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Starkick Project Report

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Picture: Tony McDonough, Woman's Day Starkick Feature June 2015

Executive Summary

It is known that children with disabilities are more restricted in their sports participation, have lower levels of fitness, and have higher levels of obesity than their peers without disabilities. We report on the physical and psychosocial benefits to children with disabilities and their families who participated in an all abilities football program called 'Starkick'. We gathered data from 60 children and 20 parents enrolled in the program in 2017 across three metropolitan sites. We measured physical benefits, such as strength, fitness and agility; psychosocial benefits such as perceived self-competence and enjoyment of physical activities; as well as impact on participation levels in the home, school and community. We took a goal centred approach to measuring changes and gathered qualitative information on consumer satisfaction on the way Starkick was delivered. Our findings showed that participants of Starkick tended to have high levels of self-esteem and enjoyment of physical activities. Most of the children showed improvements in at least one physical aspect assessed. Many children achieved the goals that parents identified for them from participating in the program. Participation in a season of Starkick resulted in attainment of participant identified goals including inclusion, improvements in physical condition, interpersonal and social skills and engagement in sport. There was a high level of satisfaction with the program and how it was delivered. In addition, our results demonstrated that Starkick and the way in which it was delivered enabled children with disabilities to participate more in the lives of their families and communities. Most feedback for improvement centred on requests for more knowledge and awareness of other inclusive sports and recreational opportunities for children with disabilities, and consideration for increasing some of the focus of the program specifically to the social aspects of playing team sport.

Background

Participation is defined by the World Health Organization's International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY) as 'involvement in life situations' (p.9).[1] It includes activities of self-care, mobility, socialization, education, recreation, and community life. A recent more contemporary view of participation is to consider participation as a family of Participation Related Constructs (fPRC) that includes both attending and being involved in life situations.[2] Participation in activities is important for people with and without disabilities as it is the context in which people form friendships, develop skills and competencies, express creativity, achieve mental and physical health, and determine meaning and purpose in life. [3,4]

Children with disabilities have lower participation rates in organised sport and recreation compared to children without disabilities.[5,6] This gap in participation in organised sport between children with and without disabilities widens as children become teenagers and adults.

The benefits of physical activity are universal for all children, including those with disabilities.

Children with disabilities have lower levels of physical activity and fitness compared to children without disability.

Children with disabilities have lower participation rates in organised sport and recreation compared to children without disability.

Enabling the participation of children with disabilities in sports is important because of the health related benefits from the physical activity opportunity it affords.

The World Health Organisation global recommendations for physical activity and health state that:

- Children and youth aged 5-17 years should accumulate at least 60 minutes of moderate to vigorous-intensity physical activity daily.
- Amounts of physical activity greater than 60 minutes provide additional health benefits.
- Most of the daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week. [7]

A Western Australian survey into physical activity levels of children with disabilities identified that only 50% of children/adolescents with disabilities performed sufficient physical activity to meet the recommended Australian guidelines. Activities were primarily home-based and involved unstructured free play. In addition, participation rates in physical education and organised sport at school were also lower than that of their typically developing peers. Whilst parents were aware of the benefits of physical activity and participation in sports for their child with disability, suitable programs were hard to find.

"*We do make an effort to provide physical activity that our child enjoys such as swimming, bike-riding, walking and playing in the park. We would just love him to be able to participate in a team type activity if there was some modified version that he would be welcome to participate in and be able to learn some skills in - where are these for our children?"* (Parent, PASCAD 2006).

To encourage physically active lifestyles, recommendations have been made for children to be given exposure to a broad variety of physical activity and sports during early childhood to increase the chance of finding activities the child enjoys.[8,9] Increased physical capacity and physical activity during childhood has also been linked to physically active lifestyles in adulthood.[10-12]

A recent review has highlighted that fewer children with disabilities than without disabilities participated in team and non-team sports, and many children reported not

participating in their preferred activities. A significant barrier is lack of a suitably supported sports activity for children with disabilities. [13]

Physical benefits aside, there are also important psychosocial benefits of participation in sports related activities and belonging to a team. Typically developing children who engage in team sports learn to develop self-discipline and decision-making skills and to work within the rules of the game. They also acquire team work and negotiation skills that may transfer to educational and other settings.[14,15] The same psychological and social skills are important in the development of children with disabilities, and the concepts of "fun" and "friendship" should be embedded in all types of physical (re)habilitation programs to enable children with disabilities to participate fully in school and community life.[16] Children with disabilities are more likely to participate and persist in organised team sports if the sport is of their choosing and therefore perceived to be more enjoyable than sports chosen by their parent or therapist.[13]

Currently, there is limited research in the benefits of sports participation of children with disabilities.

The rationale

In 2016, researchers from Curtin University and Ability centre were asked by Coolbinia Bombers Football Club to conduct research into Starkick, an all abilities Football program that the club initiated for children with disabilities. The football club required assistance in quantifying the benefits to the children and was looking at ways that they might improve the Starkick program.

Two years ago, Curtin University School of Physiotherapy and Exercise Science and Ability Centre, provided inkind time and resources to conduct a small pilot project to determine the feasibility of field measures. Forty-two children with disabilities between the ages of 5-12 years registered to participate in the 2016 Auskick season. Consent was obtained from parents and data were collected from 13 participants (1 female) within a two week time period. The assessments that could be collected included physical fitness, football specific skill attainment, perceived self-competence, participation measures, quality of life and enjoyment. The study gave insight into participation levels of children with disabilities across the different environments of home, school and community. Level of participation

frequency (how often) and involvement (how much) was lower in school and the community than in the children's home environments. The level of enjoyment of Starkick was high but scores of physical related competence were relatively low. We were able to determine that field measures of fitness and agility could be collected during training sessions and these were lower than published findings on their typically developing peers.

What this pilot project also highlighted was that Starkick may provide a platform to intervene to improve physical capacity, perceived self-competence and physical fitness of children with disabilities. The effect of gross motor skills or activity capacity on the child's overall frequency and diversity of participation has been found to be significantly mediated through what they really do in day-to-day life or their activity performance. [17] With the addition of some strategies to the program, Starkick can be adapted to also target increasing participation into the school and broader community environments for children with disabilities. It was not unreasonable, therefore, to expect a cyclical relationship between physical activity performance in Starkick and health related outcomes including fitness, musculoskeletal health, as well as psychosocial and general well-being, as well as improved participation across other domains and environments.

Therefore, *the primary aim of this project was* to measure the changes in the physical and psychosocial health of children with disabilities who participated in the 'Starkick' program: specifically, children's fitness (anaerobic, aerobic, and agility), level of physical activity (including intensity), football skill attainment, participation, and enjoyment in physical activity. *A secondary aim was* to assess whether these changes improved participation in other environments, namely school, home, and community. *A tertiary aim was* determine potential barriers to participating in the program, through qualitative data collected from participants and parents who chose to drop out of the program prior to the end of the season.

We hypothesized that participation in modified sport would have significant positive impact on both physical and psychosocial outcomes and the positive benefits attained from participation in community sport would translate into increased participation in the school environment.

The Starkick Program

'Starkick' is an all abilities football team founded and launched by the Coolbinia Bombers Junior Football Club in 2015. The 'Starkick' program welcomes boys and girls between the ages of 5 and 12 years of all physical and cognitive abilities. The program promotes inclusion, equality and opportunity and runs as an integral part of the club's Auskick Centre. Starkick caters for children who by circumstance or choice are unable to join in the club's existing football programs. Children who may need extra support or time to achieve their goals are supported by a team of volunteers. Starkick aims to cater for all disabilities and runs by a simple mantra –"If you want to play we will find a way".

Starkick is conducted in the same format as Auskick. Each session consists of AFL skill training, such as handballing, drop kicking, catching and running. This is conducted in small groups for approximately 40 minutes. This is followed by a game on a "field" approximately 25m long and 15m wide with goal posts. The children have an opportunity to play in different field positions, so every child has an opportunity to play in the forward line to score a goal, centre to run the ball through the field, or in defence to save goals. As most of the children require assistance with physical skills or positioning on the field or decision making, there are several volunteers who also "participate" in the game.

Study design and setting

This was a cross-sectional study using mixed methods including standardized questionnaires, qualitative methods and field based physical measures. This study used a before-after repeated measures design. All field based measures (physical assessments) were collected as part of the Starkick training program, at the three metropolitan based football clubs running the Starkick program in 2017. These were Coolbinia Bombers, Joondalup Jets and East Fremantle Sharks. The Starkick program consisted of weekly sessions conducted during the Australian Rules Football season between May and August with a break for school holidays inbetween. The maximum number of sessions available was 12 at East Fremantle and 14 at Coolbinia and Joondalup.

Participants completed a full battery of assessments of their cardiorespiratory fitness, agility, functional strength, physical activity levels, and paper survey's assessing participation levels, enjoyment of physical activity and self-perception. Participants were assisted in determining physical activity/participation specific tangible and measurable goals which could be attained, or towards which significant progress could be made, within the Starkick season.

The two key assessment time points measured during the 'Starkick' football season were within the first three weeks of the 'Starkick' football season (assessment 1) and then in the final three weeks prior to the completion of the 'Starkick' season (assessment 2).

The field based measures were taken during training sessions at each respective club. Participants were tested before, during or after the Starkick sessions to minimize interference in the Starkick program. Assessments were performed by the research team, Curtin University Physiotherapy Honours students and student volunteers from the Curtin School of Physiotherapy and Exercise Science. All assessors were familiarised with the assessment procedures.

Questionnaires were completed by parents and participants either during, or after the Starkick sessions or parents took the questionnaires home with an addressed and stamped return envelope.

Two research assistants were employed for the duration of the Starkick season to record attendance at the weekly sessions and to populate a coach's log of activities that occurred from week to week in the Starkick training sessions (see Starkick Coaches Resource, pages 24-52).

An exit/completion interview was conducted at the end of the 'Starkick' season with 20 randomly selected parents/carers of 20 participants. Interviews were conducted via phone

and questions related to parent/carer perspective of the program and their intention to re-enroll next season (Appendix 1: Parent Completion Interview Questions). If participants decided to withdraw from the 'Starkick' program prior to the completion of the season, one additional question pertaining to their reason for leaving the program was asked: "What were your reasons for leaving the program?"

Participants

Eighty two children enrolled in the 2017 Starkick program of which 53 (62%) consented to participate in the study (47 males, 6 females, mean age 9.2 years, [SD 2.32]). Twenty-five participants attended more than 10 sessions with 28 participants attending 10 or fewer sessions.

Eighty two children with disabilities enrolled in the Starkick 2017 season.

A range of disability diagnoses were represented in the enrolled participants which included Autism Spectrum Disorder (24), Cerebral Palsy (8), Down syndrome (5), Hypermobility (1), Vision impairment (4), Attention Deficit Hyperactivity Disorder (2), Spina Bifida (1), Tuberous Sclerosis (1) Developmental Coordination disorder (1), Epilepsy (1), and one participant who was typically developing but lacked confidence to participate in mainstream sport.

Results

The coach's log was developed into a coach's resource and this is attached to this report.

Forty-one participants completed both pre- and post-assessments of the physical measures (38 males, 3 females, mean age 9.01, [SD 2.25]) of which 33 completed all physical measures. There were variable subsets of completed pre

and post psychosocial measures. Twenty six participants had pre and post goal assessments; 14 had completed pre and post self-perception assessments; and 24 had completed pre and post physical enjoyment assessment. Twelve families completed the pre and post Participation and Environment Measure for Children and Youth (PEM-CY).

Participation in Starkick results in physical benefits

Over 80% of participants improved in at least one of the physical outcomes assessed.

Of the 41 participants enrolled in the Starkick study, 32 **(81%) improved in at least one of the physical assessments measured**. The majority of improvements were in anaerobic fitness (62% of participants improvement) and agility (58% of participants improved). Analysis of group results also showed statistically significant improvement in anaerobic fitness. Both anaerobic fitness and agility develop from short fast sprinting type activities. This finding of improved anaerobic power and agility is in keeping with the type of activities that were conducted in the Starkick program which involved activities that required the Starkickers to turn, sprint and change pace during activities and games (as detailed in the Starkick Coaches Resource).

Starkick improves anaerobic fitness and agility which is in keeping with the type of activities that were conducted in Starkick that required the children to turn, sprint and change pace during activities and games.

Participating in community sports programs can improve participation in school and community environments.

Participation restriction in children with disabilities is reported to occur across school and community environments. [18] We wished to determine if participating in a community based sports program improved participation in other environments such as the home or school. We measured participation across these environments using the Participation and Environment Measure in Children and Youth (PEM-CY). [19] The 25-item PEM-CY assesses a child's participation in broad types of activities in the home (10 items), school (5 items),

and community (10 items). For each item, parent's assess three dimensions of their child's participation: (1) frequency (8-point scale from never [0] to daily [7]); (2) level of involvement (5-point scale from minimally involved [1] to very involved [5]); and (3) their desire for change in the child's participation (yes or no; if yes, is change desired for frequency, level of involvement, and/or involvement in a broader variety of activities of that type).

The frequency of participation and level of involvement in activities at the start and end of Starkick are shown in the Figure 1.

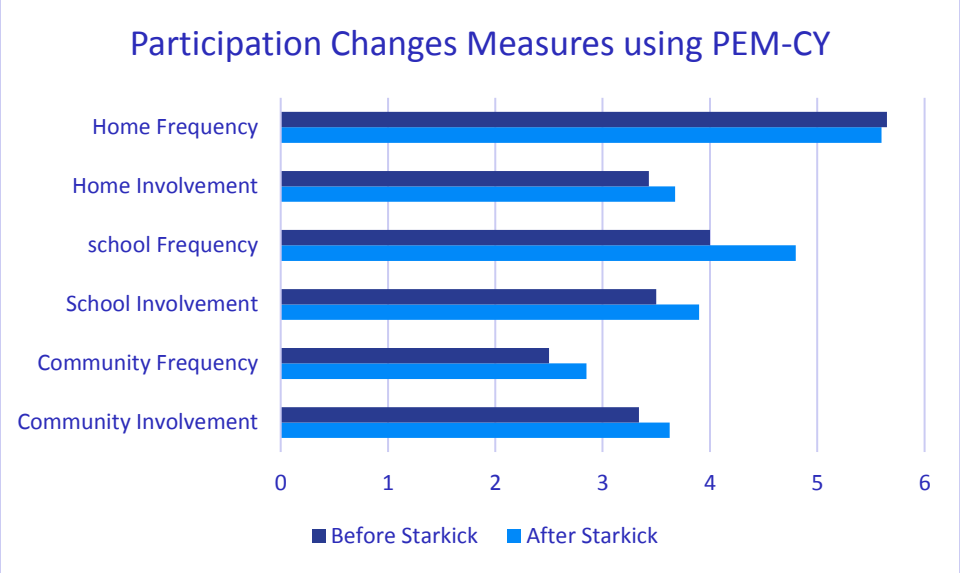

Figure 1. Participation of children involved in the 2017 Starkick season

On average, the number of activities and frequency of participation, and involvement in the home environment was quite high for children with disabilities and this remained high at the end of the season.

Participation in the school environment was lower than the home environment, and participation in the community environments was lower again than in the school environment. It was encouraging to see that that following the St*arkick* program, parents reported a **higher frequency of participation** in school and community activities, as well as **increased involvement** in these activities in these environments. Both these findings were statistically significant.

Starkick improves activity and participation goals in children with disabilities

Participants' individualised goals were assessed using the Canadian Occupational Performance measure COPM). The COPM measures self-perception of performance in, and satisfaction with self-care, productivity and leisure over time. COPM is useful in rehabilitation of children with disabilities for detecting change in specified functional abilities and participation.

We helped the parents and children set goals using a semi-structured interview which enabled the parent/child to identify difficulties with specific tasks they experienced related to physical activity and participation, and that they thought attendance at Starkick might help.

We aimed to determine 1-3 goals per child. Each goal was then rated on its importance to the child's life, on a scale of 1 (not important at all) to 10 (extremely important). Each of goals were then rated further by the parent/child on similar scales, this time for performance from 1 (not at all able) to 10 (able to perform extremely well), and satisfaction with performance from 1 (not at all satisfied) to 10 (extremely satisfied).

Goals that Starkickers hoped to improve in included aspects of development like following instructions, understanding team rules, improving social engagement and leadership skills.

A full set of the identified goals are listed in Appendix 2. Many of these goals were set by more than one family.

Parents, and (where able) children, identified 53 goals that they hoped to achieve by being involved in Starkick. The types of goals fit across six broad themes:

1. Involvement or engagement in sport (n=10);
2. belonging to a team, including understanding team dynamics and rules (n=10);
3. improving social engagement and making friends (n=8);
4. improving physical function or physical activity levels (n=7);
5. improving attention and emotional regulation (n=7);
6. improving confidence and leadership (n=6).

It is interesting to note that only 7 of the 53 goals specifically aimed to improve physical aspects of participating in Starkick. Most focused on psychosocial aspects of development.

Over 60% of goals were met.

Most met goals related to activity or participation.

Thirty-four goals (63%) showed clinically significant progress in performance or satisfaction. Eighteen of the 19 goals that were not achieved related to goals around improving social engagement and making friends, and belonging to a team, including understanding team dynamics and rules.

Children with disabilities attending Starkick have good levels of self esteem

Level of self esteem was measured using the Self-Perception Profile for Children (SPPC; Harter, 1985).[20,21] SPPC is a self-report questionnaire assessing children's self-esteem. The scale consists of 36 items that can be allocated to five specific domains of self esteem scholastic competence, social acceptance, athletic competence, physical appearance, and behavioural conduct, as well as global self-worth. Each SPPC item consists of two opposite descriptions, e.g. ''Some children often forget what they have learned'' but ''Other children are able to remember all things easily''. Children have to choose the description that best fits and then indicate whether the description is somewhat true or very true for them. Each item is scored on a four-point scale with a higher score reflecting a more positive view of oneself. For each of the self-esteem domains and for the global self-worth scale, a total score is computed by summing relevant items. The SPCC has been validated in children without disabilities but not in children with disabilities.[22,21] [23,24] At Starkick the SPPC was completed either by the child independently, by the child with assistance from a parent/researcher or by a parent proxy.

Starkick participants had good levels across all five domains of self esteem and global self worth at the start of the Starkick season that remained high at the end of the season. There were no significant changes before and after Starkick. See Table 1.

Table 1. Self-Perception Profile for Children Scores Before and After Starkick Season

	Before Starkick	After Starkick	*p*-value
Domain of SPPC			
Scholastic competence *Median (IQR) [min-max]*	**2.25 (1.86, 3.00) [1.00 - 3.67]**	**2.38 (2.00, 3.06) [1.75 - 3.25]**	**0.697**
Social competence *Median (IQR) [min-max]*	**3.00 (2.33, 3.33) [1.00 – 4.00]**	**2.84 (2.33, 3.75) [1.33 – 4.00]**	**0.293**
Athletic competence *Median (IQR) [min-max]*	**3.00 (2.42, 3.67) [1.67 – 4.00]**	**2.67 (2, 3.33) [1.67 – 4.00]**	**0.072**
Physical appearance *Median (IQR) [min-max]*	**3.00 (2.67, 3.84) [1.67 – 4.00]**	**3.33 (2.33, 4.00) [1.67 – 4.00]**	**0.064**
Behavioral conduct *Median (IQR) [min-max]*	**2.67 (2.17, 3.00) [1.33 – 4.00]**	**3.00 (2.33, 4.00) [1.33 – 4.00]**	**0.673**
Self-esteem *Median (IQR) [min-max]*	**3.00 (2.67, 3.59) [1.5 – 4.00]**	**3.00 (2.59, 3.67) [2.00 – 4.00]**	**0.284**

Children with disabilities attending Starkick enjoy participating in physical activity

The enjoyment of PA was assessed by the revised PACES.[25,26] The revised PACES consists of 16 statements which begin with the stem "When I am physically active…"and participants respond using a 5-point Likert-type scale (1 = "Disagree a lot" to 5 = "Agree a lot"). A score is computed by calculating the average of the 16 items, with a higher score indicating higher enjoyment. The items of the PACES questionnaire can be seen in Table 2.

Table 2. Items from the PACES questionnaire

Stem: When I am physically active…
1. I enjoy it
2. 1 feel bored
3. I dislike it
4. I find it pleasurable
5. It's no fun at all
6. It gives me energy
7. It makes me sad
8. It's very pleasant
9. My body feels good
10. I get something out of it
11. It's very exciting
12. It frustrates me
13. It's not at all interesting
14. It gives me a strong feeling of success
15. It feels good
16. I feel as though I would rather be doing something else

It is encouraging to see that Starkick participants scored a high level of enjoyment of physical activity at the start of the Starkick season with an average score of 4.47 (where the maximum possible was 5.0). This remained high at the end of the season with an average score of 4.11.

It is important to note that for both the measures of self esteem and level of enjoyment of physical activity that there may have been a positive bias in reporting, resulting from self-selection to participate in the Starkick program.

The benefits from participating in Starkick that were demonstrated by quantitative testing and the questionnaires were confirmed by the parent interviews.

The parental interviews agreed with the findings from both the physical and psychosocial findings. Parents highlighted that as well as participation in Starkick providing an opportunity and platform to improve physical skills, there was a greater emphasis on the importance of broader concepts of belonging, fun, social opportunities, support and having a choice of a physical activity.

"He is happier because he had something to look forward to every Sunday." Mum of participant,

Particularly for children attending mainstream school, parents highlighted that Starkick provided an environment where children with disabilities could have a **greater sense of belonging.**

"It gave him some opportunities for change in socialisation at school… perhaps more conversation with the other children, you know sort of like places that they had gone to, their Auskick, he'd say that he went to his kind of thing." Mum of participant, East Fremantle Sharks JFC

For parents the importance of participating in Starkick were about their child learning the sport, team fellowship, having fun and making friends.

"When [my son] started (because he was one of the originals) he was only just learning to kick a ball at that stage, but he has developed skills like reaction and sometimes marks the ball. So, I think at school it helped him socially sort of participate with some of the other kids." Mum of participant, Coolbinia Bombers JFC

"I think when all the other kids are talking about what they do on the weekend like [my son] will join in and say what sort of sports he plays and so I think that's good for his confidence." Mum of participant , Coolbinia Bombers JFC

"He uses his experiences of his weekend footy talking about it for school news. A real change in attitude, confidence now. He is much more confident to have a go in playing school sport, he gets right in, more active involvement in school – in any sports, goes to the school shed and gets equipment." Mum of participant, Joondalup Jets, JFC

Picture: Tony McDonough, Womans Day Starkick Feature June 2015

The importance of social connection in the context of the child within the family, but also the family within the sports club were expressed. The importance of the **experience of team fellowship** was a key theme highlighted by parents.

> ***"He liked seeing the same - kind of the same faces week after week and getting to know some of the kids that are around his age. And he just liked being on the footy field, having a uniform and being part of a team."*** Mum of participant, East Fremantle Sharks JFC

> ***"… it's a really good program for children who can't participate in Auskick for whatever reason. Yeah, I think it's a great opportunity for the families to be part of the sporting community including the children who play and the extended family and grandparents, for them."*** Mum of participant, Coolbinia Bombers JFC

> ***"Because he wanted to play a sport, but we've been to a few sports and because he's autistic and ADHD we didn't fit."*** Mum of participant, East Fremantle Shark, JFC

> ***"[He] wanted to play a team sport. He couldn't play with his peers because of his medical condition, so we thought we would give this a go."*** Mum of participant, Joondalup Jets JFC

Parent's valued the **atmosphere of acceptance and social support** for families, where they did not feel that they had to explain their child's behaviour, and they could just belong.

> ***"And there were no expectations from when I think - you know, not having to explain his behaviour or the pressure or you know whatever was going on; it's just so much more accepted."*** Mum of participant, Coolbinia Bombers JFC

> ***"You know, and I suppose from a parent perspective as well it was quite nice to meet other parents who deal with different issues obviously with their kids and learn how they sort of combat that and how they sort of roll with the punches, if you like."*** Father of participant, Coolbinia Bombers JFC

The people running the program matter

Parents were satisfied, confident and highly praising the people involved in running Starkick across all three sites. They felt the coaches were competent and the volunteers interested in information about their child and how to motivate them to participate. There was a strong theme around the friendliness and support of the people who were involved in the Starkick program. The support, dedication and competence of the coaches and volunteers dealing with the child were seen by parents as crucial for the child's participation in the program but also their motivation to bring their child to the program.

All 20 parents interviewed offered similar statements to the ones represented below.

> ***"I think the club is really well-run and there's a great sort of committee, and yeah, it's been really good."***
>
> ***"I guess the coaches are amazing…it's just really well-run."***
>
> ***"I think the coaches and volunteers of the Starkick program were excellent. Excellent."***
>
> **"We were really happy with the organisers of the whole Starkick. You know, the coaches and all the guys that were involved with it were just absolutely brilliant. You know, really friendly and really accommodating**."

Suitable junior sports programs and access to information about programs are hard to find.

Parents highlighted the barriers to participating in sports for children with disabilities, and finding the right sport, the right coach, and the right team had been challenging until they were aware of Starkick.

During the interviews parents highlighted that they had to search for information, help and opportunities for sports programs suitable for their children. They believed that there was limited access to junior sports activities that were possible for their children to participate in but also poor advertising or knowledge of what other physical activity and sport opportunities were available to them. Better advertising and more information about opportunities was requested. Many wished there were more sport choices available for their children, specifically more programs 'like' Starkick – meaning the way the program was run to be inclusive and supported.

> ***"Like he's already planning for next year but he wants to do something else but there's nothing. But you've got all the other sports but they're not…well, I'm going to be frank, it's basically that if your child's not good at sport then you're taken out. If he's different they don't want you to take part. So, you're just wasting your time and effort trying to. Because I have tried other sports for him …"*** Mum of participant, East Fremantle Sharks JFC

> ***"When it came to footy. 'We will welcome you,' so that's what was really exciting… But I mean I haven't heard anything else…I haven't heard of anything else sports-wise really offered to him."*** Mum of participant, Coolbinia Bombers JFC

Conclusions and Recommendations

Participation in organised sport, such as Starkick was shown to confer many benefits to children with disabilities. These included improvements in physical function, but also improved participation in the school and broader community environment.

Results from the parent interviews highlighted that participation in sport can be significant for the well-being and social support of children with disabilities, but also their families.

The physical improvements from involvement in Starkick were evident in the findings. This is expected given that Starkick activities are based on the junior development program "Auskick" for which the activities primarily focus on physical aspects. However, the importance of Starkick as a means for forming friendships, belonging and improving behavioural and social aspects of disability were also highlighted by the goals of participants in this study. This finding identifies a potential future focus of the Starkick program.

Generally, parents of children with disabilities would like to see better access to information about local sports and active recreation opportunities for their children. The format and inclusive processes of Starkick were a suggested exemplar for other sports organizations to consider following.

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Appendix 1: Parent Completion Interview Questions

***to be completed by phone interview**

Exit interview/ Completion interview (circle which applies)

Name of interviewer: _____ Participant Code::_____

Relation of interviewee to the participant: _____

Date: _____ Date of last Starkick session: _____

Post Starkick season: Interview script

Topics	Questions	Prompts
Date/Verbal Assent	Okay the date is ___ and I am interviewing xxx. Is it ok if I record this interview?	
General	Firstly, can you tell me what you think about the Starkick program overall?	What works with the program? What did not work well for your child?
	What were the reasons for joining?	Was it more about the chance to play football specifically or the availability of this format of sports program?
	Can you tell us about your families experiences in Starkick?	Child (participant) Parents? Siblings? Grandparents?
	How did you hear about the program?	
Community participation	Have you felt that your involvement in the community has changed this year?	If yes – prompt Can you describe in what ways
School Participation	Do you think involvement in Starkick has had any positive benefits in school participation or involvement	Prompt in what ways e.g. more active involvement in school life eg sports , more engaged with peers at recess/lunch Any impact on concentration in class, leadership opportunities in school, happier
	Do you think that your child/your family has been more open to joining in with extra-curricular activities this year?	

Health/Fitness	Have you observed any changes in your child's health/fitness over the 'Starkick Season' that may be result of Starkick?	Skills? General endurance? Sprinting? Coordination? General health?
	Do you think their involvement in Starkick has altered their likeliness to join in with other sports/ physical activities?	
Behaviour/ Confidence/Self esteem	Have you noticed any changes in your child's behaviour this year?	Changes in attention? Following direction?
	Have you observed any changes to your child's confidence/ self-esteem?	In Starkick and out of Starkick?
Continue	Will you join up again next year/are you looking for other programs like Starkick?	If not re-joining prompt for reasons
Study	Do you have any feedback on the assessments that you/your child completed as part of the study?	
Anything else	Is there anything else you want to tell me including about anything we have already discussed?	

Appendix 2 -Types of Goals Identified

- Learn the skills of football – marking, kicking
- Understand and follow the rules of Starkick
- To be less 'sluggish' with physical activity
- To keep active
- To decrease sedentary time
- To increase physical activity
- To help with making friends more easily
- To understand about belonging to a team
- To just be a part of a team
- To initiate more physical activity at school
- To provide my child with an opportunity to experience success
- To improve confidence (in general)
- To increase physical activity self efficacy
- To learn to better cope with not winning at sport
- To improve communication
- To be able to integrate into mainstream sport
- To make new friends
- Socially engage more in a community sport
- To increase confidence in sport
- To be happy trying new physical activities
- To engage with sport from start to finish
- To improve motor skills
- To improve coordination
- To learn not to go running off during sport
- To increase awareness of others in a team environment
- To increase more spontaneous play and move away from parents to play
- To transition from 1 on 1 into group sport
- To increase independence and leadership at school
- To improve sustained attention
- To improve of self-regulation
- To improve stability
- To improve physical performance
- To be comfortable 'leaving the house' for Starkick