time (Baseline and Follow-Up) and participant (coach, athlete, parent/guardian).

**Themes**

1. **Safe Place for Youth to Play**

Many of the parents spoke about the dangerous communities in which they lived. Zones 18 and 7 have some of the highest rates of violence in Guatemala. As a result, many parents spoke about not letting their children play outside in the street. Many parents also spoke about having to leave their children alone at home because they had to work and/or because the child’s other biological mother/father did not live with them. Therefore, the children were either at school or inside the home watching TV, playing video games, or other indoor activities. The following quote provides an example of the type of neighbourhoods many of the participants live in and the fear that parents have of letting their children outside to play.

“I prefer them to be locked down at home, I prefer to buy them some movies, and leave them watching TV because if I am not with them, they cannot go out because I go out to work and if something happens to them outside and I do not know. Oh no! Oh my God! I cannot give them permission to go out because sometimes young people with shotguns pass close to where we live” (Parent, baseline)

The addition of the Hoodlinks program within the communities gave their children a place to play under adult supervision at no cost. For the most part, parents viewed these places as safe because there were adult coaches there to watch over their children.

“No, at least my son did not have the opportunity to go to another place because the place we live at is dangerous, so he hadn’t been able to go. So now that we had the opportunity to come here, my son is too excited. So he told me to come here and thanks God, here we are and I even do the [boxing] practice with him” (Parent, baseline)

“We do not feel safe because difficult things have passed; but thanks God since the program started, it has helped us as a benefit because we can let our kids out with trust because we know that coaches are around and nothing is going to happen to them,” (Parent, baseline)

“In the past, I did not let him go out. I used to prefer that his friends arrived to the house. But now, the times that he has gone, I have let him go and I am not scared anymore. I wanted to take care of him too much because he is the only male son
that I have, but now I am not scared anymore. I feel happy now when I know that he has to go to train.” (Parent, baseline)

In one case where a parent was afraid of sending her child to the program on their own, the coach came by and brought them to the program:

“I did not want to send my children to practice but then I thought that it was better to send them. When you hear things that happen you get scared. I talked to coach X, I asked him to pick my children up because I was scared about sending them alone. I have been praying a lot to God so he can take care of them when they get in and out from the place where they practice sports because I like the place they go to, because the teachers support them.” (Parent, baseline)

Some did report examples of delinquency on the way to the Hoodlinks site or directly outside (e.g., youth smoking marijuana outside the program site). However, once they were at the program, they felt their child was safe. Similarly, one coach indicated that he would like additional security outside of the program to prevent neighbourhood youth from smoking and drinking while the athletes were arriving and departing. However, he also indicated that when he asked such youth to leave the entrance, they respected his request and left.

For the athletes, being able to participate in the Hoodlinks program felt almost like being liberated. Because of the dangers many children face on a day-to-day basis in their communities, they are not allowed to go outside and play and feel like they are imprisoned in their own homes. This quote by a young athlete highlights the sense of freedom that Hoodlinks provides to many of the youth:

“I always come to train and no longer keep me locked up.” (Athlete, follow-up)

2. **Hoodlinks Provides a Diversion from Delinquency**

Several of the parents commented that without Hoodlinks, their children would be tempted to participate in delinquent activities. Coaches also commented on how some of their athletes who had participated in delinquent behavior (e.g., street fighting, drug use, etc.) had stopped such behaviours since starting their participation in Hoodlinks.

“Well, as my son was saying, in the past, when the Olympic Foundation hadn’t arrived yet, there were some people who came to try to convince young people to be gang members. But we thank God because when the Olympic Foundation started the project in here, all the young people joined and this place gets full (Talking about the practice room). Little by little the situation has been more calmed.” (Parent, baseline)

“Oh yes, delinquency, there is delinquency, but I think that with these activities the children are more entertained and they are not thinking about being outside. We have the tire repair business in here, so when we send them here, they stay here. (Laughs). So I prefer they to go to the practice, and when they get out from the practice, they go home to do homework.” (Parent, baseline)

One of the main outcomes identified by participants of the Hoodlinks program was that it kept the kids “off the streets” and diverted their attention away from other, and in many cases more dangerous, activities.
For example, these two athletes identified the important role that Hoodlinks played in their community:

“It was something different for the neighborhood because everybody used to be outside doing bad things … now everybody is doing good things, doing sports.” (Athlete, baseline)

“It has impacted us, because some guys who now are training, before they used to do bad things on the street. I have seen they enjoy practice sport instead be on the streets.” (Athlete, follow-up)

Participation in the Hoodlinks program was also seen by some athletes as being a diversion away from gangs and violence:

“I think Hoodlinks has helped many young people because they are not in troubles, drugs or gangs any more they are training and focused on sport. (Athlete – Follow Up)

Not surprisingly, given the dangerous living conditions that many of the families faced on a day to day basis, many parents sounded relieved that participation in Hoodlinks kept their children busy and off the streets and served as a distraction and deterrent from the dangers they face every day.

“I think that these type of projects take away from gangs the people who, at certain point of their lives, were going to join them ... The truth is that gang members don't come here, or people who come here for rehabilitation. But when there is somebody who does not have anything to do, that doesn’t go to the school, it would be good for this person to, at least, come here to try to learn something. It is not only sports, but they teach them values” (Parent, baseline)

“In these neighborhood there are many gangs. So if this project is recruiting children and has them in here since they are very young, it is something good. For that reason I wanted the girls to come to train so they can use their spare time in positive activities because if they are not practicing they are outside (Parent, baseline)

“Well, thanks God I have seen that my children and grandchildren have learned many things: because instead of being on the street they are going to train then come to do homework and after they prepare to go to school, because they study in the afternoon.” (Parent, baseline)

Coaches as well identified with the role that Hoodlinks had of helping kids get off the street and participate in more positive prosocial activities offered through the program:

“I think that if programs like this were implemented, we would reduce delinquency rates considerably because it would be possible to keep the minds of the children busy, their bodies would be working, they would be thinking of a better future, and we would avoid gang members to come and influence them to do bad things, right? Like going to sell drugs, smoke, get drugged in groups, so it would be awesome that this project would be in every neighborhood” (Coach, baseline)

Despite the positive aspect that Hoodlinks has of discouraging gang membership, two of the coaches did offer a cautionary disclaimer that this may actually upset the local gang members because they are taking away potential recruits:
“But I think that maybe the gang members think that we are taking away their young people, right? And maybe they don’t like that. Some people might take this as if something good is being done, but other people might think that we are doing something wrong. Since they are always looking for young people to do bad things and we are looking for young people to become athletes and to make them change.” (Coach, baseline)

“At the beginning you will always realize that there are many people who reject it. Because if you are going to start this project in a red zone and you are going to try to take the guys away from all the bad things, those guys, I mean, the leaders of those place are going to see that they are losing their people, so they are going to be against you, right? Because you are taking them away the future thieves, future gunmen, and all of that, so they are going to be against you.” (Coach, baseline)

3. Athletes Are Taught About Values in Hoodlinks

The stated purpose of Hoodlinks is about teaching Olympic values to the athletes. The following quote from one of the athletes provides an example of how different values were introduced and taught at the program site:

“Well, I have learnt many values because they teach us a lot about values. When I was wrestling, they used to tell us that every week we were going to learn a new value; they used to teach us one value per month, I think that they used to give us a value, we had to learn, and we used to write about that value or what it meant. We learnt the values: effort, perseverance, coordination, fellowship, respect…They taught us about many values” (Athlete, baseline)

“The impact is that I not only know about values, I’ve applied it. For example, in a badminton competition you have to apply fair play because some points the judge don’t see well and can score it or not. But if we are honest the truth must be first of all. We have to respect the opponent because this is only a competition they are not our enemies. After the competition we can talk or be friendly with them. So, fair play, friendship, searching for excellence are important values we must to practice.” (Athlete, follow-up)

Learning values through sport was also identified as being particularly impactful. As this athlete described, it wasn’t until he started to participate in the Hoodlinks program that he started to really understand the importance of values:

“I learned most of all about values. Previously I did not practice any value in spite of at school [the teachers] talk me about that. But when I started training my mentality change. They [coaches] told me that I have to respect others, learn to be honest, among other values and I decide to change my attitude. Then I started to implement and change.” (Athlete, follow-up)

The coaches also recognized the impact of sport to teach life skills and the Olympic Values on their athletes:

“I think teaching values is the most impactful; values are more important than sport training we give them here. Like me, I am training them from the beginning (they did not have any previous preparation) and we are forming good people to be an example for society. When we started Judo, many of the participants say to me that they don’t want to study. Actually they share to me his dreams, they told me: Teacher, in many years I will be a professional, or an engineer, doctor… or I will be
working in some good place. So, we have awakened their desire to excel.” (Coach, follow-up)

Coaches also identified that Hoodlinks was, for some, the first place that the athletes had learned about values and this in turn had an important impact on their overall behaviour and character:

“I think teaching values have influenced a lot the personal change of kids. There were girls that even didn’t know the meaning of the word values. So I told them the meaning and slowly they were learning the Olympic values that could help in their life and to notice that if they perform some good attitudes they can reach some reward or a good feeling back. Eventually some mothers ask me: “coach what did you do to my kid?” and I answered: “Why” and they told me “because she has had a big change, one night I began to cry for the simple reason that my daughter came and said thanks” (Coach, follow-up)

As a result, much of the interview was spent trying to better understand if and how such values resulted in behavioural change. The values, or life skills, were subsequently coded into one of two categories: interpersonal or personal skills and then coded into specific life skill sub-themes.

A) Interpersonal
Interpersonal skills refers to skills that individuals use to interact with others. Table 2 provides a breakdown of the percentage of participants who identified specific interpersonal skills during both the baseline and follow-up interviews.

i) Respect for Others
As Table 2 demonstrates, the most frequently mentioned interpersonal skill that the each group of participants identified with as a result of participation in Hoodlinks was respect for others. When asked about the type of values that they have learned in the program, athletes typically identified the importance of respect for their coach, respect for others in the program and for those outside the program such as friends, family members, and teachers. The following represents the type of typical responses posed to an athlete about what they have learned in the Hoodlinks program.

“To respect my elders. In the past, I used to be a little rude to my elders, but this has helped me to respect them and to be friendlier. In the past, I was not that sociable.” (Athlete, baseline)

“Well, it has helped me a lot because I have seen that respect to others is a good tool to have friends and open many doors.” (Athlete, follow-up)

“About respect, I have learned to respect decisions and opinions of others, because all of us have different way of thinking” (Athlete, follow-up)

“I have learned to respect the smallest to the biggest. Does not matter the age, we have to respect others in the same way we want them to respect us.” (Athlete, follow-up)

The importance of respect was also something that the athletes felt they could demonstrate in various environments and various situations:

“I have learnt respect. You have to be respectful everywhere you go: the house, the school, and other places.” (Athlete, baseline)
Several parents confirmed such statements by saying that since starting the Hoodlinks program, their son/daughter has been more respectful at home and to their siblings:

“She has become more respectful. In the past, she always used to be fighting with her sister. I used to tell her that she was older than she, and that the two of them had to respect each other. Thanks God, she has changed a lot lately.” (Parent, baseline)

Coaches also commented on the increased amount of respect that the athletes have demonstrated towards their parents:

“They also learn to respect their parents. I have realized that some of them do whatever they want and not what their mom tell them, they do not care. But lately, I have realizing that they have been respecting their mother more. In the past their mothers used to attend the practice and they did not even pay attention to them. But now they say hi to their mothers, they hug them, things like that. What I have done is to tell them that if they respect other people, other people are going to respect them. They understood that, finally.” (Coach, baseline)

Some of the coaches also talked about the role that sport plays in helping youth to respect the rules and opponents. This is particularly important for youth who are constantly exposed to violence and see others break rules. Learning to follow rules and respect others through sport was identified as an important life skill for youth who live in high crime areas.

ii) Social Cohesion

Social cohesion, or the opportunity to make friends and develop a social network through the Hoodlinks program, was identified as the second most popular theme by all three groups.

For some of the participants, Hoodlinks was the only form of social interaction with other children. In this quote, you can sense the fear that this mother has of allowing her daughter to go outside and play with other children in the neighbourhood.

“I almost do not take her out, she is always at the house, and she does homework and watches some TV. I take her out only if we have an activity or something, but on the contrary, she stays at home. In order to avoid problems she does not go out. I do not like that somebody might hit her. I do not want anybody to touch my little girl. I tell her not to allow anybody to do that and if somebody is bothering her, she has to tell me. She only talks to her friends from gymnastics. She does not talk to anybody else.” (Parent, baseline)

For the athletes they felt that Hoodlinks had provided them with an opportunity to make new friends. Some had commented on how much easier it was to make friends at Hoodlinks compared to school. Athletes also commented on how Hoodlinks had taught them the importance of developing true friendships and positive interactions with others. For example, this athlete recognized the importance being to identify true friends which is an important life skills in avoiding delinquency and succumbing to peer pressure:

“About friendship, we must learn to recognize who are friends and who are not.” (Athlete, follow-up)
As well, this athlete recognized that Hoodlinks had taught them how to work with others and why it was important to be successful in school:

“At school we used to do homework in a group and it is necessary to know how to work with others. If we do not work in group it can be more difficult.” (Athlete, follow-up)

For the parents, it wasn’t just the additional friends that their children made at Hoodlinks, but also the quality and importance of these friendships:

“I think that it helps them a lot because many times they have been growing up alone and they do not have any support. But in here, they have friends or people who support them and give them good advice” (Parent, baseline)

“Well, he used to be so shy, he didn’t like to socialize with anybody. But now that he is here, he has been doing better at the school. He participates more, he has not been rude anymore. Even with the teacher, she has told me that in the past he didn’t like to participate, so sometimes she had to force him to participate. But thanks God, I have realized that he has been socializing a lot and he has participated more” (Parent, baseline)

Finally, one of the coaches noticed more positive interactions between youth in the community which in turn had a positive impact upon conflict resolution skills:

“At the beginning of the project, they pass in front of other and did not speak. The project came and help them to be friendly, and communicate better and avoid conflicts between them” (Coach, baseline).

iii) Conflict Resolution
The ability to solve conflict in a more peaceful manner was another interpersonal skill that the athletes, parents, and coaches all felt that Hoodlinks taught the athletes. Strategies such as walking away and not getting into a fight and to intervene when they saw a friend start to fight were identified by athletes as conflict resolution skills learned during the Hoodlinks program. Parents also commented that their children had become less aggressive at school and at home and noticed less use of fighting to solve problems since starting in the program. As this parent noted, her son has also passed on these strategies to his brothers at home:

“Well, he try to talk with his brothers if they are fighting to avoid a worse fight. He don’t like his brothers or others fighting. I can see a big change in my son.” (Parent, follow-up)

iv) Other Interpersonal Skills
Table 2 provides a summary of the other types of interpersonal skills identified by the participants. For the most part, these interpersonal skills promoted pro-social behavior such as helping generate leadership qualities, being able to communicate and collaborate better with others, helping others and helping out more at home, using more elements of fair play, and being able to defend oneself. However, one parent and one athlete from the boxing program did comment during the baseline interviews that the boxing skills that were taught in the Hoodlinks program had been used by some athletes to threaten others or to fight with others outside of the program.
B) Personal Skills
Table 3 provides an overview of sub-themes that emerged from the Personal Skills theme. Personal skills refer to skills that individuals have and that impact people primarily at a personal level.

i) Self-Regulation
All three participant groups commented on improvements to athletes’ self-regulation skills. Specifically, many noted improvements in the athletes’ temperament and ability to control their anger to avoid getting into fights.

“I see that he is so happy here and his temper is very calmed. He used to be so angry and now he has improved a lot” (Parent, baseline)

She has improved … she is more formal. Before Hoodlinks she was so angry and aggressive, but now she has a better emotional control is more obedient” (Parent, follow-up)

“I think so because in the past, my temper used to be like bad and since I come here, I have improved a lot. I don’t get angry anymore. I try to handle things better.” (Athlete, baseline)

“I have learned to control myself in a better way, to focus my feelings, to control and respect.” (Athlete, follow-up)

Coaches have also been in positions where they have seen other athletes help each other to exhibit more self-control:

“It is by the way the values have been applying. The experiences transmitted by coaches, their own experiences and the opportunities to compete they have had. For example, if a child sees that his partner will do a bad thing or do some damage to another person, he try to calm him, or tell him about some similar experience he had, or remember him something the coach said about to control feelings, emotions” (Coach, baseline)

ii) Self Improvement
Participants identified areas of self-improvement, particularly with sport skill techniques such as improved flexibility and striving towards excellence. Other areas of self-improvement included not using foul language and stopping substance use of tobacco and drugs. The following quote by an athlete highlights how Hoodlinks has motivated them to be a better person:

“Personally it [Hoodlinks] has changed me a lot. Sometime ago, I used to answer bad to my mother, go out (on the street), but no more… I do not stay on the street. I prefer to use that time to read, to study (because the tests are close). The behavior with my parents and brothers has improved. Definitely, the impact has been amazing. I was so rebellious but no more. (Athlete, follow-up)

Parents in particular commented that athletes were discouraged from abusing substances such as drugs, alcohol, and tobacco because it would negatively impact their sport performance:

“Yes, there are many guys who practice with us, in the past, they used to smoke marijuana, but they have stopped because they already realized on how that substance affects their performance.” (Parent, baseline)
iii) **Personal Responsibility**

Personal skills pertaining to personal responsibility was identified by all three participant groups. Athletes and parents mentioned that Hoodlinks had taught them to be responsible by being punctual and arriving to the program site on time and by assisting others. For example, this parent talked about the importance of being responsible by helping others in the neighbourhood without expectation of payment:

“The most important value he has learned is responsibility, discipline and that he avoid problems. Now he helps me a lot at home.” (Parent, follow-up)

Expectations around arriving on time clearly came from the coaches who frequently mentioned that they stressed the importance of arriving to the program on time:

“Gymnastics need discipline, responsibility in schedules, for example, an athlete will not be one hour [late]. That’s something I demand them a lot because at first they always arrive late. We have to begin at 02:00 pm and they were arriving almost 2:45. It was not the best schedule and they almost lost 1 hour to develop and improve their skills. Now that we have a well-equipped gym, girls are waiting from one-thirty, quarter to two outside the place. Now when I arrive, all girls are waiting. That’s responsibility and love that are holding them to sport.” (Coach, baseline)

iv) **Goal Setting**

The impact of Hoodlinks to help the athletes set individual goals was another theme common to all three groups of participants. As this athlete and coach identified, Hoodlinks helped them not only to set goals, but to track and monitor their personal goals in and outside of sport:

“Most of them have set goals for life. Before the project they were aimless, do not know what they want, and neither what sport they were good [at]. But Hoodlinks program helps us to understand, learn and focus on something that we really like and we know we are on the right track.” (Athlete, follow-up)

“Now they (the kids) have established goals, they know where they go, what they are doing and where they want to, not only in sport, also in their studies.” (Coach, follow-up)

v) **Other**

A number of other themes were identified less frequently by participant groups. These included: appreciation, confidence, honesty, motivation, decision making, leadership, problem solving, stress management, striving for excellence, and resilience. Although not as frequently mentioned by all of the groups, these themes are important to recognize as contributing factors in the role Hoodlinks.

For example, athletes identified the role that Hoodlinks had played in increasing their self-esteem and helping them to be more confident when speaking with people.

Athletes also identified that they had learned the importance of honesty as this quote demonstrates:

“Teaching us to work well, for example, if the coach asks me to do 100 push-ups, I have to make them well, not only 50 if he is not looking at me, so I can do whatever I want to do. To work like that, right? Honesty would be that.” (Athlete, baseline)
Although only mentioned by one of the athletes, this quote demonstrates how Hoodlinks helped to foster a greater appreciation for what one has and not to pass judgement on others based on how they look:

“The main thing is to value what I have. There are people who need many things and I have started to realize that the society is updating and there are better things and better technologies. So I want many things, and I start valuing the things that I have, when so many people cannot have them. To share, not to look down on every person, despite of their appearance. I have to help them if I can. I have to share, and not only with my people, because sometimes when you start growing up you tend to forget where you come from.” (Athlete, baseline)

Hoodlinks was also a source of personal motivation for the participants:

“The project arrived to this settlement to motivate many children because if the project was not here, children would be outside in the street” (Parent, baseline)

“They feel more motivated and they are already inviting their friends. So they say: “let’s go,” They like it and now they even have taekwondo videos on their cell phones. That was something that I really liked because I maybe I have practiced, maybe I don’t know, maybe I have one or two videos, but they already deleted their songs to have more space and have videos.” (Coach, baseline)

Athletes and parents commented on how the program helps them to become more resilient by encouraging them to overcome adversity (either through a loss or by learning a hard skill).

Coaches commented on the development of personal skills such as leadership, decision making, and problem solving. For example, this coach highlighted that his athletes commonly used their leadership skills to share not only the sporting skills they learned with their family and friends, but also the Olympic Values they learned in the program:

“If they learn something new with us, then put it into practice with their friend or family. I have the case of some athletes who are older and I know that they have taught to other relatives or little brothers sporting aspects but also Olympic values.” (Coach, follow-up)

4. Hoodlinks Provides Other Types of Support

Parents commented on the additional support that the Hoodlinks program provides in the form of academic support, scholarships, parent workshops, family support, and basic necessities. For example, one of the participants had moved to Guatemala from a neighbouring country and did not have the necessary birth certificate to attend school. During the time where the parent was in the process of obtaining the birth certificate, Hoodlinks provided an environment where the athlete could continue with their studies:

“It is very good to know that my children are studying here because they are not studying at the school. I want them to learn.” (Parent, baseline).

As indicated previously, athletes in the Hoodlinks program are eligible to receive a scholarship to help them with the costs of attending school. Often times, parents cannot afford to have their children attend school due to the additional costs (e.g., uniforms) or require their children to work to earn money for the family. However, by
receiving a scholarship, the families are able to afford to have their children attend schools. Athletes must maintain good academic standing to continue to receive the scholarship throughout the school year.

“I tell to my kids they have to approach the benefits Hoodlinks give them, because this year I don’t have money to continue studies. But thanks God and Foundation, 3 of my children have scholarship; that is one of the reasons I am grateful. The last year I got fired it was a difficult time for us. So I told them they have to take all blessings.” (Parent, follow-up)

For many of the parents, they felt that participation in the Hoodlinks program also encouraged success at school. Parents felt that athletes learned to be more disciplined through the program and therefore were more likely to do their homework than to play on the streets during their free time. Coaches in particular stressed the importance of doing well in school and completing their homework.

“Until now that the foundation arrived to this place, they are doing so much for many kids because I see that there are many children who are getting benefits because of this project … Last year, he did not do well at the school. But this year he has been doing great thanks to coach X who has been insisting him to do homework.” (Parent, baseline)

Parents also used participation in the Hoodlinks program as motivation for their children to complete their homework. In some cases, if the athletes did not finish their homework, they could not participate in the program on a particular day:

“She has improved because sometimes I tell her that if she does not hurry up with her homework, she is not going to go to the group, I tell her that I am not going to let her come here if she does not study; and she does all that is possible in order to be better.” (Parent, baseline)

“I tell them they must to do homework, because I know practice sport is important, but also the study is very important, if they are good athletes they should be good students. Then they know that if they do well their tasks can continue training.” (Parent, follow-up)

Athletes in the Hoodlinks program are also provided with a modest snack. Although the parents expressed their appreciation for the food for their children, they wish it could be more as they have very limited financial resources to provide nourishing food for many of their children. In some cases, parents have to spend their limited resources on some of their children at the expense of others during critical growth periods.

“Well, I have 5 children and it is very difficult to feed them … we do not have much food, they have been given Ensure to the third one. He is growing up well and I am so grateful. I do not want to skip the importance of this, you know.” (Parent - baseline)

One child commented that as a result of her mom attending a breakfast for parents, that she received some new shoes.

Some parents and athletes noted that participation in Hoodlinks had actually brought them closer together as a family:
“She also get along with her older sisters, and used to teach them what they learn in Hoodlinks.” (Parent, follow-up)

“Well, as a family we are more united. When I have a competition they (their family) support me and come to see my fights.” (Athlete, follow-up)

Parents were very appreciative of the workshops that Hoodlinks had helped to arrange for them.

“They invite us to meetings to know our kids development and taught us how to be better parents for them. At the parents’ meeting we also learn how to correct and bring them a better life, because every day we learn something new. On the last meeting an athlete who does not have a leg tell us that his parents always treat them like a normal person. Many times our children are normal and we treat them as if they were not. This was a lesson for parents to teach our children that everything can be in this life if you fight for achieve it.” (Parent- follow-up)

The coaches also served as mentors to many of their athletes and became someone with whom they could go to for advice.

“But I have seen significant changes on my athletes, to someone it is difficult to stop bad habits like smoking, for example; because one of them came to training smelling of marijuana. (Despite they not smoke during training) but now I see that they are honest with me and told me: “teacher I smoked, I did this, or I did not do that”; I think we’ve created that bond of sincerity and honesty and I can work with them in a better way, get close and if they allow me, suggest some things. They are sincere with me and then I can work with them in a better way, approach and advise them like a friend.” (Coach, follow-up)

5. Changes within the Community
Parents in particular noticed positive changes in their community since the Hoodlinks. They described it as more calm or peaceful. For example:

“Well, thanks God it has been calmed, I realized that there was a change when the project started because in the past, there was much delinquency, groups, and all the stuff. But now that the project started, I see here in Las Torres that there was a change. Almost every day you see people playing at the football court, so every group that arrives has their own rules, they leave and then another one comes at around 5:00 or 6:00 p.m. The ones from here arrive and they play at until 9:00 p.m. That is the change that I have seen.” (Parent, baseline)

“Now the neighborhood has turned in a happy place because the coaches who come and also for the kids.” (Parents - baseline)

Parents and athletes also commented about the joy and fun that the program had brought to the community:

“Before the project there were many kids who were doing bad things, but when the project came it was a shock for us, because it is free. We can train, learn and have fun.” (Parent, follow-up)

“This place was so desolate like a bad place. But with this project there is joy. People hope to be part of Hoodlinks. It’s like one of their [own] and it has helped a lot.” (Athlete, follow-up)
When asked what would happen if the boxing program left their neighbourhood, this parent responded “But I think that it can continue being here, it is better to me if it is here because the peace will continue in this area. If they leave and go to start at another place, there is going to be violence again.” (Parent, baseline)

Coaches also stressed the importance of ensuring that the program is sustainable in the communities to which they have made a commitment to offer programming:

The acceptance of the people [in the community] also counts. At the beginning it is going to be something like: Oh well, there is a project which just comes for certain period of time and then it is going to leave. At the beginning it is very complicated, but you have to…we have to demonstrate them the project as it is, the vision that you have.” (Coach, baseline)

6. Program Recommendations
All of the participants were asked if they had any recommendations to help improve the program. Most of the participants indicated that they were very happy with the program and hoped that it continued. However some did offer recommendations on how to improve the program.

a) Convince Other Parents of Program Importance
Several parents commented that some parents initially felt that Hoodlinks was not a valuable use of time and were reluctant to register their children. They felt that it was important to try and convince these parents of the true value of the program from the beginning:

“Really many of parents do not understand sports. We have seen many cases of children who at beginning do not have the parents support but little by little has been achieving it. As parents did not know the sports, they think that children are wasting time. When they see the changes on children and all the support they are receiving, parents begin to interest in the Program and the things their kids do.” (Parent, baseline)

Coaches also commented that overcoming this stereotype from parents is often an important barrier to overcome and convince them to send their children to the program:

“I have more children in Hoodlinks because they invite their friends because they see the project as a positive and benefit thing. So, they transfer the good of the project to other children. In this kind of place (Settlement) parents see sport as a waste of time but kids said to them that this is not a waste of time but they learn a lot. At the beginning, parents don’t pay attention but they regard after some time their children show positive changes.” (Coach, follow-up)

b) Issues Concerning Facilities and Equipment
Coaches in particular commented on the need for better facilities and more equipment. Many of the facilities that Hoodlinks utilizes are community facilities that are used for multiple purposes. As a result, when the Hoodlinks program arrives each day, the facility is not always left in a condition by the previous group that is ready to use.

“The community is difficult for us to do what we have planned because there are some days that the room (where we train) is dirty or they are using it for some activity of the community. Other days the people in charge to open the room is not
available and we cannot train. All of this affects sporting developing of children.” (Coach, follow-up)

c) Offer more sessions
Because of the success of the Hoodlinks program, parents in particular would like their children to participate in more session or for longer periods of time in the program:

“Maybe if they have more time to train because they need to learn too much and need more time because we want a better future for them.” (Parent, follow-up)

Figure 9: Qualitative Themes
### Table 1. Themes and Sub Themes Identified by Group and Time

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<th>Safe Place to Play</th>
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### Alternative to Delinquent Activities

| Provides a Diversion                   | ✓       | ✓ | ✓       | ✓ | ✓     | ✓ |
| Alternative to being in dangerous streets | ✓      | ✓ | ✓       | ✓ | ✓     | ✓ |
| Discourages Substance Use              | ✓       | ✓ | ✓       | ✓ | ✓     | ✓ |
| Take in Aggressive Athletes            | ✓       |   |         |   |       |   |

### Interpersonal Skill

| Aggressive Behaviours                  | ✓       | ✓ | ✓       | ✓ | ✓     | ✓ |
| Collaboration                          |         |   |         |   |       |   |
| Communication                          | ✓       | ✓ | ✓       | ✓ | ✓     | ✓ |
| Conflict Resolution                    | ✓       | ✓ | ✓       | ✓ | ✓     | ✓ |
| Helpful                                |         |   |         |   |       |   |
| Gender Equity                          |         |   |         |   |       |   |
| Fair Play                              | ✓       |   |         |   |       |   |
| Jealous                                |         | ✓ |         |   |       |   |
| Leadership                             | ✓       | ✓ |         |   |       |   |
| Respect                                | ✓       | ✓ | ✓       | ✓ | ✓     | ✓ |
| Social Cohesion                        | ✓       | ✓ | ✓       | ✓ | ✓     | ✓ |
| Teaching Others                        |         | ✓ |         |   |       |   |
| Teamwork                               | ✓       | ✓ |         |   |       |   |

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<tr>
<td>Problem Solving</td>
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<td><strong>Provides other forms of Support</strong></td>
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<tr>
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<tr>
<td>Family Time</td>
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<tr>
<td><strong>Community Wide Impact</strong></td>
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</tr>
<tr>
<td>Prevents Gang Membership</td>
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</tr>
<tr>
<td>More Peaceful</td>
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<tr>
<td>Need to convince parents of importance</td>
<td>✓</td>
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### Table 2. Percentage of participants who identified types of interpersonal skills

<table>
<thead>
<tr>
<th></th>
<th>Athletes</th>
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<th>Parents</th>
<th></th>
<th>Coaches</th>
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<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Aggressive Behaviours</td>
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<tr>
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<tr>
<td>Communication</td>
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<td>Conflict Resolution</td>
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<td>0%</td>
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<td>Jealous</td>
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<tr>
<td>Respect</td>
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<td>Social Cohesion</td>
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<td>70%</td>
<td>18%</td>
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<tr>
<td>Teaching Others</td>
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<td>0%</td>
<td>0%</td>
<td>5%</td>
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<tr>
<td>Teamwork</td>
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<td>0%</td>
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</tr>
</tbody>
</table>

### Table 3. Percentage of participants who identified types of interpersonal skills

<table>
<thead>
<tr>
<th></th>
<th>Athletes</th>
<th></th>
<th>Parents</th>
<th></th>
<th>Coaches</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
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<tr>
<td>Appreciation</td>
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<td>5%</td>
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<tr>
<td>Confidence</td>
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<td>5%</td>
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<tr>
<td>Decision Making</td>
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<tr>
<td>Excellence</td>
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<td>0%</td>
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<td>0%</td>
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</tr>
<tr>
<td>Goal Setting</td>
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<td>10%</td>
<td>3%</td>
<td>10%</td>
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<td>20%</td>
</tr>
<tr>
<td>Honesty</td>
<td>5%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Leadership</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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<td>80%</td>
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<tr>
<td>Motivated</td>
<td>0%</td>
<td>0%</td>
<td>8%</td>
<td>5%</td>
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<tr>
<td>Personal Responsibility</td>
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<td>25%</td>
<td>5%</td>
<td>25%</td>
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<tr>
<td>Problem Solving</td>
<td>0%</td>
<td>15%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>Resilience</td>
<td>3%</td>
<td>0%</td>
<td>5%</td>
<td>5%</td>
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<td>0%</td>
</tr>
<tr>
<td>Self Defense</td>
<td>5%</td>
<td>0%</td>
<td>3%</td>
<td>0%</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Self Improvement</td>
<td>18%</td>
<td>5%</td>
<td>10%</td>
<td>25%</td>
<td>60%</td>
<td>80%</td>
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<tr>
<td>Self-Regulation</td>
<td>28%</td>
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<td>26%</td>
<td>40%</td>
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<tr>
<td>Stress Management</td>
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<td>0%</td>
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</table>
Discussion

Overall, scores from the YES-Sport questionnaire indicated that athletes in the Hoodlinks program had very positive experiences both at baseline and at the 6 month follow-up period. High baseline numbers likely created a ceiling effect resulting in the lack of significant changes seen during this time period. On average, athletes indicated that they felt that the Hoodlinks program had helped them “Quite a Bit” to develop personal and social skills, cognitive skills, goal setting skills, and initiative skills. Such results are encouraging as these skills are aligned quite well with the Olympic Values of Joy of Effort, Fair Play, Respect, Search for Excellence, and Mind, Body and Will Balance. These Olympic Values formed the foundation for the Hoodlinks program. In addition to the questionnaire data, interviews with the athletes, parents, and coaches all highlighted the various life skills that they felt were being developed and applied within the Hoodlinks program. Based upon the responses to the YES – Sport questionnaire and the interviews, it would appear that their experiences within the Hoodlinks program were positive and consistent with the development of the Olympic Values. Not only were these positive experiences reported at the beginning of the study, but were maintained 6 months later during the follow-up period. In a recent study by Nanayakkara (2016), she reported that students in Sri Lanka improved their critical thinking, reflective judgement, decision making, and self-correction skills after spending 6 months in a program that integrated Olympism Education and Conflict Resolution strategies together. The changes were the same regardless of gender (similar to this study) or ethnicity. Bean, Forneris, and Fortier (2015) also utilized the Youth Experience Survey to assess girls’ experiences in a physical activity program geared towards the development of life skills. Similar to the results in this study, athletes from low-income families reported high quality of experiences in a program where life skills were intentionally taught through sport. Qualitative results from interviews with girls in the same program also highlighted the development of similar personal (e.g., emotional regulation, goal setting) and interpersonal life skills (e.g., respect, responsibility, social interaction) as those reported in this study (C. Bean, Kendellen, & Forneris, 2015).

One of the variables that did change significantly was the coaches’ overall ratings of the athletes’ use of life skills during the Hoodlinks program. Coaches’ assessments of the athletes’ ability to interact with others, overcoming difficulty, taking initiative, managing conflict, and listening to and following instructions each increased significantly during the 6 month study. These results are particularly encouraging given that these are an indicator of the athletes’ application of the life skills that they have learned in the program. While athletes reported moderate levels of life skills using the self-report Life Skills Questionnaire (LSQ) at both time 1 and time 2, only the Communication variable significantly increased. The LSQ assesses the use of life skills on a daily basis not within the Hoodlinks program itself. Follow-up correlations between Coaches’ Overall Ratings of Life Skills within the Hoodlinks program and the athletes’ overall Life Skills score from the LSQ did not reveal a significant correlation either at baseline or at follow-up. This suggests that the life skills that the coaches were observing in the Hoodlinks program were not correlated to the life skills that athletes felt they were using in their day-to-day lives. During the interviews, athletes could identify with many of the Olympic Values related to respect for others, positive social interactions with others, more peaceful conflict resolution strategies, controlling aggression through self-regulation strategies, personal goal setting, and personal responsibility for social and personal improvement. However,
they often had a difficult time articulating how they were implementing them outside of the program. This evidence suggests that athletes may require further support on how to transfer their life skills outside of the sporting environment. Previous research has highlighted that when Olympic Values are practiced and intentionally taught through games and sport activities that are focused upon conflict resolution, participants are better able to make the connection to applying these values at home, school and the community (Nanayakkara, 2016).

The one self-reported life skill from the LSQ that did increase significantly was Communication. It was also a common strategy that parents and participants identified during interviews on how the athletes dealt with conflict both in and outside of the program. Athletes often articulated during the interviews when confronted with aggressive behaviours from others or when seeing their peers engaged in aggressive behaviours, they would often resort to communication skills by using words not physical aggression to solve problems and to tell others to “stop fighting.” Sport, it would seem, can provide an opportunity for athletes to practice their communication skills in a safe environment and can be an effective way to avoid conflict. For example, previous research with ex-gang members in Mexico found that games which focused on the development of communication, teamwork, trust and problem solving significantly improved perceptions of happiness, life satisfaction and self-concept (Hanrahan & Ramm, 2015).

Although the athletes were often not able to clearly articulate their use of life skills outside of the program, the parents were noticing positive behavioural changes at school, at home and in the community. Parents often reported that their children were spending more time focusing on doing well in the program and doing well at school rather than participating in delinquent behaviours manifested on the streets in their communities. As reported previously: “Participation in sport programs has been suggested to act as a diversion towards criminal (Cameron & MacDougall, 2000) and risky behaviors (Holt, Scherer & Koch, 2013) and as a deterrent towards joining gangs (Seefeldt & Ewing, 1997)” (Mandigo et al., 2014, p. 115). For example, previous research with child soldiers in Sierra Leone highlighted that a football program geared to help reintegrate youth after a civil war played an important role in distracting youth from delinquent behaviours on the street and also served as a psychological coping mechanism for participants to help them divert their memories away from the horrors of war (Dyck, 2011).

The Hoodlinks program is run directly within two of the most dangerous Zones of Guatemala City. The decision to take the program directly to athletes within the Zones has been a very important one. Providing children and youth with a safe place to play is consistent with Article 31 of the United Nations (1989) Convention on the Rights of the Child which states: “Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.” While concerns around safety and security at the sites needs to be continually monitored, the location of the Hoodlinks program has become almost a safe haven for those in the community. Athletes and parents described the feeling of being held hostage in their own homes due to the dangers right outside their houses. The only place where the athletes were allowed to go previously was to school and then straight back to their house. Once at home, they were not allowed to go outside due to the dangers on the streets. However, with the addition of the Hoodlinks program in their communities, it
became a place where the children and youth of the community were allowed to go to by their parents. Athletes described these experiences as being a form of liberation from their homes where they often felt locked up when they were not at school. These results provide further support for the importance of running life-skills based programming directly in the areas where it is most needed. Similar findings from a study with the South African Buffalo City Soccer School (BCSS) located in the Buffalo Flats community in the East London area of the Eastern Cape Province have also been reported (Draper & Coalter, 2016). The Buffalo Flats community is reported to have a high level of unemployment and inadequate access to basic infrastructure such as health facilities, law enforcement and basic necessities. The BCSS program focuses upon the development of life skills through soccer. Participants who were interviewed in the program described the BCSS as a safe place where they can go to get off the streets and hence stay away from getting into trouble.

The Hoodlinks program has also become an opportunity for families to receive support beyond the benefits of sport participation. Hoodlinks has provided additional support in the form of academic scholarships that encourage good academic standing, some basic nutrition for athletes, and workshops for parents. Other examples of life skills based programs that have reported similar findings include the BCSS program in South Africa that provides support for school work and the home environment (Draper & Coalter, 2016) and Right to Play (2010) who report increases in school participation, HIV and AIDS awareness, reductions in violence, stronger community leadership, and increased inclusion of marginalized groups in the various countries they run sport for development programs.

Recommendations
Based upon the results of the study, a number of recommendations to build off of the success of the Hoodlinks program to date are provided.

1. Replicate Hoodlinks to more Zones across Guatemala City and across more at-risk areas of Guatemala. Overall, the program has been a large success. It has not only impacted the athletes, but has also has a positive impact upon the parents, the families, and the communities in which athletes live. Providing opportunities for more children and youth to participate in the program will have a positive impact across more communities in Guatemala.

2. Continue to support coaches with training opportunities focused on how life skills and Olympic Values can be integrated and taught through various sport activities. During the time between the baseline and follow-up data collection periods, Hoodlink coaches had received specific training on the use of games and activities that focused on the development of Olympic Values. Based upon the observations of the coaches, it would appear that the athletes are utilizing more of their life skills within the Hoodlinks program. However, many of the athletes had a difficult time clearly articulating the mechanisms with which they "learned" about life skills through the program. For example, when asked to clarify and expand on what was meant by words such as respect or cooperation and how Hoodlinks helped them to better understand and integrate these concepts, many of the youth found it difficult to articulate a response. The Hoodlink program appeared to do a good job of raising awareness of life skills, however, it was not always clear in the interviews whether or not the athletes truly understood the meaning of the life skills and
how to apply them within the sport and their daily lives. Coaches should continue to receive training on how to embed life skills within their activities and be given the opportunity to share with their colleagues best and promising practices with each other. For example, including games and activities within the Hoodlinks programming on a consistent basis that are only focused upon developing important life skills and then providing time for debriefs and discussion after the game to help the athletes make the connection to how to apply the life skill into their sport and daily life would be particularly useful.

3. **Provide further education and opportunities for athletes to transfer their life skills learned through the Hoodlinks program into their day-to-day lives.** While coaches observed better use of life skills over the 6 month period within the program, and while athletes reported high positive experiences and were able to articulate how they used various life skills within the program, coaches may wish to spend more time using the Talk, Tale, Video, Game, Task and Play strategies to better understand how they can transfer what the athletes learned in the program to their day-to-day lives. This may be particularly relevant for themes such as gender equity, collaboration, decision making, and leadership which were identified by coaches but not by the athletes in the interviews. Intentionally teaching how to transfer life skills into day-to-day life has been shown to be an effective strategy when utilized in sport programs (C. Bean et al., 2015).

4. **Explore ways to actively engage parents.** One of the key themes expressed by the parents was the importance of convincing other parents of the importance of the Hoodlinks program. One of the best ways to convince parents of the potential impact of the Hoodlinks program is by allowing them to experience it for themselves. This could be done by providing parents opportunities to participate directly in the activities themselves or providing activities they can do with their children at home. The parent workshops that are run by the Olympic Foundation have also been particularly impactful. These workshops have assisted many parents with not only parenting skills but also helps them to make the connection between what their child is learning in the program and how they can help support their children to apply the values each day;

5. **Ensure program sites are safe and accessible.** While for the most part, members of the community were supportive of the Hoodlinks program, coaches did raise some concerns around the safety of the program sites and also concerns with access to the sites on a regular basis. The Olympic Foundation should continue to work with local communities and settlements to ensure facilities are safe and accessible and to also explore new sites that will allow for an expansion of the current programming.

**Conclusions**
The results from this study support the importance of embedding sport programs directly in neighbourhoods at high risk of violence. As many of the parents in this study commented, the streets outside of their homes are dangerous. Before Hoodlinks arrived in their community, the children and youth in the community were either “locked inside their homes” when not at school or were outside on the streets either participating in or being subjected to delinquent behavior. With the arrival of the Hoodlinks program, the children and youth now had a safe and welcoming place...
where they could go to during their leisure time. While at the Hoodlinks program, athletes developed a positive social support network with their coaches and their peers and reported positive experiences throughout the duration of the study. Through sporting activities, they also had opportunities to learn, develop, practice, and apply numerous personal and interpersonal life skills linked to the Olympic Values. Coaches noticed significant improvements after 6 months of their athletes’ use of life skills such as interacting with others, overcoming difficulty, taking initiative, managing conflict, and listening to and following instructions. The athletes themselves reported significantly higher levels of communication skills six months after their baseline assessments. While further efforts are needed to help the athletes make the connections between the life skills learned in Hoodlinks and the application of these skills in their day-to-day lives, parents and coaches had started to notice changes within the home and within community. Parents in particular noticed that their children had started to develop good study habits at school and were taking their academic responsibilities more seriously. Athletes were also more helpful at home and were getting along better with their siblings. Parents also felt that their communities had become more peaceful with the arrival of the Hoodlinks program and feared that if the program was discontinued, that violence levels would escalate. Finally, the Hoodlinks program provided support outside of the sporting arena. It provided academic scholarships so that athletes could attend school and which encouraged them to succeed. Parents also received workshops on a number of topics that parents felt helped them to be better parents. Overall, the results over a six-month period are quite encouraging with respect to the development of life skills of athletes in the program. With baseline data now available, tracking athletes over a longer duration of time will help shed light into the long term impact of the Hoodlinks program. As well, exploring the potential for program expansion to serve more youth and more communities appears warranted given the positive results from this study.
References


Moestue, H., Moestue, L., & Muggah, R. (2013). *Youth violence prevention in Latin America and the Caribbean: a scoping review of the evidence*. Retrieved from Norway: [www.cheapbuilding.no/var/ezflow_site/storage/original/application/0de9c5dd2bf52b9ed5e0f2b21bcc6578.pdf](http://www.cheapbuilding.no/var/ezflow_site/storage/original/application/0de9c5dd2bf52b9ed5e0f2b21bcc6578.pdf)


