

Analysing junior sport development programs in New Zealand: A qualitative case study

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## **Abstract**

It is widely recognised that children who participate in sport can gain a number of social and physical benefits. These benefits are particularly evident in children who participate in a range of team sports. Despite this, research has emerged that describes unhealthy relationships between children and sport, leading to negative experiences and dropout. Sport NZ, who are responsible for leading the sport industry and its governing bodies, have outlined five key behaviours that impact negatively on a child's relationship with sport. These include early specialisation, early success for children, applying an adult sport lens to youth sport, poor policy of team selection and the impact of intense training on children. All of these issues can lead to children dropping out of sport. To tackle this, Sport NZ have launched the Balance is Better philosophy, a campaign that intends to align sporting practice in New Zealand to create healthy environments for children. The purpose of this qualitative case study is to understand how aligned the junior development programme of four team sports in New Zealand are to the Balance is Better philosophy. From this, recommendations can be made as to how a National Sport Organisation (NSO) could better align with the philosophy, based on existing literature or using examples from other NSOs.

This case study is defined by the junior development frameworks currently used by Netball New Zealand, Hockey New Zealand, New Zealand Football and New Zealand Rugby, to understand how the junior development frameworks of these NSOs are delivered and establish their level of alignment with the Balance is Better philosophy. Data collection utilised semi-structured interviews and document analysis. For the interviews, NSOs were asked to nominate a participant from their organisation who could represent their junior development programme. These interviews were used to capture the perspective of the NSOs. A document analysis took place, using documents that illustrated the practical application of and theoretical underpinnings behind each NSOs junior development programme. A thematic analysis was used to understand the data that was collected and generate themes.

Five themes were identified from the thematic analysis; 1) Development of junior sport programmes; 2) Participant-centric approaches; 3) Benefits of modified small-sided games; 4) Developing and educating people to deliver junior sport; 5) The role of the NSO in delivery of junior sport. Each theme is supported by sub-themes and is explained

in relation to current literature that exists around sport development. Recommendations from this case study are intended to provide NSOs with suggestions on how their junior development programme can better align with the Balance is Better principles. These ten recommendations are presented in a practical way, using examples from other sports to suggest resolutions that NSOs are able to take action within their junior development programme.

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### **Attestation of Authorship**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except when explicitly defined in the acknowledgments), or material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed: \_\_\_\_\_

Jesse Rawlings

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### **Ethical Approval**

Ethical approval was gained from Auckland University of Technology Ethics Committee (AUTEC) on 23 July 2021, ethics application number: 21/124 (Appendix A).

## Chapter 1: Introduction

This chapter begins with a background of the sporting experiences of children in the Aotearoa New Zealand (NZ) context. The focus includes the purpose of sport participation, the role of sport in NZ and how the Balance is Better philosophy has been created and implemented. The context of the research is provided, as well as the research questions and the purpose of the research.

### 1.1. Background

For children, structured and unstructured sporting experiences can provide meaningful experiences which connect them with their community (Bowers & Green, 2013). There are a number of potential social and physical benefits for children to gain through participating in sporting environments. For instance, children who participate in sport are reported to have higher levels of resilience than those who do not, whilst children who played a broader range of sport were found to have greater empathy, social competence and self-regulation than those who played few sports (Caldarella et al., 2019). Also, children who frequently participate in a range of team sports experience a better health-related quality of life, especially children who participate in sports they enjoy and favour as opposed to sports they do not enjoy (Moeijes et al., 2019). However, there are challenges existing within sport, which often lead to children dropping out. To minimise dropout, sport must define success as having fun - as opposed to winning, while maintaining positive parental involvement and encouraging participation in multiple sports (Witt & Dangi, 2018). Overall, children must have autonomy of their sporting choices and experiences (Witt & Dangi, 2018).

In New Zealand, sport is a prominent social tool in which New Zealanders identify as belonging to a great little sporting nation with a rich history in a wide range of sports (Thomson & Jackson, 2016). Sport NZ is a government agency, with a responsibility to “contribute to the wellbeing of everybody in Aotearoa New Zealand by leading an enriching and inspiring play, active recreation and sport system” (*Sport New Zealand - Ihi Aotearoa*, n.d.). In 2012, Sport and Recreation NZ was renamed Sport NZ, focussing on creating a sporting system that featured aligned pathways from community level to high performance, using National Sport Organisations (NSOs) as a common channel for sport delivery (*Evolution of Government Agency for Sport and Recreation* | *Sport New*

*Zealand - Ihi Aotearoa*, n.d.). In their quest to create a world-leading sport system, Sport NZ's 2016-2020 Talent Plan focuses on "preparing athletes for high performance through quality experiences in the development phase", by strengthening local, regional and national competitions (*Talent Plan | Sport New Zealand - Ihi Aotearoa*, n.d.).

In order to achieve the goals of the Talent Plan, Sport NZ developed the Balance is Better philosophy. The Balance is Better philosophy is an "evidence-based approach to support quality sport experiences for all young people, regardless of ability, needs and motivations" (*About - Balance Is Better*, n.d.). The Balance is Better (BiB) philosophy has been developed in collaboration with the NZ sport system through various sport organisations, leaders, administrators, schools, clubs, coaches, parents and volunteers, to provide quality sport opportunities for all (*About - Balance Is Better*, n.d.). Sport NZ outlined five key reasons for developing the Balance is Better Philosophy. These were: "1) Declining youth and adults sport participation in Aotearoa New Zealand; 2) Research on and insights from young people strongly indicating that the NZ sport system is not doing a good job at catering for their needs; 3) Reviews conducted into the New Zealand sport system, outlining the need for change; 4) New Zealand research perspectives from the past 20 years on sport participant and athlete development experiences and systems; 5) International research perspectives from the past 20 years on sport participant and athlete development experiences and systems" (*About - Balance Is Better*, n.d.). To complement the five reasons for developing the Balance is Better Philosophy, Sport NZ has outlined five behaviours affecting youth sport, which are presented as myths that justify and underpin the implementation of the Balance is Better approach (*The Campaign | Sport New Zealand - Ihi Aotearoa*, n.d.). Each of the five myths are presented in Table 1, alongside statements that summarise opposing evidence that Sport NZ has collected.

**Table 1**

Five Behaviours Affecting Youth Sport (*The Campaign | Sport New Zealand - Ihi Aotearoa*, n.d.)

| Myth Number | Behaviours Affecting Youth Sport                                  | Opposing Evidence   |
|-------------|---|---|
| 1           | Early specialisation is good for development                      | Multiple sports and a variety of skills are good for development.                   |
| 2           | Early success leads to adult success                              | Young people develop at different ages and stages.                                  |
| 3           | Applying an adult sporting paradigm to develop youth participants | Understanding how youth learn and play by applying a participant centric approach.  |
| 4           | If you're not in the top team, there is no point continuing       | Involvement in sport at any level or stage in life is better for overall wellbeing. |
| 5           | The harder and more often you train, the better you are           | Overtraining and over playing can lead to injury and burn out in young players.     |

In order to expel these five behaviours (in Table 1 above), Sport NZ developed nine Balance is Better principles which were created to guide future approaches to junior sport, which are presented in Table 2 (*About - Balance Is Better*, n.d.).

**Table 2**

Balance is Better Principles (*About - Balance Is Better*, n.d.)

|  |
|--|
| 1. All New Zealanders have the right to participate in sport in an inclusive, fair and safe environment  |
| 2. All young people should receive a quality sport experience, irrespective of the level at which they are involved  |
| 3. Aotearoa's sport sector must work collaboratively to encourage the widest possible change for the wellbeing and sport participation of young New Zealanders   |
| 4. Sport leaders, coaches, administrators, parents and caregivers involved in youth sport must collectively lead attitudinal change  |
| 5. All young people should be offered participation and skill development opportunities  |
| 6. Bold and courageous leadership at national, regional and local levels is required to design and deliver youth sport participation and development opportunities   |
| 7. All young people should be supported to participate in a range of activities and play multiple sports   |
| 8. Talent identification should occur later in young people's development; reviewing the role and nature of national and regional representative selections and tournaments is an important step in ensuring elite sport attitudes and practices are introduced at developmentally appropriate times |
| 9. Adults need to proactively monitor and manage the workload (intensity and volume) of motivated young people to mitigate the risks of overtraining and overloading   |

In 2019, Netball New Zealand (Netball NZ), Hockey New Zealand (Hockey NZ), New Zealand Football (NZ Football) and New Zealand Rugby (NZ Rugby) each signed a published Statement of Intent, with a view to aligning their approach to children's sport with the principles of the Balance is Better philosophy. The purpose for signing the Statement of Intent was to bring the fun and development focus back into sport and create a positive experience for all young people playing sport (*Changing the Approach to Youth Sport / Sport New Zealand - Ihi Aotearoa*, n.d.). An additional 10 NSOs signed the Statement of Intent in April 2021 (Athletics New Zealand, Badminton New Zealand, Basketball New Zealand, Golf New Zealand, Gymnastics New Zealand, New Zealand Rugby League, Softball New Zealand, Touch New Zealand, Volleyball New Zealand & Waka Ama New Zealand), committing to the Balance is Better philosophy

and making “substantial change in the way youth experience sport in this country” (*Changing the Approach to Youth Sport | Sport New Zealand - Ihi Aotearoa*, n.d.). The six commitments of the Statement of Intent are listed in Table 3, providing an outline for NSOs to change the way in which they approach youth sport.

**Table 3**

Statement of Intent (*Changing the Approach to Youth Sport | Sport New Zealand - Ihi Aotearoa*, n.d.)

|   |
|---|
| 1. Ensuring all young people receive a quality experience, irrespective of the level at which they compete  |
| 2. Leading attitudinal and behavioural change among the sport leaders, coaches, administrators, parents and caregivers involved in youth sport  |
| 3. Providing leadership to support changes to competition structures and player development opportunities   |
| 4. Working within their sports and schools to keep minds open while identifying talent throughout the teen years, including reviewing the role and nature of national and regional representative tournaments to ensure that skill development opportunities are offered to more young people |
| 5. Supporting young people to play multiple sports  |
| 6. Raising awareness of the risks of overtraining and overloading   |

## 1.2. Context of the Research

The scope of this research is to critically analyse the junior development frameworks of NZ Cricket, NZ Football, Hockey NZ, Netball NZ & Rugby NZ to determine whether these frameworks align with the Balance is Better philosophy. These NSOs have been selected because: 1) They are team invasion games, where a team aims to invade their opponent’s territory to score points; 2) Each sport is predominantly played in winter; 3) They were initial signatories of the Sport NZ Statement of Intent.

Measuring these frameworks against the principles of the Balance is Better philosophy will identify the evidence-based practices/models which exist in these four frameworks, the similarities and differences between the four selected codes and areas in which these four junior development frameworks can be further developed using evidence-based models.

### 1.3. Research Questions and Purpose

The research questions for this qualitative interpretive case study were:

1. To what extent do the junior sport development programmes and frameworks of the Keep up with the Play campaign, align with the Balance is Better philosophy?
2. What are the similarities and differences between the junior frameworks of the four team invasion games that support the Keeping up with the Play campaign?
3. What are the strengths and weaknesses between the junior frameworks of the four team invasion games that support the Keeping up with the Play campaign?
4. How can these junior frameworks inform each other to improve the alignment with the Balance is Better philosophy?

The purpose of this research is to understand how aligned each NSOs junior development framework is to the Balance is Better philosophy. From this, recommendations can be made as to how an NSO could better align with the philosophy, based on existing literature or using examples from other NSOs.



## Chapter 2: Literature Review

### 2.1. Introduction

This literature review will discuss the global role of sport development, to understand what sport development is and how it has come to exist within the lives of children. Approaches to youth sport development, incorporating physical education, academic models and government approaches will be analysed. Finally, a synthesis of literature relating to current issues in youth sport development will be presented.

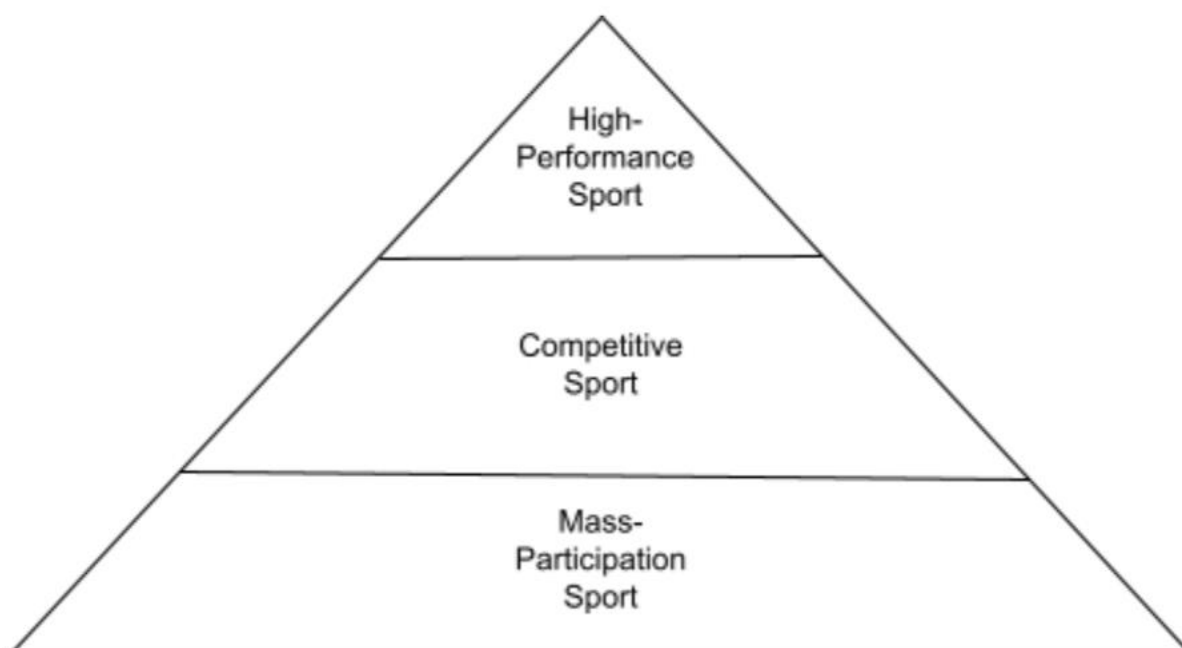
Sport development focuses on promoting opportunities to participate in and benefit from sport, contributing to overall wellbeing (Shilbury et al., 2008). However, the objectives of sport development can be difficult to summarise, partly as a consequence of the role that sport can play as a low-cost, high visibility tool to respond to a wide range of social issues (Houlihan & Green, 2011). Globally, sport development is executed at different levels and there are a myriad of approaches which are taken in the development of sport systems, financing of sport, creating sport policy and objectifying sport participation (Hallmann & Petry, 2013). The main approaches to studying sport development have been the development *of* sport and development *through* sport (Ha et al., 2015).

A range of studies have been conducted in relation to the development *of* sport and talent development (Gulbin et al., 2013; Henriksen et al., 2010a, 2010b).

Development *of* sport is a traditional approach to research, covering topics such as sport policy, enhancing sport participation and increasing competitive standards (B. C. Green, 2005). Previously, there has been a well-supported notion that recruiting and retaining a deeper pool of participants will allow a larger number of elite participants to emerge, which is summarised by the Pyramid Model of Sport Development, presented as Figure 1 (B. C. Green, 2005). However, this pyramid approach has also been viewed in the opposite way, whereby the production of elite athletes is perceived to increase mass participation, although previous research has failed to back up this viewpoint (De Bosscher et al., 2013).

**Figure 1**

Pyramid Model of Sport Development (B. C. Green, 2005)



More recent approaches to research have focussed on development *through* sport, which identifies sport as a vehicle to drive a range of development schemes (Ha et al., 2015). In an analysis by Levermore (2009), these schemes may cover conflict resolution, cultural understanding, developing infrastructure for the community, increased standards of educational awareness, empowering a range of people, encouraging healthy participation and developing economic strategies (Levermore, 2009). One example of development *through* sport, which looked at revitalising communities through sport in Poland, concluded that using sports projects to assist in community development can train groups to prevent social exclusion, boost commitment that may encourage voluntary contributions and enable the development of infrastructure (Ignasiak-Szulc, 2020). A number of studies exist that have looked at the development of people and communities *through* sport in recent years (Dionigi et al., 2018; Nascimento Junior et al., 2021; Skinner et al., 2008). A summary of these studies would suggest that sport can play an important role in human development *through* participation across the world. Youth sport development is an important tool that can be utilised globally to develop positive character traits and experiences.

## 2.2. What is Youth Sport Development?

Sport is a vehicle which can lend itself toward promoting positive youth development, enabling individuals to lead healthy, satisfying and productive lives as a youth, and developing competence to engage in activity and nurture others as an adult (Hamilton & Hamilton, 2003). Children who participate in youth sports may benefit from improved physical health through activity, develop psychosocial skills, and maintain a better foundation of motor skills (Côté et al., 2008). Engaging in youth sport may expose the participant to more positive development experiences and outcomes than those who partake in other extracurricular activities (Bean & Forneris, 2016). With regard to sport participation, it is important to note that children are different from adults in a number of ways, thus a child's sport participation may result in a broader range of developmental outcomes (Wiese-Bjornstal et al., 2009).

There are a range of contemporary studies that help to better understand the impact that positive youth development through sport can have on children and adolescents. Research by Wiese-Bjornstal et al. (2009) looked into the impact that sport may have on the cognitive development of youth participants and highlighted the need for sport leaders to understand how a participant may change with age and maturation (Wiese-Bjornstal et al., 2009). A qualitative study by Vierimaa et al. (2012), utilised semi-structured interviews to establish coaches' perceptions of positive youth development. The coaches identified immediate (e.g. enjoyment), short-term (e.g. competence, confidence, connection, and character), and long-term developmental outcomes (e.g. contribution), as well as social and contextual processes (e.g. activities, social relationships, and settings) which underpin these outcomes. In summary, it is important that youth have immediately enjoyable, positive experiences through sport, and that accumulated positive experiences result, over time, in lasting effects on athletes' development (Vierimaa et al., 2012). A number of other studies have focussed on the importance of youth sport development (Coakley, 2016; Harwood & Johnston, 2016; Holt et al., 2017).

## 2.3. Youth Sport Development Approaches

### *2.3.1. Physical Education*

Physical Education (PE) has traditionally been a method for engaging youth in sport. Globally, 95% of countries practice PE in schools, although there is often a gap between official policy and actual practice. Actual PE practice in schools may be impacted by several factors

including; loss of time due to allocation to other competing subjects, lowered importance of physical education as a subject in school, lack of official assessments for credits, and constraints on finances and resources for sporting equipment and coaches (Hardman, 2011). Traditional approaches to physical education have been justified in their links with military training, creating social order and linking physical activity with health (Light & Fawns, 2001). Issues that arose from these traditional approaches included a lack of direction and purpose within physical education, leading to a lack of meaning in the lives of young people and student alienation from physical activity (Graham, 1995). This negative stigma attached to traditional PE has led to a shift in more recent times. Several models have been developed to emphasise the cognitive dimensions of physical activity, such as the Teaching Games for Understanding (TGfU) model (Bunker & Thorpe, 1986), which placed a greater focus on tactical dimensions of games and the active role of the learner (Light & Fawns, 2001). Games based approaches, such as TGfU, are closely linked to the process of playing sport by developing a deeper understanding, game sense and principles of action for participants, all of which are a reason why physical educators in France and the UK have promoted this approach to physical education (Martínez-Santos et al., 2020). Research by K. Green et al. (2005) looked into the role that PE can play in the lives of youth. In summary, competitive forms of physical exercise (such as games) may give way to challenging forms of physical exercise (e.g. outdoor pursuits), and game contests (e.g. soccer) may be replaced by game challenges (e.g. climbing) (K. Green et al., 2005).

### *2.3.2. Academic Models*

Initial research conducted by Côté (1999) looked at the influence of family in developing talented athletes, and identified three phases of participation from childhood to adolescents. These phases are the sampling years, the specialising years and the investment years (Côté, 1999). This ground-breaking research underpins the world renowned Developmental Model of Sport Participation (DMSP). The DMSP is based upon theoretical and empirical data to identify the different trajectories of sport participation, highlighting the need to optimise the health of youth athletes through continued participation in sport in the search for elite-level athletes (Côté et al., 2007). Based on the DMSP, Côté, Lidor & Hackfort (2009) identified seven postulates about youth sport activities leading to continued participation and elite performance. These postulates have been identified in Table 4 below (Côté et al., 2009). The

DMSP has been cited in a range of studies, including the research on specialisation pathways among elite Danish athletes (Storm et al., 2012), a qualitative study looking into Olympic and World Championship track and field athletes' experiences during the specialising and investment stages of development (Huxley et al., 2018), and the development of Swiss football talent (Sieghartsleitner et al., 2018).

**Table 4**

Seven postulates about youth sport activities that lead to continued participation and elite performance (Côté et al., 2009).

|   |
|---|
| 1. Early diversification (sampling) does not hinder elite sport participation in sports where peak performance is reached after maturation  |
| 2. Early diversification (sampling) is linked to a longer sport career and has positive implications on long-term sport involvement   |
| 3. Early diversification (sampling) allows participation in a range of contexts that most favourably affects positive youth development   |
| 4. High amounts of deliberate play during the sampling years build a solid foundation of intrinsic motivation through involvement in activities that are enjoyable and promote intrinsic regulation |
| 5. A high amount of deliberate practice during the sampling years establishes a range of motor and cognitive experiences that children can ultimately bring to their principle sport of interest    |
| 6. Around the end of primary school (about age 13), children should have the opportunity to either choose to specialise in their favourite sport or to continue in sport at a recreational level    |
| 7. Late adolescents (around age 16) have the developed the physical, cognitive, social, emotional and motor skills needed to invest their effort into highly specialised training in one sport      |

One of the major global sport development approaches, based on physiological development, is the Model of Long-Term Athlete Development (LTAD), instigated by Balyi & Hamilton (2004). The LTAD approach is split into “Early Specialisation Model”, referring to sports such as diving, figure skating and gymnastics as these sports require a high frequency of early sport-specific training, and “Late Specialisation Model” which includes all team sports and requires a generalised approach to early training. The six-stage Late Specialisation Model is broken

into 1) The FUNdamental Stage; 2) Learning to Train; 3) Training to Train; 4) Training to Compete; 5) Training to Win and 6) Retirement/Retainment (Balyi & Hamilton, 2004). Around the world, researchers have relied on LTAD to study elite netball players in South Africa (Nolte & Hollander, 2020), a community sport club in Canada (Millar et al., 2020) and female university rugby players (Neto et al., 2021). However, criticisms and limitations of the LTAD have begun to challenge the effectiveness of the model. One analysis by Dowling, Mills & Stodter (2020) concluded the LTAD over-emphasises the physiological factors of the athlete development process and is too high-performance centric, as well as marginalising other ways of thinking about athlete development (Dowling et al., 2020). Another analysis by Varghese et al. (2022) concluded that the LTAD model tends to focus on singular physical attributes, which are actually interconnected in their training. The LTAD model also does not account for the resources that athletes may have available to them over time. The applicability of this model requires more rigorous testing within a diverse range of contexts (Varghese et al., 2022).

One contemporary approach to sport development is the Athletic Skills Model (ASM), introduced by Wormhoudt, Savelsbergh, Teunissen & Davids (2017). This model is based on the concepts from DMSP and LTAD (Ribeiro et al., 2021). The ASM offers an alternative to dominant talent development theories by placing an emphasis on physical intelligence (Wormhoudt et al., 2017). The ASM emphasises the importance of fun, pleasure and enjoyment, in order to become a well-rounded athlete before choosing to specialise (Savelsbergh & Wormhoudt, 2021). Key components of the ASM, defined by Savelsbergh & Wormhoudt (2018), are referred to as the Three Roads, which are defined in Table 5. Participation that is guided by the Three Roads, either individually or collectively, will increase an individual's level of physical literacy and increase the possibilities for variable and adaptable movement possibilities (Savelsbergh & Wormhoudt, 2018).

**Table 5**

The Three Roads of the Athletic Skills Model (Savelsbergh & Wormhoudt, 2018)

|  |
|--|
| 1. <i>Concentric approach to movement skill acquisition:</i> A concentric approach to movement skill acquisition identifies the need for a child to become a “good mover” through fun and enjoyable experiences, before developing into an athlete and finally, a specialist within a sport.   |
| 2. <i>Creating challenging environments from a constraints-led perspective:</i> Utilising a constraints-led approach (Newell, 1986), a person with individual movement possibilities interacts with a task in an environment in which the task has to be performed. By designing how task, individual, and environmental constraints interact, situations can be created that support adaptability and creativity of the performer because they require a search for useful movement solutions that solve the motor problem at hand. When manipulating constraints, the coordination pattern is influenced without any instruction and, in some cases, this can lead to new and highly functional behaviour. |
| 3. <i>Exploiting the transfer-ability of movement:</i> The concept of transfer of learning holds that previous practice or experience in one task or domain will enable (positive transfer) or inhibit (negative transfer) successful performance in another related task or domain  |

As a recently developed model, the ASM is lacking in rigorous analysis and critique. However, the ASM does challenge the traditional approach to talent development, in which athletes are asked to specialise at an early age and take part in a linear “pathway” to the top. However, the ASM provides a nonlinear perspective on talent development, precluding identification and selection of children as athletes with potential specialisations at younger ages, indicating when specificity of practice is important and when general preparatory experiences are important for developing foundational movement capacities (Ribeiro et al., 2021).

One significant issue that exists within youth sport development is the translation of good research to practical application. A number of studies have identified inconsistencies between research and policy within the context of sport (e.g. Gilmore & Gilson, 2007; Guskiewicz, 2008; Pain & Harwood, 2004). One project in particular, which looked into factors associated with the use of research evidence in Canadian National Sport Organisations, found there to be a

lack of understanding of evidence and capacity to access and translate research into practice (Holt et al., 2017). More recently, research has centred around how theoretical knowledge can be disseminated into practical application within youth sport (Fry et al., 2020; Holt et al., 2018)

In a New Zealand context, the study by Bradbury et al. (2021) explored the industry-academic nexus through the lens of Aktive (Auckland Sport & Recreation) and their Good Sports project. The findings from this research identified the need for a collaborative approach between the industry and academic personnel, in which common language, trust and respect were imperative to addressing a shared outcome (Bradbury et al., 2021). Crucial aspects of a successful collaboration include communication, consensus decision-making, diverse stakeholders, goals, leadership, shared resources, shared vision, social capital and trust (Mayer & Kenter, 2015).

### *2.3.3. Government approaches/policies*

Sport policy-makers recognise the value of sport as a means of physical activity participation during an inactivity pandemic, highlighting the importance of organised sport structures and recreation facilities (Rowe et al., 2013). Globally, research into the effectiveness and outcomes of youth sport programmes is ongoing in Canada (Bean et al., 2018; Pankow et al., 2019), Norway (Kristiansen & Houlihan, 2017), USA (Bowers et al., 2010; Jones et al., 2020), China (Zheng et al., 2019) and England (Enoch, 2010). However, there are inconsistencies around these approaches and policies, whereby participation-focussed approaches and talent development approaches are often separated. One model that seeks to integrate both the community and elite streams of development has been designed in Norway; the Nordic elite sport model, which is an example of a national approach to talent identification and development by Bjørndal (2015). In Norway, sport is organised and driven through voluntary associations and clubs, which creates an environment where all organised sport for children and youth, including mass participation, talent development and elite sport is driven within the same structure. This approach lends itself to broad exposure to many sports during childhood, through multi-sport clubs, aligned to sampling approaches and diversified sport experiences. Formal rules are also in place to deny national sport organisations from identifying talent before the age of 13 years. Therefore, children are afforded the chance to demonstrate their talent through a variety of sporting experiences (Bjørndal, 2015). The



Nordic elite sport model aligns with a number of best-practice approaches that have been identified thus far, including the Pyramid Model of Sport Development (B. C. Green, 2005) and the Developmental Model of Sport Participation (Côté et al., 2007). As the name suggests, there is a focus on developing 'elite' talent but through the lens of creating a wider pool of youth participants and ensuring professional talent development programmes occur at an appropriate juncture in a child's sporting journey.

#### 2.4. Current Issues in Youth Sport Development

Whilst there are a multitude of positive outcomes that can occur from participation in youth sport, often the design of youth sport fails to promote outcomes beyond that of talent development (Anderson-Butcher, 2019). Many of the current issues in youth sport programming stem from this approach, where the outcomes of elite performers overbear the significance of mass-participation. A chapter written by Fraser-Thomas & Côté (2006) identified three key messages for sport programmers; 1) To avoid specialisation at ages where children are not physically, psychologically, socially or cognitively ready, 2) There is little evidence to suggest talent identification is important when developing talent and the national approaches to identifying "talented" individuals should be re-examined and 3) Sport programmes have become elitist and institutionalised, negating the opportunity for all youth to engage in sport and develop to their potential. Instead, the goal of youth sport is to nurture a child's intrinsic motivation to play sport, with a focus on deliberate play and sampling multiple sports (Fraser-Thomas & Côté, 2006). Youth sport programmes should ensure that participants of all ages, abilities and experiences are provided with positive, enjoyable experiences (Damon, 2004; Park, 2009). The Fun Integration Theory, which is a multidimensional framework derived from the perceptions of players, coaches and parents to promote active, healthy sport experiences, identified 81 tenable suggestions to improve the fun of children's sport (Vissek et al., 2015).

##### *2.4.1. Early Specialisation*

Whilst early specialisation can be an effective method for developing expertise, there are potential psychological and biological costs to a child's development which can be negated by a sampling approach, which is linked to positive sport and psychosocial outcomes (Côté et al., 2009). Contemporary research has focussed on the role of early specialisation in skill

acquisition (Anderson & Mayo, 2015; Roetert, E. P., Woods, R. B., & Jayanthi, 2018), physical development and injury prevention (Carder et al., 2020; DiCesare et al., 2019; Francia et al., 2021; Zoellner et al., 2021) and dropout and burnout (Giusti et al., 2020).

In their systematic review and meta-analysis, which looked at youth athlete injury amongst those who sample and those who specialise, Carder et al. (2020) concluded that sport sampling is associated with a decreased risk of sport injury in youth athletes when compared with those who specialise in one sport. As a youth athlete becomes more specialised, their rate of injury increases and therefore, youth athletes would benefit substantially from participating in sports sampling (Carder et al., 2020). A similar systematic review and meta-analysis identified that adolescent sport specialisation is associated with greater levels of burnout than those who sample sports, caused by a reduced sense of accomplishment, sport devaluation and exhaustion (Giusti et al., 2020).

According to Agel & Post (2021), adults are an influential factor on early specialisation, often with a perception that accumulating a high number of practice hours may lead to professional contracts or athletic scholarships. Coaches are more aware of the risks of early specialisation than parents, particularly around issues such as burnout and risk of injury (Agel & Post, 2021). In one recent study, Atkinson & Goodway (2021) investigated the myths that lead parents to enrol their child in early sport specialisation. Three myths were uncovered and debunked: 1) The athlete will acquire more sport skills, 2) The athlete will become more prepared for adulthood and 3) The athlete will receive better coaches. The pursuit of sporting excellence and achievement is used by organisations who encourage early sport specialisation, which can have an unhealthy impact on parents and children (Atkinson & Goodway, 2021).

The American Orthopaedic Society for Sports Medicine (AOSSM) has made a number of future recommendations regarding early specialisation. In summary, these include monitoring children who spend more hours per week than their age participating in a single sport, creating public health messages that target the myth that multisport participation will not diminish athletic capability, reinstating physical education as non-competitive play in school curriculums, emphasising the economic cost of obesity on the health system, recognising the loading pattern and injury risk of each sport, identifying the optimal level of training with minimal injury risk and highlighting the detrimental results of early sport specialisation for international, Olympic or professional sport success (LaPrade et al., 2016).

#### *2.4.2. Pressure of competition & emphasis on winning*

Children who are not emotionally, mentally or physically equipped to understand the pressure of competition associated with sport are often subjected to a poor experience. According to Daniels (2007), defining competition as merely winners or losers creates a winning at all costs mentality, which must be replaced with developing cooperative skills and achievement motivation. Children must first be given the opportunity to learn and develop their ability and skills prior to being exposed to sport with an emphasis on competition, results and winning (Daniels, 2007). Practical applications that stem from the research of McCarthy, Jones & Clark-Carter (2008), outline that developmental differences in sources of enjoyment do exist between participants aged 8-15. Older children reported significantly greater enjoyment relating to competitive excitement, whilst children aged 8-13 reported high levels of task goal orientation (McCarthy et al., 2008). This research suggests the introduction of competitive sport at a developmentally appropriate stage is crucial, but also identifies the need to support children in their quest for achieving tasks and goals associated with the sport, such as acquiring a new skill. In another study, conducted by Wearing, Swan & Neil (2010), motivations for junior sport participants were identified as enjoyment/fun, socialisation and skill development, whilst the factors that inhibited participation were coaches and parents, rules and competitions, and other factors such as alternative leisure activities to sport, low perceived ability, lack of enjoyment and excessive pressure. The need to de-emphasize competition is part of a shift in values to prompt parents, coaches and administrators to create sport experiences that meet the needs of children, as opposed to viewing children as mini adults (Wearing et al., 2022). As a solution to the issue concerning the role of competition in junior sport, Daniels (2007) proposes three types of competition. The first is a military model, which exists when children view opponents as an enemy. The second is the reward model, which is an ego-oriented climate whereby young athletes compete for rewards such as championships or adult approval. The third model is the partnership model, which best aligns to the task-oriented model. Opponents are viewed as personal challenges, where skills can be challenged and mastered through effort and individuals base their success on their ability to implement their skills and do their best, as opposed to the score. Parents, coaches and administrators must work together to create a task-oriented climate by promoting the partnership model of competition and fostering a positive youth development climate (Daniels, 2007).

#### *2.4.3. Talent Identification & Development*

Programmes identifying and developing talented individuals have traditionally been of significant importance to national sports organisations, who seek to gain a competitive advantage on the international stage (Güllich & Cobley, 2017).

Many sport-specific studies, including case studies and using thematic analysis, have taken place to identify the ways in which talent can be developed in football (Gledhill et al., 2017; Ringereide & Sæther, 2016; Ryom et al., 2020; Webb et al., 2020), netball (Bruce et al., 2009; Nolte & Hollander, 2020), rugby union (Dimundo et al., 2022; Rosevear & Cassidy, 2019; Spamer, 2009; Worsnop, 2016) and field hockey (Smolianov et al., 2020; Timmerman et al., 2019). In their review of existing literature pertaining to the talent development environment, Wang, Le, Chunxiao & Chian (2019) identified five essential components of talent development environments, displayed in Table 6. The results provided a contemporary understanding of the essential components of the talent development environment (e.g., long-term development and support network), as well as their differential and holistic role in fostering talent development (Wang et al., 2019).

**Table 6**

Essentials of Talent Development Environments (Wang et al., 2019)

| Components                    | Features  |
|-------------------------------|---|
| Long-Term Development         | <ul style="list-style-type: none"> <li>• Allow mistakes</li> <li>• Emphasise fundamentals</li> <li>• Reap the gains of diversification</li> <li>• Delay specialisation</li> <li>• Identify late bloomers</li> </ul>   |
| Support Network               | <ul style="list-style-type: none"> <li>• Seek continual familial support</li> <li>• Extent support network to friends and peers</li> <li>• Give permission to maintain or develop support network</li> <li>• Avoid intra-team conflict</li> </ul>                           |
| Holistic, Quality Preparation | <ul style="list-style-type: none"> <li>• Employ deliberate practice</li> <li>• Individualise programs with sport science support</li> <li>• Balance training and recovery/school</li> <li>• Create a sporting culture</li> </ul>  |
| Communication                 | <ul style="list-style-type: none"> <li>• Provide immediate informative feedback</li> <li>• Build positive coach-athlete relationship</li> <li>• Set clear performance plan that emphasises progression</li> <li>• Use formal and informal communication channels</li> </ul> |
| Alignment of Expectations     | <ul style="list-style-type: none"> <li>• Set expectations with appropriately difficult challenges</li> <li>• Align expectations with the long-term development goals</li> <li>• Involve significant others in adjusting expectations</li> </ul>                             |

#### 2.4.4. The Influence of Coaches & Parents

There is a global recognition of coaches having a significant influence on the enjoyment a child feels from participating in sport (Jowett & Cramer, 2010; Martin, 2020). Factors influencing a coach's decision to become involved in junior sport include being involved with children, giving back to the sport and social interaction. Conversely, a coach may choose to stop coaching because of the impact on work-life balance, lack of professional development or burnout (Rundle-Thiele & Auld, 2009). When researching the role that coaches play in youth sport, Martin (2020) outlined three recommendations for coaches to facilitate enjoyable and motivating sport experiences. The recommendations are for coaches to understand

achievement orientations influence perceptions of ability, emphasise a task/mastery orientation and use the Fun Integration Theory to increase enjoyment (Martin, 2020).

In order to lead change among youth sport coaches, sport leaders can reflect on coach education as a means to connect and influence their coaches. In a study that looked at coach education with a positive youth development perspective, Newman et al. (2020) explained the importance of investing in identifying and educating coach developers within sport systems. This approach must ensure that positive youth development materials are included in coach education programming, along with a shift toward an experiential learning model of coach education (Newman, Santos, et al., 2020). A similar study, MacDonald et al. (2020), found that coaches who undertook a positive youth development coach education course increased the frequency of positive youth development-oriented behaviours, concluding that positive youth development coach education could potentially influence coach behaviour (MacDonald et al., 2020).

Parental figures play an influential part in the development of youth sport participants. A parent can initiate their child's participation in sport and motivate their child to take part in further activity, which can positively impact upon the child's autonomy, enjoyment, interest level and self-perception of skill (Jeanfreau et al., 2020). One study has suggested that children can have increased transfer of life skills such as teamwork, social responsibility, social competence and transfer of learning when interacting with their parent/caregiver in a positive youth development context (Newman, Anderson-Butcher, et al., 2020).

Parental involvement in youth sport has not always led to positive outcomes for participants. Problematic situations occur when a parent connects their moral worth to their child's participation and accomplishment in sport, whilst their ego defensiveness can lead to aggressive sideline behaviour which may contribute to the child deciding to drop out of their sport (Jeanfreau et al., 2020). In a study seeking to understand why children engage with or dropout from competitive sport, Fraser-Thomas, Côté, & Deakin (2008) used semi-structured qualitative interviews which identified that parents who place excessive pressure on their child to compete and perform are a significant factor in disengagement with competitive sport (Fraser-Thomas et al., 2008). In order to educate parents on the importance of their role, Heinzmann (2016) suggests the use of an orientation meeting where parents can meet the coaches and administrators, become educated on the objectives of youth sports, understand the expectations of parents and their child, establish lines of communication and

inform the coaches and administrators of any concerns which they have (Heinzmann, 2002). In another study, which looked at the help available to parents to become better coaches and spectators, Witt & Dangi (2018) concluded that sport leagues must work with coaches and parents to implement and enforce the expectations for positive parental-spectator behaviours (Witt & Dangi, 2018).

## 2.5. Summary

The complex nature of sport development has been scrutinised through research and literature. Modern sport development trends have seen a shift toward developing people through sport, which is associated with developing character as well as physical and mental skills. A multitude of different approaches have been taken to incorporate sport into the lives of children and young people. Within the school system, physical education seeks to provide an avenue for adolescents to learn through sport. Models for sport development have also been engineered in academia, creating a range of research-based theories. Issues have arisen when applying these theoretical models into practically applicable programmes. The development of sport is also subjected to government policy, in which the purpose of sport may range from health benefits to social inclusion and high-performance programmes for international success. However, a number of issues still exist within sport development that lead children to become disengaged and dropout of sport. Children who are subjected to early specialisation are at-risk of dropout through injury and burnout. A range of existing evidence has suggested that children who specialise early do not acquire a broad range of physical or technical skills in comparison to those who are allowed to sample a range of sports, leading to inadequate performance. An overemphasis on winning can generate unnecessary pressure on children, putting the role of competition into question. Often, children participate in sport as a social opportunity to have fun and engage with their peers. Approaches to identifying and developing talent have also been questioned, with high expectations placed on children at ages where it may not be appropriate. This ties in with the first two points, where children have been made to specialise and compete from an early age as a means to develop their skill. An overemphasis on these high-performance-type approaches is often influenced by coaches and parents.

### **Chapter 3: Research Design**

The two broad methodological approaches, quantitative and qualitative, are typically split according to whether numerical data is collected or not (Smith, 2018). Quantitative research is a deductive position with an emphasis on collecting numerical measurement, whereas qualitative research is an inductive position that seeks to understand human behaviour (Smith, 2018). Qualitative research in sport is commonly conducted as a case study, using semi-structured interviews to collect data which can be used to code during a data analysis (Hoeber & Shaw, 2017).

#### **3.1. Research Paradigm**

This qualitative case study is placed within an interpretive paradigm, accounting for subjectivity within an individual context and valuing the participant as a key part of the research (Günbayi & Sorm, 2019). An interpretivist approach understands that knowledge is relative to circumstance and can exist in multiple forms of reality, underpinned by the notion that objectivity can never be captured (Levers, 2013). The methods adopted in this case study were designed in relation to an interpretive perspective.

#### **3.2. Research Position**

A researcher's ontological position refers to the nature of the world and what there is to know about it (Ritchie et al., 2013). Ontology concerns an individual's beliefs about the nature of reality and the social world (Al-Saadi, 2014). This interpretive approach adopted a relativist ontology, where reality is dependent on perception (Potrac et al., 2014). Relativist ontology accepts that through multiple interpretations of experience comes multiple realities, highlighting the importance of understanding a subjective experience of reality and the multiple truths attached (Levers, 2013).

Qualitative research is also driven by the researcher's epistemological position. Epistemology focuses on the ways of knowing and learning about the world, specifically how we learn about reality and the formation of our basis of knowledge (Ritchie et al., 2013). A subjectivist epistemology, in which knowledge is subjective and socially constructed (Potrac et al., 2014), will be drawn upon in this study. Subjective



epistemology recognizes knowledge as value laden, whilst acknowledging the role individual reflections and interpretations may influence knowledge (Levers, 2013).

### 3.3. Research Background

To maintain a level of transparency, researchers who conduct a qualitative case study must provide context in relation to their own personal experiences, perceptions and assumptions they bring to the study (Morrow, 2005). As a graduate of the Bachelor of Sport Coaching at University of Canterbury, I have entrenched myself in coaching sports participants at a range of different ages, stages and skill levels. Through my postgraduate study at Auckland University of Technology (AUT), which has been completed part-time alongside working roles within junior and youth sport, I have developed a keen interest in approaches to ensure children have the best possible experience within sport. In previous roles, I have worked for a primary school physical education provider, as a development officer for a football federation and with high-performance male and female football players. This experience has continued to develop my passion for children's sport and assisted me with a broad knowledge of current approaches in existence within junior and youth sport in New Zealand. My role within the case study was to elicit a deeper understanding of the models and frameworks that currently exist within the junior space in the New Zealand sport system and explore the impact the Balance is Better approach may be having on these approaches.

### 3.4. Research Methodology

Case study has been chosen as the methodological framework for this research. According to Hancock & Algozzine (2021), case studies are intensive analyses in which the researcher is positioned as a decision maker, addressing the case which they have described and appraised in order to make recommendations which may influence policy, procedures and future research. Stake (1995) defines the three types of case study as intrinsic, instrumental or collective. Intrinsic case study design focuses on researching the case, whilst instrumental design is used when the focus of research is the issue rather than the case and collective case study uses multiple instrumental

cases (Stake, 1995). For this case study, an intrinsic design was conducted to understand the landscape of junior sport development in New Zealand.

#### *3.4.1. The case*

Case study research focuses on individual representatives of a group, an organisation or organisations, which are bound by time, place, context and activity, creating richly descriptive research grounded in deep and varied information sources (Hancock et al., 2021). This case study is bound by context and place, as the NSO's are national providers of the four team invasion games that were initial signatories of the Sport NZ Statement of Intent. Each sport is traditionally played in the winter and interviews with participants took place at the end of the winter season, binding the case by time. As discussed in more depth below, the participants were bound by their activity, due to their role in delivering junior sport at an NSO level.

This case study is defined by the junior development frameworks currently used by Netball New Zealand, Hockey New Zealand, New Zealand Football and New Zealand Rugby, which make up the Keep up with the Play campaign. In context to this particular case study, this intrinsic approach will attempt to understand how the junior development frameworks of these NSO's are delivered and establish their level of alignment with the Balance is Better philosophy.

#### *3.4.2. Participants*

A purposive sampling approach was utilised, in which participants from organisations from the same sector, geographical location and level of success or profitability were sought (Veal & Darcy, 2014). Purposive sampling relies on the judgement of the researcher when selecting the participants to be studied (Sharma, 2017). In qualitative research, purposive sampling is used to select participants based on the purpose of the study, with a view toward each participant providing rich information that is of direct value to the study (Etikan et al., 2016). However, purposive sampling is prone to researcher bias when a clear criteria is not set (Sharma, 2017).

In this case, the sector was National Sport Organisations (NSOs) within New Zealand who are responsible for leading and developing their sport at a community level. The

four NSO's were chosen because they are team invasion games who were initial signatories of the Sport NZ Statement of Intent.

A total of four participants were sought, one from each of the NSOs, to participate in an interview. To avoid any potential researcher bias within this purposive sampling approach, the CEO's of Netball NZ, Hockey NZ, NZ Football and NZ Rugby were contacted via email to introduce the study. This email contained an invitation to participate, along with information sheets for both organisations and participants and a permission for researchers to access organisational staff sheet (Appendix B). A request for the NSOs most recent document/s for their junior framework was also sent. The CEO was asked to pass the information to the relevant person, who would become the participant for the research. Each nominated participant had the right to choose whether they wanted to take part in this study. Those who agreed were asked to contact the author, to set up an interview at an appropriate time.

#### *3.4.3. Methods of Data Collection*

Data collection in this qualitative case study utilised semi-structured interviews and examination of documents to create a broad range of information (Sandelowski, 2000). Combining interviews with a document analysis is a common method for collecting data in case study research, providing the researcher two sources of data to identify trends and themes, which are identified through summarising and interpreting the information provided (Hancock et al., 2021).

In-depth, semi structured interviews are a commonly used method for collecting data in qualitative case study research (Smith, 2018). This approach to interviewing relies on longer, less structured interviews, creating depth by probing through supplementary questions and expanding on key points that arise in conversation (Veal & Darcy, 2014). Hancock & Algozzine (2021) recommend the researcher uses the following steps; 1) Identify participants with knowledge and opinions that offer valuable insight; 2) Develop an interview guide based on the fundamental research questions for the study; 3) Identify an appropriate setting for the interview; 4) Develop a means for recording the interview data which can incorporate deep insight; 5) Detail and adhere to legal and ethical requirements.

Once the identified staff member had received the information from their CEO, they were asked to contact the researcher to set up the interview. The interview questions (see appendix C) were intended to create semi-structured and open-ended conversation. The interviews sought to understand and discuss the theory underpinning each of the junior frameworks, clarify themes arising from document analysis, discuss the potential strengths and weaknesses of the framework and whether there are specific areas that do or do not align with the Balance is Better philosophy. All interviews took place online using Zoom due to the influence of Covid-19 and the risk associated with travelling. A participant information sheet (Appendix B) and interview questions (Appendix C) were sent prior to the interview, allowing the interviewee to prepare. Each interview was recorded and transcribed verbatim. The interview was recorded using both the Zoom recording feature and a voice recording app on a mobile phone. Participants were informed when the recording would commence and finish. The researcher completed the transcription independently, using the voice recordings to type out the interviews on a word document. To ensure each transcription was accurate, the researcher read through each document whilst listening to the interview, correcting any mistakes and making alterations where necessary.

The detailed data which was generated from the interviews was utilised within the thematic analysis, adding depth and understanding to pre-established themes, or challenging themes identified within the document analysis. Analysing documents allows the researcher to uncover valuable data by examining information and finding new insights, relying on their intuition, research questions, educated hunches and their eye for identifying findings (Merriam & Tisdell, 2016). When gathering information from documents, Hancock & Algozzine (2021) encourages the researcher to identify the available sources which may answer the research questions and identify how information will be selected and collected. Prior to the interview, the researcher searched the website of each NSO to identify relevant documents for analysis. To ensure these documents were relevant and up to date, the participants were asked to confirm whether these documents were appropriate during the interview.

The junior framework document/s provided data for a thematic analysis, in which data is derived from the content analysis and generated into codes or themes (Sandelowski,

2000). The documents that were analysed are publicly available, be it in the form of an online document or printed edition, thus not requiring ethical approval.

### 3.5. Ethical Considerations

Ethical approval for this research was granted by The Auckland University of Technology Ethics Committee (AUTEC) and given ethics approval number 21/124 (Appendix A).

### 3.6. Data Analysis

A thematic analysis was chosen as the most appropriate method for analysing the data in this qualitative case study. Thematic analysis is a relatively accessible qualitative analytic technique for those wishing to do descriptive work and wanting to produce research for public consumption (Braun et al., 2016). Braun & Clarke (2016) outline a six step guide to completing thematic analysis, including; 1) familiarising yourself with the data; 2) generating initial codes; 3) searching for themes; 4) reviewing themes; 5) defining and naming themes; 6) producing the report. This six step approach has been utilised previously in thematic analysis (e.g. Sadiman, 2017).

Developing familiarity with the data took place during data collection, whilst conducting and transcribing the interviews or identifying and reading through the documents which had been collected. This process of familiarisation allowed the researcher to identify a range of interesting quotes and information from the data sources, creating the base of initial codes. Each quote was initially labelled with a short, descriptive code. Once these initial codes were generated, they were then collated and clustered to create the initial themes, each with relevance to the research questions. A thematic map, which cross-checked whether the themes worked in relation to the codes, was then created to address the key areas outlined in the research questions. The initial themes were then clustered together. Key themes were created from a cluster of sub-themes, providing a name that represented the overarching idea of the sub-themes. Themes were defined by quotes, which were related to the sub-theme. In the report, five themes have been identified, along with their respective sub themes (see figure 2 below).

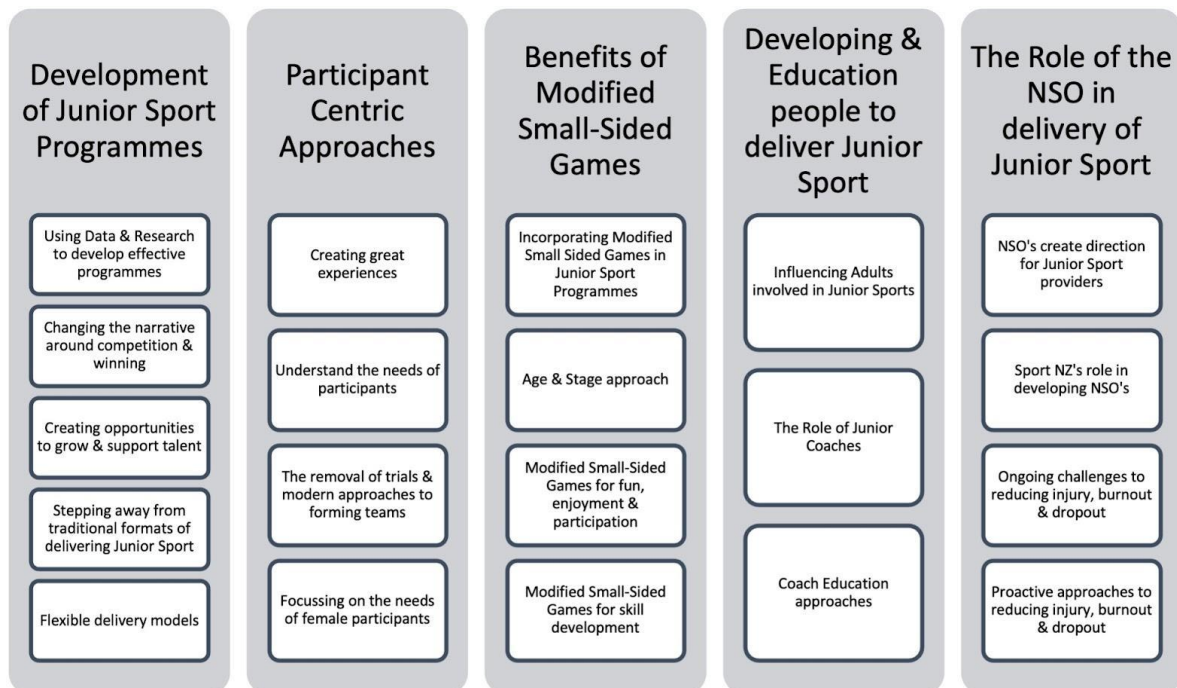
The analysis was able to define areas in which the junior frameworks of each individual sport align with the guiding principles of the Balance is Better philosophy, whilst providing an opportunity to generate strengths and weaknesses for each framework. Where weaknesses of a framework were identified, the researcher would first look at the strengths of the other frameworks to identify potential solutions. An analysis of literature was also completed, also to provide solutions. These potential solutions are presented as recommendations to the NSO's in Chapter 6.

## Chapter 4: Findings

This chapter presents the findings from the analysis of data collected through semi-structured interviews and documents searches. The findings of this data collection have been analysed using Braun and Clarke's (2016) thematic analysis approach, resulting in the generation and development of five key themes with their related subthemes (see figure 2 below). This chapter will be guided by the overarching themes with the underpinning subthemes demonstrating the detail and depth of each theme.

**Figure 2**

The five identified Themes & Sub Themes from thematic analysis



### 4.1. Development of Junior Sport Programmes

The first theme (from Figure 2 above) examines the development of junior sport programmes and provides some context into the process of creating, communicating and evolving the junior sport programmes currently in existence. The participants in this study provided a background of their junior sport programme and outlined some of the key principles and fundamental ideas utilised to support the design and implementation of their junior sport programmes.

#### *4.1.1 Using data & research to develop effective programmes*

All four of the participants acknowledged the role that evidence-based decision making played in developing or evolving their NSOs current programmes. NSOs identified data points, such as decrease in participation numbers, as a means for creating or evolving their programme. For example, the current Netball NZ 'Future Ferns' programme was set up in 2012 "after a Junior Netball Review" took place (I4). NZ Rugby also committed to researching some key issues around "falling numbers and relevancy and appeal of the game" (I1).

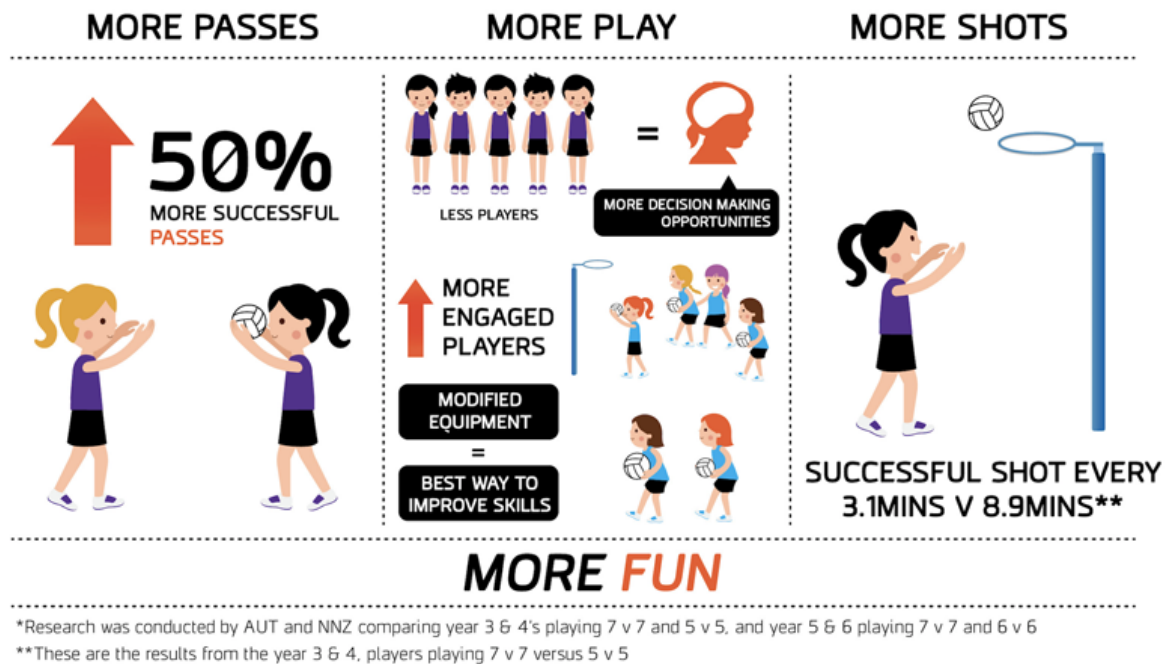
Another commonality shared between the sports is the reliance on international best-practice in shaping their programmes. Hockey NZ is built on fundamental ideas that have been implemented within other countries such as Australia, the Netherlands and the USA and have adapted these to their own context (I3). Similarly, NZ Rugby developed their Small Blacks Development Model with input from the RFU (England), Netball NZ, NZ Cricket, and Australian Rugby League around a small-sided games approach (I1). NZ Football relies on research by the international governing body, FIFA, to understand why kids play football (I2).

Moving forward, the NSOs are continuing to use data and research to evolve their programmes and identify areas of growth. For example, NSOs had partnered with AUT University to help create strong data on their current programmes. NZ Football are in the process of beginning "an extensive study" using video analysis and 'voice of participant' surveys "that will shape our thinking to create recommendations to the national leadership group around what the Junior Framework could look like" (I2). Hockey NZ are set to undertake a similar study (I3), whilst Netball NZ have conducted and published the results of their research, in partnership with AUT, to determine that their 'Future Ferns' programme provided "more passes, more play & more shots" (D4). The results of the Netball NZ/AUT research are presented below in Figure 3.



**Figure 3**

Future Ferns Research (Resources, n.d.).



#### 4.1.2. Changing the narrative around competition & winning

One of the challenges junior sport has traditionally faced is the perceived importance of winning. Whilst sport is naturally competitive, there has been a significant focus on ensuring fun, enjoyable sport experiences are favoured over winning competitions. NZ Football have removed all competitions and tables in their junior grades, however scores are recorded “so that we can make sure that kids are playing at an equal challenge point and enjoy the experience of playing” (I2). Scores for each match are maintained by the federation, who are then able to ensure all levels of grades represent teams of similar ability. Netball NZ has also removed scores and tables from their junior programmes, up until the year 5-6 age group. Whilst there is no structured approach to grading, it is permitted, as explained below;

*What happened when we first started was that year 5-6 had no scores and no tables, it was causing some teams to annihilate other teams which wasn't creating a good experience either. They just do very basic grading to try and streamline the teams so they're a little bit more evenly matched so one team doesn't end up having a bad time (I4).*

A similar reform around the role of tournaments has taken place across the four NSOs. Representative tournaments, for example, have been largely eliminated from junior sport and replaced by alternative events. NZ Football has encouraged a shift toward festivals, which provide more kids with an opportunity to get involved. The following quote highlights this sentiment;

*In the junior space we say no tournaments, festivals only. Because traditionally there is only one team from a club whereas a festival has as many teams as you want. Tournaments would be results driven, with tables and an overall champion. At a festival, everyone plays the same number of games, we don't keep tables or scores and overall, we celebrate everybody (I2).*

#### *4.1.3. Creating opportunities to grow & support talent*

For each of the four NSOs, their junior sport programme is the first entry point for children who may go on to perform on a world stage. Whilst only a tiny percentage of participants go on to compete in professional sport, the foundation for growing talented athletes must also be recognised with these programmes. For NZ Rugby, the 'Small Blacks Development Model' is based around developing core skills of "run, catch, pass, kick, tackle, scrum, lineout and breakdown" in an age appropriate manner (I1). In the below statement, there is no doubt the key focus in the junior age groups is participation and creating future professional players is a bi-product of a well-developed junior programme.

*We are a system that has to recognise that we do have to, in time, which is the critical statement, produce athletes that are ready to perform because we are a very integrative system in that it is not too far from being a club player to being an All Black or a Black Fern and so our systems need to support that somehow, but not at the expense of participation and that is where some of the real challenges have been, between participation and performance.*

*As a late development sport, we don't know what they will look like so we don't want them to specialise too early. We need them to unwind so the message to us internally was you need to try to unwind some of the early specialisation*

*that is happening because it is jeopardising our talent opportunities later on (I1).*

This approach is echoed by Netball NZ, who have developed a 'Player Development Programme' for year 7&8 players. NZ Football, as explained below, have implemented a 'Skill Centre' programme for players aged 9-12. The emphasis is still on participation, therefore barriers to entry, such as trials or selection-only, have been replaced by open programmes for every player who wishes to attend.

*Then attached to that is the Skill Centre programme which is an open programme, which has moved away from being a talent programme and is open for anyone to register, even if you're not a part of a club. It's aimed at Skill Acquisition and players will do an arrival activity, an introduction to the skill, a game which is more invasion and opposition and then finish with a game which is tailored to learning that core skill (I2).*

The move toward additional skill acquisition programmes is intended to give opportunities to participants to grow and develop their talent. The focus for Netball NZ and their 'Player Development Programme' is "to widen and improve the talent base through comprehensive development opportunities" (D4). The same approach applies to NZ Football, as indicated by the following statement;

*It is a fine balancing act because we still need to grow talent in NZ for us to be successful on the world stage, but we also need to keep more kids in the game. At the end of the day, the wider the base, the more cream that will rise to the top (I2).*

#### *4.1.4. Stepping away from traditional formats of delivering junior sport*

Traditionally, winter team sports have been delivered through training on weeknights and games on the weekend. As times change, NSOs are making concerted efforts to ensure a more appropriate approach to delivering their junior programmes is achieved, in order to attract a broader range of people into sport. Netball NZ noted that "we're still on a crusade to keep

shifting that dial but it will take a generation, when these kids who have participated in the modified sport come through as parents” (I4). NZ Rugby has also had to contend with people who have a mindset that “if it’s not 15s, it’s not rugby so we don’t have to worry about it” (I1). Evolving the ‘Small Blacks Development Model’ toward a more progressive, non-linear programme is also an ongoing task. Interviewee 1 supports this sentiment by stating;

*One other thing I’d say about the Small Blacks Development Model is that it was quite linear, in that you played rip rugby for a couple of years and then you moved into under 8’s - 9’s – 10’s and the progression was quite fast. We are trying to slow down the skills, systems and structures that we are introducing for a whole bunch of reasons (I1).*

NZ Football are “exploring alternative ways to capture audiences outside of traditional approaches” and rely on programmes such as “holiday programmes, Football in Schools and Fun Football Centres” to try and engage with a wider audience (I2). Supported by the below statement, stepping away from traditional formats of delivering junior sport is an important principle for Hockey NZ in the ongoing development of the game;

*We want to be more inclusive in a broader sense and how we make sure the game is not a 2- or 3-hour drive away at a \$1million facility that costs \$300 to \$500 for a high school or adult to play, with a \$200 or \$300 stick. So how do we create a diverse opportunity to engage with our game and that’s the long term vision to reposition the brand of hockey in our community (I3).*

#### *4.1.5. Flexible delivery models*

Possibly the most important aspect of developing junior sport programmes is the need for flexibility in their delivery. NSOs have worked to ensure that their programmes are not copy and paste approaches, instead valuing flexible models that can be adapted and applied in a range of settings and situations. For sports such as Netball and Hockey, there is a reliance on accessing suitable facilities in order to play, although NZ Hockey are looking to tackle this perception, as stated below;

*We do have a variety of delivery models within that, such as traditional competitions which our associations provide at our facilities. There are a few satellites, localised comps, which are a focus for us moving forward because there's no reason we can't play on turf or grass. We've got a project at the moment around the delivery network strategy which is aligned with a facilities strategy, and we are trying to evolve that to deliver that game in a hub model. So from our point of view, we have an image of 11-a-side on beautifully manicured turfs and it shouldn't be. We want to balance that going forward, especially in juniors with a modified format, you don't need that full turf. So we want to promote flexible delivery to fit what the communities have available to them. We are aware of grass, astro turf spaces in schools and spaces that we can leverage from and that's our focus over the mid to long term. That's why I touched on the focus for us around creating better local access to the game that doesn't rely on facilities (I3).*

For Netball NZ, the flexibility of their 'Junior Netball Policy' is a strength because it can be delivered at any time of year, which is important "particularly in the South Island, where they can't access indoor venues and it is freezing cold so they move the year 1-2's to term 4" (I4). This flexibility has also created opportunities for them to access more participants who live away from their netball centres.

*Hamilton has set one up in Raglan so those kids don't have to travel in and they can get access to a whole new community. They deliver Future Ferns out of there although it is still connected to the centre. They still get the development of the coaches, and we have a lot of that around the country now, that satellite setup. In Queenstown and Wakatipu, all of the year 1-2's are run at the five schools and then year 3-4 they bring them into the centre and they've been seeing some really good growth by doing it that way in their community. In our bigger centres they will have a draw. So somewhere like Auckland, they have thousands of players so they have to put them into a draw. They will do their skill session together and then play against each other. In some other areas they will run it all together, put them into teams, because the kids sign up*

*individually, do their skill session and play some games and go home. What it looks like is similar but depends on the community. That flexibility is important because they are servicing different types of communities (I4).*

The “regional flavour” approach is also an important backbone of NZ Football’s ‘Junior Framework’, which is intended to be delivered by federations, clubs and schools, depending on what is most appropriate. This approach allows for a multitude of methods to deliver. In Auckland “99% of clubs are doing something on Friday, Saturday or Sunday” whilst the Central Football and Southern Football federations “run the in-house programmes” and clubs in North Canterbury “come together to do First Kicks or Fun Football because of the numbers they have” (I2). This aligns with NZ Rugby’s core question of “what is the format of the game that our participants want to engage with” (I1)? Based on this question, NZ Rugby have focussed on thinking “more laterally so the design of the game meets their needs. It could be contact or non-contact, it could be 7, 10 or 15 a side, beach rugby, walking rugby and a whole bunch of other things” (I1). The statement below highlights an example of the flexibility that NZ Rugby are promoting, with the implementation of rip-rugby as an alternative pathway to tackle rugby, giving participants an opportunity to play the game which they want to engage with;

*The benefit of that will be that we can keep more kids in the game, playing rugby and it develops them in a way that as they mature, gain more confidence or whatever, they can transition into tackle rugby and take all those skill sets with them. As opposed to going away from the game for a few years, coming back and trying to learn with kids that are already advanced. So North Harbour established the first part of that, where they have had rip rugby running parallel to tackle rugby. They saw no decrease in tackle rugby numbers, but what they have seen is a lot of kids flooding into that junior rip rugby space. In time, that may have benefits for them in terms of continuing that pathway into secondary school but also as kids mature and grow, they may use it as an onramp in tackle rugby (I1).*

## 4.2. Participant-Centric Approaches

Within the participant-centric approaches theme, there are four sub themes identifying the need for participant-centric approaches and how these can be best achieved. The participants spoke with great passion and detail about ensuring decisions were made to suit the participants who engaged in their sport.

### *4.2.1. Creating great experiences*

To keep participants engaged in the game, all four NSOs agreed that the experience is important, as described in the following statements;

*We're big on positive experiences for the membership. We're focussed on kids and how they get those positive experiences from football and that aligns with our ethos and Balance is Better (I2).*

*The main philosophy is around having fun and enjoying participating in netball so players will come back (I4).*

Traditional junior sport offerings, such as representative tournaments, have mostly been replaced by festivals and have-a-go days. To create a positive atmosphere, fun and enjoyable experiences are fundamental, as the statement below suggests;

*We have decided to remove national tournaments, we've done 13s and 15s traditionally and we've gone through a review of what that could look like. We're reluctant to use the word replace, it's more about providing better offerings that meet the needs for weekly competition, player development opportunities and event experience that contribute to the game of hockey (I3).*

For NZ Rugby, “we don’t have an issue with recruiting people into our game, our issue is retaining them because of the quality of experience” (I1). A model which they rely on is FABS, where “an environment for kids is one that looks Fun, kids need a sense of Achievement, they need a sense of Belonging and they need to be Safe” (I1). All four participants highlighted the

role of NSOs in promoting positive experiences, ensuring that these are shared with the widest possible audience.

#### *4.2.2. Understand the needs of participants*

In order to implement a truly participant-centric approach to junior sport, there is a need to first understand what the participant needs. It is an important step, to allow NSOs to make adjustments and changes for the right reason, as explained below;

*From a game-centric perspective, rugby would admit that they spent a lot of time trying to make the players fit the game. We had very limited offerings and a strong view on what rugby needed to look like for it to be rugby. As we have seen with modern trends and understanding of what is required now in sport, we realised we needed to make a shift to that more participant-centric approach and work out how we make the game fit the players (11).*

One approach that NSOs have taken to better understand what the participant needs is to review their programmes using a 'voice of participant's survey. The results of a junior review by NZ Football in 2018 illustrated that junior participants valued fun and enjoyment far above winning. In future, NZ Football plan to use a similar means of data collection to review some alterations to gameday formats which they intend to trial. Likewise, Hockey NZ have used participant numbers to determine the success of changes which have been implemented in recent times. There are also plans to further their use of "voice of participant" research to find out the wants and needs of their membership.

There is also a general acknowledgement that sport is played by a diverse range of people. Understanding the needs of individual groups of participants is another key tool that NSOs can leverage to increase participation and engagement in their game. An example of how an NSO may adapt to create a more diverse approach is explained below;

*We talked about moving from game-centric to participant-centric, so we had to unpack what does participant-centric mean and what does it look like for our participants. So what we ended up with was a mental model which was to*



*put those participants, whether it's a new kid to the game, a teenage girl, a 1st XV player wanting to make professional rugby or a senior player coming to the end of their time or if it is a child with disability or a child who is new to the community and has never been exposed to the game. We've tried to use that mental model when we're looking at an issue. With the participant at the centre, what does it look like for them? As a result, that has started to throw up a lot of real opportunities because we keep putting different participants at the centre of the model, we start to unpack how the game may look for them, what does the delivery look like, what does the environment look like. Living proof of that is we are working with Parafed Auckland at the moment around what does a Rangatahi offering look like for those who are wheelchair bound and want to play wheelchair rugby, how might we design, deliver and provide the environment for that to occur but not just for those participants, but for their mates who might be able bodied and want to participate. Previously we wouldn't have seen it so through this lens, we're now able to keep replacing the person in the middle and work out what it looks like for them. The Chinese community, we've done a lot of work with them around what rugby could look like for them so we have learned some things about the design, delivery and environment for those communities which our clubs may struggle with (I1).*

This mental model approach enables NZ Rugby to understand how their game can be implemented to suit a wide range of people. For NZ Hockey, along with the other NSOs, there is a need to diversify their membership, which is acknowledged in the statement below. Understanding their participants through a well-established mental model may help them to do that;

*I think a big underpinning around what we shift towards is acknowledging diversity and providing choice. I think that is something that we need to ensure, as we design and make decisions, that actually that is a real underpinning of what shapes the process for us and I just think that hockey is very much a niche representation of the wider community and as we open the doors more, we want diversity and we want to embrace it so we are ahead of the game and*

*once those doors, or floodgates, open, we have some really good opportunities and experiences in place already to cater for that (13).*

#### *4.2.3. The removal of trials & modern approaches to forming teams*

For a long time, trialling for teams has been common practice in junior sport. Trialling often creates selection-based teams, where the strongest players are pooled together and the weakest are discarded. A common message from the participants was to move away from this method of team formation for a number of reasons. One approach that Netball NZ have taken is to discourage trials between years 1-6, which has created some new thinking with schools around how they form teams. This is explained below;

*We talk about it being no grading until year 7, not putting them into any graded teams and a lot of schools are following that. It makes it easier to be honest, to just pop them into teams and they will do things like choose two friends that you want to be in a team with. They put their teams together that way. For year 7-8, you can trial but let's look at alternate ways. Let them put teams in with their friends and if they don't want to trial, no worries. If they want to trial, set them up differently. Give options to kids, if they want to trial, they can, if they want to be put in a team then put them in a team (14).*

This approach is aimed at providing less barriers to sport for children and letting them participate with friends, in environments that they choose. Netball NZ have also taken a proactive approach by suggesting what an alternative trial process could look like for year 7-8 players, which is stated below;

*I've created this 1-page guide for if you're running trials, here are some alternate ways you can do it. It's targeted at year 7-8 and talks about setting it up as skill sessions. Most will have 2-3 trials if they are a large school so set it up as an attacking session, defence session and midcourt session. Get all the kids to come along, get all the coaches coaching so that you can coach the kids, run then through a Netball Smart warm up, see their motivation and attitude and coachability so if you have to stream them, make it an environment that's*

*less chucking them on the court and asking them to perform because they're not at that age and it puts a lot of kids off participating in our sport or entering our sport at 12 (14).*

In 2021, NZ Football created and released their 'Team Formation & Grading' guide. Using data about relative age-effect, the document provides recommendations for coaches, schools and clubs that dissuade traditional trial processes in favour of participation and enjoyment. This is summarised in the following statement;

*What we recommend for 9-12's is to not select one team, have multiple teams, so avoid early selection and early specialisation. With that, we released some data about relative age effect where we saw that teams who were selected were predominantly selecting kids born at the beginning of the year, which the international research shows, regardless of the sport. Early born will usually get picked over later born and we found strong evidence that it was flat lined when there were non-selected junior teams. What we're saying is don't have one A team, have two or three or four teams based on the mass of the club, which should help the kids transition into Youth football (12).*

In another example, NZ Rugby have taken a lead on bio-banding and are completing some research on how this may shape future approaches. When it comes to creating bands of players, there are multiple approaches taken by unions, but the difficulty is "how do you determine weight, how do you manage dispensations, players playing up or down, emotional and cognitive considerations" (11). These factors alone make it difficult to recommend the best way to form teams, but a commitment to understanding how these bio-banding options may work is an important step in creating game structures that support players being involved with and against appropriate players.

#### *4.2.4. Focussing on the needs of female participants*

As NSOs work to make their programmes more suitable for a wide range of participants, opportunities to grow female participation have been explored. NZ Rugby and NZ Football have both employed staff to work specifically within the female game, with particular focus

on the community level and getting more participants into sport. Again, NZ Rugby's mental model approach can be applied to understand the needs of female participants, as explained below;

*The only thing I'd add is we are recognising the great growth in girls and women, but it is challenging and there are growing pains that go with it. And so as a result, it is starting to test some of our mental models around how these work. So for example there are a few girls who play Small Blacks but it's not a high number. Where we see our big numbers come in is in teenage rugby. That itself is challenging because a lot come in having not, or if we look at how many 13-14 year old girls are completely new to rugby, it's over half. Which means they are potentially new to invasion sports and they're potentially new to things like falling safely. So we are looking to implement a level to learn model in that teenage girl space (I1).*

Similar issues have been identified within NZ Football, who have created opportunities for female participants through 'Girls Only Player Programmes', which "helps to meet some of the social needs that may not be met in a more male-dominated environment. This has been shown to further engage female players, helping grow the game and increase the depth of competition" (D2).

#### 4.3. Benefits of Modified Small-Sided Games

The participants spoke regularly about the implementation of a small-sided games approach within junior sport, with appropriate modifications made in game design so that the game represented a suitable offering for players. The themes which emerged from within the discussion about modified small-sided games were the need for an age & stage approach and the benefits of this approach for enjoyable participation and skill development. The Junior Game Design overview (in Figure 4 below) provides context by outlining the various modifications to games that take place across junior sport.

**Figure 4****Junior Game Design overview**

| Sport                 | Rugby   |   |  |                     | Football                             |                |                                  |               | Netball  |                                   |                                       |                  | Hockey  |  |                                  |              |
|-----------------------|---|---|--|---------------------|--------------------------------------|----------------|----------------------------------|---------------|--|-----------------------------------|---------------------------------------|------------------|---|--|----------------------------------|--------------|
| Program Name          | Small Blacks  |   |  |                     | Junior Framework                     |                |                                  |               | Future Ferns                                   |                                   |                                       |                  | Small Sticks  |  |                                  |              |
| Age Groups            | Under 6/7's   | Under 8's   | Under 9/10/11's                          | Under 12/13's       | 5-6 Years                            | 7-8 Years      | 9-10 Years                       | 11-12 Years   | 5-6 Years                                      | 7-8 Years                         | 9-10 Years                            | 11-12 Years      | 5-6 Years   | 7-8 Years  | 9-10 Years                       | 11-12 Years  |
| Field/Court Size      | 1/4 Field   | 1/4 Field   | 1/2 Field                                | 1/2 Field           | 20x15m                               | 30x20m         | 45x35m                           | 60x45m        | 1/3 Court                                      | 2/3 Court                         | Full Court                            | Full Court       | 1/8 Field   | 1/4 Field  | 1/2 Field                        | 1/2 Field    |
| Players per Team      | 7v7   | 7v7   | 10v10                                    | 10v10               | 3v3/4v4                              | 4v4/5v5        | 7v7                              | 9v9           | 4v4  | 5v5                               | 6v6                                   | 7v7              | 4v4   | 6v6  | 6v6                              | 7v7          |
| Goals                 | Portable  | Portable  | Portable                                 | Portable            | 2x1 metre                            | 2x1 metre      | 4x2 metre                        | 5x2 metre     | 2.1 metres                                     | 2.6 metres                        | 2.6 metres                            | 3.05 metres      | Modified  | Modified   | Full Size                        | Full Size    |
| Ball Size             | Size 3  | Size 3  | Size 3                                   | Size 4              | Size 3                               | Size 3         | Size 4                           | Size 4        | 20cm   | Size 4                            | Size 4                                | Size 5           | Light Ball  | Light Ball   | Light Ball                       | Standard     |
| Game Length           | 2x20mins  | 2x25mins  | 2x25mins                                 | 2x30mins            | 45-60 mins                           | 60-75 mins     | 2x25mins                         | 2x30mins      | 2x8mins  | 4v8mins                           | 4x8mins                               | 4x10mins         | 10 mins   | 40 mins  | 40 mins                          | 50 mins      |
| Positions             | Rotate positions throughout game/season                       |   |  |                     | No GK's, rotate positions            |                | Include GK's, rotate positions   |               | None   | 2xA, 1xC, 2xD                     | 2xA, 2xC, 2xD                         | GK/D,WD/A,C,GA/S | No GK's, free play positions                                  |  | Optional GK's, rotate positions  |              |
| Gameday Structure     | 2x20mins Game   | 2x25mins Game   | 2x25mins Game                            | 2x30mins Game       | 11+ Kids                             |                | 11+ Kids                         |               | Netball Smart                                  | Netball Smart                     | Netball Smart                         | Netball Smart    | Fundamental Skills  | -  | -                                | -            |
|                       | -   | -   | -  | -                   | General Movement                     |                | Football Technique               |               | Skill Development (20mins)                     | Skill Development (15mins)        | -                                     | -                | Game Sense  | -  | -                                | -            |
|                       | -   | -   | -  | -                   | Football Technique                   |                | or                               |               | -  | -                                 | -                                     | -                | Hockey Skills   | -  | -                                | -            |
|                       | -   | -   | -  | -                   | Football Coordination                |                | Football Coordination            |               | 2x8mins Game                                   | 4x8mins Game                      | 4x8mins Game                          | 4x10mins Game    | 1x10min Game  | 1x40min Game   | 1x40min Game                     | 1x50min Game |
|                       | -   | -   | -  | -                   | 3x10 min Games                       | 4x10 min Games | 2x25mins Game                    | 2x30mins Game | Cool Down                                      | Cool Down                         | Cool Down                             | Cool Down        | -   | -  | -                                | -            |
| Recommended Gamedays  | 1   | 1   | 1  | 1                   | 1                                    | 1              | 1                                | 1             | 1  | 1                                 | 1                                     | 1                | 1   | 1  | 1                                | 1            |
| Recommended Trainings | -   | -   | -  | -                   | 1                                    | 1              | 2                                | 2             | None   | 1                                 | 1                                     | 2                | -   | -  | -                                | -            |
| Game Modifications    | No Scrums   |   | Introduce Scrums (No Contest or Pushing) |                     | No Offside                           |                | Introduce Offside                |               | Goal-line throw-in                             | Centre Pass from non-scoring team |                                       | Centre Pass Rule | Push Only, no Raised Stick, Hacking or Tackling from the left |  |                                  |              |
|                       | No Lineouts   |   | Introduce Lineouts (No Lifting)          |                     | Kick In                              |                | Throw In                         |               | Players to pass or shoot within 5 secs         |                                   |                                       | 3 Second Rule    |   | No deliberate use of foot, accidental use should see play continue |                                  |              |
|                       | Rippa Rugby   |   | Introduce Tackle (Below Sternum)         |                     | No Penalty Area                      |                | Introduce Penalty Area           |               | No walking with ball                           | Stationary landing                | Introduce Footwork Rule               |                  | No Penalty Corners/Strokes                                    |  | Optional Penalty Corners/Strokes |              |
|                       | No Conversions  | Introduce Conversions (Punt or Drop Kick in front of posts) |  |                     | Indirect Free Kick for Foul/Handball |                | Introduce Direct Free Kicks      |               | Goals scored by all                            | Goals scored by A's only          |                                       |                  | No Contact or Obstruction                                     |  | No Obstruction                   |              |
|                       | No Kicking  | Introduce Kicking (Encourage Running & Passing)             |  |                     | -                                    | -              | Introduce "Retreating Line" Rule |               | Lenient Contact & Obstruction rules            |                                   | Introduce Contact & Obstruction rules |                  | Rolling Subs  |  |                                  |              |
|                       | Free Pass   | Tap & Pass  | Scoring Team Kick                        | Normal Kick Off     | Rolling Subs                         |                |                                  |               | Rolling Subs, all players must play 1/2 a game |                                   |                                       |                  |   |  |                                  |              |
|                       | Tap & Pass  |   |  | Introduce Penalties |                                      |                |                                  |               |  |                                   |                                       |                  |   |  |                                  |              |
|                       | All players must play minimum of 1/2 a game (No Rolling Subs) |   |  |                     |                                      |                |                                  |               |  |                                   |                                       |                  |   |  |                                  |              |

**4.3.1. Incorporating modified small-sided games in junior sport programmes**

To start with, the participants spoke about where the modified small-sided games approach came from and the processes which allowed the NSOs to settle on their current formats. This links back to research and data which has been sourced by the NSO when developing their programmes, in order to land upon a games model that fits the needs of their participants. For example, Hockey NZ relied upon influences from Kiwisport's modified games approach, as well as the Australian and Dutch models for delivering junior hockey. Following the successful implementation of these approaches, Hockey NZ made a decision to "extend the small-sided games format to include year 7-8's, where previously this was 11v11. We agreed with our associations to include the older age group as we had a little more evidence around the benefits of small-sided games" (I3). Similar to this, Netball NZ went through a data

collection procedure with AUT to shape the small-sided games which are used in the 'Junior Netball Policy'. Another example of popular small-sided games is Futsal, an indoor five-a-side version of football which has taken off within NZ and is now recognised as its own sport, although falling within the remit of NZ Football. As part of their participant-centric model, NZ Rugby has developed a range of modified small-sided game formats to better suit their membership, as stated below;

*In the last 3 years what we have done is taken things like 10s and said that we think it is really important, which is not a commonly accepted form of the game, and said we think 10s has got lots of merit. But not 10s as people would know it, which is 10s on a full field. We've taken rip rugby, which is the equivalent of tag or touch, and we've looked to legitimise and normalise because it has had a good uptake, especially with girls and the girls game in parts of the country and we think there is more opportunity there. We've started to unpack what it looks like in the Small Blacks space in a way that is developmentally appropriate for their cognitive ability. So that's what the design of the game looks like (11).*

Within junior sport, modified small-sided games have become commonplace which has allowed for further exploration. All four NSOs were conducting, or planning to conduct, pilot studies into their current game models to determine their effectiveness and uncover alternate formats that may be even more appropriate for participants within their sport.

#### *4.3.2. Age & Stage approach*

The fundamental reason for adopting a modified small-sided games approach is to ensure that children are playing in an environment that suits their needs. It is agreed that a full sized version of a sport, played on bigger areas with bigger numbers, is not appropriate for junior participants. However, within the lifespan of a junior participant, there are a number of considerations made to adapt the games to suit certain age groups, experiences and competencies. This is known broadly as an age & stage approach. Hockey NZ's 'Small Sticks' programme is an example of this approach, as noted in the quote below;

*It was established in 2012, so before my time. It was built on the premise around age and stage and the notion of what's appropriate (13).*

As demonstrated in the Junior Game Design overview (Figure 4), an age & stage approach has been applied to a range of areas. This can include the size of the playing field or court, the number of players in each team, the size of the goals which are being used, the scaling of equipment such as balls and sticks, the length of the game, the positions required to play the game, the structure of a gameday, the number of contacts per week and the modifications made to the game to ensure that it is developmentally appropriate.

In the youngest age groups, gamedays look totally different to that of a youth or senior player. In the case of Netball, Football and Hockey, this incorporates the development of fundamental skills (specific and non-specific) as well as small-sided games in modified environments. An example of this approach is evidenced below;

*Within Future Ferns, year 1-2 do one day which is a skill session and then they play a game. Year 3-4 is also set up like that with a skill session and a game, but they can opt to have training if they want to at their school but it's by no means expected or necessary. Year 5-6 looks like 1 training and 1 game although in some of our smaller areas they're trialling the same setup as year 1-4 with a skill session and then game play. The kids only have to do netball on one day a week and then year 7-8 should be the same, so it should be 1 training and 1 game (14).*

*The kids can turn up and do their activities, which are General Movement, Football Coordination, Football Technique and Small Sided Game which is usually done in an hour. It's normally even time spent doing the activities and they're not necessarily football related. There might be tag games or other fun games that help teach kids how to move. In the 7-8's we have Fun Football which is the same as First Kicks but the timings are a little different and the info is kept in the Junior Framework document. The difference between these is the*

*size of the game, so First Kicks is recommended as 3v3/4v4 with no GK's on small pitches. In Fun Football we play 4v4/5v5 (I2).*

*That sits more around our Fun Sticks module, which is our first intro to the game of hockey. The premise is more around enjoying physical activity through fundamental movement skills as opposed to playing the game of hockey. So that's packaged up and rolled out through associations or through clubs (I3).*

#### **4.3.3. Modified small-sided games for fun, enjoyment & participation**

One of the underlying principles of each NSOs programme is the importance of fun, enjoyment & participation. Put simply, it is vital that kids have a great time when they play their sport. Game design plays a part in this, as a game can heavily influence a child's perception of sport. For NZ Rugby, adapting the field dimension has led to more enjoyable experience, as stated below;

*On a big field, fewer kids get their hands on the ball because it doesn't get passed and the engagement levels drop as the good kids get the ball. For quality experience, the ball is power essentially, so the more power you can put in kids hands, the better. And the way to do that is to constrain the field so the ball turns over more (I1).*

Below, another example of a slight rule variation and its impact on enjoyment can be found in Netball.

*The rules of year 5-6 game is that the team who scores, the opposing team gets the centre pass so they'll still get some game play (I4).*

These simple changes, made at a national level, filter down to every child that participates in the game across the nation. The notion that "the ball is power" is reflective of exactly why children play. Since implementing a small-sided games approach for longer, Hockey NZ "are seeing better engagement with the game, with an increase in participation numbers" (I3).



This once again reinforces the need to maintain and explore modified small-sided games to keep children engaged and involved.

#### *4.3.4. Modified small-sided games for skill development*

Tying into the need to grow and support talented players, the use of modified small-sided games for skill development has become universal. Modern approaches to skill acquisition rely on games as an integral part of their strategy and NSOs are cognisant of this when developing their junior sport programmes. Based on data from Hockey Australia, Hockey NZ has been able to implement a small-sided games approach, with reliable evidence of the benefits. Netball NZ's anecdotal evidence also suggests that a small-sided games approach, with modified rules, has created a stronger skill set within junior players as they move into the next phase of their journey.

The small-sided games approach enables participants to develop their skills within game contexts and NSOs such as NZ Rugby have pushed to incorporate small-sided games for longer within their programmes. The quote below is an example of changes to game design being implemented;

*So in 2019 we realised we need to make a fundamental shift for player development and player engagement, which are slightly different. Having a chance to develop skills is great but having the chance to use them is another thing. Game design must enable kids to use them multiple times. For engagement and development to be maximised we believe that they should be playing in a small sided games approach for longer and that the catalyst for driving the change around under 11s (I1).*

Modified rules can help to achieve a better level of skill acquisition, with NZ Football's 'Retreating Line' an example of a modification to encourage a skillful outcome, as explained below;

*We have the Retreating Line, which encourages kids to play out from the back and structure the game more so they're not just kicking and chasing, they're trying to play, and it gives them some breathing space (I2).*

Rules like the 'Retreating Line' encourage skilful behaviour within games. For NZ Rugby, their 'Rip Rugby' approach has been designed around safety. As an NSO, NZ Rugby are looking to create ways in which a participant can choose whether to play tackle rugby, or 'Rip Rugby', to enable kids to develop fundamental skills without the fear of injury.

*Our thinking was around the participants who want to stay engaged in the game but they're not quite ready, or don't ever want to, play in a tackle format. So what we've done at under 8's and beyond is mirrored tackle rugby with rip rugby and as a result, those developmentally are linked, so that you still develop game sense, you still develop fundamental skills, just without tackle or breakdown, but with all of the other aspects (I1).*

Staggering the rules within rugby has also been a focus for NZ Rugby, to ensure that their game design creates space for children to learn fundamental skills without specialising on one area of the game, which can come later as the player becomes more developed. An example of this approach is outlined below;

*The reality is they don't push, so scrums are of limited value until 13 years old so we need to deconstruct some of those elements to take the focus off of specialising these kids because the system and design requires it. Game design shouldn't inadvertently lead to kids specialising too early, they should all get the chance to be the first five or the half back or play in the front row if that is what the game requires as opposed to selecting kids to be a prop or a half back or whatever the case may be (I1).*

The staggering of positions is also relevant in Netball. Whereas the 7-a-side, full court version relies on a very specific set of specialist positions, there is a gradual introduction of positions

within their 'Junior Netball Policy' to ensure that children are able to develop a core set of fundamental skills by being exposed to a variety of situations within the game.

#### 4.4. Developing & Educating People to Deliver Junior Sport

In order for junior sport to go ahead, there is a huge reliance on a wide range of people. These include, but are not limited to, coaches, supporters, parents, officials, administrators, RSO's, schools, clubs and local councils to name a few. Therefore, NSOs assume the role of developing & educating these people so that junior sport programmes are delivered as effectively as possible.

##### *4.4.1. Influencing adults involved in junior sports*

As mentioned, there are a vast range of adults who are relied upon to ensure that junior sport exists. Most notably, parents can play a hugely influential role in their own child's experience of sport. It was regularly noted when discussing parents, that the junior sport programmes that exist in the current day are far removed from what the majority of parents would have experienced in their own junior sport contexts. Therefore, the need to educate parents on what junior sport looks like in the current climate and in the future has been at the forefront of NSOs approaches. One common approach is the influence of the Good Sports campaign, which is being relied upon by NSOs to influence a shift in mindset, exposing parents to a 'Climate of Development' approach. This is exhibited in the statements below;

*We're the beneficiaries of support from Sport NZ for the next 3 years around Good Sports. Looking to roll out 5-6 provincial unions over the next few years as a trial to implement this to support parents. A number of provincial unions have used this successfully, mainly North Harbour, which is the foundation for getting movement around other changes that we've discussed (I1).*

*For us, one Federation, NRF, is currently signed up with the Good Sports programme through Active. So they run Good Sports workshops within their clubs. It's really big in Northland and it is a prerequisite in Northland that they must run a Good Sports workshop with their clubs and then the clubs filter that down to their parents. Capital Football have now signed up to Good Sports, and*

*our job is to encourage our Federations to carry on that good work. For us as an NSO the next steps would be to explore Good Sports on a National front and coming up with our own national frameworks and explore alternative ways of celebrating positive behaviour and what does that look like. I believe the better the parent support, so how can we support the parents to be the best sideline supporters, then that leads to better experiences for the kids so that's the next step for us as an NSO (I2).*

Sideline support is noted by the participants as being influential for a child and can impact their experience in positive and negative ways. Netball NZ mentioned that keeping score can be a contentious area for parents and have created a resource to help parents understand the purpose of the 'Future Ferns' programme, outlined below;

*We get a few parents keeping score but year 5-6 is where it really ramps up. That's probably our most problematic space in terms of sideline behaviour and the feedback is that is where the sideline behaviour is the worst, even more so than year 7-8. We have a Parent Info guide and we give those out to our centres and they give those out when the teams first come along. We give one to each parent to explain what Future Ferns is, what the benefit is for the different age groups and different games for those age groups so we give one of those out to all of our parents (I4).*

For Hockey NZ, sideline behaviour is not seen as a significant problem due to "the relatively positive culture in hockey across the country", but they are taking proactive steps so that they can achieve their intent "to open the doors more so we can see a much more diverse community within hockey" (I3).

Parents are not the only subgroup of adults within junior sport that NSO are working to influence. For NZ Football, a move toward Good Sports is seen as a "system wide approach", reliant on a "big piece of education and development" for "coaches, administrators, federations and clubs" (I2). A similar outlook is shared by Hockey NZ, who "provide info to administrators and leaders and thread it through our education pieces for coaches, parents

and officials” around the role of fun in “developing people” (I3). Nationwide campaigns, such as Good Sports, are useful in developing a much larger audience of people who are involved in junior sport, because of the tone of the messaging. This is supported by the following statement;

*So if they're (adults involved in junior sport) a bit more reflective, through a climate of development lens, around the environment created for their child, then that's a good thing because these messages will get through. Good Sports is provocative because you need to be to get a mindset shift. We spend too much time doing surface level marketing around what good looks like when we need to confront the bad so Good Sports has been great and it's great to see that move into a national lens (I1).*

#### *4.4.2. The role of junior coaches*

Coaches can play a huge role in the experiences of junior sport participants. However, within the junior landscape these coaches are parents or volunteers who give up their time to help the children within their care, as stated below;

*Often what we see in the Small Sticks space is that the parents and coaches are one and the same. It's a challenge to refer to them as coaches where realistically they are adults facilitating a group of kids, which is all we really want, to allow self-exploration etc (I3).*

There is an acknowledgement from NSOs that junior coaches should create space for children to explore their sport. Therefore, the question is whether the term ‘coach’ is an accurate representation of what the role actually entails. Netball NZ have removed the term ‘coach’ entirely from their year 1-4 space, explained below;

*So how we have set that up is that every centre has a Lead Junior Coordinator and under them they have, and it's a bit confusing because they're also called Junior Coordinators, but they are the experts and they are often people who will stay in their age group for a number of years. Under them we have the Star*

*Helpers and they might be the coaches. So, you have 1 Junior Coordinator who works with 3 or 4 Star Helpers and all of the kids who they have. They work as a cohort so it's not just coaching on your own. That is setup for the year 1-4 space. The Star Helper is like your mum or grandma or big sister or whoever and many of our coaches have never played netball before (I4).*

The shift away from having set coaches is also not intended to limit the influence that these adults have on the children, it is more of an attempt to funnel the influence in a positive way.

*The coaching piece is a massive part of Future Ferns because they have such a huge influence over the environment and over the experience that the kids have (I4).*

This is a novel approach that emphasises the role of the 'Star Helper' may be more appropriate to junior sport than the traditional definitions of a 'coach'. This change has not been perfect and there is still a mindset shift that needs to happen within some quarters, as noted in the statement below;

*The system of having a coach for one team is still so embedded so it's a change management piece. With the centres that are totally on board, they'll follow and do it exactly right whereas it's not done like that everywhere (I4).*

#### *4.4.3. Coach Education approaches*

One of the areas where NSOs can have a real impact on their coaches is their coach education strategies. One emerging theme is the different approaches that are taken to developing coaches across the NSOs. Impressively, NZ Rugby have implemented compulsory attendance of their 'Small Blacks' course for all coaches working with their junior programme, which is explained below;

*We have mandatory coaching requirements for all coaches, often centred around safety. Not just player safety but keeping players safe. So player safety in terms of safe tackling, breakdowns etc but also child protection, good*

*behaviour around kids, what to do if you've got concerns or alarm bells start ringing. So there is a mandatory touch point with coaches at the moment which is done through our Small Blacks course which is delivered locally (I1).*

The 'Small Blacks' course consists of an online component, which is completed prior to attending at 2-3 hour practical session which is hosted and delivered by provincial unions. Coaches are given a choice of when they want to attend, creating a flexible approach that aligns with the compulsory nature of the course. The course looks at a range of different areas that can help a coach throughout the season. This is outlined in the following statement;

*There will be a lot of what to coach, with focus areas from the previous year that are key. This year was how to referee the game well. There is also a bit of how to coach and so we had a primary school principal who is a high level rugby coach and referee, so he ran a session around how to coach kids. So that talks more to kids' cognitive development, how to manage kids, how to keep them engaged, how to keep it fun, how to scaffold sessions in a way that is appropriate to kids so you don't just crack into a drill, you've got to build it up (I1).*

Alongside the compulsory element, NZ Rugby are looking at different approaches they can implement throughout a season to keep their coaches engaged. One example of this is a Facebook page, set up to allow 'Small Blacks' coaches to contribute and share advice. The use of webinars and forums, focussing on areas such as "how to support your teams with good environments, good climate of development and managing expectations about what that looks like" (I1). In future, there are plans to grow their coach education to help manage the transition to different stages. This includes "tackle clinic, where kids learn how to tackle and coaches learn how to coach tackle" and scrum clinic "about getting into strong, safe shapes" (I1). The additional programmes are aimed at "reducing the risk of injury" (I1).

In a similar vein, Netball NZ have developed a coach education network that allows them to put "4000-4500 coaches through coaching workshops a year" (I4). These are split into age & stage appropriate workshops, for year 1-2, year 3-4, year 5-6 and year 7-8 coaches. These

workshops can take place online, but “face to face is the gold standard” (I4). However, there are plans to move the theoretical elements online so that the face to face workshops can focus more on the practical side of coach development. As part of their attendance, coaches are given a resource which they can use with their players and teams, which is aligned to their age & stage. One of the benefits of their gameday structure is the ongoing development and education that a ‘Star Helper’ can receive from the ‘Junior Coordinators’ at the Netball Centre, as stated below:

*By having a Junior Coordinator to connect to, who helps to run the skill session, they don't feel like it's just “here's your book, good luck, have a good time”. They can actually have some support there on the day to help them deliver to kids. So if they've never done that before, it can be a challenge about how to provide a fun and healthy environment (I4).*

The online approach to coach education is one which has been utilised by Hockey NZ. This provides a core of coach education which can be topped up by the associations across the country, as explained below;

*We use an online learning portal so within that, there are some basic fundamental modules for our foundation coaches. There is stuff there to help them around skills and attributes of the game, but a massive thing around what's important. We also support our officials there around what they should be doing for the game in terms of letting the game flow, loads of touches on the ball, try not to oversubscribe rules and same for coaches around keeping it simple and other messages we discussed before. Associations run their own community coaching courses and there are a variety of those and they are different depending on what is offered (I3).*

There is no compulsory approach to coach education with Hockey NZ, with a bigger emphasis on creating access for coaches who want it.



*It's an opt-in approach, it's easy access and they're short, normally 20-30 minute maximum in terms of the modules so it can fit in with time and flexibility (13).*

There is also no compulsory attendance for coaches operating within NZ Football's 'Junior Framework'. Instead, their coach development pathway is far more linear than the other codes. Coaches first attend an 'Introduction to Junior Coaching', which can be offered both in person and online. Coaches then progress through the 'Junior Level 1', 'Junior Level 2' and 'Junior Level 3' pathway, with each course focussing on different areas of coach development. There is flexibility in that these courses can be hosted by federations or clubs, which can create easier access for coaches. The next steps for NZ Football is to incorporate the messages that have been popularised by Good Sports into their formal coach education approach, as indicated by their following statement;

*The Good Sports work will embed into the traditional, formal coach education and what does the informal supporting network look like and how does that messaging filter into those frameworks (12).*

#### 4.5. The Role of the NSO in Delivery of Junior Sport

Each NSO operates with a different model and structure, from the grassroots up to the national staff and offices (as displayed in Figure 5). However, the role of the NSOs in delivering junior sport programmes are mostly aligned across the sports. Commonalities centred around the role of the NSO as a leader to direct and develop their RSO's, clubs and schools in order to ensure that they are aligning to the principles of their junior sport programme, as well as front footing any issues or pressures that exist within their ecosystem.

**Figure 5**

Structure of Sport Delivery from NSO to Grassroots

|                        |                      |                          |                    |                     |
|------------------------|----------------------|--------------------------|--------------------|---------------------|
| NSO                    | Netball NZ           | NZ Rugby                 | NZ Football        | Hockey NZ           |
| RSO                    | 5x Zones             | 26x Provincial<br>Unions | 6x Federations     | 32x<br>Associations |
| Grassroots<br>Delivery | Centres +<br>Schools | Clubs & Schools          | Clubs &<br>Schools | Clubs &<br>Schools  |

*4.5.1. NSOs create direction for junior sport providers*

Whilst the NSOs do not deliver their programmes on the ground, they are responsible for supporting those who do. By creating direction and aligned principles, the NSO plays a role in supporting the various RSO's, schools and clubs across the nation in delivering their programmes. Leading in an aligned manner is seen to be important, so that messages can filter through to everyone, as explained below;

*I guess the thing is the influence, continually trying to drum the messages because it can't just be led by the Netball NZ. It has to be bought into by everybody on the ground and it is a credit to those people in our zones who weave that message in and go into battle again and again with people that have opposing opinions (14).*

As mentioned, there is a vast difference in the structures that align the NSOs to the participants. Within NZ Football, there are 6 Federations who work with clubs and schools. Netball NZ is similar, with 5 Zones that are linked directly to the Netball Centres within. The centres are responsible for running the 'Future Ferns' programme, in conjunction with the schools that provide the players and teams, which outlined in the following statement;

*The way our system works is we have Netball NZ and then 5 zones, and then we have the 83 netball centres. The way I describe it to people is Netball NZ sets the strategy and the framework and then the zones are the capability*

*builders who develop the delivery agent. They're the ones who are connecting with them on a regular basis, providing upskilling and supporting the frameworks developed by Netball NZ. The centres are the delivery agents of the programme, who do the actual delivery of it (I4).*

However, NZ Rugby have 26 Provincial Unions, with a Relationship Manager employed to “look after those” (I1). Amongst the Provincial Unions, there are organising committees within each union that “work out when the competitions start, when they finish, what priorities are afforded over each other” (I1). Junior rugby players will join a school or club team. Likewise, Hockey NZ are responsible for managing a large RSO contingent, with 32 Associations spread across the country. The role of Hockey NZ is outlined in the following statement;

*Our delivery network is in our associations. We provide a leadership role and packaged resources but it's certainly around how we upskill and influence our associations to deliver (I3).*

The management of these relationships is vital for the NSOs, as the direction which they create at the top can only have a direct influence on the participants if the various levels of governance are brought in and aligned.

#### *4.5.2. Sport NZ's role in developing NSOs*

Whilst NSOs are responsible for delivering and administering their own sports, Sport NZ provides guidance and leadership to develop the capability of the NSOs and strengthen the sporting landscape in NZ. One means of support is through funding, such as Kiwisport. This funding has allowed for programmes, such as ‘Football in Schools’, to grow and flourish. Sport NZ also lead through innovation, with ‘Balance is Better’ and the ‘Keep up with the play’ campaign as examples of initiatives that enrich the sport system. The influence of Sport NZ on NSOs is summarised in the below statement;

*In terms of any impact that the talent plan or Balance is Better created, I guess for us there has been a level of enhancement. So some of the elements that we*

*looked at were the messaging we try to add in to what was already there, which is around promotion of enjoying multiple experiences of sport, including other sports and physical activity. That's aligned to what BiB is all about, development and that fun aspect as well. Some of the messaging, like climate of development and Good Sports, linked to Balance is Better, has contributed to the evolution as well. The key words around development being a primary focus rather than the outcomes which have traditionally been wrapped around sport (I3).*

Sport NZ also has the capability to develop the people who work internally within the NSOs. Engaging with these people is a means to aligning the sport sector and developing capable, skillful people, as explained below;

*Some other stuff I've done which has influenced me is through Sport NZ. I was on the residential leaders, which was the final piece before BiB arrived, with the top 5 participation sports, which had a massive influence on how I work and what types of things are important to target (I4).*

#### *4.5.3. Ongoing challenges to reducing injury, burnout & dropout*

The nature of contact sport means that there is a likelihood of injury occurring. The types of injuries are often dependent on the sport which the person is participating in. Stated below, NZ Rugby have identified the role that injury has in impacting a participants experience of the sport.

*We needed to improve the profile of the game because we have an issue that we are a contact and collision sport and there are growing concerns about the impact of injury, particularly in young players, growing concerns about the impact of head injuries, so that's a real issue for us so we need to address that through a number of means to improve the profile of the sport (I1).*

Injuries that are suffered in the game, such as head injuries in rugby, are a problem that can be managed but are difficult to fully eradicate. However, overuse injuries are an area of

concern that NSOs feel they can have an impact in minimising and negating. Overloading, particularly in a tournament setting, is an ongoing concern for NSOs. NZ Rugby are looking at ways “to restrict load in tournament settings”, using AIMS Games as an example where participants “were doing more load than a 7s player at a World Series event” (I1). The same challenges exist within hockey, where the mix of “school environment, club environment and representative environment” is creating an increased risk of injury because the coaches or managers do not discuss the players loading amongst each other (I3). This creates a situation where children are choosing to prioritise fewer sports in their week, where “insights from Sport NZ show it’s not the individual who chooses to specialise but the adults around that” (I3). The school environment is a particular concern for the associations who deliver hockey across NZ, as noted below;

*Scheduling sits within our associations, around what they deliver and when they do. On the plus side, there are not many external providers, so we have a level of control. A significant challenge can be the school environment, and what they offer and when they offer them when our influence in that space is quite small. We haven’t quite worked out what we need to do in our network or whether we need to leverage off the likes of Sport NZ or the Ministry of Education to contribute there (I3).*

The overload injuries and packed schedules create burnout within participants. However, injuries and burnout are not the only contributors to participant dropout. One issue that NZ Rugby has had to contend with is the fallout due to bad experiences that can be created by poor bio-banding, which is noted in the following statement;

*The thing we know is a factor which has an impact on drop out is people having bad experiences because we haven’t got bio-banding quite right. The perception is wrong. We band by age but provincial unions band by weight. Auckland Rugby did some research which suggests that roughly 45% of kids who play 2 years up do not come back because their experience isn’t great because their emotional and cognitive skills are not at the level of that age*

*group. So we're looking to provide more guidance and leadership around that (I1).*

The bio-banding approach was initially implemented to make the sport safer by putting children of similar size together. However, this has only opened more questions around how bio-banding can work to ensure the players are still mixing with appropriate social groups and exposed to an equal level of competition.

#### *4.5.4. Proactive approaches to reducing injury, burnout & dropout*

Dropout can be caused by injury, bad experience or burnout, which are all controllable in the eyes of the NSOs. Therefore, proactive steps are being taken to ensure that the risks to children are negated to reduce injury, create positive sport experience and avoid burnout. In relation to injury prevention, Netball NZ have introduced the Netball Smart programme, a warmup which has been specifically designed to prevent or reduce injury. The influence of this programme is outlined below;

*Netball Smart has had a huge influence in that space. We've started to really drive the warmup which is driven into all of the Future Ferns space so previously, all the courts were always booked and there was no time to warm so people would just not do it. Whereas now it's built into the game time which influences it. Putting it into 10 weeks, removing Reps so it's not overloading (I4).*

Similarly, NZ Rugby employs an Injury Prevention & Wellbeing Manager, who is responsible for the RugbySmart programme. As a high risk sport, NZ Rugby offers additional programmes to ensure their participants are safe, including tackle clinics and safer scrummaging clinics, which “support transitions and are around reducing injury and screening players who shouldn't be considered for certain roles” (I1). NZ Football have included a Player Welfare Manager & Team into their staff, to research problem areas regarding injuries and make recommendations to the national leadership group. These roles are crucial in ensuring the junior sport programmes are operating using a best practice approach, providing a resource

to educate coaches and clubs and create programmes and other approaches that will negate the impacts of injury within junior sport.

One common area that sports are currently tackling is the issue of overload, with season lengths being adapted and changed to avoid the pitfalls of too much sport at too early an age. An example of this, as seen throughout all four NSOs, is the removal of a representative programme in the junior ages. Netball NZ, as stated below, have recorded a substantial drop in injuries in junior players;

*We actually know now, which has helped us in the year 7-8 space and removing representative teams, is that 10–14-year old's were our most injured players. It's now shifted up an age group! But most of those injuries were overloading injuries and they were participating in too much netball (14).*

As a blanket rule, Netball NZ has capped their Future Ferns programme at a maximum of 10 weeks per season. The rationale behind this move is to fit the netball season into one school term, provide opportunities for children to participate in other sports and to remove the representative programme in a bid to avoid overloading the participants. Hockey NZ have also created some workload guidelines, to “inform associations to understand what is going on, what they are designing and how this impacts their community” (13). NZ Football have also taken proactive steps to reducing overload by reducing their Skill Centre programme, from 32 weeks to 24 weeks, as stated below;

*It used to be 32 weeks per year but now it is a maximum of 24 weeks. So the programme can be between 16-24 weeks which is generally the length of the football season. So two terms of football, which fits in with the BiB philosophy. Clubs can do it whenever they want, so they might do it in terms 2 & 3 alongside the winter season or they may do term 1 & 4. Because it's an open programme, players don't need to register so you may love football and don't want to play cricket in the summer, they can do that. But if you want to play football in the winter and do cricket in the summer, you can choose when you come and do your football. Another thing that is really positive is there are Federations who*

*are moving to align their seasons with the school terms. My view is that this is a positive step because it works with the councils, where they can upgrade and maintain the pitches, whilst it's also a clear distinction for parents to see that term 1 & 4 is for summer codes and terms 2 & 3 is winter sport (I2).*

NZ Rugby are currently undertaking some work around their season lengths and creating flexibility for participants who wish to sample other winter sports, referred to below;

*What we are also trying to do is influence thinking around competition design for youth. Some youth competitions run longer than senior ones and we are trying to influence thinking with organising committees around the concept of 'seasons within a season'. Its new thinking at the moment, but it relates to being participant-centred, which is actually for many people, term 2 rugby is all they want. They don't want another term in term 3, so can we construct competition systems that give them 10 weeks of rugby. And if they want to sign up for another 10 weeks, they can, and the system would provide that. Whereas now it is a whole winter season, kids start in March and finish in August. Very long season for little kids when a 10-12 week programme would be enough for them and then they can play something else or stay on for another 10 weeks. So we try to influence thinking about how specialisation and intensification of training, long pre seasons etc, are not required (I1).*

Employing skilful people to design programmes and make recommendations that will lead to a reduction of injury, creating safer sport environments, ensuring the season length is appropriate and allowing freedom for participants to sample multiple sports show that each of the NSOs are committed to making changes that suit children beyond their own membership base.

#### 4.6. Summary

This chapter has presented the findings on the current implementation of junior sport programmes in NZ. The findings of this case study have led to creation of themes and sub-themes that reflect the current efforts being made within NSOs to align with Balance is Better.



It is evident that each NSO is working to establish a junior sport programme that is able to engage and retain participants. A number of challenges have faced NSOs, such as accessibility of facilities, overuse injuries and burnout caused by the impact of multiple environments and breaking down rigid beliefs and opinions about junior sport.

Key findings from this case study are that NSOs must focus on the needs of the children, in order to create great experiences. This can be achieved by continuing to develop contemporary programmes that are flexible in design and underpinned by data and applicable research. Ensuring the use of modified small-sided games is vital, and NSOs can continue to work on the design of these game formats to suit the widest possible range of children. From an organisational standpoint, Sport NZ and the NSOs must continue to influence and support the network of people who deliver junior sport. Redefining the role of junior coaches through education and development opportunities is an important factor in aligning people to the importance and value of junior sport. The NSOs must continue to challenge traditional mindsets and beliefs around topics such as overload, burnout, the importance of winning, grading and forming of teams, skill acquisition and small-sided games.

## Chapter 5: Discussion

The purpose of this qualitative case study was to explore the junior (aged 4-12 years) sport development frameworks currently existing within rugby union, hockey, netball and football in New Zealand. Specifically, the following research questions were set out to be explored:

1. To what extent do the junior sport development programs and frameworks of the Keep up with the Play campaign align with the Balance is Better philosophy?
2. What are the similarities and differences between the junior frameworks of the four team invasion games that support the Keeping up with the Play campaign?
3. What are the strengths and weaknesses between the junior frameworks of the four team invasion games that support the Keeping up with the Play campaign?
4. How can these junior frameworks inform each other to improve the alignment with the Balance is Better philosophy?

The dominant themes which were identified from the thematic analysis were: 1) Development of junior sport programmes; 2) Participant-centric approaches; 3) Benefits of modified small-sided games; 4) Developing & educating people to deliver junior sport; 5) The role of the NSO in delivery of junior sport. This chapter will discuss the findings of the dominant themes and associated subthemes in more detail, with support from academic literature where possible.

### 5.1. Development of Junior Sport Programmes

NSOs have worked to develop programmes for junior sport participants to encourage their ongoing engagement with sport and physical activity. These programmes tend to align with BiB Principle #1 - “All New Zealanders have the right to participate in sport in an inclusive, fair and safe environment” and BiB Principle #2 - “All young people should receive a quality sport experience, irrespective of the level at which they are involved” (*Balance Is Better Philosophy / Sport New Zealand - Ihi Aotearoa*, n.d.)

The design and development of each NSOs junior sport programme has relied on a range of data and research. Evidence has stemmed from a number of different areas, be it academic research, models from other sporting organisations or surveying data about the current programmes the NSO is offering. For example, Netball NZ have used a mixture of quantitative data from small sided-games and 'voice of participant' information to understand their

current approach to developing junior netball. A reliance on international best-practice approaches is also clear within each NSO, who have utilised junior development programmes implemented by other countries and applied it to the NZ context. An example of this approach comes from NZ Rugby, who have referenced a research piece by Thomas & Wilson (2015) called 'Playing by the Rules: A developmentally appropriate introduction to rugby union' to guide the recent changes to their Small Blacks programme .

Recently, the perceived importance of winning and the role of competition within junior sport has become a contentious issue in junior sport. The role of competition within junior sport often serves the needs of coaches and parents, creating an imbalance of power with the potential to drive children away from their sport of choice (Walters et al., 2012). In response, NZ Football and Netball NZ have both removed competition tables below the age of 12, placing less emphasis on the result of a match. As part of this approach, no competition tables or standings are able to be posted. Scores are kept and submitted to a competition department for the purpose of grading teams, ensuring there is an appropriate level of challenge. However, results and competition tables are still published within junior rugby and hockey. It is possible the continued emphasis on winning within rugby could negatively impact on coach behaviour. In their analysis of sideline behaviour of coaches within children's team sport in New Zealand, Walters et al (2012) identified that rugby coaches used the highest percentage of negative comments and lowest percentage of positive comments on the sidelines. This may possibly be linked to the fact coaches may place a higher value on winning in junior rugby than other sports. Focussing on winning and competition, at the expense of learning and effort, can lead to a range of physical and psychological stress responses in youth participants (Vella, 2019). Instead, NZ Football and Netball NZs approach to removing competitive structures, such as competition or league tables, is reinforced by the notion that prioritising competition and winning is often detrimental to skill development within junior sport (Daniels, 2007; K. Green et al., 2005). The purpose of playing games against an opposition creates a task-oriented approach to competition, where opponents provide a level of challenge to encourage skill mastery (Daniels, 2007). This proves junior participants still require an opponent, though the purpose of this opponent is to develop skill, competence and confidence as opposed to winning and losing. All four NSOs have removed competitive tournaments from these age groups to enable a stronger focus on skill and confidence development. This move has created a space for 'festivals', where the focus is on participation

and inclusion by ensuring there is no winner or loser. The focus of a festival is to ensure each player is able to play in a fun and fair environment.

Within the construct of junior sport, opportunities to grow a base of talented participants is an important factor for NSOs. Each NSO features high performance teams who compete in professional leagues and global competitions. Therefore, a by-product of sport development must be the ability to generate talented performers. The overwhelming evidence from this research is aligned to BiB Principle #7 - “All young people should be supported to participate in a range of activities and play multiple sports” and BiB Principle #8 - “Talent identification should occur later in young people’s development; reviewing the role and nature of national and regional representative selections and tournaments is an important step in ensuring elite sport attitudes and practices are introduced at developmentally appropriate times” (*Balance Is Better Philosophy | Sport New Zealand - Ihi Aotearoa*, n.d.). Whilst NZ Rugby and Hockey NZ rely on the design of their junior programme to develop the core skills of their sport, NZ Football and Netball NZ have taken approaches to design additional skill development opportunities for those children who want to participate. For NZ Football, the Skill Centre programme caters for children aged 9-12 and is run by clubs who meet a set of criteria, outlined by the NSO. To align with Balance is Better, this programme has been reduced from 32 weeks to a maximum of 24 weeks per year, whilst trials have been removed to ensure a wider base of children can access the Skill Centre. These changes are an important step in ensuring the Skill Centre avoids putting undue stress on children. The Player Development Programme has been designed by Netball NZ to increase the number of talented players coming through the system. All four NSOs have outlined a desire to produce more skilful athletes, in order to achieve a wider base of talent and allow “the cream to rise to the top” (12). Traditional approaches to talent development have relied on early specialisation of participants, often at the request of parents, coaches and administrators (Agel & Post, 2021). The perils of an early specialisation approach have become clear in recent years, due to negative links with skill acquisition (Anderson & Mayo, 2015; Roetert, E. P., Woods, R. B., & Jayanthi, 2018), physical development & injury prevention (Carder et al., 2020; DiCesare et al., 2019; Francia et al., 2021; Zoellner et al., 2021) and dropout & burnout (Vopat et al., 2021). Whilst some degree of specialisation is necessary to develop elite-level skill, an intense training focus on a single sport should be delayed until late adolescence to minimise injury, psychological stress and burnout (Jayanthi et al., 2013).

The practical delivery of an NSOs junior sport programme may look different across the country. Developing flexible programmes has been a key emphasis for NSOs. Modified small-sided games have created opportunities for flexible delivery as there is less reliance on having marked pitches and full sized goals or posts. For hockey and netball, a hub model of delivery, where sport is delivered away from their main facilities, has been crucial in providing more access to the game. Hockey NZ are attempting to shift the mindset of having to play on full size turfs, which are costly and difficult to access in rural areas. Traditionally, participants may have to travel for several hours in order to play a match or attend training, which has impacted on participation numbers. Currently, work is being completed to understand how to deliver hockey to a broader audience, on a range of different surfaces. Netball NZ encourages flexibility around when their programmes are delivered, often due to inclement weather and use of facilities at their netball centres. Setting up satellite hubs away from the main netball centres has allowed more participants to take part closer to home. The challenge of accessing facilities is less visible within rugby and football. Instead, flexible delivery models have been implemented within these sports to make them as attractive as possible for children and families. In the instance of NZ Rugby, the development of rip-rugby as an alternative method of play has been designed to target those children who are not prepared or experienced enough for tackle rugby. NZ Football have encouraged flexibility in their programme by allowing clubs and schools to take more control of the junior space. This has created opportunities for clubs to run their First Kicks and Fun Football programmes on a weeknight, as opposed to the traditional Saturday morning time slot. As a result, more participants may be able to access football, whilst potentially taking part in other sports on Saturdays. In areas where the club network is unable to sustain the number of participants needed for a quality programme, the local Federation may take the lead. Whilst the four NSOs are each constrained by a range of different factors, such as access to facilities, different delivery agents and creating experiences that are suitable for all children, the design of their junior sport programmes allows for flexibility and adaptation.

## 5.2. Participant-Centric Approaches

The four NSOs noted the importance of providing positive experience for those who participate in junior sport. Therefore, understanding the needs of players, coaches, parents and administrators has become vitally important. Meeting the needs of those who participate

in sport is a core responsibility of NSOs. Each NSO has made an effort to understand what their participants want and need from their sporting experience. The participants in this study explained that creating and analysing data, be it through participant numbers, dropout rates and 'voice of participant' surveys, is vital for NSOs if they are to truly align with their members.

Moving away from competitive leagues and tournaments is aligned to the thinking of the NSOs, who outlined their willingness to create great experiences for their membership and help children stay in love with sport. NZ Rugby's F.A.B.S approach, centring on Fun, Achievement, Belonging and Safety, is an example of a framework an NSO currently utilises to enhance participation and retention. Removing existing barriers to entering community sport is one of the key reasons behind modernising the way in which teams are formed and selected (Bailey et al., 2013; Somerset & Hoare, 2018). Netball NZ have included a rule that teams should not be graded or streamed until year 7. Rather, their suggestion is for teams to be selected based on friend groups and other social factors. A similar approach has been adopted by NZ Football, who encourage clubs to select teams of mixed ability throughout the junior years. As mentioned, the importance of winning does not align with the needs of junior participants. Rather, junior sport should prioritise enjoyment, fun, socialisation and skill development (Wearing et al., 2022). This has paved the way for NSOs to remove participation barriers like formal trials and ability based selection. More freedom is given for children to play with their friends, in an environment that promotes enjoyable experiences. This freedom is aligned to the need to create participant-centric approaches, by giving children an opportunity to choose who they play sport with.

One innovative approach to understanding the needs of participants is the mental model approach, used by NZ Rugby. In this instance, NZ Rugby have utilised a mental model, which places participants from a range of backgrounds, experiences and cultural groups at the centre of their thinking. An example of this approach being practically applied is meeting the needs of female participants. By placing a range of female participants at the centre of their mental model, NZ Rugby can then begin to understand their needs and how best to support them. For example, barriers to entry may be different for a female participant who is new to the sport, versus a female participant who played rippa-rugby but has no experience of tackle rugby. Solutions to these issues may then result in increased female participation. A mental-model approach allows an individual or group to understand phenomena and experiences by

proxy (Johnson-Laird, 2004). In reference to sport, mental-models have often been studied in relation to team building and management (Crust & Lawrence, 2006; Klimoski & Mohammed, 1994).

Shifting toward a participant-centric approach by looking at rugby through the lens of multiple participation groups has enabled NZ Rugby to grow their offering to a broader audience, leading to greater retention of participants. A participant-centric approach aligns with BiB Principle #6 - “Bold and courageous leadership at national, regional and local levels is required to design and deliver youth sport participation and development opportunities” (*Balance Is Better Philosophy | Sport New Zealand - Ihi Aotearoa*, n.d.).

### 5.3. Benefits of Modified Small-Sided Games

The four NSOs have committed to designing modified small-sided games for junior participants. Each NSO has previously conducted research to understand what junior games may look like, with an emphasis on researching international best practice, along with internal research looking at what each sport currently offers. The benefits for players of modified small-sided games include an increase in both enjoyment and skill development. According to Buszard et al. (2020), modified rules and equipment used when playing sport may represent an effective strategy for both increasing participation and increasing the learning of sport-specific skills.

Altering the equipment participants use is one means of modifying games for children. Findings from this study identified that each of the four sports use a lighter and smaller ball, netball has a range of modified hoop sizes and heights, and both football and hockey use a variety of smaller, modified goals. A number of previous studies have looked at the modification of equipment (Brocken et al., 2020; Brocken et al., 2021; Dancy & Murphy, 2020; Davies, 2019; Oppici et al., 2018). The benefits of scaling equipment so it is suitable for junior participants is essential for safety, enjoyment and skill development and is most evident with children who are less skilled, encouraging implicit motor learning (Buszard et al., 2014). In relation to the benefits of modified equipment within small-sided games, findings from Barnett et al. (2009) suggest children who are more proficient from a motor-control perspective, are more likely to become active adolescents.

A quote from Interview 1 highlights the importance of modifying the size of area used in rugby, where “the ball is power” for quality experience. “Constraining the field so that the

ball turns over more” is a practical method of ensuring more children participate by engaging in the most enjoyable part of the sport, that is running with the ball. With this in mind, all four NSOs have modified the size and area of their field or court, to suit the age & stage of the participants. Hockey NZ split a standard full size turf in  $\frac{1}{8}$  for 5-6 year olds,  $\frac{1}{4}$  for 7-8 year olds and  $\frac{1}{2}$  for 9-12 year olds. Football, rugby and netball follow similar approaches, ensuring that the pitch size grows alongside the participants. Likewise, the number of players on each team increases as the area becomes bigger. For Netball NZ, the number of players per team increases from four versus four (4v4) for 5-6 year olds, 5v5 for 7-8 year olds and 6v6 for 9-10 year olds, before reaching the full size 7v7 for 11-12 year olds. However, football (11-a-side), hockey (11-a-side) and rugby (15-a-side) do not reach their full quota of players in the junior space. All four NSOs explained the need for small-sided games to feature for longer within their programs, to slow the rush to full sized games by ensuring children are participating with appropriate game formats.

From a skill development perspective, small-sided games have shown to increase individual actions in field hockey (Honório et al., 2021; Timmerman et al., 2017), football (F. M. Clemente, 2016; F. Clemente & Sarmento, 2020; Rusdiana et al., 2017), rugby union (Mazzeu et al., 2021; Thomas & Wilson, 2015) and netball (Chandler et al., 2014; Spencer & Wolf, 2017). Each participant talked about how NSOs utilise modified approaches within a small-sided games context to develop skill within their junior sport programs. Findings on game-based approaches to skill learning by Serra-Olivares et al. (2016) reported modifying small-sided games can alter the way in which learners interact with contextual, tactical constraints, which is essential when nurturing game intelligence and skill.

Within the current NZ context, rule variations, such as the retreating line in football, goal line throw-in in netball, rippa rugby and tackle height rules in rugby and the push only rule in hockey, have been implemented to encourage the development of skill and maintain player safety for participation. These approaches are aligned with BiB principle #5 - “All young people should be offered participation and skill development opportunities” (*Balance Is Better Philosophy | Sport New Zealand - Ihi Aotearoa*, n.d.). A range of studies have been produced on the topic of modifying the rules of games in junior sport (Chalip & Green, 1998; Gastin et al., 2017; Pill & Elliott, 2015; Thomas & Wilson, 2015). By utilising modified small-sided games, NSOs are providing their players with opportunities to become more skilled and develop an internal desire to play their chosen sport.



#### 5.4. Developing & Educating People to Deliver Junior Sport

The core role of the NSO is to create direction and influence the network of people who are responsible for delivering sport to children. Traditionally, this has focussed on the development of sport, with an emphasis on policy, community participation and talent development (B. C. Green, 2005). However, the NSOs role in modern approaches to sport is founded on supporting the delivery of their sport programs, as well as researching and establishing methods to deal with issues to arise within these programs.

With the support of Sport NZ, the four NSOs have taken responsibility for ensuring their programs meet the needs of all participants. This is not without challenges however, with the NSOs feeding into a variety of RSO's and delivery agents. Whereas NZ Football works with their six federations and Netball NZ with their five zones, NZ Rugby have 26 provincial unions and Hockey NZ have 32 associations. Building, fostering and maintaining relationships with these RSO's is essential for delivering aligned messages and programmes. This approach aligns with BiB Principle #3 - "Aotearoa's sport sector must work collaboratively to encourage the widest possible change for the wellbeing and sport participation of young New Zealanders" (*Balance Is Better Philosophy | Sport New Zealand - Ihi Aotearoa*, n.d.).

An area that NSOs have previously put little or no resource into is the development and education of sport parents. The influence of parents on a child's sporting experiences can lead to increased autonomy and enjoyment (Jeanfreau et al., 2020; Kim et al., 2020) as well as disengagement and dropout (Fraser-Thomas et al., 2008; Jeanfreau et al., 2020).

One initiative each of the NSOs has partnered with is Good Sports, which is incorporated with Sport NZ's approach to parents. Good Sports is aligned to Balance is Better by recognising the need to support and educate adults, especially parents, in order to create positive sporting experiences for children (*Good Sports® National Parent Project | Sport New Zealand - Ihi Aotearoa*, n.d.). NZ Rugby have committed to rolling out the Good Sports program in 5-6 of their provincial unions as a trial. NZ Football are in the process of encouraging their Federations to align with Good Sports, whilst looking into methods to celebrate positive sporting behaviour. Both Netball NZ and Hockey NZ have outlined their commitment to continue to develop the knowledge of their parent base, to improve and maintain the overall experience of each child. By emphasising the importance of educating parents about the benefits of junior sport, NSOs are aligning with BiB Principle #4 - Sport leaders, coaches,

administrators, parents and caregivers involved in youth sport must collectively lead attitudinal change (*Balance Is Better Philosophy | Sport New Zealand - Ihi Aotearoa*, n.d.).

Another group of adults who directly impact on the enjoyment and engagement of players are coaches. Within junior sport, these coaches are often parents or caregivers who volunteer their time at training and matches. Quoting from interview 3, the role of these coaches could be defined as “facilitating a group of kids, to allow self-exploration”. Netball NZ have taken this principle literally. For 4-9 year olds, the coach is referred to as a ‘Star Helper’ and works with the Junior Coordinator at each netball centre to deliver the game day experience.

Contemporary research on the area of coach education has identified a need to shift toward a positive youth development approach to positively influence coach behaviour (MacDonald et al., 2020; Newman, Anderson-Butcher, et al., 2020). Each of the four NSOs takes a significantly different approach to coach education. Hockey NZ utilises an online, “opt-in approach”. Coaches can access an online portal with a range of modules and courses, which coaches can choose to utilise. Optional coach education courses are also run in-person by regional associations. This approach allows coaches to access content they want, when they want. In contrast, NZ Football provides a pathway, from Level 1-3 in their junior coach education program. These courses are not compulsory and become more detailed as each level is achieved. These courses can be run by clubs or federations at any time, providing flexibility for coaches. This flexibility is important because clubs are able to set up coach education for their coaches at a time and venue that suits them, removing barriers for coaches. Conversely, Netball NZ and NZ Rugby have implemented compulsory coach education into their junior programs. For Netball NZ, these are broken into age and stage workshops, allowing coaches to attend a workshop tied to the group of kids they work with. The coach will also receive a practical resource designed to develop players in their specific age group. There is also a practical benefit of playing netball within centres, which feature a number of junior coordinators who can support coaches on the court, aiding their development. For NZ Rugby, coaches must attend a Small Blacks course prior to their season commencing. This is a highly practical session which is run by the provincial union and looks at relevant areas of coaching kids, player safety and skill development. Each NSO spoke to the idea of creating more content for coaches to access online.

Efforts are being made by NSOs to support and develop their delivery network, as indicated by the findings of this research which are outlined above. However, NSOs must continue to

spread their reach and work to develop as many people as possible, throughout their delivery network. Sport NZ's Talent Plan proposes coaches, teachers and parents must align with the following beliefs; "athlete's needs come first, working together for collective impact, effective pathways, continuous learning and quality coaching" (*Talent Plan | Sport New Zealand - Ihi Aotearoa*, n.d.). This must continue to be a focus on NSOs as they continue to grow their influence and create mechanisms for developing adults the people who deliver junior sport.

#### 5.5. The Role of the NSO in delivery of Junior Sport

Each NSO utilises a different operating and delivery model for Junior sport, as mentioned earlier in this discussion. However, the common role of the NSO is to lead, direct and develop their RSO's, clubs and schools. This collaborative approach broadly covers three BiB Principles; #3 - Aotearoa's sport sector must work collaboratively to encourage the widest possible change for the wellbeing and sport participation of young New Zealanders, #4 - Sport leaders, coaches, administrators, parents and caregivers involved in youth sport must collectively lead attitudinal change and #6 Bold and courageous leadership at national, regional and local levels is required to design and deliver youth sport participation and development opportunities (*Balance Is Better Philosophy | Sport New Zealand - Ihi Aotearoa*, n.d.).

To define their role within the delivery of junior sport, NSO representatives discussed their role of influencing people who deliver junior sport. For Netball NZ, this influence comes from creating strategy and upskilling each zone and netball centre. Creating and maintaining aligned messages is key for Netball NZ, as the people within each netball centre are the delivery agent of the Future Ferns programme. Similarly, NZ Rugby have employed a Relationship Manager who works alongside the complex network of provincial unions and organising committees, working toward an aligned approach to suit the players. Largely, the role of the NSO is to lead, upskill and support their delivery network so the practical implementation of their junior programme is aligned to the Balance is Better principles. This will ensure that children are having the best experience possible, as the programmes which they engage with are developmentally appropriate and enjoyable for all.

Sitting above the NSOs is Sport NZ, who represent the governmental arm of play, active recreation and sport (*Sport New Zealand - Ihi Aotearoa*, n.d.). Each NSO outlined the support which they receive from Sport NZ, largely centring around funding, innovation and developing a higher level of capability within the NSOs. From a funding perspective, Sport NZ have

previously supported NSOs through their Kiwisport funding. This fund has paved the way for a number of projects amongst the NSOs, such as Football in Schools, with an emphasis on developing functional movement skills. However, Kiwisport has been replaced by Tū Manawa Active Aotearoa, which has a particular focus on groups who are less active, including girls and young women, people with a disability and those living in higher deprivation communities (*Tū Manawa Active Aotearoa | Sport New Zealand - Ihi Aotearoa*, n.d.). These funding mechanisms often relate to programmes and approaches developed by Sport NZ. The Balance is Better philosophy, Keeping up with the Play campaign and Good Sports programme are innovations Sport NZ have led. These are fundamental examples of the impact Sport NZ has on the sport-sector. The programmes which emerge from these funding streams and innovations allow children to engage with a broader range of sports activity. Aligned to this is the development of people within NSOs, often centring around these innovations. Providing opportunities for leaders to collaborate and share knowledge, relating to Sport NZ initiatives such as Balance is Better, develops a higher calibre of people working within the sports industry. As an example, Sport NZ setup a meeting to introduce the Balance is Better philosophy prior to its implementation. The participants of this study mentioned this meeting, as an example of NSO staff collaborating and learning with and from each other. This is an area in which Sport NZ can look to further develop, as the collaboration and sharing of knowledge between NSOs may contribute to a greater sporting environment in NZ.

Collaboration between Sport NZ and NSOs has looked to solve issues arising within junior sport. In particular, BiB Principle #7 - All young people should be supported to participate in a range of activities and play multiple sports and #9 - Adults need to proactively monitor and manage the workload (intensity and volume) of motivated young people to mitigate the risks of overtraining and overloading, which are issues that require attention (*Balance Is Better Philosophy | Sport New Zealand - Ihi Aotearoa*, n.d.). There is a commonality between these two principles, with early specialisation associated with physical development & injury prevention (Carder et al., 2020; DiCesare et al., 2019; Francia et al., 2021; Zoellner et al., 2021) and dropout & burnout (Vopat et al., 2021)v. Based on these principles, NZ Rugby have worked to reduce the number of head injuries sustained by players, in order to improve the profile of the sport. Commonly, NSOs discussed the challenges they have faced when trying to reduce player overload. Children often participate in sports across multiple environments, such as club, school and representative sport. Often, the scheduling of these different

contacts meant children were doing too much, resulting in injury or burnout. None of the NSOs identified a method enabling them to solve the issue of overload across these different environments. Whilst scheduling of seasons, competitions and tournaments continues to be an issue NSOs must work toward solving, a number of initiatives have been implemented to negate injuries caused by overload. For NZ Rugby, this included employing an Injury Prevention & Wellbeing Manager to run their RugbySmart programme, with a focus on reducing injury through safe tackling and scrummaging. Similarly NZ Football have a Player Welfare Manager, who is responsible for a team of staff who research current trends relating to injury and dropout, making recommendations to the national leadership group about potential changes to their programmes to increase safety. NSOs have begun to take a more proactive approach to negating the likelihood of overload injury and burnout by reducing or limiting the length of their programmes. Netball NZ have decided upon a 10 week season length in some ages, whilst NZ Football have reduced their Skill Centre from 32 weeks to 24 weeks. Led by Sport NZ, NSOs have also collaborated to create aligned seasons between summer and winter codes, using the school terms as a guide (*Season of Change - Balance Is Better*, n.d.). Whilst the collaboration of NSOs is a positive step, the benefits of sampling multiple sports is yet to be reflected within junior sport. Creating diverse sport experience is linked to long-term involvement and positive youth development (Côté et al., 2009). Ultimately, the collaborative approach between Sport NZ and the NSOs have seen positive changes occur within the junior landscape. In future, this collaborative approach must continue in order to develop more opportunities for children to sample a diverse range of sports.

## 5.6. Summary

This chapter has discussed the research findings which were identified through thematic analysis, based on the semi-structured interviews of four participants and the document analysis of the four NSOs junior sport programmes. The chapter presents the methods that NSOs have used to align with the Balance is Better philosophy and principles. Each of these methods is analysed and discussed, using comparisons between each NSO, as well as academic research, to determine the areas of strength and areas that require further attention.

Overall, NSOs could work more collaboratively, to share their knowledge and experiences of implementing changes that align with Balance is Better. Whilst each NSO has made efforts to better align their junior sport programmes to the principles of Balance is Better, the challenges and obstacles that each NSO faces are reasonably similar. For example, the changes made by Netball NZ and NZ Football to remove traditional competition structures from their junior programme could be modified to suit Hockey NZ and NZ Rugby. Further suggestions, based on this chapter, are presented in the recommendations section below.

## Chapter 6: Recommendations and limitations

### 6.1. Recommendations

The recommendations coming from this research are presented as a list of key suggestions for NSOs to consider for maintaining and advancing their role in providing great sporting activities for children. Therefore, this chapter is written using language intended to resonate with members of the NSOs and contains several points mentioned previously in this thesis. NSOs should continue to work collaboratively, alongside Sport NZ, to align their junior sport programmes with the Balance is Better principles to ensure they are maintaining their commitment to the Statement of Intent. This research has highlighted areas where NSOs are currently well aligned with Balance is Better, as well as areas where alignment could be improved. To summarise, the following recommendations are presented:

- *Continue to develop junior sport programmes using data & research.* NSOs must continue to be proactive in researching their own programmes to generate data. Using “voice of participant” surveys and interviews will help NSOs to understand the experiences of their membership. Identifying and implementing research based on best practice, potentially from different sports, could also help NSOs to modernise their approaches to junior sport where necessary.
- *Remove the emphasis on winning whilst maintaining a fair grading system.* NSOs must take initiative by removing the emphasis on winning. Ensuring competition tables and results are unable to be published, as demonstrated by Netball NZ and NZ Football, will help to realign the focus toward development and participation in sport for children. However, results should still be recorded and used for the purpose of grading. In order to provide a positive experience for players, teams or groups should be partnered with those of similar abilities throughout the season. NSOs should strive to have regular regrading throughout the season, with no competition tables or ladders.
- *Continue/begin to provide opportunities to grow and support talent.* NSOs must take proactive measures to grow their talent base, whilst managing the potential impact of overload. Examples of this approach are the NZ Football “Skills Centre” and Netball NZ “Player Development Programme”. These initiatives utilise a model where qualified coaches provide skill development opportunities for players, based on developing the

individual. To achieve this, these programmes are designed to complement a participants club/school “team” and is an optional addition for children who wish to increase their participation in their sport. Due to the optional nature of these programmes, children may choose to use these programmes as an opportunity to sample and diversify their sporting experience.

- *Understanding the needs of the player and developing programmes which suit a broader range of children.* NSOs must ensure that their programme is not a one size fits all approach. NZ Rugby’s mental model approach to participation provides a strong base for creating flexible delivery models for a diverse range of people. By taking a group of people (gender, ethnicity, location, income, experience level) and placing them in the middle of a mental model, NSOs can begin to understand what each group of people may need, the barriers to their participation and how to create more inclusive programmes for all junior players.
- *Modifying the length of season and giving players an opportunity to choose.* NSOs have begun to collaborate on season alignment, using the school terms as a guide. This approach should be carried out nationwide. Once this is achieved, NSOs can begin to explore a delivery model that allows players to choose when to engage with sport and how long for. As an example, if a winter season was broken into two 10-week blocks, participants could choose whether they want to commit to 10 weeks of one sport and then 10 weeks of another, or 20 weeks of one sport. This flexibility will give players an opportunity to diversify their sporting experiences.
- *Maintain the use of modified small sided games and explore their ongoing implementation.* Modified small-sided games have become the common delivery method for NSOs. Further research could include the use of field space and dimensions, size and scale of equipment and modified rules and game formats. With regards to rules and game formats, examples of this include the “Push Only” rule in hockey, “Retreating Line” in football, “Rippa” in rugby and “Positions” in netball.
- *Supporting coaches by providing age and stage specific coach education.* NSOs provide a range of coach education opportunities. Formalised coach education should be relative to the age and stage of the team the coach is working with. This should take place over the traditional ‘level’ based qualifications, used by the likes of NZ Football. Instead, an approach similar to Netball NZ’s coach education could be applied,



whereby coaches attend courses designed to focus on a particular age group and stage of development.

- *Supporting in-person coaching courses with online resources.* NSOs have noted the delivery of coaching courses is best achieved in-person. A flexible model of coach education will allow for resources to be made available online for coaches to support their course attendance. Hockey NZ utilises an online programme for their coach development. Creating specific resources or courses for each sport may give a coach access to material applicable to their sporting environment, developing knowledge of the game and how to teach it.
- *Continuing to research and implement parent education services.* NSOs have committed to Good Sports as a means for providing education to parents of sport players. The impact of this partnership should be understood through research and data analysis to determine whether this programme is impactful in their context.
- *Aligning school and club sport to negate the impact of overload and reduce burnout of players.* NSOs have outlined the issue of player overload and burnout takes place when there are significant club and school sport commitments. Often, clubs and schools run in separate competitions or leagues, with little to no alignment. To reduce the impact of player overload and burnout, NSOs must work across both club and school sport and begin to challenge the status-quo.

## 6.2. Limitations

There are a number of limitations to this research to be considered in this chapter. Each limitation will be examined to demonstrate the potential impact it may have on the research outcomes. These limitations include: Limiting the case study to four NSOs, the angle of the NSO versus grassroots delivery, the limited number of NSO staff as participants, limited sources for document analysis and online versus in-person interviews.

- One limitation of this study is the focus on the four invasion sports and their NSOs. Whilst these NSOs are bound by the Statement of Intent and commitment to Balance is Better, there are limitations to this. As mentioned in the Introduction section, there are now 15 NSOs that have signed the Statement of Intent. This includes a mix of invasion, individual and other team sports. Deeper investigation into all of these NSO's

would provide more rounded, holistic recommendations that understand the impact that Balance is Better has had on a broader range of junior sport participants.

- Findings from this case study come from documents and the perspective of representatives from four NSOs in NZ. One limitation of this research is it is centred around the four NSOs and the theoretical underpinnings of their junior development programme. A document analysis provided information about the NSOs junior development programmes which currently exists and is available to the public. Interviews took place to add depth and insight to these junior development programmes. Therefore, whilst the best efforts have been made to ensure the recommendations are based on the application of each NSOs junior development programme, it must be noted that there is no evidence provided around how these programmes look from a grassroots level. No RSO's, clubs or schools were asked to contribute to this research.
- Another limitation of this study is the limited access to NSO staff. Each participant was a representative for their junior development programme and its implementation. More depth could have been gained if a broader range of participants were interviewed. For example, identifying and interviewing those staff who are responsible for areas such as coach education, player welfare, sport science, community development and club development. Linked to this is the fact that only one participant was sought to represent each NSO. Therefore, the bias and perception of the participant was not taken into account. To limit this, more participants from each NSO could have been sought in order to create a better understanding of each NSO's programme.
- On a similar note, the limitations of researching the four NSO's included the limited sources that were attainable in the document analysis. A broader range of documents would have created a stronger case study of Balance is Better and how it has been implemented into current junior sport programmes. The opportunity to analyse a wider range of programmes would also have added more depth to the recommendations section, in which NSO's programmes are compared and contrasted to make recommendations for the future.
- One situation which occurred during this thesis was a Covid-19 lockdown. This created issues with travel and access to participants. Due to this, the interviews were moved

online to ensure they could take place in a timely manner throughout regional lockdowns. Conducting online interviews can be beneficial for saving on time and money. However, limited face-to-face interactions and understanding non-verbal cues can be cited as a potential limitation when collecting data.

### 6.3. Future Research Recommendations

Despite these limitations, the research contributes to a great understanding of how NSOs are contributing to the improvement of sporting experiences for children. Future research could look at a broader range of NSOs and their alignment to the Balance is Better philosophy. This would incorporate a broader range of sports, each with their own unique set of values, challenges and operating models. The 15 NSOs that are current signatories of the Statement of Intent would be a great starting point.

Further research could look at the implementation of each NSO's junior development programme at a grassroots level. This could contribute to understanding whether there is alignment between what the NSO suggests for junior sport and what actually takes place further down the sporting chain i.e. community sports clubs etc.

Further investigation could also look at NSOs in a broader sense to identify how each department is working toward the BiB principles of alignment of their programme. This would include a broader range of participants from each NSO, with a view to understanding the role of each department within an NSO and how this may impact on junior sport development. This approach may choose to isolate an individual NSO.

### 6.4. Conclusion

This case makes a significant contribution to the existing literature on children's sport. It identifies areas in which the NSOs' junior development programmes are aligned to the principles of the Balance is Better philosophy, as well as areas where alignment could be improved. This research also identifies the similarities and differences between the junior development programmes of each NSO and how these programmes may inform one-another. Themes have been identified and discussed within this case study are intended to provide a background of the design and delivery of the junior sport programmes. As NSOs continue to align with Balance is Better it is envisaged these themes will influence the future of junior sport programmes within NZ. Results of this study hold important implications for Sport NZ, NSOs,

RSOs and administrators within the junior sport environment of NZ. Children's sport is something to be cherished and valued within NZ and this case study provides a resource for its continued growth and development.

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## Appendices

## **Appendix A:** AUTECH Approval for study

## **Appendix B:** Ethics documents related to semi-structured interviews

## **Appendix C:** Interview Question Guide