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Impact Study & Recommendations

KENYA YOUTH HOCKEY DECVELOPMENT PROGRAMM

COMMISSIONED BY *THE JOHAN CRUYFF COLLEGE*,
CONDUCTED BY *WHITTENEY NYABUTO*



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Executive Summary

This study provides an outlook into child development using a multidimensional approach with the initiatives of Stichting Kenya Youth Hockey Development (KYHD) as the basis. KYHD gives underprivileged children a new perspective through hockey training, play and development of a sports mentality. KYHD provides gear, clothing, transportation, medical assistance, food and drinks and related services. The management is actively involved in rolling out a sports programme in Kenya, mainly in Nairobi.

The past and present impact of the development initiatives that are endorsed by KYHD can be felt and observed through the athletes and all the parties involved. There's a desire though to maximize this by **improving the mental resilience of the athletes, uplifting their academic performance and achievement and increasing the social impact in the communities where they come from**.

The participating children's living environment at home and in the community limits their ability to fully achieve developmental milestones socially, academically and mentally. They are constantly surrounded by high crime rates, immorality, alcoholism and drug addiction, domestic violence, peer pressure and instability. These situations force them to develop unhealthy mental and physical coping mechanisms which can be displayed in their personalities.

Participating in hockey and various activities endorsed by the Kenya Youth Hockey Development foundation has given them a chance to step into a new and different environment away from the daily hustle and bustle of their home environment.

The youth hockey development initiatives that are endorsed by KYHD in the past and have been impactful in various ways:

- The trainers, coaches and volunteers provide a support system for guiding and protecting the children. They have a safe and free space which helps them to stay calm and develop positive mindsets.
- Through sports scholarships and donations, more than 20 children have been able to attend good schools and afford to stay in school which is helping to improve their academic performance.
- There has been a boost in social involvement in the communities with the children's involvement in hockey being a unifying factor.
- The meals served at the hockey training session are a source of good nutrition and incentive for participation.
- The parents are now more involved in their children's lives by engaging with them in the communities' activities related to the children's participation in hockey.
- The children's confidence and mental health is significantly improving and they are able to have fun.

The recommendations of this report to increase impact per pre-selected area, are as follows;

Mental resilience of the participating sporters

- Consulting or involving professional assistance like a child psychologist on the topic of mental health.
- Educate the trainers about mental health.
    - Openly encourage active conversations about the children's mental health and psychology. Listening, supporting and engaging them in their interests can be a great way to keep them motivated.
- Use the captivating audience provided by hockey to explore and spread awareness on mental health.

School performance of the participating sporters

- Develop a step-by-step structural plan from an early stage for each child to help them to focus on specific goals.
- Take interest in the academic progress of these children and see that they are in a good place mentally and physically to attend school.
    - Organize extra tuition where possible to boost the children's performance and seek help from their teachers and parents.
- Continue to provide funding to support the children to attend school.

Social impact on the communities that the young hockey players come from

- Regularly attend events and hockey tournaments to encourage interactions with the community members.
- Keep supporting more children to attend boarding schools.
- The parents should be frequently and actively engaged in the activities of the KYHD foundation and encouraging them to support their children.

For the athletic development of the children, the Athletic Skills Model (ASM) needs to be applied to aid in successful step by step growth.

The methodology used in this study allowed the generation and collection of required information to determine the current progress and aid in discussions and decision making for the growth and development of the young athletes.

We applied Jean Piaget's Theory of cognitive development and Lev Vygotsky's Sociocultural Theory and the Zone of Optimal Development. The two theories explain the developmental psychology of children with focus on how they acquire, process and apply knowledge under different circumstances.

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1. Introduction

Every child has talent, but in Kenya too few children get the chance to develop it. Nor does every child have the healthy opportunity to play sports. Based on these observations, the Kenya Youth Hockey Development Foundation was established.

Through hockey, children learn that they can accomplish something on their own if they put in the effort. Through the competitive element of the game they learn to deal with loss and disappointment. These are important lessons you need in life.

After almost 10 years of dedication and joy, and last year's transitioning of the KYHD initiative into a Foundation with certified ABNI Status, we were asking ourselves the following questions:

1. *What is the impact of the youth hockey development initiatives that are endorsed by KYHD*
    a. *In the past;*
    b. *In the present?*
2. *How can the impact be improved or be increased in the areas of*
    a. *Mental resilience of the participating sporters;*
    b. *School performance of the participating sporters;*
    c. *Social impact on the communities that the sporters come from?*

These questions are answered in this report that was produced through powerful team effort from three organizations; Johan Cruyff College (Roosendaal), Curio Sports & Bewegen (Breda) and our Kenya Youth Hockey Development Foundation.

- **Chapter 2** briefs you about the **approach and methodology** that we applied
- **Chapter 3** paints the **context** of the livelihoods of the children that we support
- **Chapter 4** may inform you about everything you wanted to know **about KYHD**
- **Chapter 5** gives the relevant **theoretical framework**, as a complete report always does
- **Chapter 6** outlines the past and present **impact** that KYHD is making
- **Chapter 7 concludes** and gives **recommendations**
- **Chapter 8** is about **implementation**
- **Chapter 9** expresses our **acknowledgements and gratitude**

Ahead of your reading, we hope that our children may inspire you as they keep on motivating us to go on. This spirit is reflected in a quote from the youngest player ever, male or female, to win five master championships in golf:

> ***"I will keep smiling, be positive and never give up! I will give 100 percent each time I play. These are always my goals and my attitude."***
>
> ***Yani Tseng***

Erik van der Dussen, Founder Stichting Kenya Youth Hockey Development
Whitteney Nyabuto, Author of this report and delegate to JCC

Nairobi/Breda, August 2022

2. Approach and Methodology

The research focused on the past and present impacts of the KYHD foundation with interest to these subjects:

- History and development of field hockey in Kenya
- Sports psychology and the mental health of the young athletes
- Social and academic development of the children
- Sports development and management of the young athletes
- Involvement of girls in the sport

Research of articles, publications and other sources of information were tapped and implemented with consideration to the main questions to be answered.
We consider Mental health as a **state of balance**, both in the external and internal environment. Physical, psychological, social, cultural, spiritual and other interrelated factors participate in producing this balance. While mental resilience is related to the mind, it's a person's ability to change and adapt to uncertainty. Resilience means being able to recover quickly from something difficult that has happened. In this report, we are defining mental health as the children's (ages 4-16yrs) physical, emotional and social safety and stability while dealing with the various adversities they experience in their daily lives.

By conducting interviews, information on these subjects was gathered from trainers, community members, stakeholders, players, sponsors and supporters. The interview questions were designed with focus on the specific roles of the involved parties and the nature of their interactions with the young children and the foundation (1). A survey was also conducted on a group of 15 boys and girls who have been part of the program since 2014 for the purpose of performance analysis.

To get more detailed and expert perspective, consultations and discussions were continuously held with experts, athletes and educators from the Johan Cruyff college – Curio and other external expert associates on sports and developmental matters.

The impact of the program was weighed by studying the development of the children. The development was measured through various aspects of child development and their correlation with each other. These include but are not limited to the following;

- Academic performance
- Social behavior
- Mental health factors and,
- Other life milestones

This outcome was determined and measured according to Jean Piaget's *Theory of Cognitive development* and Vygotsky's *Sociocultural Theory* (2) and the concept of the *Zone of Proximal development* (3).
The two theories explain the developmental psychology of children with focus on how they acquire, process and apply knowledge under different circumstances. Both scientists suggested that children develop and make decisions according to the quality of knowledge they have and this is mainly acquired from their physical environment which in turn affects the mental.

KYHD's patrons avoid school drop-out of 2 top-talented girls



Brigit and Monicah are both very talented girls that participate in the youth hockey program. The one scores impressive school grades, the other has unparalleled hockey skills. They also have a humble family back ground in common, living with their family in a one room iron sheet in a shanty town.
To their own grief, the parents were not able to pay for secondary school fees when the girls reached age of 14. This would paint their lives black and fade out any perspective.
The problem was perceived by the girls' coaches and they reported it to the Foundation who reached out to its patrons that immediately stepped in to fund Brigit and Monicah's secondary school. The same weekend the team brought them to a reputable boarding school, after making sure that all needs were sorted: school uniform, books, bed linen et cetera.

They are now safe and sound, enjoying a happy life at school and campus with special attention of the Dean. And both continue to play hockey and … and they are already positively impacting on the school's performance in regional competitions.



My daughters involvement in hockey has enabled her go to high school, as the first in our family. If she would have stayed home she could have ended up badly. She could even get married at a young age or get pregnant. Thank you so much.

Catherine Njeri, mother to Brigit

She is my first born. It was a great relief for my daughter to go to a boarding high school and stay a way from a toxic environment. It has also helped the entire family. I strongly believe she will have a good future thanks to hockey.

Mable Alividza, mother to Monica



3. Context

3.1. Child Poverty in Kenya and how it impacts child development.

According to UNICEF, child poverty is the lack of access to or lack of availability of several basic needs, services or rights necessary for a child's survival and development. Poverty and low financial gains largely affect access to basic human needs such as quality healthcare, proper nutrition, education and shelter which in return inhibit personal growth (4). Child development refers to the biological, psychological and emotional changes that occur in human beings between birth and the end of adolescence. The development stage is the most crucial in human development since it greatly determines the nature of their adult lives. Adequate development of children is very critical to society and it is very important to understand social, cognitive, emotional and educational development of children. Understanding how situations that result from poverty affect the lives of young people can aid in developing helpful solutions. Most children who experience child poverty are exposed to many toxic stressors which contribute to teen problems. These situations include but are not limited to:

- **Low parental supervision:** Encouraging child development through parental care and supervision among other things contributes to excellent rates of child development. Lack of parental supervision leaves the children with responsibility over themselves and personal decision making without proper guidance. A lot of times the children will make choices based on peer guidance and their personal knowledge which in turn leads to involvement in crime, drug use and other undesirable outcomes.
- **Toxic living environments (crime, etc.):** According to Jean Piaget's Theory of cognitive development (5); adaptation to an environment is managed through a learning process and it occurs by assimilation and accommodation. The development of children mostly happens through social relationships. Exposure to childhood trauma and unfriendly living conditions can cause mental instability and poor achievement of various developmental milestones in children. Eventually, this results in disadvantageous conditions that limit opportunities to live fulfilling lives both as children and adults.
- **Domestic violence and abuse:** Due to lack of access to basic services and rights that are essential to child development, many impoverished children are frequently exposed to domestic abuse and violence towards them or people around them. Such experiences lead to child depression and as a result they develop unhealthy survival and coping mechanisms like aggression or social withdrawal (6).
- **Financial instability:** unstable living conditions, constant mobility, lack of access to basic needs; these can all result from financial instability. Material deprivation negatively affects development of children, especially teenagers. It can also result in low self-esteem and emotional stress.
- **School dropouts:** While poverty is associated with a lot of things, it contributes to a high rate of school dropout incidences among teenagers. Children from low-income households have a higher chance of dropping out of school. This can be a result of situations like shortage of school supplies, inability to afford tuition fees or psycho-social issues like drug abuse, bullying and unfavorable home situations. Also, most schools and academic institutions in the impoverished neighborhoods are severely underfunded. This makes it near impossible to provide conducive mental and physical learning environments for the children.

3.2. Field hockey in Kenya

For many years, the performance of the national team has been below par. Therefore, there is a great need to develop players from an early stage to change up how things are when it comes Kenya's hockey performance nationally and internationally. The program helps in the development of proper technique through psychomotor development of players from a young age. Currently most of the active players (4yrs-18yrs) are not playing at the national leagues' level but those who have previously gone through the program are playing with various teams and some are already in the Kenya national teams.

4. Sichting Kenya Youth Hockey Development

The Kenya Youth Hockey Development Foundation is providing a safe haven for children from the slums and low-income households of Nairobi to play hockey and escape from the hustle and buzzle of their everyday life.

Kenya Youth Hockey Development goes back to 2014. Erik van der Dussen from Breda moved to Nairobi for his work. Looking for a hockey club, he met coaches and former international hockey players who wanted to develop hockey talent on behalf of the Kenya Hockey Union and Kenyan hockey clubs. One of them, Tom Olal, had started a hockey initiative with only very few resources or materials. That soon changed, thanks to the generous support of the Breda field hockey community. That was the start of a beautiful hockey program that offers vulnerable children a chance to a better future. Since then, one thing led to another. You could also call it 'a circle of good'. In 2021 the initiative became a registered Foundation (7).

The Youth Hockey program caught the attention of the media quite soon, such as the Sports Show of K24.

< Scan QR-code to witness the interview.



BREDA HELPT NAIROBIZ

Hockey uitweg uit de sloppenwijken

Hockeystad Breda helpt kinderen uit sloppenwijken van Nairobi aan sticks en ballen.

Hockeyende straatkinderen uit Nairobi lopen warm.

Erik van der Dussen tijdens een training.

Trots showen de Keniaanse hockeyers hun hesjes uit Breda.

Erik van der Dussen verdeelt zaterdag de gebitsbeschermers die hockeystad Breda schonk aan hockeyende kinderen uit de sloppenwijken van Nairobi. Zijn broer Taco en diens dochter Francis hadden de beschermers, en sticks en ballen, meegenomen uit Breda.

The foundation uses hockey as a tool to develop talent and drive ambition in the young athletes' communities. The program has gained popularity among the hockey community and extended to schools, organizations and various supportive parties. A constant group of 200 Young boys and girls between 4yrs – 16yrs regularly show up for the weekly events at City Park Hockey Stadium, Impala Youth Academy and other venues.



Most of them are from slums and low-income households in Nairobi and its surrounding areas. As part of their development, the children get coaching for both sports and general life skills putting the focus on mental health, academic growth, physical health and social development with hockey as their stepping stone.

The past and present impact of the development initiatives that are endorsed by KYHD can be felt and observed through the athletes and all the parties involved.

KYHD works with supporters and partners from the Netherlands and Kenya. Supporters endorse KYHD financially, with materials, logistics and their expertise. Partners are the ones with whom we join forces to get everything done in Kenya.

4.1. Supporters

KYHD is blessed with generous and loyal supporters from The Netherlands, ever since it's inception in 2014. Hockey clubs, Teams, Companies and Individual sympathizers has enabled the program to structurally provide and renew gear, feed all participating children each week, solve medical issues, provide transport and offer secondary school scholarships.

We refer to the KYHD website for more details about supporters.

- From the start onwards: https://kenyayouthhockey.com/history/
- Right now: https://kenyayouthhockey.com/collaboration/

4.2. Partners

There are fruitful local partnerships with focus on the main projects that have direct impact on the lives and livelihoods of the children and their families. The main projects are;

4.2.1. Impala Hockey Academy (Nairobi)

This is a CSR project by Impala Sports Club: a social sports club which was started about 40 years ago and it provides facilities for many sports activities like hockey, rugby and tennis. The hockey academy started as a CSR program for the local community members. The visible hockey talent in the children from the Lenana HESA group and their desire to play motivated them to collaborate with and the Kenya Youth Hockey Development Foundation to support the children through hockey. The club provides safe, open and free access to their facilities for the children to play hockey and engage in other sports activities with compulsory adult supervision.



We wish to thank the Kenya Youth Hockey Development Foundation for the generous support towards our young boys and girls. Through the partnership the kids have been able to get a balanced meal every Saturday something that they cannot get at home. The foundation has fully equipped the kids (kits and gear).This has gone a long way to improve on the skills and safety of the kids. The foundation provides transport for the kids to be able to train every Saturday.

HESA Impala Hockey Academy

4.2.2. Kenya Hockey Union – LTAD Program (Nairobi)

The Kenya hockey union long term athlete development (KHU LTAD) program is about nurturing and developing athletes and not just about 'winning'. It accommodates athletes from the age of before 6 ye ars and train them during holidays and weekends in accordance with the structured curriculum. The program has the blessings of the Kenya Hockey Union executive who gave us the astro turf pitch at the city park hockey stadium facility

See (8)https://www.facebook.com/KHU-LTAD-Program-107835278361359/



The Dutch foundation through Erik Van der Dussen, has been a big pillar of support to the program. The foundation has provided sticks, shoes , balls, uniforms, goalkeeper equipment, feeding program among very many other support. We cannot thank the foundation enough. Kenya was once a hockey great in the world and these children will be the ones to take us back to that space. These athletes are our investment today .
KHU

4.2.3. OKOK Community project

The Project started with the support of the Dutch Hockey Clubs, Companies and Community through KYHD. Unique in the team is the cross sectional representation of children, parents and grandparents who transcend all walk of life in the village setting and the immediate impact to the community, school, and children who have embraced hockey and now have a chance to soar above the village life with broadened expectations given the community involvement in supply, cooking and serving meals

KYHD is the main facilitator and mobilizer of resources ensuring the programs requirements and budget are met therefore ensuring sustainability and value to the community and the children being the main beneficiaries.

4.2.4. Wazalendo Hockey Club, Nairobi

Since its establishment in 1995, Wazalendo Hockey club has always focused on the development of young players in the sport. The identification, mentoring and provision of opportunity to young talented players is the core of the vision of the club. Since its inception, the club has been recruiting young players from secondary schools across Kenya. The KYHD foundation is endorsing the Youth Hockey initiatives of Wazalendo Hockey Club by providing hockey equipment and welcoming the young players to hockey training sessions at the City Park hockey stadium. See (9) https://www.wazalendohockey.co.ke/wazalendo-young-player-development-ypd-programme-boost/

We want to sincerely thank you for the time you took to visit us at our training grounds and the donation that you made to us in the form of Uniforms, Hockey Bags, Shoes, Hockey Balls, Hockey Sticks and Hockey Grips. The availability of equipment is a key factor in the sport of hockey. This was therefore a timely and very welcome boost to our young player development program

Wazelenda Hockey Club



5. Theoretical Framework

5.1. Sports and poverty

As much as sports and athletic involvement is not an easy ticket out of poverty, it can provide avenues to acquiring necessary skill, support and guidance that can aid in the development and growth of the youth in poor communities. With daily struggles to make ends meet and generate enough income, many families in Nairobi, especially the slums, cannot afford to invest in sports and other recreational activities. Therefore, children living in poverty are less likely to participate in sports compared to their peers. Some of these children have great talent that is not practiced and by default they are excluded from academic scholarships, sponsorships and other opportunities that can propel their growth. According to a study by Professor Grant Jarvie (10) children born into poverty are 50% more likely to miss educational milestones. Combining the popularity of sport with well planned and executed education through sport interventions and sports programs that are tailored for impoverished communities is not only a solution but an important part of a solution. Build other things around it, sport can be a resourceful avenue out of difficult circumstances. For some it can be an escape from poverty. Like everything else, sports are not only something all children should have the chance to experience but also the right to learn.

5.2. Mental health in children and young adults

Mental health includes emotional, psychological and social well-being and it influences cognition, perception and behavior. Cognition is the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses**.** The way a person handles stress, relations with others and decision making is largely influenced by their mental health and vice versa. This may also include how a person enjoys life and how they create a balance between life activities and efforts to achieve psychological resilience. According to scientific studies, mental instability attributes to approximately 16% of disease and injury in people between 10-19 years of age and most cases go undetected and unrecognized. On average, depressive disorders in children start occurring between 11-14 years of age and quite often, these issues are either unrecognized in children, unattended or wrongly handled. The adolescent brain is extremely flexible and absorbent because it is still developing. Therefore, it can be affected by extreme situations and stress. Research has shown that sports contribute a lot to mental health of children, especially adolescents (11). Apart from physical engagement, sports are a great aid in relieving physical and mental stress (12). One way of getting physically active is through organized team sports in schools and some group or community activities such as hockey, soccer or basketball. Depression rates are lower for those children who play sports with coaches and/or parents being key supportive individuals.

In a study to examine the relationship between participation in sports during teen age and mental health in early adulthood, (13) where 853 adolescents reported to have participated in school sports throughout high school, it was determined that **participating in school sports may protect against depression in early adulthood. The research found that involvement in school sports during adolescence was a statistically significant predictor of lower depression symptoms, lower perceived stress, and higher self-rated mental health in young adulthood.** See; School sport participation during adolescence and mental health in early adulthood - PubMed (nih.gov)

5.3. Sports & Academic development

Sports contribute to both formal and informal education in many ways. Access to sports can alter chances in life and advance educational achievement. Physical activity can greatly impact cognitive skills and attitudes and academic behaviors which are very important factors in academic performance. Scientific evidence suggests that physical activity activates the allocation of cognitive resources and promotes faster understanding and processing of knowledge by increasing brain activity (14). Also, physical activity can promote brain cell stability and eradicate the negative effects of stress on the body (15). There is a direct link between physical activity and cognition. These include improved concentration and attention as well as better behavior in the classroom. These enhancements in turn are directly related to the core of academic ability and its manifestation in grades and test scores. For example, a multiple regression analysis of 4,746 middle and high school students in America found that increasing students' physical-activity levels from less than 2.5 hours per week of moderate-to-vigorous exercise to 7.0 hours per week was associated with 5.7%–9.1% increases in students' grades. Other observational analyses have consistently found that increases in physical activity are directly associated with improvements in academic performance (15).

At the same time good athletic performance has earned many poor but academically excellent students, scholarships and sponsorships to world class universities and colleges. This serves as a motivation factor to drive high academic achievements in other student athletes.

5.4. Theories of child development

This research was focused on the various ways that the activities endorsed by the KYHD foundation impact on the growth and development of the children. The goal is to enhance the children's mental resilience and instill desire for success and achievement hence Jean Piaget's *Theory of Cognitive development* and Vygotsky's *Sociocultural Theory* (2) and the concept of the *Zone of Proximal development* (3) were considered.

5.4.1. Piaget's Theory of cognitive development

Jean Piaget was one of the most influential researchers during the 20th century because of his work in the areas of developmental psychology. Also known as the Developmental Stage Theory, Piaget's Theory of Cognitive Development is a comprehensive theory about the nature and development of human intelligence. He described cognitive development as a progressive reorganization of mental processes which is a result of biological maturation and environmental experience. The theory focuses on the nature of knowledge and how human beings gradually acquire, construct and use it. Piaget believed that children of different ages make different decisions and behave differently because of the quality of knowledge they have and not the amount of knowledge they possess. From this, he proposed four stages that describe the development of children with each stage describing a specific age group and how children develop their cognitive skills in each stage (5).

- **Sensory motor stage (infancy):** in this stage intelligence is motor activity (movement) without use of symbols. The has limited knowledge of the world because is based on physical interactions and the physical mobility helps the child to develop new intellectual abilities.
- **Preoperational stage (early childhood):** intelligence is demonstrated through the use of symbols; language use matures and memory and imagination are developed but thinking is done in nonlogical unreversible manner.
- **Concrete operational stage (elementary and early adolescence):** intelligence is demonstrated through logical and systematic manipulation of symbols relates to concrete objects. Mental actions at this stage are reversible and egocentric thoughts diminish.

- **Formal operational stage (adolescence and adulthood):** intelligence is demonstrated through logical use of symbols related to abstract objects with return to egocentric thinking in the early period.

He believed that children create an idea of the world around them, internalize the differences between what they know and what they discover in their environment and then adjust their opinions accordingly. Many pre-school and primary school programs are modeled on Piaget's theory since it provides part of the basis for constructive learning (16). This theory focuses on the processes of assimilation and accommodation. Assimilation refers to how people receive and process new information and it occurs when one comes across new or uncommon information and refers to previously acquired knowledge in order to understand it. Accommodation is the process of taking new information in one's environment and altering the pre-existing information in order to fit the new one and this happens when existing knowledge is no longer relevant and needs to be changed to deal with a new situation or object. Assimilation and accommodation are co-existent. Growth increases the balance between the two functions and stimulates mental development.

5.4.2. Vygotsky's Sociocultural Theory and the Zone of Optimal Development

According to Lev Vygotsky's sociocultural theory, social interactions are the primary source of cognition (learning) and behavior. To further develop Jean Piaget's theory about children being lone and autonomous learners (17) he created the Zone of Proximal Development (ZPD). Vygotsky's Zone of Proximal Development is the difference between what a learner, in our case a child, is capable of doing on their own and what they can do with support and guidance. It is the range where they are only capable of achievement only with support and supervision from someone with more knowledge and experience; the extent to which children can rapidly develop under guidance compared to when they are alone. In this zone a child will only learn when they are assisted by a teacher or a peer who is more knowledgeable and experienced compared to them and they cannot complete the process of learning without guidance and support. This guidance is needed until the child learns to do the particular thing by themselves and attains independence. Any activity within this period of learning and development matures within a particular internal context that includes not only the activity's actual level but also how susceptible the child is to types of help, how this help is offered, their mindset and formed stereotypes, how willing the child is to collaborate, social behavior and other factors (18). This alone can affect the level to which knowledge and learning develops.

6. Past and present impact of KYHD

For 8 years now, the KYHD program has been providing a safe and reliable environment for children from Nairobi and its surrounding regions to play hockey and explore other avenues of sports. Directly and indirectly, the program has been, and still is, impacting the development of the Kenyan youth and this is aiding in the achievement of various milestones that are instrumental in the development of children and young adults.

6.1. Mental health

As a result of their home environment, most of the children are timid, fearful and emotionally closed off. These children are frequently exposed to toxic environments hence they develop coping mechanisms by either being physically aggressive and defensive or withdrawing from social and peer interactions. With constant effort and involvement from the trainers and volunteers at the KYHD program their mental health improves gradually. They become more expressive with better communication skills and their confidence levels improve. With the trainers, the children feel safe and cared for. However, it takes time to build trust and confidence with the children for them to freely approach and open up to the trainers. Also, the people who are available for these children are not properly equipped in the areas of mental health and child psychology. Despite this, they still make efforts to see that the children are sufficiently taken care of in all aspects.

6.2. Academics

6.2.1. Performance

Academic achievement is one of the major developmental areas of focus for the KYHD program. The children's academic performance has been ranging from excellent to below average with most of them rating at average and below average. From recent school assessment tests results, there have been observable improvements in the academic performance for most of the children. Efforts are being put in to support better performance from these children.

6.2.2. Attendance and classroom behavior

The rate of school attendance for the children has been gradually improving. The teachers also report improvement in classroom behavior with increased attentiveness and participation. However, some children often miss school or are unable to fully participate because they don't have tuition fees, required stationery and textbooks, low or no supervision from parents and other circumstances that affect their ability to properly access education.

6.2.3. Affordability and academic achievement

The sponsors and well-wishers of the KYHD program have previously provided funds and scholarships to support the education of the children. This has significantly contributed to better academic achievement for the children who benefit from the funding. A bigger number of the children manage to attend high school in good boarding schools which they could otherwise not afford or opt to drop out of. Seeing many of the older children pursue education beyond secondary schools and develop careers is a motivation for the younger children to put more effort into academic achievement.

6.3. Social impact

Comparing to when they are new to the program, the children's social skills keep improving with their continuous involvement. New and healthy relationships with each other and with the trainers are born. In the past, this has led to new and very long friendships. At the same time, they develop communalism and responsible behavior which is mostly exhibited through the way the older ones teach and care for the younger children both at the hockey sessions and out in their communities.

- At the start, most of the kids were not very keen on etiquette, but as we have progressed, words like thank you, please, excuse me have become common among them. They are keener on basic etiquette, showing the behavioral impact the program is having on the kids.
- The program also looks to have positive impact on the socio - cultural aspect of human development of the children who come from different social, religious and family backgrounds. They learn to coexist beyond their differences and see each other as human beings and brothers and sisters which is a basic aspect of human civilization. In some cases, this has had a domino effect in the communities where the children come from. The newly acquired friendships and similar interests are driving positive peer influence.
- Gradually more and more parents are accompanying their children to training. This for us adds to reinforcing the family unit.

6.4. Health & Nutrition

The Foundation has a feeding program for the kids after training. Some of the kids do not have the resources at home to afford decent meals. By coming to training, they are assured of a proper and nutritious meal.

6.5. Development of girls through sports



The girls are actively being involved in the sport and other activities and the rates of them dropping out have recently declined. They are fewer and less consistent compared to the boys which also makes their hockey skills level a bit lower. Some are stopped from playing by the parents, others drop out because they cannot financially afford to play after graduating from the KYHD program. Despite this, many others stay motivated to keep playing. Keeping the girls engaged in the sport contributes a lot to their personal development especially academically through hockey scholarships and sponsorships. This has helped them to become more ambitious and develop a broader perspective of life. There have been cases of dropping out of school and the sport due various reasons including;

- Lack of tuition fees
- Early pregnancy
- Peers' pressure
- Unstable and toxic living environments and unsupportive parents
- Menstrual health

6.6. Challenges

6.6.1. Parental involvement

In most incidences, the parents are either absent, uninterested or negatively involved in the development process of the children. Some parents stop the children from attending hockey sessions either because they think the sport is dangerous or it is a waste of time that could be otherwise spent studying. In some cases, the parents are absent and uninterested in the development of the children which leaves the children unsupervised and not fully supported.

6.6.2. Toxic and unstable living environments

In their living environments, the children are exposed to a high crime rate and immorality. Some children do not have a stable home to live in, therefore, they are constantly moving homes and living with different relatives. With constant incidences of abuse, domestic violence and alcoholism among parents and guardians these children do not have to stable and reliable support structures at home which makes them very vulnerable. Also due to financial constraints in the families, some children, especially the girls, are used as extra manpower for their parent's unorthodox business ventures to bridge the financial gap. These, among other toxic stressors, result in unhealthy home environments which heavily affects their mental health.

6.6.3. Accountability

The Partner-projects are run in good faith with their management to keep quality, focus and impact per player. The number of participants per project should be at a maximum but can grow 'out of hand' because of the popularity of it or for other reasons. Moreover, transparency that we expect from our partners is not always met and can therefore diminish trust.

7. Conclusions and recommendations

According to the trainers, coaches and community members who interact frequently with the children it is evident that the KYHD program is impacting them positively. There is clear and observable wholesome development in the lives and personalities of the young athletes. The shift in their mindsets is driving desire and will to learn and develop further.

The children are constantly in limiting environments and situations. With reference to Piaget's Theory of cognitive development, they are required, by default, to develop behaviors and mindsets that will help them to accommodate and assimilate to these living situations which in turn affects their mindsets. The kind of knowledge and social interactions that these children have access to limits their develop to specific levels. This is because their mindsets are mostly limited to copping and survival mechanisms like aggression and timidness. They do not have the courage or mental resilience to push beyond the unfamiliar ideologies (safe zone). Consequently, to successfully spread and improve the impact of the KYHD foundation much needs to be done. It is important to consider Vygotsky's Sociocultural Theory and the Zone of Optimal Development by providing sufficient support and guidance for these children to help them in developing the courage and mental resilience to embrace independent thoughts and have a positive perspective of life. Since this cannot be achieved overnight, the support and guidance provided through KYHD needs to be continuous and consistent until the desired goal is achieved.

7.1. Education and academic achievement

- Academic achievement is considered the main measure of personal development and is a major tool of competition. The children who perform well academically are more confident and respected by their peers. It also plays a big role in how one will pursue and achieve life's milestones (finance, career, social status, etc.). In a society where academic excellence is a priority, poor performance and low academic achievement is a limitation to the children's growth and development.
- Among other things, constant underperformance mentally demoralizes the children. Developing a step-by-step structural plan from an early stage for each child will help them to focus on specific goals which will make the development easier and consistent (19).
- Sometimes the children are forced to miss school when they cannot afford tuition fees and school supplies.
- Most of the children attend public schools which are underfunded (4). As a result, the children have trouble getting necessary paraphernalia for learning because the schools cannot sufficiently provide them. These shortages are mental stressors that get them off focus and into poor performance.
- It is important to take interest in the academic progress of these children and to see that they are in a good place mentally and physically to attend school. Sports scholarships and other means of providing school supplies can be a great help.
- Listening, supporting and engaging them in their interests can be a great way to keep them motivated and boost their abilities to perform well (18).

7.2. Mental health and mindset development

- The topic of mental health is not discussed freely and often because of the societal stereotypes about mental health. Deliberate efforts are being made but the KYHD team is not well equipped in the area of mental health.
- Conversations about mental health and child psychology need to be encouraged and supported.
- Hockey provides a very captive audience of both children and directly involved adults. This is something that should be taken advantage of to open the conversation and spread awareness.
- The coaches, trainers and volunteers provide a reliable support system for the children. They need to be well informed and educated on the field of mental health and child psychology so that they are better equipped to take care of themselves and the children.

7.3. How to help the children to develop mental resilience

- The children should be encouraged to ask for help and guidance at all times. Engage them in their specific areas of interest so that they know that at least someone cares.
- Opportunities to interact with the right sports and life mentors and role models e.g., national team players, should be made possible by inviting them to the training sessions or letting the children watch league matches. This will teach them that nothing is impossible.
- Strongly encourage and teach the children to speak up against bullying, abuse and harassment towards them or their peers and discourage social interactions with misfits.
- The trainers and coaches should use more compassionate and corrective methods instead of the commonly used authoritarian and punishing methods to teach and guide the children.
- The children should be encouraged to have fun and make mistakes as the process of learning. This can be done by engaging them in other activities and exercises in addition to the hockey training.
- Changes in personal and social behaviors should be addressed immediately they are noticed.

7.4. Healthcare, nutrition & personal hygiene

- Getting access to good medical attention is a big problem for most families of the children. It is either not well planned for or expert services are too expensive. The Kenyan government provides a public health fund/insurance (NHIF) and each family can subscribe to an insurance plan. However, some families cannot afford this. There needs to be a reliable plan for medical care for such cases and emergency situations.
- Period poverty is a big problem among the girls. Adolescent girls and cannot afford tampons, sanitary towels and other personal care items during their menstrual cycle. For this reason, they constantly miss school and hockey training sessions. Also, the inability to properly take care of themselves during this time puts them at risk of contracting infections which is a health risk. Providing them with these critically important items will not only boost their confidence but it will also make it possible for them to normally participate in hockey and school.
- The meals that are provided at the hockey training sessions are a big addition to the children's nutritional requirements. However, we also need to encourage and promote personal hygiene among all the children to boost their physical health.
- Parental involvement
- Parents and guardians are the most basic support structure in a child's development. Obedience and respect for authority is highly encouraged and parents are the first line of

authority in these children's life. This leaves the children in a conflicted state of mind when their parents do not support their interest of playing hockey. This conflict of interest is a mental stressor that interferes with their ability to perform well.

- Lately many of the parents have become keen to allow their children to attend the hockey sessions because they are confident that the children are in a safe environment. Also, some parents who were not present for their children have started showing interest and getting involved in the children's activities.
- The parents should be frequently and actively engaged in the activities of the KYHD foundation. Involving them in the routine activities and conversations will keep them in the picture and encourage them to support their children.

7.5. Social impact

- By playing hockey, the children get a chance to get out into a different social and physical environment. This has helped them to have a different view of life from what they are used to.
- As Vygotsky theorized, social interactions are the primary source of cognition and behavior. The achievements of the children through hockey are having a placebo effect in the communities where they come from. Their achievements positively rub off on other people and in occasion, the communities organize events to celebrate these children. This open appreciation should be embraced because it motivates the children to do better (20).
- Since the community members regularly attend hockey tournaments where the children play, we should take this and the organized events as a chance and opportunity to interact with the children's environment which can help to understand their experiences better and how to help further.
- The academic scholarships help the children to go to good boarding schools. This gets them away from the home environment and gives them an opportunity to experience life from a different environment that is safe and diverse.
- The interactions among the children are positive and healthy. They genuinely care and show concern for each other. The program is bringing a lovable sense of belonging and communalism to the extent that when someone misses training, they take personal initiatives to find out what they missed from their friends and peers.

7.6. Management & development of athletes

- Management and development of the athletes should be done with specific coaching goals. The Athletic Skills Model (ASM) should be thought and implemented in the process.
- There's immense talent amongst these children that needs to be uncovered. When they first show up for training, it looks like just a formality or a trial scenario but as they continue to train, they quickly discover that they can actually be good players and fall in love with the game. This is explained by the consistent numbers at training sessions with every session being a learning opportunity and a source of motivation to further develop their athletic abilities.
- The coaches take keen interest on the general development of the kids and are eager to find out how the kids are doing at home and in school. They are equally quick to correct unbecoming behavior and the parents notice the change in their kids, according to the feedback we get. Hockey is for life and not only in the field, and so the program is keen to eventually deliver an all-round person.
- A happy kid grows into a useful and happy adult. It's not worth it if there is no fun in it. The program is keen on the players enjoying their time on the field. The training sessions are fun

and engaging with intent to help them learn more and get their minds off whatever difficulty they have at home or school. This way, the program is a safe haven for the young athletes.

8. Implementation

8.1. Approach

We have extracted a series of initiatives from the previous chapter. These are the basis for implementation to make an increased impact.

The foundation should reach out to new and existing supporters to realize these (clustered) projects. For example: leverage CSR programs and partnering with hospital(s) to solve the issue of healthcare for the children. Or request a large distributor of stationary goods to donate school materials. NGO's that care for the children's wellbeing in general or girls specifically may find good reasons to step in.

But first of all, the partnership of Johan Cruyff College and KYHD - with this report as the first deliverable - is an opportunity to take the Youth Hockey development program to a next level.

JCC/Curio Opleidingen could send a delegation of students and tutors with relevant expertise to Kenya to help launch initiatives in the area of mental resilience/metal health.

The preparation of such a field trips and its execution including plenty of engagements with trainers, coaches and our young sporters, should be a huge and unforgettable learning experience for the students. Hopefully it will also inspire tutors to apply their skills and knowledge in a place where it is much needed.

For the purpose of budgeting and decision taking we will define a project outline.

8.2. Initiatives

Area I		
Increase Mental Health/Resilience		
#	Initiatve	
A1	**Involve a child and/or sport psychologue in the KYHD organisation for advice and guidance**	
A2	**Courses for the coaches & trainers about child mental health and sports psychology**	
A3	**Embedd Mental Health. mental resilienec as a structural goals in the program, by:**	
	>	Conversations with the children about their problems and how to deal with them
	>	Scheduling mentally and physically stimulating fun activities to train the children on resillience
	>	Closely monitoring of behavior to identify and solve problems
	>	Organise for back up professional support if the traner-coaches lack capability to solve problems
A4	**Interventions to keep the adeloscent girls in their personal comfort zone**	
	>	Provide the girl players with sanitary towels and other personal hygiene products
	>	Sex education especially for the girls to be able to identify abuse, protect themselves and ask for help.
	>	Medical checks when needed
A5	**Arrange for basic health insurance of the core group of participating young atlethes and their families**	
A6	**Generally encourage and promote proper hygiene among the children**	

Area 2		
Improve School Performace		
#	Initiatve	
B1	**Develop an academic guidance program for the children that engages their goals and interests to keep them focused**	
	>	Collaborate with deans and school teachers to provide extra tuition and monitor academic performance
B2	**Endorse and facilitate secondary (boarding) school scholarships; and (very) sure that the granted boys and girls are guided**	
B3	**Provide in small needs that could affect school participation badly if not available**	
	>	Primary schoolfees that frequently keep the children out of school
	>	Providing exercise books, stationary and other school items for those in need

Area 3		
Enlarge social impact on communities		
#	Initiatve	
C1	**Organise or attend tournaments and community events**	
C2	Ensure the positive involvement of the parents in the children's development process.	
C3	**Involving parents in conversations and decision making through monthly meetings or social groups**	
	>	Dedicate some sessions to discuss healthy social relationships, communalism and ppersonal development

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Other stakeholders

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Ends