

Talent Identification and Development: An Investigation into the Policies and Practices of
One New Zealand Rugby Provincial Union

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ABSTRACT

Increasingly countries are coming under pressure to succeed on the world sporting stage. As a result, athlete talent identification and development have become central concerns and challenges to sporting organisations globally. In the competitive New Zealand rugby union environment, Super Rugby Franchises and Provincial Unions are working hard to find solutions to identify, recruit and retain rugby talent; investing significant human and financial resources into the rugby pathway and talent development programmes. However, few studies have specifically investigated talent identification and development in a New Zealand rugby union context. This study used a single case to investigate the talent identification and development policies and practices of one New Zealand Provincial Union. Interviews were the main method of data collection with participants being purposely selected based on them being knowledgeable and information rich about the area of investigation (Byra & Goc Karp, 2000; Finn & McKenna, 2010). Additionally, documents were collected that contained relevant information on the talent identification and development policies and practices. The data was analysed using a theoretical standpoint informed by a multidimensional and dynamic concept of talent (Abbott, Button, Pepping, & Collins, 2005) and an ecological approach to development (Bronfenbrenner, 1979). Investigating the Provincial Union's talent *identification* policies and practices, it was found the Union has developed a *Talent Profile* to be implemented in the identification of rugby talent. Players are assessed and evaluated against specific talent criteria to shape decisions on which players are selected into Provincial Union talent development programmes. The findings highlight selector judgements are subjective and interpretive in nature and identified a number of tensions with the implementation of the *Talent Profile* and between talent identification policy and practice. It was also found the Provincial Union has an unofficial policy of selecting "no dickheads", with a focus on a player's character and behaviour embedded in the Union's talent

identification policies and practices. External influences deemed influential in why policies are, or are not, implemented in practice were also identified. Investigating the Provincial Union's talent *development* policies and practices it was established the Union wants to achieve winning teams and national representation for their players from implementing player development programmes; in addition to developing players for the future. The Provincial Union implements talent development opportunities through the operation of a High Performance Academy, representative teams, and age-group development camps. The study highlights limitations and tensions associated with the monitoring and assessment of players through development programmes and found a focus on the short-term, players "in a rush" to make it to elite levels of performance, and the impact of family and peers as significant to the implementation of the Provincial Union's talent development policies and practices. It is concluded the findings demonstrate the practical challenges and complexities of player talent identification and development and provide support for a multidimensional and dynamic concept of talent and an ecological approach to talent development and talent identification. Further research conducted in the New Zealand (NZ) context would continue to advance our understanding of the dynamic nature talent identification and development processes.

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CHAPTER ONE: INTRODUCTION

The International Context

Increasingly countries are under pressure to succeed on the world sporting stage (Collins & Bailey, 2012). As a result, athlete talent identification and development have become central concerns and challenges to sporting organisations globally (Gray & Plucker, 2010; Henriksen, Stambulova, & Kaya Roessler, 2011; Tranckle & Cushion, 2006). What is more, “[u]nderstanding of the pathway to athletic excellence remains a coveted objective for a range of sporting stakeholders” (Gulbin, Weissensteiner, Oldenziel, & Gagne, 2013, p. 1). The pressure to succeed in international sport has led a number of countries to place increasing value and importance on optimising the identification, recruitment and development of athletes. In addition, a focus has been placed on redesigning talent identification and development systems to maximise the delivery of prepared athletes to senior competition and subsequent world stage performance (Barreiros, Côté, & Fonseca, 2012; Collins & Bailey, 2012; Martindale, Collins, & Abraham, 2007). Success on the world stage has therefore become major policy of most sport governing bodies in an attempt to achieve success in world class competitions (Pankhurst & Collins 2013). Copley, Schorer and Baker (2012) highlight this global trend by stating “[r]ecently, countries such as Australia, China, the United Kingdom and the United States have invested considerable resources into the identification and development of the next wave of sporting champions” (p. 1).

Success on the world stage comes with financial rewards and increased recognition. Henriksen et al. (2011) argue that sport systems capable of developing athletes to international level are likely to receive greater financial reward and recognition. Given the amount of money often at stake in the professional sporting industry, it is no wonder that identification and development of athletic talent has become a major concern for professional

sporting organisations, as well as those that aspire to become part of (and be successful in) professional competitions (Gray & Plucker, 2010). Bailey and Toms (2011), state the substantial financial investment in high level sport performance comes with additional pressure; the increased pressure on all involved to deliver. Renshaw, Davids, Phillips and Kerhervé (2012) further highlight the challenges for sporting organisations by discussing how they are now faced with having to protect “their ‘market share’ of talented athletes in their sport” (p. 65). They suggest that sports are assuming they are competing for a limited pool of talented athletes (Renshaw et al., 2012), with many sporting organisations prioritising the implementation of systems for the recruitment and development of talented athletes before “they are snatched up by other competitors” (Abbott, Button, Pepping, & Collins, 2005, p. 62).

The New Zealand Context

In 2003, Sport and Recreation New Zealand (SPARC) formed a Task Force to review talent identification and development in NZ (New Zealand Academy of Sport, 2004). The Task Force was established to “investigate and evaluate existing and proposed talent identification and development systems and make appropriate recommendations for the on-going development of a national TID¹ strategy and framework for New Zealand” (New Zealand Academy of Sport, 2004, p. 6). The Task Force reported to the SPARC board that the accurate identification and development of athletes with potential to achieve success is critical if New Zealand is to ensure sustained success at an elite level. However, in their findings they concluded that talent identification and development in NZ is “ad hoc, under-resourced and based on a belief of ‘hope’” (New Zealand Academy of Sport, 2004, p.9). They also concluded that the approach taken in identifying and developing athletes in NZ, at the time, was neither working nor up to date in comparison to international best practice. One

¹ Talent identification and development.

recommendation was that SPARC adopt a pan-agency² view of talent identification and development and work closely with key sporting organisations.

On the 1st February 2012 SPARC changed its name to Sport New Zealand (Sport NZ). The name was changed to better represent the role the organisation played as the leaders of NZ's sport system and to align with their subsidiary organisation High Performance Sport New Zealand (HPSNZ), that was formed in 2011 (Ministry for Culture & Heritage, 2012). According to Sport NZ, “[s]port is integral to New Zealand’s culture and way of life. It helps define who we are as a Nation and how we are viewed by the rest of the world” (Sport New Zealand, n.d., p. 3). Sport NZ is a Government funded sport organisation whose policies mirror what is occurring globally by stating a priority for Sport NZ is to create more winners on the world stage. An important strategy to try and achieve this was the formation of High Performance Sport New Zealand³ (HPSNZ). One of HPSNZ’s key strategic priorities is to strengthen high performance athlete development (that includes talent identification and development) to ensure National Sporting Organisations (NSO’s) have effective high performance athlete development systems to deliver more winners on the world stage (High Performance Sport New Zealand, n.d.). Specifically addressing talent identification and development, the HPSNZ strategic plan 2013-2020 (n.d.) states HPSNZ will “[a]ssist NSO’s to develop and implement high performance athlete development pathways and track performance of developing athletes” (p. 9).

An additional strategy of Sport NZ has been designing the Sport and Recreation Participant and Athlete Pathway (see *Figure 1*). This pathway illustrates Sport NZ’s position on talent identification and development and the link between the community sport system

² A uniform and consistent organisational viewpoint.

³ High Performance Sport New Zealand replaced SPARC’s high performance network The New Zealand Academy of Sport.

and the high performance system (Sport NZ, n.d.). However, the Chief Executive of Sport NZ recently stated that this link is not straightforward when it comes to achieving the vision of more winners on the world stage. He alluded to the bridge between participating in the community sport system and transition to high performance environments as being an area that has been problematic for some time (P. Miskimmin, personal communication, May, 30th, 2014).

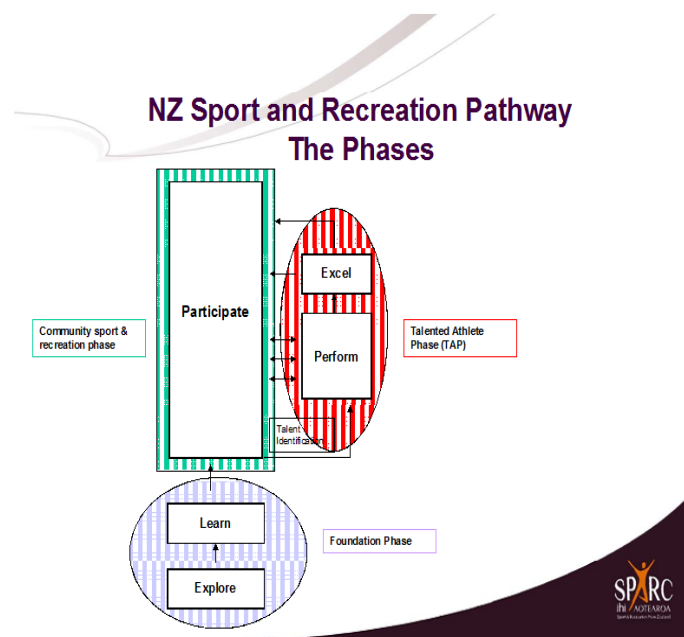


Figure 1: NZ Sport and Recreation Pathway (SPARC, n.d.)

Recently Sport NZ funded a study on talent development in the NZ sport context (Hodge, Pierce, Taylor, & Button, 2012). The aim of the study was to gain an in-depth understanding of the performance factors necessary for talent development in NZ, from the perspective of key stakeholders, to gain an understanding of the pathway that our current and former elite athletes have taken (Hodge et al., 2012). The study highlighted a number of factors that influenced the athlete pathway, such as the support from others, psychological development, and the challenges associated with elite sport (these will be discussed in the literature review in Chapter Two). The point here is that Sport NZ funding a study into the development of elite athletes illustrates the importance and focus the primary NZ sport governing body places

on the effective identification and development of talent; further reflecting current global trends.

Two recent initiatives that further demonstrate the importance and focus Sport NZ is placing on talent identification and development has been the establishment of a nationwide talent development programme entitled *Pathway to Podium* and the planned development of a talent development strategy. The *Pathway to Podium* programme is a joint partnership between Sport NZ, HPSNZ, NSO's and Regional Sporting Organisations (RSO's) with the Government (through Sport NZ and HPSNZ) investing \$1m into the programme. The aim of the programme is to fill a gap in the current athlete development pathway by identifying emerging athletes from targeted sports with the objective of ensuring they are better prepared to enter the demanding high performance environment. Identified goals of the *Pathway to Podium* programme are to make the pathway to high performance sport clearer for pre-elite athletes and to help more New Zealanders to win on the world sporting stage (*Pathway to Podium*, n.d.). Sport NZ and HPSNZ are also developing a National Talent Strategy to ensure developing athletes participating in competitive sport receive high quality sporting experiences to ensure HPSNZ continues to produce more winners on the world stage (Sport NZ, n.d.-a).

Talent Identification and Development in Rugby Union

In 2008 the New Zealand Rugby Union (NZRU) launched a new vision for rugby in New Zealand that was applicable to the NZRU, the Super Rugby Franchises, Provincial Unions and Community Rugby Organisations (New Zealand Rugby Union, n.d.-a). The vision is one of unifying and inspiring New Zealanders and is underpinned by six key pillars. One of the identified pillars, in line with the global perspective and the vision of Sport NZ to have more winners on the world stage, is having a winning All Blacks team (New Zealand Rugby Union,

n.d.-a). Under this pillar the NZRU state they will lead and support rugby development at all levels. Rugby is a Sport NZ targeted sport at both a high performance level and a community level, as a result the NZRU receives government funding through Sport NZ and HPSNZ to run their talent identification and development programmes.

Stakeholders in the talent identification and development pathway

The NZRU has designed a pathway for talented rugby players. Secondary school age players can start with age group Provincial Union representative sides at Under 14 and go through to Under 21 level, get selected for Franchise Development Camps for Under 17 and 18 year olds, the NZ Secondary Schools side, Provincial Union academy programmes, NZ Under 20, the ITM Cup side⁴, a Super Rugby Franchise⁵, and ultimately the All Blacks. There are many stakeholders associated with this pathway; in particular staff employed by the NZRU, the Franchises and Provincial Unions with responsibilities in the area of talent identification and development, and the coaches and registered/contracted players. The NZRU has a High Performance Manager, Rugby Development Managers and dedicated Talent Identification and Development Managers. A number of Franchises and Provincial Unions also have these full time roles and additional roles that support talent identification and development, for example Rugby Development Coaches and Strength and Conditioning Trainers. A number of these roles at the Provincial Union level are part/fully funded by the NZRU. Rugby becoming professional in NZ has created vocational opportunities for players and coaches as well as staff employed in the area of talent identification and development. Provincial Unions have established high performance academy development programmes for identified talented school leavers. Usually aged 18-21 years old, these players are contracted

⁴ The ITM Cup competition is the highest level of NZ domestic professional rugby union. It is also referred to as the National Provincial Competition/Championship (NPC). The ITM Cup changed its name to the Mitre 10 Cup in 2016.

⁵ Super Rugby is a Southern Hemisphere professional rugby union competition that currently involves 15 franchise teams from Australia, New Zealand and South Africa.

to the Provincial Union on what is called a Provincial Union Development (PUD) contract. These contracts are usually worth \$2,000-\$5,000 per annum and are normally two year contracts. Provincial Unions also employ players on Provincial Union contracts to play in their ITM Cup side.

My experience of NZ rugby union talent identification and development

My interest in talent identification and development in the rugby union environment stems from being a rugby coach for 16 years at a range of levels in NZ, specifically Secondary School 1st XV, Age Group Representative sides and ITM Cup level. Also I have held the position of Academy Manager⁶ at a Provincial Union. This experience has provided me with insight into the highly competitive rugby environment not only in Franchises and Provincial Unions, where the competition to contract identified talented school leavers (regardless of where “home” is) is intense, but also with other sports (in particular Australian Rules Football and rugby league), where “scouts” invite talented rugby players to switch to their sports; leading the NZRU and Provincial Unions to establish initiatives to “protect their patch”.

Super Rugby Franchises and Provincial Unions are working hard to find solutions to identify, recruit and retain rugby talent and consequently invest significant human and financial resources into the rugby pathway and talent development programmes at various levels. In essence they are seeking to find the “holy grail” of rugby talent identification and development in an attempt to ensure they have the “right” talent in their systems and development programmes to win championships, become Super Rugby players and All Blacks, but also to “protect their patch”. Secondary Schools are also placing increasing significance and resources into the success of their rugby programme as it is assumed 1st XV

⁶ Previously the NZRU called these positions Academy Managers, they are now more commonly known as Rugby or Player Development Managers.

success adds prestige to the school. A number of Secondary Schools are operating rugby sports academies to cater for “talented” rugby players and in many instances these academy programmes are being mirrored on adult high performance environments and systems and are utilising Provincial Union resources.

Despite efforts to maximise talent identification and development initiatives, I have observed a number of examples that illustrate limitations and tensions with current systems and practices in NZ rugby. Even with the human and financial resources at their disposal, the Provincial Union can only cater for a select few in their age-group representative sides and high performance development programmes, thus potentially excluding a number of talented players. There is also an identified lack of transition through the pathway with a large number of talented rugby players selected for younger age-group representative sides not appearing in teams once players have matured. Also late developing players who have not been included in “the system” and have “hung in there” can appear as the most talented at senior levels. In contrast the players who have come through the pathway can continue to be selected, with those outside the system sometimes struggling to get an equal opportunity as they have not been exposed to the same level of expert coaching and resources.

More often than not rugby selection is based on subjective game observation of technical, tactical and physical abilities with limited awareness of other factors that determine performance and potential in rugby. Those selected into high performance academy programmes sometimes struggle to cope with the transition from their school (and sometimes home) environment. If these players are not provided the time or appropriate support needed to be successful they can, and do, drop out of the academy system. It is important to note that there is a growing awareness in some rugby quarters of late developers in the pathway and the impact of youth developmental experiences on senior performance. There is also a growing

acknowledgement of other factors that can impact on the capacity of an individual to develop the abilities necessary for successful elite rugby performance. For example, increasingly there is an emphasis placed on a player's behaviour and character, with subjective "judgements" being made on a player's character during talent identification and development processes. However, it is not clear how desired character and behaviour traits are defined and assessed during talent identification practices.

Rationale for the Study

The above discussion provides a clear rationale for the need of further research in the area of talent identification and development. Despite a developing research base dedicated to the area of identifying and developing talent in sport (Pankhurst & Collins, 2013; Tranckle & Cushion, 2006), there still remains a lack of literature based on an in-depth analysis that draws on the insights and experiences of those significantly involved in the identification and development of athletic talent (Tranckle & Cushion, 2006). Martindale, Collins and Daubney (2005) believe there is a distinct contrast between theoretical concepts of effective talent identification and development and what is currently occurring in practice. Moreover, Pankhurst and Collins (2013) argue there is little evidence to suggest that sport governing bodies are reading or taking into account current research in talent identification and development. This contrast between evidence based concepts and what is implemented in practice supports the need for further research that investigates talent identification and development perspectives and experiences of key stakeholders that could in turn inform current practice (Martindale et al., 2005). As well as inform decisions about the effectiveness of talent identification and development processes (Baker, Schorer, & Copley, 2012). Pankhurst and Collins (2013) maintain that sport governing bodies cannot ignore the low success rates of identified athletes going on to become world class performers without attempting to uncover reasons for the lack of success within their own talent identification and

development policies and practices. They continue by stating; “[t]he call for ‘evidence based practice’ in this area is surely clear” (p. 93). Collins and Bailey (2012), claim there is potential to make significant contributions and positive gains to both community sport participation and high performance environments if talent identification and development processes are conducted in an inclusive and evidence based fashion.

Despite the growing body of literature on talent development it is important to note that Hodge et al. (2012), in discussing previous research conducted in the area of talent development, stated that “it does not automatically relate directly to the NZ sporting context” (p. 7). I too have been unable to locate a significant body of literature that specifically investigates talent identification and development in the NZ and rugby union context.

Research Aim and Questions

When taken together, the context, which was previously introduced, and the identified gaps and rationale, demonstrate the topicality and significance of a study in the area of talent identification and development in a NZ rugby environment. As a result, the following research aim was developed:

To investigate current talent identification and development policies and practices of one New Zealand Rugby Provincial Union⁷.

Based on the research aim the following research questions were addressed:

1. What policies and practices are utilised by relevant staff members within one Provincial Union to identify and develop rugby union talent?
2. How are the talent identification and development policies and practices implemented within this Provincial Union?

⁷ For the purposes of the present study, only policies and practices associated with males were investigated.

In order to answer these questions, I interviewed staff employed by the Stonebridge⁸ Provincial Rugby Union⁹ with responsibilities for talent identification and development. I also talked with the Vulcans¹⁰ Super Rugby Franchise High Performance Manager due to the close relationship this person has within the Stonebridge Rugby Union with staff involved in the area of talent identification and development. In addressing the above research questions, I also requested and analysed documents that detail the Provincial Union's talent identification and development policies and practices, as well as any documents that are used to inform the policies and practices. I also searched for documentation and material on relevant websites and public databases. Documents were requested from the following sporting organisations; the NZRU, the Vulcans Super Rugby Franchise, and the Stonebridge Rugby Union.

Organisation of Thesis

The thesis begins with a review of relevant literature to locate the present study investigating talent identification and development policies and practices within the context of the literature and demonstrates how my topic is informed by these theoretical frameworks and evidence based research. Following this is an explanation of the methodological approach and selected methods; as well as links made to the ontological and epistemological assumptions. As a consequence of analysing the data, two analysis chapters are presented. One focuses on the Stonebridge Rugby Union's talent *identification* policies and practices; whereas the second focuses on the talent *development* policies and practices of the Stonebridge Rugby Union. A concluding chapter reintroduces the research questions and summarises the key findings in light of the questions and identifies implications for practice and areas for future research.

⁸ Stonebridge is a pseudonym used to protect the anonymity of the participants.

⁹ The criteria used to select the Stonebridge Rugby Union as the single case for this research project is discussed in the Methodology chapter (Chapter Three).

¹⁰ The Vulcans is a pseudonym used to protect the anonymity of the participants.

CHAPTER TWO: REVIEW OF LITERATURE

This chapter reviews relevant literature to the present study which is investigating talent identification and development policies and practices in the Stonebridge Provincial Rugby Union. This review begins by examining traditional and dominant talent identification and development practices, as well as describing dominant models used for talent development. The conceptualisation of talent as multidimensional and dynamic is then discussed along with the notion of combining talent identification and talent development processes. Alternative models and frameworks portrayed in the literature reflecting a multidimensional and dynamic concept of talent are then presented, before discussing an ecological approach to talent development. Talent identification and development in the NZ context is addressed before specifically addressing talent identification and development in a rugby union context.

Traditional and Dominant Talent Identification

Traditionally, talent identification processes have been based on the early identification of “talented” athletes in the hope they will then develop into elite adults (Abbott et al., 2005; Bompa, 1994; Martindale et al., 2005). The identification of these “talented” athletes has usually been based on isolated one-dimensional measurement, evaluation and analysis of physiological characteristics and motor skills (Abbott & Collins, 2004; Burgess & Naughton, 2010; Côté, Lidor & Hackford, 2009; Lidor, Côté, Hackford, 2009) or based on subjective game performance assessments (Burgess & Naughton, 2010; Lidor et al., 2009). Furthermore, the early identification of “talented” athletes, based on isolated one-dimensional measures of “talent”, often occurs when athletes are at a young age (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Côté et al., 2009; Lidor et al., 2009).

An increasing body of literature questions talent being measured at a young age and long term predictions being made of future adult success based on the physiological characteristics of young athletes (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Côté et al., 2009; Lidor et al., 2009). According to Abbott et al. (2005) young people are not stable in their development as they are in a period of continual change and developing at varying rates and at different stages of maturity. Youth development is characterised by unpredictable jumps and slumps (Abbott et al., 2005) that can impact on sport performance, and is not a predictable straightforward linear process (Bergeron, Mountjoy, Armstrong et al., 2015; Cobley et al., 2012). The use of physiological characteristics and skill performance criteria as the main, or sole, attributes for talent identification to accurately identify, and predict, future talent is increasingly not supported in the literature (Abbott et al., 2005; Button, 2011; Lidor et al., 2009), because early talent identification practices often select athletes who demonstrate an early physical maturity bias and excludes late developers (Cobley, Baker, Wattie, et al., 2009; McCarthy & Collins, 2014). It is argued that many young elite are successful not because of talent or superior skill level, but simply as a result of an early physical maturity bias in comparison to late developing peers (Martindale & Mortimer, 2011; Pankhurst & Collins, 2013). It should be noted however, that with time and opportunities late maturing athletes often “catch up” to their early developing counterparts, with other elements (e.g. decision making) required for successful performance (Baker et al., 2012; Meylan, Cronin, Oliver & Hughes, 2010). Furthermore, evidence suggests there is a distinct lack of transition from youth performance to elite adult performance (Bergeron, et al., 2015; Brown, 2001; Hollings, Mallett & Hume, 2014; Lloyd, Oliver, Faigenbaum, Howard, De Ste Croix, Williams...Myer, 2015; Pankhurst & Collins, 2013). Baker et al. (2012) and Meylan et al. (2010) also argue that an athlete considered to be talented at a young age may not be considered talented, or able to maintain a competitive advantage in the long-term, as athletes mature and develop. In addition, young elite players who demonstrate a higher level of skill in

comparison to their peers, are not necessarily more talented, but are more successful due to the extra hours of coaching and resources they have had access to through targeted development programmes (Ward & Williams, 2003).

The early identification of “talented” athletes to participate in sport development programmes is a double edged sword (Tranckle & Cushion, 2012). On the one side, identified athletes are selected to take part, yet on the other side, athletes are excluded or potentially discouraged from participating (Farrow, 2012; MacNamara, 2011; Meylan et al., 2010; Renshaw et al., 2012; Tranckle & Cushion 2012). Baker and Cobley (2013) argue that traditional talent identification processes work on a de-selection approach, where athletes who are not selected for higher levels of development are automatically consigned to lower levels of competition (Baker & Cobley, 2013). An additional concern some have with the overemphasis on the early identification and premature stratification of athletes, is that it can lead to discontentment and early drop out of those not selected or de-selected from sport programmes (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Côté et al., 2009; Lidor et al., 2009). A further limitation and issue associated with early talent identification policies is that talent identification methods are often sporadic and lack the application of specific criteria (Gray & Plucker, 2010). Those young people not selected into sport programmes are also likely to be denied the help and encouragement needed to attain high levels of performance and can find it extremely difficult to re-enter the system later on (Baker & Cobley, 2013).

Traditional and Dominant Talent Development

Traditionally, talent identification approaches have been viewed as a necessary forerunner to talent development practices (Abbott & Collins, 2004; Abbott et al., 2005). The purpose of the traditional approach to talent identification has been to identify “talented” athletes so they

can subsequently be supported and developed to achieve elite status (Abbott & Collins, 2004; Abbott et al., 2005). A consequence of this approach has led to the promotion of early sport specialisation as the dominant method of talent development (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Côté et al., 2009; Lidor et al., 2009;) and the perception that there is a need to monitor athletes continuously to assist them to achieve high levels of performance (Bompa, 1994). According to Renshaw et al. (2012), early specialisation is intuitively appealing for sporting organisations as it enables them to concentrate limited resources on a smaller number of identified athletes to develop to elite status. However, research evidence continues to illustrate that early specialisation practices struggle to appropriately develop future elite and can be detrimental to the long term health and well-being of young athletes, resulting in an increased rate of burn out and drop out (Baker, Côté, & Abernethy, 2003; Pankhurst & Collins, 2013; Renshaw et al., 2012; Strachan, Côté & Deakin, 2009). Studies by Memmert, Baker and Bertsch (2010) and Soberlak and Côté (2003) also found that in order to achieve expertise in a specific sport domain, early sport specialisation was not a necessary factor. Bailey and Toms (2011) question the ethical nature of early specialisation. They argue athletes selected for the increased quantity and duration of practice associated with the early specialisation approach are often very young, and may not have developed the necessary attributes required to cope with increased practice demands. They maintain young people are often under pressure to specialise early despite the continued lack of evidence to support the practice.

Linked closely with early specialisation is the concept of deliberate practice (Ericsson, Krampe & Tesch- Römer, 1993). The deliberate practice concept was originally presented by Ericsson and colleagues (Ericsson et al., 1993; Ericsson & Lehmann, 1996) and suggests that in order to achieve expert status in a specific domain, individuals need to specialise early to engage in 10 years or 10,000 hours (known as the 10 year or 10,000-hour rule) of deliberate

practice. The concept of deliberate practice assumes that experts in different domains follow a similar pathway to expert status (Ericsson et al., 1993; Ericsson & Lehmann, 1996; Ford, Ward, Hodges, & Williams, 2009). Deliberate practice is characterised as being highly structured, provides opportunities for skill repetition, error detection and to receive feedback, requires participant full attention, maximal effort and concentration, is not necessarily enjoyable and explicitly differentiated from play (Ericsson et al., 1993; Ericsson, 2006; Ford et al., 2009). A number of sport based studies have been conducted that support early engagement in domain specific activities, for example in one study on elite youth soccer players, the findings highlighted the need for minimal diversity and a balance between domain-specific practice and participation in domain-specific play in the development of expert soccer players (Ford et al., 2009). However, despite evidence to support the notion of deliberate practice, the notion has been criticised and regarded as flawed (Lloyd et al., 2015; Pankhurst & Collins, 2013), with evidence to suggest individuals can also reach expert status participating in differing pathways (Côté, Baker, & Abernethy, 2007; Côté, et al., 2009; Coutinho, Mesquita & Fonseca, 2016; Renshaw et al., 2012; Voigt & Hohmann, 2016).

Dominant Models of Talent Development

The Pyramid Model

The pyramid model reflects a linear pathway that starts from a broad base of foundation participation followed by increasing higher levels of performance engaged in by less and less athletes (Bailey et al., 2010; Bailey & Collins, 2013; Gulbin et al., 2013). The base of the pyramid starts with school sport and physical education and is followed by involvement in sports clubs, regional and national competitions, with the peak of the pyramid being elite (international) competition (Bailey et al., 2010; Bailey & Collins, 2013). Participants engage in sports participation at the base level of the pyramid, with those assumed to have the most “talent” and “ability” being developed through the various levels of the pyramid which equate

to increasingly higher levels of performance (Green, 2005). It is argued that elite performance at the pinnacle of the pyramid is supported and developed from a broad base of foundation participation programmes where the most “talented” are selected for higher levels (Green, 2005).

The pyramid model is extremely popular amongst sporting organisations and policy makers due to its simplicity, ease of implementation and the ability to rationalise limited talent development resources (Bailey et al., 2010; Bailey & Collins, 2013; Gulbin et al., 2013). Despite this popularity there are a number of criticisms levelled at the model (Bailey et al., 2010; Lloyd et al., 2015) primarily because it “lacks any sustained empirical or conceptual integrity” (Green, 2005, p. 234). According to Bailey et al. (2010) and Bailey and Toms (2011) the pyramid model systematically excludes athletes as they progress in sport in a “Darwinian process” (Bailey & Toms, 2011, p. 157). The model assumes current performance and subsequent progress is a result of talent and ability, with success demonstrated at the lower levels being an accurate predictor of future performance (Bailey et al., 2010; Bailey & Collins, 2013). Another criticism of the pyramid model is that it does not factor in individual differences in growth and maturation (Lloyd et al., 2015), or other elements, for example, psychological behaviours, support networks and environmental factors (Bailey et al., 2010). A study conducted by Gulbin et al. (2013) also discovered, contrary to the assumption that participants develop and progress in a linear fashion from one level of the pyramid to the next, that “not all athletes entered their sport specialization from the ‘base’ of the pyramid” (p. 7). They found that only 16.4% of athletes followed a predictable linear ascent in a sport and highlighted a diverse pathway to elite competition (Gulbin et al., 2013).

Bayli's Long Term Athlete Development Model

The Long Term Athlete Development Model (LTAD) was initially promoted by Istvan Balyi in 1990 (Bailey et al., 2010). According to Bayli, Way and Higgs (2013) the model provides a planned, systematic and progressive approach to athlete development. The model promotes the concept of sensitive or critical periods of development or windows of opportunity in which key elements need to be developed at crucial periods or windows in an athlete's development (Bayli & Hamilton, 2004; Bayli et al., 2013; Ford, Collins, Bailey, MacNamara, Pearce, & Toms, 2012). As a result of this concept, Bayli's LTAD model is organised into specific stages of development. The current version of the model is organised into 7 stages; Active start, FUNdamentals, Learn to train, Train to train, Train to compete, Train to win, and Active for life (Bayli et al., 2013). Bayli et al. (2013) state the model is not only designed to cater for those engaging in health enhancing physical activity, but is also designed to provide "those with drive and talent, the best chance of athletic success" (Bayli et al., 2013, p. 1), because one of the major goals of the model is to improve sport performance (Bayli et al., 2013).

The LTAD model as a process for talent development has proven to be popular with sport organisations internationally, and "is arguably the most contemporary adopted framework for talent development at present" (Ford et al., 2012, p. 516). The LTAD model has been recommended and widely adopted by a number of National Sporting Organisations (NSO's) in the United Kingdom (UK) and Canada as a process for talent development (Collins & Bailey, 2012; Ford et al., 2011; Gulbin & Weissensteiner, 2013). In fact, national governing bodies in Britain and Canada have recently been required to have a LTAD plan in place in order to receive government funding (Black & Holt, 2009; Day, 2011). Day (2011) maintains British sporting organisations clearly regard LTAD as a blueprint for the future of elite sport,

with many assuming “that LTAD is a global law that must be adhered to for athletes to be internationally competitive” (Day, 2011, p. 181).

Despite the popularity and widespread usage of Bayli’s LTAD model, it has come under considerable criticism in the literature. It is argued the model adopts primarily a prescriptive, one dimensional physiological perspective (Ford et al., 2011; Gulbin & Weissensteiner, 2013) and is “explicitly grounded in Eastern Bloc philosophy” (Collins & Bailey, 2012, p. 4). Other criticism levelled at the LTAD model is that it is generic as opposed to adopting an individual focus, assumes people develop in a straightforward linear and chronological fashion and does not take into account other components of development and sports performance (e.g. technical and tactical ability) (Ford et al., 2011; Gulbin et al., 2013; Gulbin & Weissensteiner, 2013). Gulbin et al’s. (2013) collective findings on patterns of performance development experienced by 256 elite athletes reinforced the illogicality of purely linear and chronological prescriptive models. Their study added evidence of the non-linear, diverse and unpredictable pathways taken by elite performers (Gulbin et al., 2013). There is also a clear argument in the literature that the LTAD model lacks a credible empirical evidence base to support its usage (Ford et al., 2012; Gulbin et al., 2013; Lloyd et al., 2015; Martindale et al., 2005). Collins and Bailey (2012) argue; “[i]n the current climate, which stresses the need for evidence-based practice, one would expect such a pervasive policy to be strongly supported by scientific rigour. We and several other authors would suggest this is not the case” (p. 4). Despite these criticisms, it is important to point out that many advocate for, and have adopted a stance that supports the value of, a long-term approach to talent development, as opposed focusing on current performance and success, and is supported by a multidimensional and dynamic conceptualisation of talent (Bergeron et al., 2015; Button, 2011; Martindale et al., 2007; Meylan et al., 2010).

The Multidimensional and Dynamic Concept of Talent

The above discussion illustrates talent identification and development has historically been discussed, and practiced, primarily in a mono-disciplinary fashion (Phillips, Davids, Renshaw, & Portus, 2010). Increasingly, talent is being defined in the literature as complex, dynamic and multidimensional, with talent identification and development processes characterised as dynamic and interrelated (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Côté et al., 2009; Lidor et al., 2009). According to Vaeyens, Lenoir, Williams and Renaat (2008) there is growing consensus that traditional models used for talent identification and development are likely to continue to be ineffective “due to the dynamic and multidimensional nature of sport talent” (p. 703). In addition to physiological characteristics and skill abilities, many argue talent also encompasses psychological behaviours and is influenced by socio-cultural factors, with these characteristics, abilities and factors interacting in a dynamic, non-linear and multidimensional fashion (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Côté et al., 2009; Lidor et al., 2009). As a result, these authors maintain a multidisciplinary approach to talent identification and development is needed to effectively and appropriately identify and develop sporting talent (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Côté et al., 2009; Lidor et al., 2009; Mills, Butt, Maynard, & Harwood, 2012) and to advance our understanding of talent development and elite sport performance (Phillips et al., 2010).

According to Button (2011) sporting organisations are increasingly recognising the limitations of traditional approaches to talent identification and development and there is some evidence that governing bodies are re-evaluating (at least at a policy level) their talent identification and development systems in line with a multidimensional and dynamic concept of talent. However, despite this acknowledgment, many sport organisations continue to use traditional approaches that rely on one-dimensional and simplistic determinants of talent

(Button, 2011). Button (2011) argues potential reasons for this is the apparent ease of implementing traditional and dominant one-dimensional models and the constraint of funding schemes linked to current performance which lead to a short-term focus on success. She also suggests that despite the recognition of limitations with traditional approaches to talent identification and development, their continued implementation “may reflect the practical complexities that result from a multidimensional and dynamic concept of talent and the absence of explicit alternative strategies” (Button, 2011, p. 25).

A combined approach to talent identification and talent development

Based on the conceptualisation of talent as multidimensional and dynamic, and in contrast to traditional approaches that advocate early talent identification (TI) followed by talent development (TD), a body of literature is advocating for a combined approach to talent identification and development, with greater emphasis placed on the appropriate development and monitoring of all athletes then on identification (TiD) (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Gray & Plucker, 2010). Bailey et al. (2010), Phillips et al. (2010) and Renshaw et al. (2012) all maintain that sporting organisations should place greater emphasis on providing development opportunities that focus on factors that underpin success, and adopt a more inclusive development model that monitors potential, over wasteful attempts to identify talent early. A combined approach to talent identification and development (TiD) also upholds that talent development processes be considered alongside talent identification initiatives to increase the probability that potential elite athletes can successfully emerge from development programmes and that talent identification be held off until post puberty and closer to the age of peak performance (Abbot et al., 2005; Renshaw et al., 2012).

Alternate Models and Frameworks of Talent Identification and Development

In response to the limitations of traditional and dominant approaches and models used for talent identification and development, a number of researchers have proposed the use of alternate models and frameworks that are underpinned by a multidimensional and dynamic concept of talent and combines talent identification and talent development. The four models and frameworks discussed in the following section reflect a selection of those discussed in the literature.

1. Developmental Model of Sport Participation

The Developmental Model of Sport Participation (DMSP) stemmed from the work of Côté (1999) who gathered evidence from retrospective interviews with elite athletes. Using the evidence, Côté designed a model which reflects different pathways of sport involvement participants experience from childhood to adulthood (Côté, 1999; Côté & Hay, 2002; Côté & Fraser-Thomas, 2008). The model provides support for early and diversified sport involvement that results in much later sport specialisation (Côté, 1999; Côté & Hay, 2002; Côté & Fraser-Thomas, 2008; Coutinho et al., 2016; Gulbin & Weissensteiner, 2013), as well as highlighting various trajectories toward elite performance (Côté, 1999; Côté & Hay, 2002; Coutinho et al., 2016). The DMSP prescribes sport involvement in a series of stages; namely sampling, specialising and investment (Burgess & Naughton, 2010), which can lead to either recreational sport participation or elite performance (Gulbin & Weissensteiner, 2013). The sampling years (age 6-12) involve participation in a variety of sports, the specialising years involve a reduction in the variety of sports played (age 13-15), and is followed by a significant investment in a single sport (above 16 years) (Burgess & Naughton, 2010; Gulbin & Weissensteiner, 2013).

In response to criticisms of early specialisation and the notion of deliberate practice (discussed previously), coupled with evidence of diverse pathways to elite status, Côté (1999) promoted the deliberate play framework as part of the DMSP. Deliberate play counters the deliberate practice framework and promotes play experiences as a critical component of talent development, especially in the childhood years (Côté, 1999; Côté & Hay, 2002; Côté et al., 2007). A deliberate play approach fosters greater enjoyment and intrinsic motivation toward sport development engagement, as well as creating environments that facilitate perceptive cognitive ability; an ability seen as critical in elite team sport environments (Côté, 1999; Côté & Hay, 2002; Côté et al., 2007). A number of studies have been conducted that refute the deliberate practice framework and support the notion of deliberate play (Baker et al., 2003; Berry, Abernethy, & Côté, 2008; Gulbin, Oldenzien, Weissensteiner, & Gagné, 2010; Voigt & Hohmann, 2016). Study findings highlight the number of hours spent in sport specific practice was far short of the 10,000 hours of deliberate practice recommended to achieve expert status (Baker et al., 2003), and that elite athlete pathways and developmental experiences are diverse (Gulbin et al., 2010). One study conducted by Berry et al. (2008) with Australian Rules Football players suggested “that it is the amount of invasion-type activity that is experienced and not necessarily intent (skill development or fun) or specificity that facilitates the development of perceptual decision-making expertise in this team sport” (p. 685). The above conclusion alludes to the fact that accumulated practice hours are indeed critical for talent development, however, the accumulated hours do not need to be domain specific. Based on Côté’s work and various levels of empirical support, The International Society of Sport Psychology (ISSP) position stand on youth sport development supports early sport diversification and a deliberate play approach, and is presented in the following seven postulates (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 for 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 play during 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 specialise in their favourite sport or to continue in sport at a recreational level;
7. Late adolescents (around age 16) have developed the physical, cognitive, social, emotional, and motor skills needed to invest their effort into highly specialised training in one sport.

2. Differentiated Model of Giftedness and Talent

In response to the “one size fits all” approach of traditional talent identification and development, a number of researchers recommend the implementation of Gagné’s Differentiated Model of Giftedness and Talent (DMGT) (Gulbin & Weissensteiner, 2013; Tranckle & Cushion, 2006; Vaeyens et al., 2008). The DMGT is based on Gagné’s work in the field of education and defines development as the transformation of individual gifts and abilities into knowledge and skills (called talents) (Gagné, 2004; 2013). Tranckle and Cushion (2006) and Vaeyens et al. (2008) argue the DMGT is useful as a framework for sport talent identification and development as it emphasises an individual’s capacity to develop, and distinguishes between an athlete’s “raw” gifts and abilities and the end product of

development processes (talent). The DMGT model also highlights the role intrapersonal and environmental factors, for example, psychological behaviours and the quality of coaching, have in facilitating the development of gifts and abilities into talent. It should also be noted however, that the full DMGT model is still to be fully verified in a sport context (Gulbin & Weissensteiner, 2013).

3. Psychological Characteristics of Developing Excellence

Devised by Abbott and colleagues (Abbott & Collins, 2002; Abbott & Collins, 2004; Abbott et al., 2005), the Psychological Characteristics of Developing Excellence (PCDE) model was developed to promote the role and importance of psychology in the development of sporting success. In particular, the PCDE model highlights the need to distinguish between determinants of performance (e.g. the early development of physical maturity) and determinants of potential (e.g. psychological behaviours) (Abbott & Collins, 2002; Abbott & Collins, 2004; Abbott et al., 2005). In contrast to traditional approaches to talent identification and development, proponents of the PCDE model argue greater emphasis should be placed on the identification, measurement and development of psychological characteristics and behaviours, for example, coping with adversity, self-reinforcement, self-evaluation and goal setting, which can determine an athlete's potential to be successful and facilitate elite sport performance (Abbott & Collins, 2004; Abbott et al., 2005; Bailey et al., 2010; MacNamara & Collins, 2011; MacNamara & Collins, 2015). Studies conducted in elite sport environments support the role psychological behaviours have in assisting developing athletes to cope with the complexity of the development process, translate their potential into world class performance, transition to higher levels of development and maintain sporting success (Larsen, Alfermann, & Christensen, 2012; MacNamara, Button, & Collins, 2010; MacNamara & Collins, 2015).

Recently, MacNamara and Collins (2015) have argued there has been little consideration of negative psychological characteristics and how they may cause an athlete to “derail” from the talent pathway. According to MacNamara and Collins (2015) situational factors can influence the occurrence of negative behaviour characteristics. They argue it is therefore important that “the interaction of personality, situational and organizational factors that influence the emergence of such behaviour in a given context is understood” (p. 76). MacNamara and Collins (2015) maintain people working in talent development environments should seek to examine and understand the “dark side” (p. 77) of behaviour, with appropriate and timely clinical level screening and support provided for players who struggle along the talent pathway. Interestingly, a body of recent research is beginning to promote the experiencing of adversity and a more challenging pathway for successful performance at elite levels (Collins & MacNamara, 2012; McCarthy & Collins, 2014). Collins and MacNamara (2012) found, when examining the backgrounds of elite athletes, that a number had experienced a “...disproportionately high incidence of early trauma, or at least incidence with the potential to traumatise” (p. 3).

4. Bailey and Morley’s Model of Talent Development

Drawing on numerous empirical sources, Bailey and Morley’s (2006) model of talent development aimed to make explicit “the nature, content and character of the talent development process in physical education” (p. 212). Bailey and Morley’s model features the following three hypotheses viewed as critical for an adequate understanding of talent development within physical education (Bailey & Morley, 2006; Bailey et al., 2010):

1. The differentiation between an individual’s potential and performance, with current performance characterised as a poor indicator of future talent;
2. That development is multidimensional, with a range of factors impacting on an individual’s development; and

3. Practice is vital in the development of talent.

An additional component of Bailey and Morley's model that appears to be missing in the other models is chance (or luck) (Bailey & Morley, 2006; Bailey et al., 2010). Bailey and Toms (2011) argue that luck plays a significant role in the development of talent because an individual's genetic dispositions, parents, where they were born, the school they attend, access to quality teachers, coaches, resources and facilities, and the support of family and friends can all be argued as elements of chance or luck, and can subsequently impact on talent development.

Ecological Approach to Talent Development

Although the models and frameworks discussed above advocate a multidisciplinary and dynamic approach to talent development and identification, limitations have been identified with a models approach that tend to oversimplify talent development and does not necessarily address the totality of development (Gulbin et al., 2013; Gulbin & Weissensteiner, 2013; Phillips et al., 2010). Lloyd et al. (2015) argued development models "...should not be viewed as gold standard blueprints" (p. 1445). Phillips et al. (2010) maintain that some of the models (e.g. the DMSP) do not provide a clear "detailed, explanatory theoretical rationale underpinning a dynamic and multidimensional basis for expertise and how it may support the process of identifying and developing talent" (p. 272). It is suggested that the weakness of the models is not necessarily in their content, but rather in their scope and application (Bailey et al. (2010), and "policy makers and practitioners ought to view models with caution; they are provisional and permanently so" (Bailey et al., p. 96). Coutinho et al., (2016) recently presented the case for sport organisations to consider designing sport-specific long-term athlete development programmes, which meet the needs of each sporting context, as opposed a generalised model approach.

An alternate perspective to the models approach, which acknowledges a multidimensional and dynamic concept of talent, is an ecological approach to talent development (Araújo, Fonseca, Davids, Garganta, Volossovitch, Brandão & Krebs, 2010; Henriksen et al., 2011; Larsen et al., 2012). Based on Urie Bronfenbrenner's ecological view of human development (Bronfenbrenner, 1979; 2005; Bronfenbrenner & Morris, 2006) (which will be discussed in detail in Chapter Three), an ecological approach to talent development shifts the focus away from the individual and highlights the role of the environment in which the individual is developing (Araújo et al., 2010; Henriksen et al., 2011; Larsen et al., 2012). Recent research implies that to understand the complex nature of talent development and the development of elite athletes, researchers and practitioners need to look beyond the individual athlete to the environmental factors that impact on an athlete's development to elite status (Araújo et al., 2010; Henriksen et al., 2011; Tranckle & Cushion, 2012). Some of the environmental factors included in an ecological approach are the impact of significant others (for example, family and coaches), access to resources and the relative age effect (RAE).

Family support networks are identified as a significant environmental factor that impacts on talent development and plays a critical role in facilitating an athlete's development (Araújo, Davids, Bennett, Button, & Chapman, 2004; Bloom, 1985; Hodges & Baker, 2011; Lauer, Gould, Roman, & Pierce, 2010). In one study of elite youth soccer players, 80% of the participants reported that their parents were the most influential person in their careers (Collins, Button, & Richards, 2011). Families can provide financial, material, psychological and emotional support that impact directly on an athlete's developmental experiences and ability to achieve success in sport (Bloom, 1985; Lauer et al., 2010; Phillips et al., 2010). Pankhurst and Collins (2013) found parents to be key stakeholders in talent development systems. Consequently, they suggest the positive management and integration of parents should be a strategic priority for sport organisations. Unfortunately, while this approach is

“significantly supported by research... [it is] neglected in practice” (Pankhurst & Collins, 2013, p. 92). However, families do not always provide positive support (Fraser-Thomas, Côté, & Deakin, 2008). They maintained parents can negatively impact a child’s development by overemphasising winning, holding unrealistic expectations, criticising performance and pushing them to play. In addition to family networks, the impact of quality (or lack of) coaching as well as access to required resources and facilities are identified as significant environmental factors that can impact on the development of talent (Bloom, 1985; Hodges & Baker, 2011; Phillips et al., 2010).

One powerful environmental factor that needs to be taken into account when identifying and developing talent is the relative age effect (RAE) (Burgess & Haughton, 2010; Cobley, Baker, Wattie, & McKenna, 2009). Relative age is defined as the difference in age between individual athletes in the same age-group (Musch & Grondin, 2000). Most sporting organisations arrange young athletes into chronological age groupings for the purpose of creating equal, and developmentally appropriate, age-group competitions (Cobley et al., 2009; Musch & Grondin, 2000). A consequence of this grouping however, is the relative age effect, where athletes who are born early in the selection year often have a physical advantage over their younger peers (Meylan et al., 2010; Musch & Grondin, 2000), and being “relatively older is more likely to provide a performance and selection advantage when assessed or evaluated (by coaches) against annual age-group peers” (Cobley et al., 2009, p. 237). A number of studies reinforce the influence of the RAE and demonstrate that the older an athlete is in relation to their peers, the more likely they will be selected into higher levels of competition or provided with development opportunities, and potentially develop into an elite athlete (Côté, MacDonald, Baker, & Abernethy, 2006; Helsen et al., 2012; Helsen, Hodges, Van Winckel, & Starkes, 2000; Lewis, Morgan & Cooper, 2015; Till, Cobley, O’Hara, Chapman & Cooke, 2010). It has also been demonstrated that the RAE is more prevalent if

selectors have an over-emphasis on game performance and winning (Lewis et al., 2015; Till et al., 2010). An emphasis on short-term performance objectives results in older, more physically mature players selected in preference to younger, less physically able players (Lewis et al., 2015; Till et al., 2010). It is argued sport organisations should be aware of, and fully understand, the impact of the RAE (Musch & Grondin, 2000), yet according to Pankhurst and Collins (2013), few sports “seem able or willing to counteract the effects of relative age in their junior competitive systems” (p. 89).

Talent Identification and Development in New Zealand

A limited amount of literature provides insight into early indications for talent identification and development in New Zealand. In 1985, the *Sport on the Move* report (Sport Development Inquiry Commission, 1985) determined talent identification was still in its infancy in NZ, and argued that current practice had a limited capacity to predict future athletic performance with any level of accuracy. In this report it was argued there was a case for long-term research into talent identification. Also in 1985, Thompson and Beavis were commissioned to produce a report into talent identification in sport by the NZ Sports Foundation (Thompson & Beavis, in Scott, 1985). Their report identified several shortcomings in the practices within New Zealand when it came to identifying youth athletes for future international performance and suggested the development of sport structures to maximise youth sport development opportunities (Thompson & Beavis, in McClymont, 1996). A decade after the publication of the *Sport on the Move* report, McClymont (1996) produced a paper proposing a talent identification model to maximise New Zealand’s sporting talent. The model proposed identifying sporting talent in the education system to participate in generic skill development prior to being selected into sport specific development opportunities. A key aspect of McClymont’s (1996) model was collaboration between organisations to retain the option for athletes to change sports if the chosen discipline does not

produce success. McClymont (1996) argued that despite the shortcomings identified in the *Sport on the Move* report the identification and development of sporting talent in New Zealand was still loosely organised and New Zealand still did not have “a system that will identify potential talent, provide direction for the development of that talent, and provide a structure to oversee the process” (p.16).

The *Getting Set for an Active Nation* Ministerial Task Force Report (Ministerial Taskforce, 2001), stated elite sport will be a focus area of sport development. The report recommended talent identification systems be developed and implemented at all levels of sport and a clear and supported sport pathway be available for all talented athletes. In the report to the SPARC board from the TID Task Force in 2004¹¹ (New Zealand Academy of Sport, 2004) papers that had been authored previously in NZ were all acknowledged as part of the review process. However, they concluded “[u]nfortunately, for one reason or another, these papers’ recommendations have never been universally implemented” (New Zealand Academy of Sport, 2004, p.7). The Task Force report noted that there was no long-term solution evident to the complex problem of talent identification and development in New Zealand (New Zealand Academy of Sport, 2004). The overall conclusion reached by the Task Force was New Zealand sporting organisations should prioritise the adoption of a holistic long-term development strategy and framework for talent development; with the establishment of processes that has integrated on going talent identification (TiD) (New Zealand Academy of Sport, 2004).

Hodge et al.’s (2012) study provided insight into the performance factors necessary for talent development in the New Zealand sport context from the perspective of current and former elite athletes and their coaches and parents. They highlighted a number of factors that

¹¹ This report was introduced in the Introduction.

influenced the athlete pathway, such as support from others, psychological development, and the challenges associated with elite sport. What is more, Hodge et al. (2012) found that New Zealand athletes experience diverse developmental pathways to elite status, which supported early involvement in a wide range of sports (early diversification), and questioned the time (e.g. 10 years) needed to reach elite status. They also identified the importance of support from others in developing talent. Their findings illustrated that parents were strongly supportive (both financially and emotionally) of the athlete and applied little or no pressure or expectation for their child to progress. Peers also played an important role; in particular, in providing competition and motivation (Hodge et al., 2012). The athletes in the study highlighted the importance of gaining an understanding of, and developing, psychological skills needed to become an elite athlete. Psychological skills were considered valuable because they enabled athletes to cope with the challenges associated with elite sport, in particular experiencing the non-linear nature of the athlete development pathway and dealing with inevitable problems, obstacles and setbacks associated with achieving and maintaining elite status (Hodge et al., 2012). The athletes also stated that they need to enjoy their sport and be intrinsically motivated. Finally, the study participants recognised the importance of work ethic, commitment and motivation in their development as athletes (Hodge et al., 2012).

Rugby Union Specific Talent Identification and Development

Few studies have investigated talent identification and development in rugby union. The majority of studies which have been conducted in a rugby union context reflect a traditional approach to talent identification and development. Several studies were conducted over a 12-year period in South African (SA) rugby as part of a research project on talent identification and development (Pienaar, Spamer, & Steyn, 1998; Spamer, 2009). The main objective of the project was to test a large number of elite youth rugby players aged 10-19 years of age to compile a profile of a potentially talented and elite youth rugby player. The test protocol

involved several anthropometric, physical, game specific and injury epidemiology assessments (Pienaar et al., 1998; Spamer, 2009). The project aimed to provide scientific evidence concerning the profile of an elite rugby player which could then be used in the identification and development of future elite rugby players. Results concluded that, amongst other things, maturation plays an important role, because “[e]arly maturers tend to be taller and stronger, and therefore better athletes” (Spamer, 2009, p. 114). Interestingly, Spamer (2009) continued by saying “[e]arly maturers also seem to have more confidence, pride, and a shiny ego, compared to late maturers who seem irresponsible, childish, and seeks attention” (p. 114). However, he concluded by acknowledging that, despite 12 years researching talent identification and development, little is still known about a number of variables that play a role in talent identification (Spamer, 2009).

The authors of an investigation into the success of SA rugby player development advocated for the implementation of a LTAD model (Lambert & Durandt, 2010). Yet Lambert and Durandt (2010) argued that there was a need for a more inclusive approach that catered for late developing and smaller players to participate and be successful, rather than be forced to apply their talents in other sport domains. They concluded by stating that SA rugby will continue to experience a high level of player drop out if it fails to address significant mismatches in youth rugby (Lambert & Durandt, 2010). Hall’s (2011) thesis, studying the effectiveness and efficiency of talent identification strategies and policies utilised within one club in England, found the need for clubs to include a “safety net” within talent identification strategies to accommodate for late developing players. Smart’s (2011) thesis was conducted in a NZ rugby context examining physical profiles of rugby union players. One conclusion of that study was physical characteristics should be developed from an early age to ensure players are physically ready for elite rugby performance, and recommended adolescent talent development programmes be structured to improve physical characteristics important for elite

performance (Smart, 2011). Smart's (2011) approach privileged the physical aspect of talent development and did not take into account other recognised aspects that contribute to expert performance in sport.

In a more recent study, conducted by Hill, MacNamara and Collins (2015) on elite English rugby union academies, academy coaches and directors highlighted both positive and negative issues that influenced talent development in rugby. Examining negative issues that influence talent development, the research participants reported a range of characteristics that negatively impacted upon talent development, for example lack of commitment or self-awareness, and led to the players employing avoidance-based strategies or self-handicapping behaviours (Hill et al., 2015). The findings of this study comprehensively supported the role PCDE's play in enabling players to negotiate the pathway to elite levels of performance (Hill et al., 2015). Additionally, coaches in the study recognised the increased incidence of mental health issues in rugby, which they contended, demonstrated poor awareness of the issues and symptoms generally associated with mental health in young people (Hill et al., 2015). Hill et al. (2015) recommended further research on the awareness and impact of mental health issues on developing athletes.

The lack of literature on talent identification and development in the NZ context and specifically on rugby union, and the predominant focus of existing studies on physical characteristics, further highlights the merit of the present study investigating the policies and practices of the Stonebridge Provincial Rugby Union to contribute to the body of knowledge in the area of talent identification and development.

CHAPTER THREE: METHODOLOGY AND METHODS

This chapter outlines the methodological approach used to investigate the current talent identification and development policies and practices of the Stonebridge Provincial Rugby Union. Specifically, this chapter details descriptions of the frameworks underling my views regarding the nature of knowledge and subsequently the methodological approach and methods used for this study. Also detailed are the processes used to analyse the data, ensure the research process was rigourous and robust, and the ethical considerations for the project.

Ontological Assumptions

My ontological assumptions are informed by my own life experiences and have led me to develop an interest in the area of talent identification and development, specifically in the context of NZ rugby union. My ontological assumption asserts individual participants employed in the context of a NZ rugby Provincial Union construct knowledge, meaning and the nature of reality when participating in, experiencing, and interacting within social environments (Cresswell, 2002; Denzin & Lincoln, 2005; Lincoln & Guba, 2005). I believe key stakeholders in the NZ rugby development pathway construct their knowledge and understanding about talent identification and development from their own experience and the environment in which they operate which in turn influences talent identification and development policies and how these are implemented in practice (Schempp, 1993).

This ontological assumption reflects the general aim of an interpretive paradigm, which is to reconstruct and understand the knowledge and meaning of human experience through the perspective of the participants (Langley, 1997). The interpretivist paradigm informs the present study as I aimed to gain an understanding of talent identification and development in the Stonebridge Rugby Union from the perspectives of key stakeholders. In the context of

this study, it is the knowledge, perspectives and experiences of the participants that I aimed to capture (Bryman, 2008; Davidson & Tolich, 2003; Tinning & Fitzpatrick, 2012). I sought to understand and gain knowledge about the participants' "common sense thinking" (Bryman, 2008, p. 16) and therefore gain insight into how the talent identification and development policies and practices are developed and implemented.

Epistemological Assumptions

To gain insights into how the talent identification and development policies and practices are implemented it is useful to have a framework to guide the analysis of the insights (Horn, 2004). One framework that is generative for the present study is Urie Bronfenbrenner's ecological view of human development (Bronfenbrenner, 1979). Bronfenbrenner (2005) and Bronfenbrenner and Morris (2006), proposed a framework to be used as a theoretical framework for understanding human development, which I believe is generative for the present study which focused, in part, on talent development. Bronfenbrenner (1979) contends that to understand human development it is important to understand developmental processes and the context in which development occurs. According to Bronfenbrenner (2005);

[t]he ecology of human development is the scientific study of the progressive, mutual accommodation, throughout the life course, between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by the relations between these settings, and by the larger context in which the settings are embedded (p. 107).

Talent development can therefore be conceived as a dynamic interactional process (Horn, 2004) and can only be understood through examining the context in which the individual athlete is developing. An ecological perspective of talent development shifts the focus from the individual athlete to the "overall environment as it affects a prospective elite athlete and

mirrors the complexity of talent development in the real world” (Henriksen et al., 2010, p. 221).

Bronfenbrenner (2005) in particular was committed to explaining the ways proximal processes can affect human development. The impact of proximal processes that affect development can vary as a result of the interaction between the unique characteristics of the developing individual, the environment surrounding the individual, the nature of developmental outcomes and socio-cultural factors (Bronfenbrenner & Morris, 2006). He proposed that to understand the impact of proximal processes on the developing individual, it is important to understand that, “over the life course, human development takes place through the process of progressively more complex reciprocal interaction between an active, evolving bio-psychological human organism and the persons, objects, and symbols in its immediate external environment” (Bronfenbrenner, 2005, p. 5). What this means for understanding talent development is that for talent to develop effectively the athlete must first engage in sport activity on a regular basis for an extended period of time, activities need to become increasingly more complex and involve reciprocal, engaged, interaction between the developing athlete, significant others (e.g. a coach), and the cultural setting (Bronfenbrenner, 1999).

According to Horn (2004), Bronfenbrenner did not view human development as occurring in a straight-forward linear path or in identifiable stage-like transitions. Bronfenbrenner proposed that the environment be viewed in terms of a series of concentric circles, each representing a different contextual system that interacts with features of the individual to impact on development (Bronfenbrenner, 1979; 2005). As a result of this view, he proposed an ecological systems model (see *Figure 2.*) that portrays development as occurring through

interactions within and across varying systems; namely microsystem, mesosystem, exosystem, macrosystem (Bronfenbrenner, 1979), and chronosystem (Bronfenbrenner, 2005).

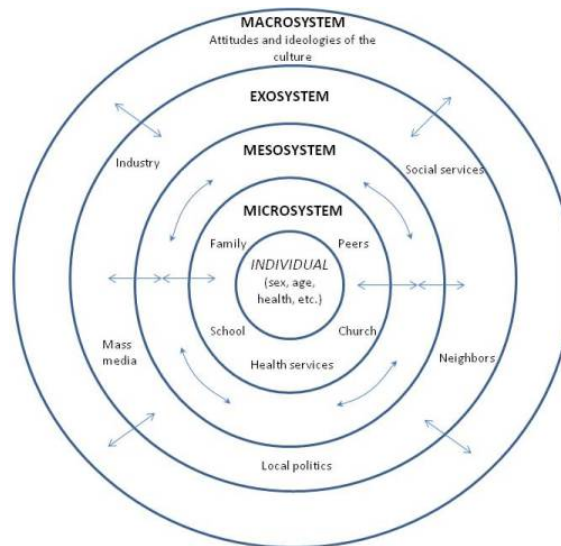


Figure 2: Bronfenbrenner's Ecological Systems Model (n.d.)

Specifically applying Bronfenbrenner's ecological systems model to the development of an athlete the microsystem involves the athlete and their interactions within their immediate environment, for example interactions with a coach, teacher, peers and family members, as well as sport organisation/development programme involvement. The mesosystem involves connections and links between the settings the athlete inhabits (e.g. home, school, club and work environments) and the impact on the athlete. The exosystem involves settings in which the athlete is not directly involved but still affects them, for example the relationship between their coach and parents, as well as the designing and implementation of competition structures and talent identification and development policies and practices. The macrosystem concerns the broader socio-cultural practices and norms that can impact on an athlete's development, for example the perspective of sport in society, and the national, youth and sport culture in which the athlete participates and interacts. The chronosystem refers to the influence of time

on each of the settings and the way processes emerge over time (Claiborne & Drewery, 2010; Duerden & Witt, 2010; Krause, Bochner, & Duchesne, 2006).

Other work that was generative for this project is that of Angela Button¹² and her colleagues (Abbott & Collins, 2002; Abbott & Collins, 2004; Abbott et al., 2005). They conceptualise talent as multidimensional and dynamic, and propose sporting organisations recognise the evolutionary nature of talent and implement a combined approach to talent identification and development (TiD). An integral part of their work is the recognition that multiple determinants of performance exist and the need to differentiate between performance dispositions and the potential/capacity of an individual to develop (Abbott & Collins, 2002; Abbott et al., 2005). My own experiences as a rugby union coach for 16 years, working with coaches, players, and Provincial Union and Super Rugby staff members at a range of community and high performance levels in NZ rugby, has also shaped my epistemological position and the approach I have taken to the research.

Methodology Justification

The adoption of a qualitative methodology provides the tools to investigate and gain a descriptive understanding of the talent identification and development policies and practices within the Stonebridge Rugby Union and how these are implemented. The qualitative methodology used in this study was a case study research design.

A case study research design can be defined as an intensive investigation of a setting and is concerned with describing the nature of “real world” phenomena and the complexity of a specific case (Yin, 1994). Case study is therefore suited to studying talent identification and development policies and practices as the situational variables cannot be separated from their

¹² Nee Abbott

setting and is therefore a useful design for investigating and understanding the complexities involved (Merriam, 1998). The specific object of study, or unit of analysis, defines the nature of case study research and what specifically constitutes a case, with the unit or object being a specifically identified individual, group or organisation (Merriam, 1998; Yin, 1994). In essence, a case can be defined as a bounded system (Merriam 1998) or as “a phenomenon of some sort occurring in a bounded context” (Miles & Huberman, 1994, p. 25). Case study researchers may adopt a single case or a multiple case design. According to Yin (1994), a single case study design provides for in-depth investigation and rich description, whereas a multiple case study design enables literal or theoretical replication and cross case comparison. In this study a single case design was adopted with one organisation, to enable me to investigate talent identification and development policies and practices within the Stonebridge Rugby Union in sufficient depth to provide a rich, holistic description and analysis of the setting (Darke, Shanks, & Broadbent, 1998; Merriam 1998; Walsham, 1995).

A limitation of utilising a qualitative case study design is the concern that case study research can oversimplify or conversely exaggerate a specific case that can mislead readers into making inaccurate conclusions on what is actually occurring in the setting (Guba & Lincoln, 1981). Additional limitations identified with the use of case study design are the issues related to researcher bias and integrity in conducting the research on a specific case, and the generalisability of the research findings to other cases or settings (Armour & Griffith, 2012; Bryman, 2008; Davidson & Tolich, 2003; Yin, 1994). To counter these latter limitations, the research was conducted with rigour and robustness, which will be discussed later in this chapter.

Researchers should select cases based on where they feel they can learn the most (Stake, 2005) and purposively select “rich” cases that can provide the information from which to

address the research questions (Côté, 1999). The Stonebridge Rugby Provincial Union was selected as a single case for the present study because it met the following criteria:

- Has a high performance academy programme where players are contracted to the Provincial Union on Provincial Union Development contracts;
- Competes in the top tier of the National Provincial Competition (ITM Cup) and is represented in regional/national age group competitions;
- Has fulltime staff in the following positions that have responsibilities for talent identification and development;
 - o High Performance Manager,
 - o Rugby Development Manager,
 - o Rugby Development Coach,
 - o Coach Development Manager,
 - o ITM Cup Head Coach
- Has a direct relationship with a Super Rugby Franchise (the Vulcans) High Performance Manager with responsibilities in talent identification and development.

Methods

The adoption of a qualitative research methodology and the use of a case study research design led me to select interviewing (as a primary method) and document analysis (as a secondary method) of data collection for the present study (Cohen et al., 2007; Denzin & Lincoln, 2005; Wellington, 2000).

Interviewing

According to Fontana and Frey (2005), interviewing is one of the most powerful methods we can employ to try and understand our fellow humans. I used semi-structured interviews as opposed to structured interviews (Fontana & Frey, 2005; MacNamara et al., 2010), because

the former offers flexibility and enabled the interview to be more like a discussion between myself and interviewees on certain themes, topics and experiences (Bryman, 2008). Such an approach allowed me to ask some structured questions followed by the exploration of general themes or topics related to these questions (Byra & Goc Karp, 2000; Hinds, 2000). As well as being responsive to what participants said and allowed me to follow up points of interest around the themes and topics discussed (Bryman, 2008; Fontana & Frey, 2005). Cassidy, Potrac and McKenzie (2006) suggest qualitative researchers utilise a reflexive approach that invites interviewees to explore certain themes with the interviewer.

I invited six participants to be interviewed; specifically, the Vulcans and Stonebridge Rugby Union High Performance Managers, the Stonebridge Rugby Development Manager and Coach Development Manager, one Stonebridge Rugby Development Coach, and the Stonebridge ITM Cup Head Coach. These participants were selected in a purposeful way so that the study's participants were "theoretically important units" (Davidson & Tolich, 2003, p. 35), were knowledgeable and information rich about the area of investigation and could contribute to answering the research questions (Byra & Goc Karp, 2000; Finn & McKenna 2010). The interview participants collectively have knowledge, understanding and experience of both the NZ and international rugby environment and have performed roles as coaches, selectors, and high performance and development managers at a range of levels for a long period of time.

An interview guide was developed and used when conducting the interviews. Tolich and Davidson (2003) recommend that the interview guide be divided into three parts; i) introductory questions (including questions that "break the ice"); ii) recurrent themes from literature and experience; and iii) a set of generic prompts or probes. Bryman (2008) pointed out that flexibility is important in semi-structured interviews. So it was necessary, at times, to

depart from the interview guide and ask new questions in response to the direction the participants took the interview in order to gain rich and detailed responses.

Tolich and Davidson (2003) argue that questions are central to the qualitative researcher's art and that "doing good research depends on asking good questions and asking them in an appropriate way" (p. 137). As a result, a great deal of forethought must be given to the designing of interview guides (Krueger, 1994). Following guidelines in the literature I used open ended questions to encourage the participants to talk about the research topic and utilised follow up questions and prompts and probes for clarification and to elicit relevant knowledge and understanding about the key points raised (Côté, Salmela, Trudel, Baria, & Russell, 1995; MacNamara et al., 2010; Mills, et al., 2012; Perry, 1998; Tolich & Davidson, 2003; Vallee & Bloom, 2005). Planned questions were deliberately broad so the response given was not led in anyway and so that the interviewees could express their views and perceptions (Abraham, Collins, & Martindale, 2006; Cresswell, 2002). The interviews conducted with participants were audio recorded and transcribed for content analysis (Bryman, 2008). This enabled me to be alert to what was being said and record non-verbal communication and relevant interviewee body language (Bryman, 2008).

Documents

According to Fitzgerald (2007) and Wellington (2000) documents used for research purposes can take many forms, for example, annual reports, policy documents, strategic plans, written feedback, as well as media interviews and website data. Reading documents provides the researcher with an opportunity to interpret policies and practices which in turn can facilitate insight into the organisation (Fitzgerald, 2007). In addition, Byra and Goc Karp (2000) suggest documents are frequently available, can provide a stable and rich source of information, and they can be used to supplement primary data sources.

In addressing the research questions, I requested the participants provide me with documentation which contained relevant information on the Provincial Union's talent identification and development policies and practices, as well as policy documents they might use to inform the talent identification and development practices. Examples of specific documents I requested were; talent identification and development policy documents, representative team selection policies and procedures, selection criteria documents, and high performance academy programme information. In addition, I searched for relevant documentation and material on the websites of the Provincial Union, NZRU and the Vulcans Super Rugby Franchise, to which the Stonebridge Rugby Union is affiliated.

Documents produced by an organisation can “tell us about what goes on in that organization” (Bryman, 2008, p. 526), and can be viewed as representing the reality of an organisation or form what they conceive as truth (Wagner, 2011). However, Atkinson and Coffey (2004) maintain that documents should be viewed only as one distinct level of reality or truth. They argue that documents should be analysed in terms of the context in which they were produced and their implied readership. When documents are viewed this way they can be regarded as being “significant for what they were supposed to accomplish and who they were written for” (Bryman, 2008, p. 526-527). Therefore, documents can be used for the purpose of substantiating data collected from interviews and vice versa (Byra & Goc Karp, 2000). Analysing interviews and documents provided me with the opportunity to determine whether what is reflected in the documents is embedded in the culture and practices of the Stonebridge Rugby Union (Fitzgerald, 2007).

Data Analysis

An iterative strategy (Bryman, 2008; Fitzgerald, 2007) was used to analyse the data collected from interviews and documents. An iterative strategy is described by Sparkes (2000) as a process of interweaving data collection and data analysis with the researcher beginning to make connections to various theoretical concepts as the data is being collected. In line with a qualitative research approach an inductive thematic analysis was used to link data and theory to develop patterns of meaning (Cresswell, 2002; Denzin & Lincoln, 2005; Pope, 2006). Lofland, Snow, Anderson, and Lofland (2006) and Vallee and Bloom (2005) describe such an analysis as being driven by the data themselves with categories and themes emerging from the gathered interview and document analysis data. I began the inductive thematic analysis by reading and re-reading the data to familiarise myself with it. I then generated initial themes that organised the data into various categories (Lofland et al., 2006; Nash & Sproule, 2009). Inter-relationships, repeated patterns and meanings were identified followed by continual reviewing and defining of the emergent themes (Hastie & Glotova, 2012; Nash & Sproule, 2009). Researcher judgment is necessary to determine what designates a theme and I retained a degree of flexibility in conducting the analysis. The concept of memoing was used to supplement the inductive thematic analysis and was fundamental to making sense of the interview and document data (Lofland et al., 2006). I wrote down ideas about various themes and categories and their interconnections by noting “analytical memos” that outlined connections to various theoretical concepts that generated an understanding of the talent identification and development policies and practices and how they are implemented (Lofland et al., 2006; Potrac, Jones, & Armour, 2002; Sparkes, 2000).

It should be noted however, that any inductive analysis is also likely to involve a degree of deductive analysis (Bryman, 2008). Deductive analysis was used in the present study to analyse the data based on existing theoretical propositions and frame the data within existing

theoretical frameworks (Elo & Kyngäs, 2008; Finn & McKenna, 2010; Perry, 1998). In particular, Bronfenbrenner's (1979) ecological view of human development, and a multidimensional and dynamic concept of talent (Abbott & Collins, 2002; Abbott & Collins, 2004; Abbott et al., 2005), was used to frame the data collected from interviews and document analysis in order to gain further insight into the Stonebridge Rugby Union's talent identification and development policies and practices. Bryman (2008) and Yin (1994) support case study researchers using both inductive and deductive analysis as they argue case study findings can be associated with both theory generation (inductive), and the comparison of findings with anticipated propositions from existing theory (deductive). Using both an inductive and deductive approach enabled me to benefit from existing theoretical frameworks and develop coherence (or lack of) with evidence based research in the area of talent identification and development portrayed in the literature (Cushion, Armour, & Jones, 2006; Martindale, et al., 2007).

Analysis of procured documents also assisted me to gain insight into the Stonebridge Rugby Union's talent identification and development policies and practices and gain a deeper understanding of the research setting. Simply reading documents is not sufficient, as it is argued that "[d]ocuments once located and examined do not speak for themselves but require careful analysis and interpretation" (McCulloch, 2011, p. 253). I sought to achieve both a literal and interpretive understanding of the documents (Wellington, 2000), with the documents scrutinised to determine the content, authorship, intended audience and the intention and purpose of the documents (Wellington, 2000). To analyse the data from acquired documents, Scott's four criteria; authenticity, credibility, representativeness, and meaning, was also utilised when examining the quality of the documents (in Fitzgerald, 2007, & Wellington, 2000). Authenticity refers to the genuineness and authorship of the document, credibility refers to assessing a document for its accuracy, the representativeness of a

document is determined by its existence and availability, and the meaning of a document is its interpretation (Fitzgerald, 2007; Wellington, 2000). According to Bryman (2008), Scott's criterion provides the researcher with a rigorous set of criteria against which documents can be analysed.

Rigour and Robustness

Consistent with a qualitative methodology; the terms credibility, transferability, confirmability and dependability were used as alternatives to validity and reliability and used to demonstrate integrity and competence during the research project (Denzin & Lincoln, 2005; Tobin & Begley, 2003). A strategy I used to add credibility to the research project and understand how my beliefs, values and theoretical bias may influence the research process and subsequent findings was reflexivity (Jootan, McGee, & Marland, 2003; Mutch, 2013). Mutch (2013) suggests that reflexivity is about interrogating yourself and critically reflecting on your research decisions. I endeavoured to conduct ongoing reflexivity during the research process to analyse my personal involvement and try to make the process as transparent as possible (Jootan et al., 2009). It is important for qualitative researchers to identify, and attempt, to suspend their own pre-existing beliefs and values that may impose biases throughout the research process (Becker, 2009). Despite the acknowledgement that research cannot be value free (Bryman, 2008); it was important that bias or subjective interpretations of the data be reduced by creating an environment where the evidence, data analysis and findings are open to peer review and continuous criticism (Pring, 2000). A significant part of my reflexivity process was the ongoing exchanges and peer debriefing with my research supervisor.

It is important to mention that I had familiarity with the research participants as a consequence of having been involved in NZ rugby for decades and having regular contact

with the participants. Mercer (2007) argues familiarity with research participants can be a double edge sword. On the one hand it enabled me access to the case environment, to build rapport more quickly in the interview situation, and allowed me to ask questions (and probes) others might not have considered due to my insider understanding of the research setting (Mercer, 2007). However, being known to the participants, they may also have tempered what they said to me as they knew my background and experience in the area of talent identification and development in a New Zealand rugby context as well as know of my understanding of the literature in this area (Mercer, 2007). Additionally, I needed to be aware of how my relationship with, and knowledge of, the participants influenced me and how I conducted the data collection and data analysis (Cohen et al., 2007). Jootan et al. (2009) state that being aware of the reciprocal influence of participants and the researcher on the research process is another way of ensuring rigour in qualitative research. It is important to note that during the data collection phase of the study I was not performing any role within the Stonebridge Rugby Union.

Bryman (2008) and Davidson and Tolich (2003) state that the purpose of a qualitative case study is not to generalise to other cases or populations but to generate an intensive examination of a topic that provides an accurate description of what occurred in a particular environment. The concept of generalisation is therefore replaced with the notion of transferability, where it is the role of others to decide the extent to which findings from the present study are generalisable to another situation (Bryman, 2008; Cohen et al., 2007). In order to maximise the transferability of the present research study, sufficiently rich data is provided so readers, and users, of the research can determine for themselves it's transferability (Cohen et al., 2007).

An auditing approach was also used to strengthen not only the confirmability of the results but also the dependability of the findings (Bryman, 2008; Cohen et al., 2007). An auditing approach required me to accurately file complete records of all research phases, selection of participants, interview transcripts, document analysis, and data analysis (Bryman, 2008; Cohen et al., 2007). I also utilised my research supervisor as an independent “auditor” to ensure the process of conducting the inquiry was acceptable and the findings were consistent with the data (Cohen et al., 2007). According to Schwandt (2001), dependability is achieved through the process of auditing, thereby ensuring the research process was logical, traceable, and clearly documented.

Ethical Considerations

Snook (2003) suggests to ensure research is conducted ethically that researchers should gain informed consent, respect confidences and make sure no harm is caused to participants. In order to ensure no harm is caused to the research participants in this study great care was taken to ensure confidentiality of all research records and the identities of all participants involved during the course of the study (Bryman, 2008; Snook, 2003). Identifier codes were used on data files and the list of participants and their codes have been stored separately in a locked cabinet in my office, transcripts do not contain participant’s names and copies have also been locked in the cabinet (Holmes, 2004). Pseudonyms have been assigned to the Provincial Union and Super Rugby Franchise for when the findings are published (Bryman, 2008).

Voluntary and informed consent was sought from all the participants involved in the study (see Appendix for participant information sheet and consent form). The research participants were fully informed about the research study, including; the nature of their involvement and that involvement was voluntary, and what was going to happen to the data. Participants were

provided with as much information as needed to enable them to make an informed decision about whether they wanted to participate in the study (Bryman, 2008). The research participants were asked to sign an informed consent (Bryman, 2008; Snook, 2003; Wilkinson, 2001). Ethics approval (category B) was granted by the University of Otago Human Ethics Committee.

PROLOGUE TO THE ANALYSIS

The following two chapters investigate the Stonebridge Rugby Union's talent identification and development policies and practices. In this study an ecological view of human development (Bronfenbrenner, 1979; 2005) and a multidimensional and dynamic concept of talent (Abbott & Collins, 2002; Abbott & Collins, 2004; Abbott et al., 2005) were used as deductive frameworks to guide the insights into the Stonebridge Rugby Union's talent identification and development policies and practices. The following two chapters illustrate how talent development and talent identification policies and practices occur within an ecology and can be understood through examining the contexts in which they occur. In addition, the chapters illustrate a multidimensional and dynamic concept of talent and differentiate between performance dispositions and the potential/capacity of an individual to develop. In conjunction with the deductive analysis, recognition was given to specific themes that emerged inductively from the participant's interview data, and the analysis of procured documents with links made to evidence based research in the area of talent identification and development portrayed in the literature. As a consequence of analysing the data, and to address the research questions, two analysis chapters are presented: Chapter Four which focuses on the Stonebridge Rugby Union's talent *identification* policies and practices, and; Chapter Five which focuses on the talent *development* policies and practices of the Stonebridge Rugby Union.

CHAPTER FOUR: TALENT IDENTIFICATION POLICIES AND PRACTICES

This chapter focuses on the Stonebridge Rugby Union's talent identification policies and practices. Specifically, this chapter addresses two questions: 1. what policies and practices are utilised by relevant staff members within the Stonebridge Rugby Union to identify rugby union talent? and; 2. how the talent identification policies and practices are implemented within this Provincial Union?

The talent criteria documented by Stonebridge's talent identification network, and used by selectors, to identify talented rugby players is initially introduced and described. After which is a discussion of the analysis of how the talent criteria is implemented in practice, with particular attention paid to how players are assessed against the criteria and the role of succession planning and player contracting. The Stonebridge Rugby Union's unofficial talent identification policy of recruiting "no dickheads" will also be discussed, along with the Union's focus on a player's character as a determinant of talent. Finally, an examination occurs of the external influences that act to "force the union's hand" and which play an influential role in why Stonebridge Rugby Union official policies are not followed.

Stonebridge's Talent Criteria

The New Zealand Rugby Union (NZRU) encourages the Provincial Rugby Unions, such as Stonebridge, to identify talented players using the following four characteristics:

1. Current talent – defined as how the player plays now;

2. Potential talent – involves an assessment of the player’s upbringing, genetics, and the selector’s gut feel¹³ on a player future potential;
3. Personal qualities – are defined as whether the player is viewed as resilient, intrinsically motivated, optimistic, and competitive;
4. Professional qualities – defined as to whether the player is coachable, has a high work ethic, is organised, and demonstrates altruistic qualities (New Zealand Rugby Union, n.d.-c).

Consistent with the approach from the NZRU, the Stonebridge Rugby Union has developed a Talent Profile Assessment Criteria document that outlines specific characteristics used to assess an individual player’s talent, and therefore their ability to be a professional rugby player (Stonebridge Rugby Union, n.d.-c). Stonebridge’s six documented talent criteria are:

1. Talent – does the player have the ability (or potential) to play rugby at an elite level;
2. Work ethic – does the player consistently look for opportunities to work harder than anyone else (at rugby practice and games, as well as with work/study. Do they consistently strive to exceed their current limits);
3. Integrity – does the player honour commitments and keeps promises. Do they accept responsibility for their actions and is up front and honest;
4. Learning capability – do they show an ability to want to learn and understand and then puts into practice what has been learnt from the experience;
5. Leadership – does the player demonstrate good self-awareness and is self-reliant. Can they lead themselves first and have the ability to lead others;
6. Off field – this is defined as whether the player understands the importance of commitment away from the rugby environment and is actively doing something about it. (Stonebridge Rugby Union, n.d.-c)

¹³ The role of gut feel as a selection tool will be discussed later in this chapter.

The above criteria form a *Talent Profile* for the Stonebridge Rugby Union. The development and implementation of a *Talent Profile* is an integral part of the Union's High Performance Plan¹⁴ (Stonebridge Rugby Union, n.d.-c; Stonebridge Rugby Union, 2015). The Stonebridge Rugby Union 2014 Annual Report and 2015-2017 Strategic Plan, states the *Talent Profile* is to be applied by staff responsible¹⁵ for talent identification to deliver continuity of talented players and successful outcomes for Stonebridge's representative teams. The Stonebridge Talent Profile Assessment Criteria document also states players are to be assessed against the six criteria and given a score to provide a total score out of 20 for an individual player. Scores for each talent criteria are documented as follows:

1. Talent (potential) /5;
2. Work ethic /4;
3. Integrity /3;
4. Learning capability /3;
5. Leadership /2;
6. Off field /3 (Stonebridge Rugby Union, n.d.-c).

If a player scores between zero and eight, that player is not to be considered for selection. Conversely, if a player scores 13 and above, they are viewed as the "ideal" rugby player (Stonebridge Rugby Union, n.d.-c). If a player scores between nine and 12, then the player may be considered as a "project"¹⁶. It is stated in the Talent Profile Assessment Criteria document (n.d.) that Stonebridge only want to cater for two projects out of every 10 players who are contracted to participate in their High Performance Academy.

¹⁴ The Stonebridge High Performance Plan maps critical elements of the Union's talent identification and talent development, for example, Stonebridge representative teams and the High Performance Academy.

¹⁵ The Stonebridge staff members responsible for talent identification are the High Performance Manager, the Rugby Development Manager, the Coach Development Manager, the Rugby Development Coaches, the ITM Cup coaches and other representative coaches.

¹⁶ The assessment of players, and players identified as "projects", will be discussed later in this chapter.

In addition to the identified professional player characteristics and *Talent Profile* introduced above, the NZRU and the Stonebridge Rugby Union have also developed selection criteria documents to assist the identification of talented players (New Zealand Rugby Union, n.d.-b; Stonebridge Rugby Union, n.d.-a). The selection criteria is organised into specific technical and tactical qualities, physical assessments (fitness component testing), nutritional assessments (body weight and skinfold measurement), and also includes an assessment of a player's character¹⁷, upbringing and genetics, and leadership qualities. The character and leadership qualities are defined as whether a player demonstrates qualities such as; resilience, coachability, a high work ethic, intrinsic motivation, life balance and is a team person. Whether a player has "X-factor" and the potential to play at a National Provincial level and beyond are also identified selection criteria. Similar to the use of the Talent Profile Assessment Criteria document, selectors are required to rate/score players against the identified selection criteria (New Zealand Rugby Union, n.d.-b). Players are given a rating of good, poor or average, or are given a score on a scale of one to five (with one being poor and five being potential All Black).

The NZRU's and the Stonebridge Provincial Union's talent criteria documents reflect a multidimensional and dynamic view of talent (Abbott & Collins, 2004; Abbott et al., 2005) and demonstrates an understanding of an individual's unique characteristics (Bronfenbrenner & Morris, 2006). In contrast to traditional (and widely criticised) approaches to the identification of talent, which has usually been based on the isolated one-dimensional measurement, evaluation and analysis of physiological characteristics and technical qualities, the talent criteria also includes psychological characteristics (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Button, 2011; Côté et al., 2009; Lidor et al., 2009).

¹⁷ How Provincial Union staff define character and how it is used in talent identification will also be discussed later in this chapter.

Examples of psychological characteristics that are included in the talent criteria are; self-reliance, self-awareness, intrinsic motivation, and having a high work ethic.

The role and importance of psychological characteristics in the identification of talent has been well highlighted in the literature (Abbott et al., 2005; MacNamara & Collins, 2011; MacNamara & Collins, 2015). An example of this is the development of the Psychological Characteristics of Developing Excellence (PCDE) Model (Abbott & Collins, 2002; Abbott & Collins, 2004; Abbott et al., 2005). The PCDE model details how psychological behaviours, like those identified in Stonebridge's talent criteria, can determine a player's potential to be successful (Abbott & Collins, 2002; Abbott & Collins, 2004; Abbott et al., 2005). Players that demonstrate psychological characteristics like self-reliance, self-awareness, intrinsic motivation, and other related qualities, are more likely to become elite rugby players and likely to be more successful than other players when they get there (Collins & MacNamara, 2012). Participants in Hodge et al's. (2012) New Zealand study also argued the importance of work ethic, commitment and motivation in facilitating the successful development of athletes.

Implementation of Stonebridge's Talent Criteria

As introduced in the previous section, the purpose of the *Talent Profile* and selection criteria documents developed by both the NZRU, and the Stonebridge Rugby Union, is for the criteria to be implemented in the identification of rugby talent. According to the Stonebridge Rugby Development Manager, the Talent Profile Assessment Criteria document is used to help shape decisions on players they select into their high performance development programmes. He believes the talent criteria is “ultimately a tool to help us make better selection decisions, and a way to weed out having too many projects in our high performance development programmes”.

There is a belief amongst the Stonebridge staff members responsible for talent identification, that talent can be assessed and evaluated using specific criteria. The Stonebridge High Performance Manager commented, "...you know, talent is one of those things you can apply to certain criteria...you can identify talent on a number of criteria, and we have the ability to do that". The Stonebridge Coach Development Manager, when discussing the Provincial Union's talent identification policies also stated, "[t]he policies are, in terms of what we are looking for in our players, do the players meet the specific talent criteria that we have". Discussing the Talent Profile Assessment Criteria document, Stonebridge's High Performance Manager explained how they used the criteria, he stated:

...and how you score them is from talent at number one, down to off field at number six, and you give them a score... and this is how we're now looking at identifying our kids, identifying them, applying a criteria process, and then potentially selecting them on the back of that.

When specifically asked how the process of implementing the *Talent Profile* actually worked in practice, the Stonebridge Rugby Development Manager answered that the selectors sit in a room and essentially discuss and "profile" a certain player.

A high degree of consistency was demonstrated amongst the interview participants on how they assessed a player's talent, the criteria they were using when identifying rugby talent, and how they understood and defined the Union's talent identification policies and practices. When discussing a player's talent, one participant summed up the participant's views by stating:

So we're looking for technical skills, position specific skills, and some x-factor around those skills, then obviously the tactical understanding and application. Sorry I should probably add also that we're looking at the physical profile, so talent has to be built into the physical component as well, obviously... and I think in terms of a policy of

identifying talent, again going back to core skills, tactical ability, and most recently, and probably in the last three to four years we've really drilled down into the behaviour characteristics of the players. (Stonebridge High Performance Manager)

In an attempt to “drill down” into the behaviour characteristics of the players, and in assessing identified players against the documented talent criteria, there is an attempt to find out information on the player to inform selection decisions. This approach was best explained by Stonebridge's High Performance Manager:

So we're trying to do a bit more homework on what they're like as kids, and that's drilled down into the school system, the club system, into their family system...when we go and select our high performance athletes, we now take a considerable amount of time to find that information out before we meet them for the first time, and then we go and meet their parents, in their house, and we go through that process.

One selector, discussing finding out information on the player to assist the process of identifying talent, said; “[w]e make an effort to talk to the kids post game. We talk to them about how they're feeling, what their role was in the game, what the game plan was, how did it go” (Stonebridge Rugby Development Coach).

The focus the Stonebridge Rugby Union placed on profiling and assessing psychological characteristics of young players is consistent with a study conducted by Kelly and Hickey (2008) in the context of the Australian Football League (AFL). Kelly and Hickey's (2008) study also discussed the variety of efforts undertaken to find out information on, and make judgements about, the behavioural qualities of potential players. Similar to the approach adopted by Stonebridge Rugby Union selectors to “drill down” and find information on the players, information gathering strategies adopted by AFL selectors also involved conducting interviews with the player, the player's family, teachers and coaches, as well as visits to the player's home (Kelly & Hickey, 2008).

The ecological model of development proposes that different contextual systems interact with an individual's development (Bronfenbrenner, 1979; 2005). This view of development was implicit in the practices of the AFL staff in Kelly and Hickey's (2008) study, as well as in the practices the staff of the Stonebridge Rugby Union adopted when they would do their "homework" to find out about a player's unique individual characteristics, and spend time attempting to understand what a player is like by looking into a player's family, school, and club environments. Bronfenbrenner and Morris (2006) maintain to understand an individual's unique characteristics, you need to look beyond the individual, and look at the overall environment in which the individual is developing. Examining a player's immediate development context (microsystem) shifts the focus from the individual player to the overall environment they are experiencing, and how these experiences has enabled them (or not) to develop, and exhibit, the desired behaviour characteristics (Araújo et al., 2010; Henriksen et al., 2011; Larsen et al., 2012).

The implementation of the Stonebridge Rugby Union *Talent Profile*, where the players' talent (or lack thereof) is assessed and evaluated (by Provincial Union staff members) against the set criteria, is subjective and interpretive in nature. The assessment and evaluation of the players by the study participants is consistent with a definition of assessment used in an education context. Educationalists Hay and Penney (2013) defined assessment to "include *any action of information collection within education settings that is initiated for the purpose of making some interpretive judgements about students*" (p. 6, *italics in the original*). The above definition is applicable to the present study on talent identification and development as the focus of Stonebridge's talent identification policies and practices is on the collection of information on a player to subsequently make interpretive judgments on that player's ability (Cassidy, Jones & Potrac, 2016). Cassidy et al. (2016) argue that whenever a player's talent

is assessed, or commented on, a judgement is made. When asked if the players knew about the *Talent Profile* and how they were specifically being assessed, Stonebridge's Rugby Development manager replied "no". According to Cassidy et al. (2016), if a player is being assessed, the player should be aware of the criteria against which they are being judged. For talent identification practices to be fair and equitable, there needs to be a level of transparency between those making the judgements (selectors), and those being judged (players) (Cassidy et al., 2016).

It can be argued the development and implementation of a *Talent Profile*, used for the purposes of talent identification by Stonebridge staff members, occurs in a context that the player is not directly involved (Bronfenbrenner, 1979). In addition, as detailed above, the players are unaware of the criteria on which they are being assessed, however, the talent identification policies and practices implemented by the Stonebridge Rugby Union staff members still have an impact on the players (Bronfenbrenner, 1979; Duerden & Witt, 2010; Krause et al., 2006). This demonstrates how the exosystem, which Bronfenbrenner (1979) described as contexts in which an individual is not directly involved, still has the ability to influence and impact on their development. It also illustrates the interaction between different contexts and the subsequent impact this relationship has on a player's development (Bronfenbrenner, 2005).

There are acknowledged tensions and gaps between what is discussed and documented at a policy level, and what occurs in practice when it comes to the identification and selection of talented rugby players in the Stonebridge Rugby Union. Despite the accepted talent identification practice within the Stonebridge Provincial Union of assessing players against the *Talent Profile*, two of the interviewed Stonebridge staff members said they were beginning to question this practice. Specifically, they were questioning the subjective

assessment of desired behavioural characteristics, and also how realistic and measurable are the characteristics. The Stonebridge Rugby Development Manager commented the talent identification process was more of a subjective “tick box exercise really” as opposed to a formalised process. Another staff member remarked:

Obviously for rugby you need to be reliable, and you need to be respectable, and coachable and those sorts of things. And there are some talent criteria and the characteristics we’ve sort of listed out, but I think they’re very idealistic and not measurable. (Stonebridge Rugby Development Coach)

The above tension between stated policy and what happens in practice is consistent with the AFL study conducted by Kelly and Hickey (2008). They found that the selectors could easily identify the desired behavioural characteristics when discussing talent and what characteristics were critical for performance, however the AFL staff found it difficult to define and describe how they specifically measured the sought after behaviour traits (Kelly & Hickey, 2008).

An additional tension and gap between what is discussed and documented at a policy level, and what occurs in practice, is highlighted when the Stonebridge Rugby Development Coach discussed the practice of “drilling down” and the gathering of information on players, by encouraging selectors to look, for example, at a player’s school report to “find out how they behave in school” he stated “that’s very idealistic, and in reality that doesn’t happen very often”. Another tension that became apparent between policy and practice is when players who are performing well in club rugby are identified and selected to play in the ITM Cup team without having been “profiled” and assessed against the documented talent criteria. This practice creates tension between Stonebridge staff members, as illustrated in the following quote:

I'll say my bit here. Often I see players brought in to join an ITM cup campaign, and the first thing they're given is a strength and conditioning programme and off you go, and so hang on a minute has anyone sat down and done a medical clearance on this guy, do we understand what his background is, have we done any of this behaviour stuff that we're talking about. It's nah, he's a big boy, and he's been playing well, put him on a contract. And that came under the spotlight again about two months ago, to say look, what's our criteria to say who's getting a contract or not, and it's not just based on his ability as a rugby player. (Stonebridge Rugby Development Manager)

The role of “gut feel”

“Gut feel” is recognised and utilised by Stonebridge Rugby Union staff responsible for talent identification as a selection tool to assess a player’s talent and potential. The NZRU selection criteria documents (n.d.) include a section headed, “[g]ut feeling on the player being a professional rugby player” (n.p.), where selectors provide a score of one (poor) to five (potential All Black). One Stonebridge Rugby Union document states, “[g]ut feel still remains a critical part of selection and must be taken into account when viewing players...sometimes gut feeling is the most powerful selection tool” (Stonebridge Rugby Union, 2010, p. 1). A number of the participants interviewed in the present study highlighted the role of “gut feel” in identifying rugby talent and in implementing the Stonebridge Rugby Union’s *Talent Profile*. The Stonebridge Coach Development Manager stated; “I use the selection criteria documents, plus ‘gut feel’ and information on the player’s background”. Discussing the identification of players to be selected into the ITM Cup Team, the Head Coach commented “...and sometimes it’s a “gut feel”, it’s something about the kid, what he does, he just does the right thing at the right time in games” (Stonebridge ITM Cup Head Coach).

In discussing the subjective and interpretive nature of talent identification Kelly and Hickey (2008) argued that subjective assessment measures, for example a selector's gut feeling on a player's talent, is commonplace in sporting organisations. They maintained that:

Organisations seek more sophisticated, more rationalised, more scientific ways to identify and recruit the talent that can deliver performance and success. But these rationalities, sciences, and measurements have their limits. When these limits are reached intuition, pre-conceptions, stereotypes, generalisations, experiences, gut instincts enter the picture to drive these processes of talent identification and recruitment. (Kelly & Hickey, 2008, p. 92-93)

It is interesting that the NZRU and the Stonebridge Provincial Union have formalised the role of "gut feel" in talent identification policy documents and encourage its use in practice.

Perhaps this is due to them acknowledging the process of identifying and measuring talent is subjective and interpretive. By explicitly acknowledging the role of "gut feel" it is possible that the policy writers are attempting to reduce the tensions and contradictions between what is stated in policy and what occurs in practice. Yet tensions still exist. The Stonebridge's Rugby Development Manager, when discussing identifying and measuring a player's potential, alludes to this tension in the following quote;

I don't think we've got a clear process or criteria around identifying that, there's a lot of 'gut feel'. We've got people that have coached to a pretty high level and can go and watch a player and go yeah there's something there, and then go back and watch him again, and watch him again, and a lot of it's built around core roles, and ultimately that's where the game is won or lost, around core roles, your catch pass, tackle, your intent to move bodies, and that's what a lot of the talent and decisions get made on. But there is always that question mark about whether he's got the ability to grow or learn.

The tensions and contradictions that exist in regards the subjective and interpretive nature of talent identification practices, and the difficulty practitioners have to accurately define and describe the sought after behaviour traits, highlights the complex, dynamic interactional nature of talent identification (and development) practices (Abbott et al., 2005; Bronfenbrenner, 2005).

Player contracting & succession planning

The NZRU define succession planning as the Provincial Union's acting to ensure they are identifying players they need to fill player gaps in their system and for the future (New Zealand Rugby Union, n.d.-c). Priority decisions on which identified players to offer a Provincial Union, or Provincial Union Development, contract is informed by the Stonebridge Rugby Union's succession plan. In the Stonebridge Rugby Union 2014 Annual Report and 2015-2017 Strategic Plan it states that the Union's contracting behaviour must be aligned to both talent profiling and player succession needs. The ITM Cup Head Coach explains the practice of succession planning:

So there's a bit of crystal ball gazing, you've got to make sure, ok, if players leave the Union in two to three years' time, what players are here at the moment, and by doing that succession planning you'll see if you've got holes in certain positions, so if our player depth in certain positions is not that good, when we're talking to our talent identification guys, we highlight the gaps. So succession planning's hugely important, so who's contracted into the high performance academy, gets affected in part by what we've got and what we haven't got.

Similarly, the Stonebridge Coach Development Manager explained:

Do they fit into our succession plan? Are they someone we can develop further to become the rugby player that we want at the end of that development plan? And do they meet our talent criteria and in terms of our player depth and those sorts of things?

Selecting “here and now” players

An additional identified tension with the implementation of the talent identification policies and practices of the Stonebridge Rugby Union is the identification and selection of players that mature physically earlier than their peers. The Stonebridge Rugby Development Coach believes this is a concern for the Union at a representative age group level, as evident in his statement “the trouble with our selection now, [is] talking about the best players who are able to win a game for you, that’s the here and now, but the long term, they may not be the best players for us in the long term”. Arguably the selection of a player ready “here and now” is due, in part, to the Provincial Union’s stated objective¹⁸ to win championships at representative age group level (Stonebridge Rugby Union, n.d.; Stonebridge Rugby Union, n.d.-b). The selection and contracting of “here and now” players is also of concern to Stonebridge’s affiliated Super Rugby Franchise (The Vulcans). The Vulcans High Performance Manager has a close working relationship with Stonebridge staff involved in the area of talent identification. The High Performance Manager highlights the tensions between the objectives of the two organisations when it comes to talent identification when he stated:

For me, the crux of it [the tension] at the moment, between Provincial Rugby and Super Rugby, is the desired objectives of the organisation. So the objectives of the Stonebridge Rugby Union, as I understand them, is to win the Provincial National Under 19 Tournament and win the ITM Cup.

However, he went on to point out that the age group pathway within New Zealand rugby is “not completely geared to being an All Black. Because everyone [in the Provincial Union] wants to achieve at their own levels and that can skew who you contract” (Vulcans High Performance Manager).

¹⁸ The Stonebridge Rugby Union’s desired objectives will be discussed in detail in Chapter Five: Talent Development Policies and Practices.

Research evidence supports the opinions of the Stonebridge Rugby Development Coach and the Vulcans High Performance Manager. Research evidence illustrates a distinct lack of transition from talent displayed by players at an age group level to elite adult performances (Bergeron, et al., 2015; Brown, 2001; Pankhurst & Collins, 2013). A study conducted in NZ and Australia athletics confirmed the lack of transition from age group performance to National representation as an adult (Hollings et al., 2014). The study concluded that a high proportion of elite junior track and field athletes do not progress to representing their country at a senior level (Hollings et al., 2014). The Vulcan High Performance Manager is aware that players selected to win at age group representative and National Provincial level, are not necessarily the players that will enable a Super Rugby Franchise to be successful winning the Investec Super Rugby Tournament. He contended the:

Players that are required to win Under 19 and ITM Cup competitions have a slightly different profile to players who we're selecting [to play for the Franchise]. Because I'm selecting, recruiting, on future potential. I'm basically having to project and say they could be a Super Rugby player and an All Black.

To illustrate his point, he provides the following example:

An example is you get a lock, who's 2.03m tall, who's a bit gangly, a bit uncoordinated, not quite heavy enough, still growing – he is really important to us, and we project he is potentially a lock for the future, when he's 23, 24. In a lot of cases at Provincial Union level he won't get picked ahead of the 1.97m guy who's matured, a good athlete, etc. It will be that guy, the 1.97m guy, who will be better for that team right here, right now. So at the National Under 19 Tournament, that guy will help the team win. Whereas the 2.03m guy, different profile, as a loose example, he's the guy we're looking at. Now if the Provincial Union does not contract that guy,

because he's not ready now, they're also being measured to achieve their objectives, that's the biggest challenge that we've got. (Vulcans High Performance Manager)

The Vulcan's High Performance Manager's perspective is consistent with the findings of a study conducted in UK rugby league (Till et al., 2010). Till et al. (2010) suggested selectors in age group competitions orientated towards the identification and selection of players who were taller, heavier and more mature than others in their age group. The authors of the study concluded that:

Boys advanced in maturity are likely to have greater representation in such youth contexts, and more likely to be selected within talent development systems, on the proviso that such sports require particular physical demands, and the sport system values immediate performance success. (Till et al., 2010, p. 203)

Baker et al. (2012) and Meylan et al. (2010) also argue that an athlete deemed to be talented as a youth may not be deemed talented or able to maintain this advantage in the long-term as athletes mature and develop. It can be argued that many elite young rugby players are successful not because of talent or superior skill level, but simply as a result of an early physical maturation in comparison to late developing peers (Martindale & Mortimer, 2011; Pankhurst & Collins, 2013). As a result of maturation factors, talent identification practices based on junior age group performance often excludes late developers (Cobley et al., 2009; McCarthy & Collins, 2014). The above discussion points have lead researchers to recommend that sporting organisations, like the Stonebridge Rugby Union, should not focus solely on the physical maturity of the developing athlete (Bronfenbrenner, 2005) or specifically select athletes to achieve short-term performance objectives (Abbott et al., 2005; Button, 2011; Meylan et al., 2010). In fact, researchers recommend sport organisations sacrifice performance at youth sport levels in order to focus on appropriate development opportunities (Abbott et al., 2005; Button, 2011; Meylan et al., 2010). The selection of “here

and now” players to achieve short-term objectives, as well as the practice of succession planning to inform decisions on which players to contract (discussed in the previous section), are further examples of how the exosystem (Bronfenbrenner, 1979) impact and influence a player’s development.

“No Dickheads” and a Focus on Character

An unofficial talent identification policy of the Stonebridge Rugby Union is to select “no dickheads”. According to Stonebridge’s High Performance Manager, the Provincial Union is “...trying to eliminate the dickheads in our system” through the implementation of the Union’s *Talent Profile*. He continues by stating, “...that’s our policy really, our policy is actually no dickheads, that’s the mantra”. Linked to the notion of “no dickheads” is the assessment of a player’s character. For the participants in this study the desirable individual behavioural characteristics documented in the NZRU’s and Stonebridge’s Rugby Union talent criteria documents serve to define a player’s character. For example, if players are deemed to demonstrate desired behavioural characteristics, such as integrity, work ethic, coachability, self-reliance and motivation, the players are believed to be people of good character (New Zealand Rugby Union, n.d.-b; Stonebridge Rugby Union, n.d.-c).

The interview participants were unanimous in describing how the talent criteria defined a player’s character, and the role that character plays in the identification of talented rugby players. The Stonebridge Rugby Development Manager detailed how the Provincial Union selectors, when identifying talented players, are looking for more than just physiological characteristics and skill performance. He stated:

We’re not just looking at rugby ability; we are also looking at their character. So we’re looking for things like are they coachable? What’s their learning ability like? Do they work hard? Do they have a bit of tenacity? Are they intelligent, in some

respects, not just meaning academically. I guess it's tied up a little bit with their learning ability. Do they have integrity? Are they honest? Do they come across as being good buggers? Having the talent is a big part of it, it's almost a given, but we're looking for who's prepared to work hard and whether or not we have some good people to work with.

Discussing the desired behavioural characteristics, the Stonebridge Rugby Development Coach also stated; “[i]t's more and more of a factor now, that we look at the character of the kids, and the holistic person, rather than just the rugby player”. Discussing the recent lack of success of the ITM Cup side in the National Provincial Championship, the Stonebridge Rugby Development Manager suggests the lack of success is due to not having players with good character, pointing out:

I think that's why Stonebridge has struggled for so long. We haven't won a championship for a long time, and we've previously had players coming through our system, that were the bigger, faster, stronger kid, maybe they are talented, but they haven't had all that character stuff.

The emphasis the interview participants placed on the role of character, and its impact on performance, is again consistent with the participants interviewed in Kelly and Hickey's (2008) AFL study. In their study Kelly and Hickey (2008) noted that the club “officials spoke powerfully about how character influenced players' performance” (p. 75). As previously discussed, behaviour characteristics that form part of the talent criteria developed by the NZRU and the Stonebridge Rugby Union, have been defined in the literature as psychological characteristics (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Button, 2011; Côté et al., 2009; Lidor et al., 2009). Research conducted in elite sport environments supports the role psychological characteristics and therefore a player's character, can have in assisting athletes translate their potential into world class

performance, transition to higher levels of development, and maintain elite sporting success (Larsen, Alfermann, & Christensen, 2012; MacNamara, Button, & Collins, 2010; MacNamara & Collins, 2015). A study conducted by Hill et al. (2015) also found that psychological characteristics for developing excellence (PCDE's) were critical to a talented rugby player's ability to negotiate the pathway to excellence.

A “no dickhead” policy and a focus on a player's character has come directly from the top in NZ Rugby. In an interview conducted by former British and Irish Lions coach Ian McGeechan, Steve Hansen, the current All Black Head Coach revealed that the All Blacks have a “no dickheads” policy (Long, 2014). Steve Hansen also stated that when the All Black's selectors are identifying players, they are trying to find people of good character. Steve Hansen's viewpoint is, if a player has a good character, they will have good character when under pressure in game environments. He believes players who are dickheads off the field are often the ones who “wilt” under pressure on the field (Long, 2014). Steve Hansen's viewpoint is consistent with the All Black philosophy of “better people make better players” (Hodge, Henry & Smith, 2014, p. 66). In a case study on the All Blacks team from 2004 to 2011, the All Black coaches during this period argued there was a link between being a better person, having positive connections to the people around you, and subsequent contribution to team performance (Hodge et al., 2014). One of the coaches interviewed for the case study stressed that, “...generally those connections are stronger if you're a good bugger, and you do things the right way” (Hodge et al., 2014, p. 66). Emphasising a player's behaviour, one All Black coach commented, “[p]layers behaved themselves into and out of the team under our watch” (Hodge et al., 2014, p. 66). It is interesting to note the viewpoint that a player who demonstrates good character, and has positive connections off the field, will consequently demonstrate good character when under pressure and contribute to team performance on the field. Arguably those who hold such a view also adopt an ecological systems approach;

which highlights the connectedness between the varying contexts players inhabit (Bronfenbrenner, 1979; 2005). Given the All Black's emphasis of having "no dickheads" and "good buggers" in the All Black environment, coupled with research to support the role of psychological characteristics in achieving sport success, it is no surprise that character and behaviour are terms strongly embedded in the Stonebridge Rugby Union's talent identification policies and practices.

"Projects"

As detailed in Stonebridge's Talent Profile Assessment Criteria document (discussed previously) if a player is likely to be given a rating between nine and 12 out of 20, they may be considered for selection as a "project" (Stonebridge Rugby Union, n.d.-c). The Provincial Union has also documented they only want to select, and contract, two players out of 10 as "projects" to take part in the High Performance Development Programme (Stonebridge Rugby Union, n.d.-c). Similar to Stonebridge's Rugby Development Manager's previous comment that the *Talent Profile* was a tool to "weed out having too many projects", participants in the AFL study also utilised tools "to lessen the risks associated with player management" (Kelly & Hickey, 2008, p. 78). Kelly and Hickey's (2008) study found that AFL clubs were placing an increasing emphasis on avoiding the selection of players "who might cause trouble in the club" (p. 36). In essence the AFL clubs approach is similar to the Stonebridge Rugby Union, with the organisation's implementing talent identification practices to minimise the risk of having "dickheads" and players of poor character in their system.

The Stonebridge ITM Cup Head Coach held an alternate perspective on selecting players that had been identified as "projects". He believes that a player who demonstrates talent in other areas, despite not rating highly in desired character or behaviour traits, should still be given an opportunity, claiming:

Character is important, but I still think some people who haven't had the opportunities to understand discipline, and other attributes of character, honesty etc., in the way they are brought up, sometimes you need to have a look at that person and say well, that's his biggest 'work on'. So we're going to give him an opportunity because his talent is that good, and we know that it's not his fault where he got brought up, or how he got brought up etc., that he hasn't had a good mentor, or whatever it might be, you need to give that person opportunity. So character I think is important, but I still think, you know you talk about a rough diamond, you smooth off the edges, smooth off the roughness, what an awesome diamond it turns out to be, and I think there is a huge place for rough diamonds. I still think there's a place where people still need to have the opportunity to have opportunities, and I think a little differently than some people about that I suppose.

He went onto say that it was important to truly understand the player's background and the environment in which they have developed.

So understanding where some of these kids come from, and understanding what drives them. Just seeing what sort of a family environment they've come from, I think it's important to understand them, and I think that's an important part that needs to be assessed. There is a saying in NZ rugby, better people make better All Blacks, but I see my upbringing as coming from a privileged background, and my father's a lawyer, and I got brought up in Woodlake¹⁹, and sometimes when you get brought up in backgrounds like mine, you don't really understand other people's backgrounds and how they get brought up.

The Stonebridge ITM Cup Head Coach's perspective of identifying players that are "rough diamonds", as well as the Union's policy of selecting "projects", aligns with the Differentiated Model of Giftedness and Talent (DMGT) (Trankle & Cushion, 2006; Vaeyens

¹⁹ A pseudonym.

et al., 2008). The model provides a useful framework for talent identification (and development) as it emphasises an individual's capacity to develop and distinguishes between an athlete's "raw" gifts and the end product of a development process (Trankle & Cushion, 2006; Vaeyens et al., 2008). The identification of players that can be categorised as "rough diamonds" or "projects" reflects the identification of a player's "raw" gifts and can be distinguished from the end product of the development process – a "smooth diamond".

While not necessarily being cognisant of the literature, the Stonebridge ITM Cup Head Coach highlighted the importance of understanding an individual player's background, and the environment in which they were brought up, and how this impacts on the player's development of undesirable behavioural characteristics (Araújo et al., 2010; Henriksen et al., 2011; Larsen et al., 2012). Yet by understanding that a player may have missed out on some things in their development, and/or missed opportunities to develop the desired behavioural characteristics, the ITM Cup Head Coach believed the Union could then still provide talented players with an opportunity to be developed in their system. This view reflects an ecological perspective on development, where the interactions between the individual player and their immediate environment (microsystem), for example their family, peers, teammates and coaches cannot be separated from the environment in which they are developing (Bronfenbrenner 1979; 2005). This view highlights that to truly understand the development process, and how it impacts on a player, selectors need to look beyond the individual to the overall environment in which they are developing (Henriksen et al., 2011)

It is interesting to note that the Vulcans High Performance Manager, when discussing a player's background, mentions experiencing adversity is a desired characteristic when identifying talented players. He stated, "[w]e know through looking at some of the research that adversity is something that features highly, so I'm looking at their background in terms of

what they've been through, and how they've dealt with that". A body of recent research is beginning to promote the experiencing of adversity and a more challenging pathway for successful performance at elite levels (Collins & MacNamara, 2012; McCarthy & Collins, 2014). Collins and MacNamara (2012) found, when examining the backgrounds of elite athletes, that a number had experienced a "...disproportionately high incidence of early trauma, or at least incidence with the potential to traumatise (pg. 3). It could be argued, in light of the above, that for players labelled as "projects" and "rough diamonds", certain developmental experiences (i.e., experiencing of adversity and trauma) may influence certain individual behaviour traits that the selectors perceive as poor character at the time of assessment (Hill et al., 2015; MacNamara & Collins, 2015). According to MacNamara and Collins (2015) situational factors can influence the occurrence of negative behaviour characteristics. Reflecting the integratedness of Bronfenbrenner's ecological systems model (1979), MacNamara and Collins argue it is therefore important that "the interaction of personality, situational and organizational factors that influence the emergence of such behaviour in a given context is understood" (p. 76). Apart from the Stonebridge ITM Cup Head Coach, who acknowledged the importance of looking beyond the individual player to understand the adverse influence of a player's background and life experiences, many other study participants involved in the practice of talent identification failed to mention how the possession of desired behavioural characteristics were developed through life experience, or how these experiences may manifest in the emergence of negative behavioural characteristics at a given time.

External Factors

Participants in the present study argued that external factors, beyond the control of Stonebridge staff members responsible for talent identification, had a considerable impact on the Stonebridge Rugby Union talent identification practices. The impact of external factors

illustrate what Bronfenbrenner (1979) would define as macrosystems. Macrosystems are large cultural patterns (Bronfenbrenner, 1979), for example the actions of other NZ Provincial Unions, Super Rugby Franchises, and sporting codes, that impact on talent identification practices and are influential as to why certain talent identification policies are, or are not, implemented in practice. One external influence that was of particular concern to the study participants was the recruitment and contracting actions of other NZ Provincial Unions and Super Rugby Franchises, as well as other sporting codes (for example; Rugby League and Australian Rules Football). These Provincial Unions, Super Rugby Franchises, and sporting codes are proactively identifying young rugby players in the Stonebridge Rugby Union to recruit into their system. This practice put pressure on the Stonebridge Rugby Union to retain young talented players in their region, often forcing the Union to contract players earlier than they would want, and offering higher levels of payment and contracts, to keep them in the Provincial Union.

Discussing the impact of external influences and decision making around the identification of talented players and player contracting, the Stonebridge High Performance Manager noted:

Unions are now making a lot of wrong decisions because of that. So when your hand is forced, you can see that this kid is going to be real good in two or three years, but if you don't grab him now you could lose him for two or three years or forever, and you have to put him in your system at the expense of a more experienced player that you know could probably do the job now.

The Stonebridge Rugby Development Manager, when discussing the actions of other Unions and sporting codes, specified he had to go and talk with players that still had a year to go at secondary school to try and retain them. He said; “[w]e were forced this year to go and talk to some year 12 boys, and the three I spoke to we haven't been able to secure any of them, one had signed a contract with league and the other two were already destined to go to other

Unions”. The Vulcans High Performance Manager further illustrates the influence of other sporting codes and Super Rugby Franchises and the impact this has on the Vulcans talent identification practices. He stated:

Competition from ARL, NFL and other franchises means sometimes we’re forced to make decisions before we would like to and it will mean sometimes we haven’t quite got the talent confirmation but we’re forced to go to the final step of contracting. So we should be going identify, develop, confirm, and then contract. We are being forced to try and do that contracting without going through the process we would like to go through. So we’re being forced to fast track that a little bit. In terms of making those decisions and making those projections a little bit further out then maybe we’d like to.

Another consequence of other Provincial Unions and Super Rugby Franchises proactively recruiting young players in the Stonebridge area, is the Stonebridge Union is getting their hand forced to pay young players higher levels of money and contract them on higher level contracts. The Stonebridge Rugby Development Manager illustrated this when he stated:

We are getting our hand forced in terms of having to pay higher levels because other Provincial Unions, like Woodtown²⁰ will throw \$18,000 at a kid and we’re only prepared to pay five or six thousand and then being told by the player’s agent, in being able to be on the same level, in terms of the negotiating table, we have to be offering a full PU contract.

The Stonebridge ITM Cup Head Coach supported the above observation when he claimed:

You see the kids now are being contracted from school and being offered blimmin’ good money by a lot of Unions all over NZ...you’ve got those elite kids that now are getting wider training group franchise contracts from school, which was unheard of

²⁰ A pseudonym used for another NZ Provincial Union to protect their anonymity.

three years ago, and then the Provincial Unions are becoming very aggressive with getting younger kids.

One talent identification policy (and practice) that is a direct result of the actions of other Provincial Unions and Super Rugby Franchises, is the Stonebridge Rugby Union's Board approval to contract more Under 19 players into the High Performance Academy. The rationale for doing this is to select a larger number (20-24 players) of Under 19 players to then develop to increase the Union's chances of winning the National Under 19 Tournament, in particular to be able to do this without the fear of losing talent to other Unions (Stonebridge Rugby Development Manager, personal communication, October 7, 2015). The actions of the NZ Provincial Unions, the Super Rugby Franchises, and the other sporting codes, highlights the pressure sporting organisations are under to be successful. It is no wonder that player talent identification has become a central concern and challenge to sporting organisations (Gray & Plucker, 2010; Henriksen et al., 2011; Tranckle & Cushion, 2006).

Chapter Summary

Investigating the Stonebridge Rugby Union's talent identification policies and practices, it was found the Union developed specific talent criteria to be implemented in the identification of rugby talent. The developed talent criteria reflects a multidimensional and dynamic view of talent and emphasises psychological and behaviour characteristics. Local players are assessed and evaluated against the talent criteria, with information gathered on prospective players helping to shape decisions on which players are recruited into Stonebridge Rugby Union talent development programmes and teams. The findings highlighted tensions and limitations with the implementation of the talent criteria and identified gaps between documented talent identification policies and what occurred in practice. In particular, the subjective and interpretive nature of selector judgements and the use of "gut feel" as a talent

identification tool were recognised as being problematic and not supported in the literature. It was also found an emphasis on achieving short-term performance objectives resulted in a talent identification practice of selecting “here and now” players who demonstrated an early physical maturation bias in comparison to late developing peers. In addition, this study provided insight into the Stonebridge Rugby Union’s unofficial policy of selecting “no dickheads”, with a focus on a player’s character and behaviour found to be embedded in the Union’s talent identification policies and practices, which had synergies with an AFL study conducted by Kelly and Hickey (2008). Finally, the actions of other NZ Provincial Unions, Super Rugby Franchises, and sporting codes were found to be external influences beyond the control of Stonebridge staff members which “forced the Union’s hand” and were deemed influential in why policies were, or were not, implemented in practice.

CHAPTER FIVE: TALENT DEVELOPMENT POLICIES AND PRACTICES

This chapter focusses on the Stonebridge Rugby Union's talent development policies and practices. Specifically, this chapter will address two questions: 1. what policies and practices are utilised by relevant staff members within the Stonebridge Rugby Union to develop rugby union talent? and; 2. how the talent development policies and practices are implemented within this Provincial Union?

As discussed in the previous chapter, players are assessed by Stonebridge Rugby Union staff members against documented talent criteria to determine a player's talent, and potential, to become an elite rugby player. The purpose of implementing the talent criteria is to recruit players considered talented into the Stonebridge Rugby Union High Performance Academy and representative teams. In both instances, the purpose of the Union's talent identification practices is to identify talented players to then participate in talent development programmes. The players identified as talented are then supported and developed in player development programmes. Such an approach reflects a traditional and artificial approach to talent identification and development (Abbott & Collins, 2004; Abbott et al., 2005). Abbott and Collins (2004) and Abbott et al. (2005), along with others, advocate for a combined approach to talent identification and development, with greater emphasis placed on the appropriate development and monitoring of all players than on identification (TiD) (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Gray & Plucker, 2010). Arguably, implementing a combined approach to talent identification and development (TiD) would increase the probability that elite rugby players would emerge from development programmes (Abbot et al., 2005; Renshaw et al., 2012).

This chapter introduces and describes what the Stonebridge Rugby Union wants to achieve from their player development programmes and initiatives. The Union's High Performance Academy is described along with the implementation of the NZRU Six Pillar Development Model. How the Stonebridge High Performance Academy Programme is operationalised is analysed followed by a discussion of identified limitations and tensions with the programme. The Stonebridge Rugby Union representative teams and age-group development camps are also described and discussed.

Stonebridge's Talent Development Objectives

The Stonebridge Rugby Union has clearly documented what the Union wants to achieve from its talent development programmes and initiatives (Stonebridge Rugby Union, n.d.; Stonebridge Rugby Union, n.d.-b). The Union staff members aim to develop players to achieve specific outcomes and subsequently use these outcomes as a measure of success for their talent development policies and practices. A documented strategic pillar for the Stonebridge High Performance Programme is to constantly deliver winning teams and national representation for their players (Stonebridge Rugby Union, n.d.; Stonebridge Rugby Union, n.d.-b). Specifically, the Union's objectives are to win the National Provincial ITM Cup competition, the National Men's Sevens competition, and the National Under 19 Tournament. In addition, the Union wants to promote players to Super Rugby level and develop players to gain selection into the All Blacks, the All Black Sevens, NZ Under 20, and NZ Secondary Schools teams (Stonebridge Rugby Union, n.d.-b).

When discussing the Stonebridge Rugby Union's desired player development objectives, the Stonebridge High Performance Manager stated, "[t]he desired outcomes for us, well there's two, one is national representation...and the second one is the success of our teams". Similarly, the Stonebridge Rugby Development Manager maintained, "...from the Union's

point of view we want all our teams winning and we want to develop players for the future”. The desire to find a balance between winning and development is similar to the NZRU approach with the NZ Under 20 Team. The objectives for the NZ Under 20 Team are to win the IRB Junior World Championship, as well as, to provide talented players with an opportunity to develop in order to be selected into Super Rugby Squads (New Zealand Rugby Union, n.d.). Yet the Stonebridge ITM Cup Head Coach highlighted the difficulty associated with trying to balance winning at all levels and the development of players for the future, when he stated:

Well it’s huge for the Union to develop our young talent, and to get them through to Super Rugby and the NZ teams. So NZ Secondary Schools, NZ Under 20’s, very very important for us to give our players the opportunity to make those levels, so that’s big for us...so when we look at the ITM cup, we talk about “well you want to win championships, but you also want to develop players”, and getting that balance right is a hard thing.

Similarly, in the previous chapter discussing talent identification policies and practices, the Vulcans High Performance Manager highlighted the tensions between Provincial Union and Super Rugby desired objectives, in particular the desire to win at age-group level. The Vulcans High Performance Manager argued the player pathway in NZ Rugby was not completely structured for players to achieve All Black selection because everyone in the Provincial Union wants to achieve results at their own levels. His comments suggest achieving a balance between winning championships and appropriate player development to attain future success (e.g. Super Rugby and All Black squad selection) is problematic. In the previous chapter it was argued players characterised as “here and now” players, or players that have matured physically earlier than their peers, are often identified as being talented and selected into representative teams in order to achieve short-term objectives. Evidence does

not support the identification, selection, (and subsequent development) of players to achieve short-term performance objectives and for those same players to then effectively transition to elite adult performance (Abbott et al., 2005; Bergeron, et al., 2015; Brown, 2001; Hollings et al., 2014; Lewis et al., 2015; Pankhurst & Collins, 2013).

Stonebridge Rugby Union High Performance Academy

The NZRU's overarching talent development policy is to identify, and then develop, the players that the All Black and All Black Sevens coaches want to select (New Zealand Rugby Union, n.d.-c). The NZRU expects all NZ Provincial Union High Performance Academy Programmes to implement the NZRU Six Pillar Development Model in order to develop identified players for professional rugby (New Zealand Rugby Union, n.d.-c). The NZRU's Development Model is a two to three year talent development programme comprising the periodised development of players in six key areas:

1. Physical;
2. Technical qualities;
3. Tactical qualities;
4. Mental skills;
5. Nutrition;
6. Character, Holistic (life balance) and Leadership (New Zealand Rugby Union, n.d.-c).

The Stonebridge Rugby Union's implementation of the NZRU Six Pillar Development Model in their High Performance Academy Programme forms a key talent development practice; with all players contracted to the Union required to participate in the programme (Stonebridge Rugby Union, 2015). The designing and implementation of the NZRU Six Pillar Development Model reflects Bronfenbrenner's (1979) exosystem. The designing and implementation of the talent development programme occurs in contexts the player is not

directly involved, however, the adoption and implementation of the programme impacts of their development as a player (Bronfenbrenner, 1979; Duerdin & Witt, 2010).

On the Stonebridge Rugby Union website, it claims the High Performance Academy Programme adopts a strong holistic approach and provides education and development opportunities for talented players to fulfil their potential in both rugby and life. The emphasis on developing the skills and attributes required to succeed as a rugby player and a person has become a major focus of the NZ rugby high performance environment (New Zealand Rugby Players' Association, n.d.-a), and is congruent with the focus on character, and the All Black's philosophy of "better people make better players" (Hodge et al., 2014, p. 66). The NZRU Six Pillar Development Model, implemented in the Stonebridge High Performance Academy, also reflects a multidimensional and dynamic approach to talent development (Abbott & Collins, 2004; Abbott et al., 2005). The inclusion of mental skills, holistic life balance, and leadership development demonstrates an awareness the development of talent involves more than just physical and technical development and illustrates a multidimensional approach (Abbott & Collins, 2004; Abbott et al., 2005; Burgess & Naughton, 2010; Button, 2011; Côté et al., 2009; Lidor et al., 2009). It also recognises the role these qualities can have in assisting players to develop their potential to perform at the elite level (Abbott et al., 2005; Larsen et al., 2012; MacNamara et al., 2010; MacNamara & Collins, 2015).

How the Stonebridge High Performance Academy is operationalised

Discussing the Union's High Performance Academy and the implementation of the NZRU Six Pillar Development Model, the Stonebridge Rugby Union High Performance Manager specified; "...in terms of our player development, it's pretty much based on the NZRU Six Pillar Model, it's a periodised programme, it's a certain number of hours per week, and it's resourced in the critical areas". The Stonebridge Rugby Union Rugby Development

Manager, who is responsible for the day to day running of the High Performance Academy, said that once players were recruited to the Union they then “fold into our Six Pillar Development Model under the NZRU, so physical, technical, tactical, nutrition, mental skills and personal leadership development. So essentially our programme is geared around delivering and it’s a progressive programme through those six pillars”. When first inducted into the Stonebridge Rugby Union High Performance Academy the players are assessed against the six pillars. The Stonebridge Rugby Development Manager explained this process: We did a week of assessment, across nutritional, what are they [the players] currently eating, what’s their level of nutrition knowledge. Mental skills, we do that, they do a full medical check with a doctor, we do all their skin fold measurements, body weight and height, we do fitness testing, strength testing, speed testing, all of that’s captured in a week. Then we go away on a camp for 3 or 4 days, and that’s to put the boys under a little bit of pressure, and do a mini longest day, and do some leadership activities. The players participating in the Stonebridge High Performance Programme reflects Bronfenbrenner’s (1979) microsystem. Players have the opportunity to develop their talent through participation in, and interaction with, the immediate context of the development programme (Bronfenbrenner 1979; 2005).

The ongoing assessment and monitoring of players participating in the High Performance Academy Programme is considered a fundamental practice in the development of talented players. Each player has three formal reviews a year and player assessments are conducted six, sometimes more, times a year. Meetings are held once a month involving all the coaching and talent identification staff to discuss a player’s individual progress in the development programme (Stonebridge Rugby Development Manager). The Stonebridge Rugby Development Manager illustrated the role that assessment and monitoring plays in developing the players, he stated:

The physical side of things, we've moved away from actually setting targets for the players, we believe the numbers have to keep moving. Whether your skin folds are coming down, or whether your body weight is coming up or down. In the gym, around your bench press, and your squat, and your key lifts, they're the measure we provide the NZRU. As long as they're tracking all the time, it's only when they start to plateau and level out we put the spot-light on them.

Furthermore, discussing the physical assessment of players, the Stonebridge Rugby Development Manager continued "...so if we're not seeing a change in those figures as we'd expect, based on norms²¹ measured from Super Rugby and ITM Cup, then we start to put the spot-light on them a little bit".

When asked what does putting the "spot-light" on a player mean, the Stonebridge Rugby Development Manager said this involved meeting with the player to find out additional information as to why the player is not progressing as expected, and then providing additional support if required. It could also mean the player is issued with a warning letter if progress is not seen for a long period of time. The view that Stonebridge Academy players' physical performance levels need to be continually tracking upwards in a linear fashion is not consistent with literature. Development, in particular youth development, is characterised by unpredictable jumps and slumps (Abbott et al., 2005) that can impact on sport performance, and is described as not being a predictable straightforward linear process (Abbott et al., 2005; Bronfenbrenner, 1979; Copley et al., 2012; Renshaw et al, 2012). Bronfenbrenner described development as non-linear and maintained development change does not continually track upwards in a smooth linear fashion or progress toward some predetermined expected end point (Horn, 2004). Abbot et al. (2005) maintain that high performing players make several

²¹ Physical assessment normative data has been collated to provide averages for ITM Cup level players. Developing players are compared against these norms as a benchmark for performance (NZRU, n.d.-b).

transitions in order to progress to higher levels of performance. They argue that during these times of transition (for example, from school to academy environments and from academy to the ITM Cup team) aspects of performance become unstable (Abbot et al., 2005). Abbott et al. (2005) argue these periods of unstable performance, or “critical fluctuations” (p. 74), are necessary to move a player from a previously stable level of performance into a higher more effective level. Rather than put the “spot-light” on players during these times of unpredictable or unstable performance, Stonebridge Rugby Union staff would be better served to acknowledge and understand a player’s development cannot move in a predictable linear fashion toward some predetermined end point based on expectations of development, and identify and understand the rate-limiters to current performance and development (Araújo et al., 2010). Collins and MacNamara (2012) also argue a smooth linear development pathway to elite levels of performance is often symptomatic of problems. They maintain that staff members responsible for talent development programmes should avoid deliberately smoothing the developmental pathway by providing additional support so that challenges are minimised (Collins & MacNamara, 2012). The experiencing of challenges in the development pathway enables the observation of how players respond to these challenges (MacNamara & Collins, 2015), and provides opportunity for critical reflections, learning, and the development of psychological skills that enable players to cope with inevitable challenges, problems and setbacks on the development pathway (Collins & MacNamara, 2012; Hodge et al., 2012).

Comparing players to norms measured from Super Rugby and ITM Cup is also not necessarily supported in the literature. Many argue sporting organisations should emphasise the individual nature of pathways and transitions to elite performance levels (Araújo et al., 2010; Bergeron et al., 2015; Phillips et al., 2010). According to Bronfenbrenner and Morris (2006), development pathways vary due to the interactions between the unique characteristics

of the developing individual and the environment in which the development takes place, with evidence suggesting individuals take varying pathways and trajectories to move from lower levels of performance to elite performance (Araújo et al., 2010; Bergeron et al., 2015; Phillips et al., 2010). In light of the above, using norms to measure a player's physical development does not provide an accurate indicator of their individual talent or potential. To optimise development it has been suggested that players should be treated as individuals and their development needs individually met (Bailey et al., 2010; Martindale et al, 2005). This may have been implicitly recognised by the Stonebridge Rugby Development Manager because he did explain that once players had completed a year in the academy programme they got a lot more individual support in their second year.

When discussing the holistic and leadership pillar of the NZRU Development Model, the Stonebridge Rugby Development Manager stated "...it's everything and anything really. But ultimately we require the boys to be working or studying in their first year, preferable full time". Another Stonebridge staff member commented: "...making sure they're doing something outside of rugby is massively important, they can't just play PlayStation all day and just be idle" (Stonebridge ITM Cup Head Coach). According to the NZRU/RPA *Collective Agreement* (2013), Provincial Union contracted players are obligated to engage in meaningful work and/or study. Having interests outside of rugby and maintaining some form of rugby/life balance is seen as important to becoming a good rugby player (NZRU/RPA, 2013). The NZRU partly fund Personal Development Managers to assist the holistic development of contracted players in the Provincial Unions. According to the New Zealand Rugby Players' Association (NZRPA), the primary responsibility of the Personal Development Manager is to guide and support players in their personal and professional development. This involves working with players to assist them in managing their professional rugby career, educational qualifications, career prospects outside of rugby, and

personal planning (NZRU/RPA, 2013). The Stonebridge Rugby Union Rugby Development Manager maintains that the Stonebridge Personal Development Manager is “across all the boys in terms of their work or study and personal lives”. The emphasis on work/life balance and encouraging players to develop balance in their lives reflects an ecological view of development (Bronfenbrenner, 1979). The Stonebridge Rugby Union High Performance Programme potentially illustrates an ecological approach to development because of the way different contextual systems (e.g. work and study environments) interact with features of the individual, and demonstrates the interconnections between these contexts, which in turn is believed to impact positively on a player’s development (Bronfenbrenner, 1979; 2005). This emphasis is also similar to the findings of an AFL study conducted by Kelly and Hickey (2008), who observed AFL staff were involved in the work and personal lives of players in the belief that a work/life balance would enhance a player’s effectiveness and performance.

Limitations of the Stonebridge High Performance Academy

A number of limitations of the Stonebridge High Performance Academy Programme were identified by the participants in the present study. As previously introduced, players are contracted to participate in the Stonebridge Rugby Union High Performance Academy Programme for a two-year period. It is stated on the Stonebridge website that some of the players will be promoted to the Stonebridge ITM Cup team in their first year, with the intention of promoting all players to ITM Cup level after the completion of two years in the player development programme. The intention to promote all players into the ITM Cup side after two years is identified as a limitation by some staff members in the Stonebridge Rugby Union. The Stonebridge Coach Development Manager argued, “I think a limitation is that we become too narrow and focused on the short term, and the expectation that the academy players will make it within those one to two years isn’t realistic”. He went on to say, “...and the fact is players develop and mature at different rates, and this needs to be taken into

account” (Stonebridge Coach Development Manager). In discussing players developing at different rates, and players can be identified as late developers, the Stonebridge ITM Cup Head Coach lamented:

There’s less and less of them [late developers] coming through now, in the system, because it’s all much more academy based, it’s being streamed into the academy of elite players and then all those players get pushed through and they get selected, and they get so much more pumped into them now as far as resources are concerned, the late developer, there’s not many of them, I believe, coming though now like there was.

As discussed previously, many elite young rugby players are successful not because of talent or superior skill level, but simply as a result of an early physical maturation in comparison to late developing peers (Abbott et al., 2005; Martindale & Mortimer, 2011; Pankhurst & Collins, 2013). The expectation that players are promoted to the ITM Cup team after the completion of two years in the player development programme is also problematic given the individual nature of pathways and transitions to elite levels of performance (Araújo et al., 2010; Bergeron et al., 2015; Phillips et al., 2010), and development regarded as not being a predictable straightforward linear process (Abbott et al., 2005; Bronfenbrenner, 1979; Cobley et al., 2012; Renshaw et al., 2012). Furthermore, young elite players who demonstrate a higher level of skill in comparison to their peers, are not necessarily more talented, but are more successful due to the 200 extra hours of coaching and resources they have had “pumped into them” through development programmes (Ward & Williams, 2003).

In addition to players being promoted through the Stonebridge High Performance Academy Programme to progress to elite levels; players are also in a rush to do so. The NZRU have documented that one of the current challenges facing talent development in NZ is the young age of players entering the professional rugby environment (New Zealand Rugby Union, n.d.-c). The interview participants agreed that players entering professional rugby

environments at a younger age is a challenge. When asked if he thought talented players are in too much of a rush to make it to elite levels, the Stonebridge High Performance Manager stated:

Heck yes, way too fast now, but the landscape has shifted to the point where it's the norm, not the exception now for kids to bounce out of secondary school and often within a year, or less than two years, be playing ITM Cup rugby, because the competition has become so young now. So we can't control that, the rugby market has controlled that, you know, we just have to deal with it.

The Stonebridge ITM Cup Head Coach supported this view in his comments:

A lot of players now are in a hurry, so if they don't make it in Stonebridge, they'll take contracts and go all over the country, and you see Stonebridge players all 'round the country now because they just want opportunity. So younger kids these days aren't doing their apprenticeship, they want opportunity, and as a result some of them fall by the wayside when they shouldn't really if they'd been a bit more patient and done their apprenticeship, and then they had the tools they needed to succeed at that level and then go to the next level.

The Stonebridge High Performance Manager's opinion that the "rugby market" determines the youthful age players are now entering the professional rugby environment, and their failure to complete a rugby apprenticeship, can be explained by the influence of the macrosystem (Bronfenbrenner, 1979); where the nature of the larger culture (e.g. the "rugby market") has impacted on players being in a rush. The notion of players doing a rugby apprenticeship and being more patient is supported by a long-term view of talent development. Rather than rush the development process and possibly result in talented players falling "by the wayside", literature supports a long-term, individually variable approach to talent development, as opposed to focussing on current performance and

continual success at a younger age (Bergeron et al., 2015; Button, 2011; Martindale et al., 2007; Meylan et al., 2010).

The Stonebridge ITM Cup Head Coach alluded to the impact peers and parents can have on players being in too much of a rush to make it to the elite levels in the following comment:

I do think the kids are getting up there too quickly, they see their mates make it, they get frustrated, and they think they're good enough, and their parents are saying you're as good as him you should be at that level as well.

In contrast, the Stonebridge High Performance Manager highlighted the value of parents understanding a long term approach to talent development, he said, "those parents who understand about the game and where it's shifted from and shifted to, concede that it's moved too quickly, and they'll have a more conservative approach". Mentioning the idea of players serving apprenticeships and the impact of being selected into higher levels of performance too soon, he continued by saying:

I think there are parents now who understand apprenticeships are important, because when the player gets thrown to the lions too early, and it doesn't work for them, it's quite hard for them to, both mentally, and [be selected to] come back, because people, you know, give up on kids pretty quickly. (Stonebridge High Performance Manager)

Parents are identified as key stakeholders in talent development systems (Pankhurst & Collins, 2013) and are a significant environmental factor that impacts on talent development (Araújo et al., 2004; Bronfenbrenner, 1979; Bloom, 1985; Hodges & Baker, 2011; Lauer et al., 2010). In a study conducted on elite youth soccer players; 80% of the players reported that their parents had the most influence on their careers (Collins et al., 2011). A critical talent development practice utilised by Stonebridge Rugby Union staff members is the engagement of players' parents, in particular during secondary school, to educate them about

age appropriate player development (Stonebridge Rugby Union, 2015). An example of this engagement is the invitation of parents to attend player development camps run by both the Stonebridge Rugby Union and the Vulcans Super Rugby Franchise. Both sporting organisations view the development opportunities at these camps as equally important for the parents as it is for the players; especially when it comes to understanding a player's holistic development (New Zealand Rugby Players' Association, 2011; Stonebridge Rugby Development Coach, personal communication, 2 December, 2015). The New Zealand Rugby Players Association (NZRPA) have also documented parent and guardian participation in NZRU development programmes is vital. Parent and guardian involvement in talent development opportunities enables them to see what is expected of aspiring rugby players, gives them a clear understanding of the issues and opportunities young players can be faced with, and provides information on how they can support their son to get their career off to the best possible start (New Zealand Rugby Players' Association, 2011). Parent and guardian participation in the talent development opportunities also reflects Bronfenbrenner's (1979) mesosystem. Stonebridge staff members' engagement with parents subsequently impacts on the development of the individual player and demonstrates the connectedness and links between settings in which development occurs (Bronfenbrenner, 1979; 2005). The Stonebridge Rugby Union's engagement of parents in talent development opportunities is also supported in the literature as a strategic talent development practice (Pankhurst & Collins, 2013).

An ecological approach to development highlights the impact of environmental factors (for example, parents and peers) on an individual's development (Bronfenbrenner, 1979). However, in spite of the attempt to engage parents in player development opportunities, and the positive impact associated with parents understanding the importance of appropriate talent development, parental influence is not always positive and can be seen as a limitation to

effective development (Fraser-Thomas et al., 2008). The negative impact of parents is evident in the above comment by the Stonebridge ITM Cup Head Coach, when he discussed parents contributing to Stonebridge academy players being in a rush to be promoted to professional rugby environments. Fraser-Thomas et al. (2008) argue parents can negatively influence a player's development through holding unrealistic expectations of their ability and readiness; as well as pushing for them to play at levels they are not ready for. The Stonebridge ITM Cup Head Coach also identified the impact of seeing playing peers "make it" in professional rugby environments as a limitation of the Stonebridge High Performance Academy Programme. Seeing playing peers be selected for higher levels of performance, and seen as being successful, is acknowledged as causing other academy players to want to emulate that success, regardless of developmental readiness to transition to the next level of performance (Vescio, Wilde, & Crosswhite, 2005), and is a further example of environmental factors impacting on talent development (Bronfenbrenner, 1979). It is not only their rugby playing peers that influence the development of talent. The Stonebridge ITM Cup Head Coach highlights the impact non-rugby playing peers can have, he recounted the story of a talented player who did not realise his talent:

Young player, extremely talented, but superbly unfit...he never came through [to become an elite player], and a lot of it was down to peer pressure. He's living with his mates, and some of his mates didn't have his talent obviously, instead of him going to the gym at 4 o'clock and improving himself as an individual, his mates want him to stay and have a couple of beers with them, or whatever it might be. You want to be wanted in your community, and liked, and if he wanted to get up and go and do his training, his mates might go, "hey where you going", you know, and he'll get dragged down by people, he couldn't break out of that, his mates would say "so who do you think you are, do you think your better than us", you know, "well stay and have a beer with us", and that sort of thing, you know, he wasn't strong enough, or his mates

didn't get behind him enough to help him do what he needed to do to be the best he could be in rugby, and as a result he never achieved what he should have achieved, but he had all the talent in the world.

An additional tension with the operationalisation of the Stonebridge Rugby Union High Performance Academy is the belief by some that players are not spending enough time and resources developing rugby specific skills; instead too much time is spent developing the players as people and improving their physical attributes. The Stonebridge Rugby Union Coach Development Manager stated:

Personally, I believe that we should be trying to make them better rugby players and I believe at the moment we are focusing on making them better people and better athletes. But are we making them better rugby players right now? The only way to make them better is to practice the rugby specific skills they need to be the best they can be.

The Stonebridge ITM Cup Head Coach agreed that not enough time was spent specifically developing a player's rugby ability, he commented, "I think the academy programme is a pretty good one...I just think there is more that can be done on the technical and tactical side of things, which hasn't been happening previously". The disagreement amongst Stonebridge Rugby Union staff members in terms of the development focus of the High Performance Academy is consistent with the AFL study conducted by Kelly and Hickey (2008), who found not all people working in AFL clubs agreed about the elements that are most critical to performance or to gaining a competitive advantage. The comments made by the Stonebridge Coach Development Manager and ITM Cup Head Coach reflect a desire for talent development activities to focus on what they see as the "core business" of the Stonebridge Rugby Union High Performance Academy; that is the development of better rugby players. It is evident tension exists between the amount of time and resources spent on the development

of better people and better athletes; and whether this development has a positive impact on the development of better rugby players. This tension was similarly found in the context of AFL (Kelly & Hickey, 2008).

“Not rewarded for developing talent”

There is frustration amongst some Stonebridge Rugby Union staff members that they are not necessarily rewarded for developing talent through their High Performance Academy Programme. Talented players who have been developed through the Stonebridge High Performance Academy are often recruited by other NZ Provincial Unions and offered full Provincial Union contracts to change regions to play in the ITM Cup Competition. In addition, as previously discussed, the players are often in a rush to take these opportunities to transition to the higher level of performance. There is a belief that other Provincial Unions are recruiting Stonebridge players instead of spending time and resources on developing players in their own region. The Stonebridge ITM Cup Head Coach, when discussing other Union’s contracting players who have been through the Stonebridge High Performance Academy, pointed out:

So instead of having to spend time developing their own players, [they can get a Stonebridge] player has made NZ Under 20’s or he’s showing a bit of potential, so they say “let’s just take him now”, because the Stonebridge player is more the finished product and they [other Provincial Unions] don’t have to develop as many, because you don’t get rewarded for developing players.

The Stonebridge ITM Cup Head Coach continued:

When you look at those small areas, you can’t tell me there isn’t the talent there to develop...I still think there’s a lot of work to do to get the balance right, you know, developing your own talent as opposed to just buying them in with Provincial Union contracts, the way things are done these days.

The Stonebridge Coach Development Manager also expressed frustration at the actions of other Unions, he stated:

I believe it's the fault of those other Unions that they're not developing their own talent, so they're looking across the border, to other Unions, to find what they're looking for without putting the work into the players they have got at their door step. I don't know whether its right or wrong, I think that competition is just a fact of being in a competitive environment.

The Stonebridge Rugby Development Coach argued that the NZRU and Super Rugby Franchises were the only organisations really making money out of developing talent:

NZ rugby expects the Provincial Unions to do all the player development and run the academies and fund the player development, but the reality is you could win every ITM Cup game throughout the season but still lose one million dollars for your Province. So the only ones that win out of it are the Super players, the Super Rugby Franchises pick the players up and make the money, and now that we're separate from our Super Franchise, we're doing all the development but they are the only ones that are going to make any money out of it.

The actions of other Provincial Unions, and the view that Provincial Unions are not rewarded for emphasising development, are further examples of the macrosystem in action where the larger "competitive environment" in which the Union's operate functions to impact on player talent development (Bronfenbrenner, 1979).

Stonebridge Representative Teams

The Stonebridge Rugby Union representative team programme is an essential practice used to develop identified talented players. Stonebridge Rugby Union staff members and representative coaches select players from the region into a number of representative teams at a range of levels each year. The main purpose of the representative teams is to ensure

talented players are given the best possible opportunity to develop and excel in an appropriate team, based on individual level of experience, age and rugby development (Stonebridge Rugby Union, 2015; Stonebridge Rugby Union, n.d.-d). The Union fields representative teams at Under 14, Under 16, Under 18, Under 19 and Under 21 age groups, a men's 'B' team and the top ITM Cup team, as well as a men's and women's Sevens team and a women's NPC team. Prior to 2010, the Stonebridge Rugby Union only selected one team in the Under 14, 16, and 18 age groups. In 2010, the Union decided to change its policy and select four Under 14 and Under 16 teams, and three Under 18 teams (Stonebridge Rugby Development Manager). The Stonebridge Under 21 team was introduced in 2011, while the Under 19 team was introduced in 2014 to replace the Under 20 team²² (Stonebridge Rugby Development Manager).

The policy decision to create more than one Stonebridge Rugby Union representative team at age-group level reflects a desire to involve more players from the region in talent development opportunities. Describing the introduction of more representative teams, the Stonebridge Rugby Development Manager said:

We are trying to stay as wide as we can for as long as we can, in terms of a policy. If you go back a few years ago now, we were picking one Under 14 team, one Under 16 team, one Under 18 team, and there was so much talent it was potentially getting funnelled way too quickly. (Stonebridge Rugby Development Manager)

The Stonebridge High Performance Manager also illustrated this point by saying:

It was just too narrow, we had too many boys to select from, and to pick a genuine Stonebridge Under 14 team from about a thousand odd kids, picking 25 kids from a thousand odd was just a nightmare, so it was politically motivated...and we spend

²² The creation of an Under 19 team to replace the Under 20 team was an initiative of the NZRU. 2014 was the first year the NZRU held the National Provincial Union Under 19 Tournament.

time in the region now developing a wider group of players. (Stonebridge High Performance Manager)

The Stonebridge 2014 Annual Report documents there are 5700+ registered secondary school aged rugby players in the Stonebridge Provincial Union (Stonebridge Rugby Union, n.d.). The Stonebridge Rugby Union talent development policy to develop more players through the representative teams is reflected in what Trankle and Cushion (2012) refer to as a double edged sword of selection. The Union are aiming to minimise the impact of only selecting, and therefore developing, a very small percentage of the large number of players registered at age-group level in their region, and therefore funnelling this talent too quickly. Literature also highlights that whenever a select few are identified to participate in sport development opportunities (for example, selection in an age-group representative team), an equal, if not more powerful message is communicated to those not included that may discourage future participation (Farrow, 2012; MacNamara, 2011; Meylan et al., 2010; Renshaw et al., 2012; Tranckle & Cushion 2012). The policy decision of the Stonebridge Rugby Union to select more teams at an age group level and to stay as wide as they can for as long as they can is also supported by critiques of the pyramid approach to talent development (Bailey et al., 2010; Bailey & Toms, 2011). The pyramid approach to talent development systematically excludes players as they progress in sport in a “Darwinian process” (Bailey & Toms, 2011, p. 157). The Stonebridge Rugby Union aims to avoid the systematic exclusion and “funnelling” of players too quickly through their age-group representative teams and provide a development opportunity for as many players as they can resource effectively.

Age-Group Development Camps

Age-group development camps are another talent development practice used by Stonebridge Rugby Union staff members as an opportunity to develop players in the region.

Coaches and development staff are an additional part of the ecology immediately surrounding the developing player and can significantly impact on player development (Bronfenbrenner, 1979, 2005). Stonebridge Rugby Union staff run skill development camps for local secondary school age players (at Under 14 and Under 16 age levels) that focus on core and position specific skill development, physical assessment, as well as some leadership development (Stonebridge Rugby Union, 2015). In describing the purpose of the age-group skill development camps, the Stonebridge Coach Development Manager, explained:

So we have skills camps where we invite any kids, they don't have to be seen as high level, players turn up because they're ambitious, but its open to any kids to attend and get some specialist coaching and to create an environment where we can get some eyes on them and see what's around and hopefully create a positive experience and keep them interested in rugby. That often unearths some gems that we may not have known too much about, just keeps those kids – educating them about the game.

Stonebridge Rugby Union staff are also involved in the planning and implementation of the Vulcans Age-Group Development Camps for Under 17 and Under 18 identified players (Stonebridge Rugby Development Coach). The Vulcans Under 17 and Under 18 Development Camps are run in partnership with the NZRU, the Vulcans Super Rugby Franchise and affiliated Provincial Unions (Stonebridge Rugby Union staff and players are therefore involved in these development camps). The purpose of the Vulcans Age Group Development camps is to prepare selected players for potential careers in rugby and give the players a taste of what life is like as a professional rugby player (Stonebridge Rugby Development Coach, personal communication, 2 December, 2015). The focus of the camps is to develop the selected players' positional and tactical understanding and provide education and development across the six pillars of the NZRU Development Model (New Zealand

Rugby Union, n.d.-c). The Vulcans High Performance Manager, describing the purpose of the Franchise Under 17 and Under 18 Development Camps, maintained:

The major focus is position specific, so we get position specific coaches in. So our role when we get them into camp is to give them position specific skills and help them understand their role. But there's also the holistic development in terms of nutrition, strength and conditioning, there's mental skill development – all the key development criteria that are given to us by the NZRU, so we have to tick those boxes throughout the week. So it's about education and that's talent development, player development.

The Stonebridge Rugby Union and Vulcans Skill Development Camps are not only used for the development of players. The camps are also used by selectors to identify players for age-group representative teams, and in the case of the Vulcans Under 18 Development Camp, selection for the NZ Secondary Schools Team. This is evident in the above quote from the Stonebridge Coach Development Manager when he was describing the purpose of the camps and commented at the camps they “can get some eyes” on the players and “see what's around”. The Stonebridge Player Development Manager alluded to a tension between using the camps to develop talented players' verses using the camps to select age-group representative teams; he commented:

At certain times of the year it forces you around selection, so selection for the Under 14's, 16's, 18's, selection for NZ Secondary Schools, selection for the Vulcans Under 18's, so you have to be quite conscious of taking those hats off at different times, but at the end of it we're having to select teams.

The fact the Stonebridge staff are “forced” at times to focus on the selection of players for representative teams, as opposed to player development, is a source of frustration for the Stonebridge Rugby Development Coach, discussing this practice at the Vulcans Under 18 Camp, he argued:

Now we're charged with getting the best 50 boys across the Vulcans franchise into the Vulcans Under 18 camp every July. From that camp we put forward nominated players to push forward for NZ Secondary Schools selection. Now that's the dilemma I have – putting the best talent into that camp versus putting the best players into that camp, and we're selecting a NZ Schools team each year which is about the here and now, we're picking the best, hopefully, 23 players in the country to play a test match. As opposed to getting the best 50 players to the Vulcans Development Camp, where we are giving players the opportunity to develop, where they may not have had that opportunity before – but they don't necessarily go together if you know what I'm saying. So that's my conflict and I talk about it frequently but there's sort of no shift in the structure of the camps or the philosophy of the camps.

The Stonebridge Rugby Development Coach concluded by stating the NZRU, the Vulcans Super Rugby Franchise, and the affiliated Provincial Unions need to "...make a decision whether it's a selection camp or whether it's a development camp". The Vulcans High Performance Manager shared a similar view, he maintained:

I found at the Under 18 camp, because there is still a NZ Secondary Schools team selected at the end of it, it still gets lent towards player ranking and selection, we talk about development, but because selection is still being made by people who are ultimately there to select a NZ Schools team – you know it's quite loose...so because we're picking teams to play at certain points, like NZ Schools, it makes talent development hard.

The above tension, between the stated objectives of the camps to both develop players for the future as well as select players to play in (and be successful) in age-group representative teams, is once again incongruent with the literature on late developing players and the non-linear nature of development, as well as the transition of junior performance to senior success

(Abbott et al., 2005; Bronfenbrenner, 1979; Bergeron, et al., 2015; Brown, 2001; Hollings et al., 2014; Pankhurst & Collins, 2013).

Chapter Summary

A finding of the investigation into the Stonebridge Rugby Union's talent development policies and practices was that the Union desires all their teams to be winning and achieve national representation for their players; in addition to developing players for the future. However, tensions exist with the documented policy to develop players for the future as well as select teams and develop players to achieve short-term objectives. The Stonebridge Rugby Union implements talent development opportunities through the operation of a High Performance Academy, representative teams, and age-group development camps. It was found the Union implemented the NZRU Six Pillar Development Model in their High Performance Academy, with the model reflecting a multidisciplinary approach to development and supported by a multidimensional and dynamic concept of talent. This study however identified a number of tensions and limitations with the operationalisation of the Stonebridge High Performance Academy. In particular, there were tensions associated with the monitoring and evaluation of players in development programmes and the literature that supports the individual and non-linear nature of talent development. Finally, the findings of this study provided support for the impact of environmental factors, for example parents and peers, on the developing individual and were identified as significant to the implementation of the Provincial Union's talent development policies and practices.

CHAPTER SIX: CONCLUSION

This chapter draws together the key findings from the present study, discusses implications for practice, and makes recommendations for future research. As a result of countries coming under increasing pressure to succeed on the world sporting stage, athlete talent identification and development have become central concerns and challenges to sporting organisations globally (Collins & Bailey, 2012; Gray & Plucker, 2010; Tranckle & Cushion, 2006). In the NZ context, a Sport NZ priority is to create more winners on the world stage, whilst a key strategic pillar of the NZRU is to have a winning All Blacks Team. New Zealand Super Rugby Franchises and Provincial Rugby Unions are also working hard to find solutions to identify, recruit and retain rugby talent and invest significant resources into the rugby pathway and talent development programmes. In spite of the increased focus on the identification and development of talent there still remains a lack of literature based on an in-depth analysis that highlights the insights and experiences of those significantly involved in the identification and development of athletic talent (Tranckle & Cushion, 2006). Furthermore, there is a lack of evidence based research investigating talent identification and development in NZ and more specifically in the rugby union context.

As a result of identifying a gap in the literature, this study investigated the current talent identification and development policies and practices of the Stonebridge Rugby Union. Specifically, my research questions were; 1. what policies and practices are utilised by relevant staff members within one Provincial Union to identify and develop rugby union talent? and; 2. how are the talent identification and development policies and practices implemented within this Provincial Union? To address these research questions this study used a single case study design. Interviews were conducted with six purposely selected participants who were knowledgeable and information rich about the area of investigation

(Byra & Goc Karp, 2000; Finn & McKenna, 2010). Additionally, documents containing relevant information on the talent identification and development policies and practices were analysed.

A key Stonebridge Rugby Union talent identification policy is the development of a *Talent Profile* used for the purpose of identifying talented rugby players and to provide continuity of talented players for the Union. The specific talent criteria in the *Profile* reflect what Abbott et al. (2005) called a multidimensional and dynamic concept of talent and demonstrate an understanding of an individual's unique characteristics and the role these characteristics have in facilitating elite sport performance. Also, the talent criteria developed by the Stonebridge Rugby Union staff include psychological behaviours and characteristics. The role and importance of psychological characteristics in the identification of talent is well supported in the literature (Abbott et al., 2005; MacNamara & Collins, 2011; MacNamara & Collins, 2015). The talent criteria are implemented in practice to assist Stonebridge staff members to make decisions on which players they recruit into their talent development programmes and teams. The talent criteria are implemented in practice by information being gathered on prospective players and "drilling down" into the various environmental contexts the individual player inhabits. Once the information is gathered the players are assessed and evaluated against the documented criteria.

It was found the talent identification practices of the Stonebridge Rugby Union had a number of limitations and there were tensions with the implementation of the talent criteria. Making judgements about a player's ability can be considered as subjective and interpretative, what is more, the talent identification practices implemented by Stonebridge staff were not transparent as the players were unaware of the criteria against which they were being assessed. Highlighting the subjective and interpretative nature of player talent identification

was the formalisation of the selector's "gut feel" as a talent identification policy; with "gut feel" being encouraged as a desired practice in selection. It was also found that two Stonebridge Rugby Union staff members questioned the assessment of players and the implementation of the talent criteria. They questioned how measureable and realistic the criteria were and illustrated gaps between what is documented, and said, at a policy level and what actually occurred in practice.

An unofficial talent identification policy of the Stonebridge Rugby Union is to recruit "no dickheads" into their system. Linked to the notion of recruiting "no dickheads" is a focus on selecting player's based on an assessment of their character. The Stonebridge staff maintained that the behavioural characteristics described in the talent criteria defined a player's character, and wanted to recruit players who were identified as having good character. However, one of the Union's talent identification policies, identified through the implementation of the talent criteria, was to consider some players who were labelled as "projects". It is interesting to note, notwithstanding the talent identification practice of seeking to understand a player's background and looking beyond the individual player to the overall environment in which they are developing, little consideration was given by the study participants to how the desired characteristics were developed.

The Stonebridge Rugby Union has clearly documented what the Union wants to achieve from its talent development programmes and initiatives, and this represents the Union's talent development policy. The Stonebridge Union objectives are to have all their representative teams win competitions, promote players to national representation, as well as, develop players for the future. A number of tensions were associated with the Stonebridge Rugby Union's objectives and the impact they had on talent development practices, for example, a focus on the achievement of short-term outcomes. The desire to achieve short-term objectives

also impacted on talent identification practices, with some participants arguing this focus lead to the selection of “here and now players” into age-group representative teams. The tension between selection and development was also evident when participants discussed the age-group development camps, with the camps used for both the development of talent and to select representative teams. The above tensions are supported by research evidence that describes development as non-linear and does not support the selection of physically mature players to achieve short-term outcomes or the transition of junior performance to adult elite performance (Abbott et al., 2005; Button, 2011; Meylan et al., 2010). It was also found however, that one of the Union’s talent development policies is to engage more players in development opportunities by selecting more than one representative team at each age-group level.

The Stonebridge Rugby Union implements talent development opportunities through the operation of a High Performance Academy, representative teams, and age-group development camps. A key talent development policy (and practice) of the Union is the implementation of the NZRU’s Six Pillar Development Model in its High Performance Academy. The development areas included in the NZRU model reflect a multidisciplinary approach to development and a multidimensional and dynamic concept of talent (Abbott et al., 2005). However, this study identified a number of tensions and limitations with the operationalisation of the Stonebridge Rugby Union talent development practices. The ongoing monitoring and assessment of players was identified as one limitation with the operation of the High Performance Academy. The expectation players’ physical test scores and measurements should continually be tracking upwards and improving, as well as compared to normative data, is incongruent with the literature that supports the individual and non-linear nature of talent development (Abbott, et al., 2005; Araújo et al., 2010; Bergeron et al., 2015; Phillips et al., 2010).

An ecological approach to talent development highlights the impact environmental factors have on an individual's development. This study supported the impact of environmental factors, for example parents and peers, on the developing individual and were found to be significant to the implementation of Stonebridge's talent development policies and practices. In addition to the immediate influences on an individual player's development, it was also found wider, more external influences, for example the actions of other Super Rugby Franchises, Provincial Unions, and sporting codes, as well as the larger rugby environment were influential on both talent development and talent identification policies and practices.

Implications for Practice

The findings of the present study identified a number of implications for practice. The first practical implication is the description of the criteria practitioners are looking for when identifying talent. The study found practitioners are placing increasing emphasis on the psychological and behavioural characteristics of players, and defined these characteristics as determining a player's character. However, practitioners need to be aware of the limitations and tensions of implementing these criteria in practice and the subsequent subjective and interpretative nature of assessing and measuring a player's talent. In particular, practitioners need to be aware of the problematic nature of utilising set criteria to make judgements on a player's character and their potential to become an elite player. This is consistent with the findings of Kelly and Hickey (2008) study who noted that selecting for character has become embedded in the language of talent identification practice and questioned the implications of such a practice.

A second practical implication from this study is the importance of practitioners understanding the dynamic, non-linear, individual nature of talent development. This study

highlighted how the implementation of talent identification and development policies and practices were often incongruent with literature that supports the individual and non-linear nature of talent development (Abbott, et al., 2005; Araújo et al., 2010; Bergeron et al., 2015; Phillips et al., 2010). This study demonstrated practitioners should avoid focusing on the achievement of short-term objectives and differentiate between performance dispositions and the potential/capacity of an individual to develop. In addition, practitioners should acknowledge and understand a player's development, whilst participating in talent development programmes, cannot move in a predictable linear fashion toward some predetermined end point based on expectations of development.

Finally, the findings of the present study provide further evidence of the complex, dynamic, interactional nature of talent identification and development. As well as providing evidence for understanding the significant influence of the overall environment on the development of an individual player's talent. The findings demonstrate the practical challenges and complexities of player talent identification and development and provide support for a multidimensional and dynamic concept of talent and an ecological approach to talent development and talent identification.

Future Research

Identified limitations of the present study provide insight into opportunities for future research. Limitations of the present study are identified as the absence of player and parent voice to gain their perspective of the implementation of the Stonebridge Rugby Union's talent identification and development policies and practices and how they impact on a player's development. In addition, it would be beneficial to investigate players selected for age-group rugby union representative sides who transitioned (and those who didn't) to elite levels of performance, as well as, players selected for elite level teams who did not play for an age-

group representative team. Future research investigating the perspective of player and parent experiences of talent identification and development in a NZ rugby context, as well as, investigations into the transition (or lack of) of players from age-group teams to ITM Cup and Super Rugby environments, could fill this gap and build on the present study. One theme that arose from the interview data was the role of secondary school sport and the practice of schools operating academy programmes. The parameters of the present study did not allow the investigation of this theme, however, future research could provide insight into talent identification policies and practices implemented in the NZ secondary school context.

The lack of evidence based research investigating talent identification and development in NZ, and more specifically in the rugby union context, has enabled the present study to contribute to the body of literature in the area of talent identification and development. However, given the present study's findings which illustrate the practical complexities of a multidimensional and dynamic approach to talent, and the significant influence of the overall environment on the developing individual, further research conducted in the NZ context would advance our understanding, and inform decisions about, the effectiveness of talent identification and development processes. In particular, future research on the impact of the relative age effect (RAE) on NZ rugby union is recommended. The findings of this study also highlight the emphasis placed on a player's character and behaviour characteristics when talent identification policies are implemented in practice. Further evidence based research on the role of character and behaviour characteristics and the subsequent impact on elite performance in a NZ rugby setting is warranted.

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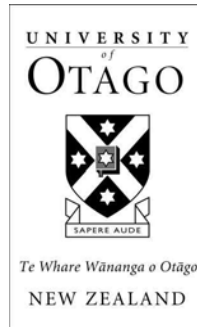
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APPENDIX

[Reference Number: *D14/378*]
[27th August 2014]



TALENT IDENTIFICATION AND DEVELOPMENT: AN INVESTIGATION INTO THE POLICIES AND PRACTICES OF ONE NEW ZEALAND RUGBY PROVINCIAL UNION

INFORMATION SHEET FOR PARTICIPANTS

Thank you for your interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part, there will be no disadvantage to you and we thank you for considering our request.

What is the aim of the project?

This project is being undertaken as part of the requirements for Andrew Hewetson's Master of Physical Education degree.

This project aims to investigate the current talent identification and development policies and practices of one New Zealand Rugby Provincial Union.

Based on the research aim the following research questions will be answered:

1. What policies and practices are utilised by relevant staff members within one Provincial Union to identify and develop rugby union talent?
2. How are the talent identification and development policies and practices implemented within this Provincial Union?

What types of participants are being sought?

Six participants are being invited to be interviewed; specifically, the Super Rugby Franchise and Provincial Union High Performance Managers, the Provincial Union Rugby

Development Manager and Coach Development Manager, one Provincial Union Rugby Development Coach, and the Provincial Union ITM Cup Head Coach.

The six participants either belong to, or are associated with, one New Zealand Provincial Union which has been purposively selected to participate in the study. Having a single case provides an opportunity to investigate the talent identification and development policies and practices of the Union in sufficient depth to provide a rich, holistic description and analysis. The criteria used to select the NZ Provincial Union were:

- Has a High Performance Academy Programme where players are contracted to the Provincial Union on Provincial Union Development (PUD) contracts;
- Competes in the top tier of the National Provincial Competition and is represented in regional/national age group competitions;
- Has fulltime staff who have responsibilities for talent identification and development, i.e.;
 - o High Performance Manager,
 - o Rugby Development Manager,
 - o Rugby Development Coach,
 - o Coach Development Manager,
 - o ITM Cup Head Coach
- Has a direct relationship with a Super Rugby Franchise High Performance Manager with responsibilities in talent identification and development.

What will participants be asked to do?

Should you agree to take part in this project, you will be asked to:

- Make yourself available for a one on one interview, at a time and place convenient to you, which will take approximately 60 – 90 minutes;
- Provide documentation which contains relevant information on the Provincial Union's talent identification and development policies, systems and practices;
- Provide policy documents you use to inform the talent identification and development systems and practices.

Please be aware that you may decide not to take part in the project without any disadvantage to yourself.

What data or information will be collected and what use will be made of it?

In order to address the research questions both semi-structured interviews and document analysis will be carried out.

Semi-structured interviews: as a participant you will be asked a series of questions using an interview guide approach. This will include pre-determined questions on the topic of talent identification and development, but the majority of the questions that will be asked have not been determined in advance and will depend on the way in which the interview develops. Consequently, although the School of Physical Education, Sport and Exercise Sciences is aware of the general areas to be explored in the interview, the Committee has not been able to review the precise questions to be used.

In the event that the line of questioning does develop in such a way that you feel hesitant or uncomfortable you are reminded of your right to decline to answer any particular question(s).

Data collected from interviews will be recorded, later transcribed and returned back to the participants to edit, comment or correct before data analysis can begin.

Document analysis: Documents provided by participants will be analysed in conjunction with the interview data.

The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve your anonymity and that of the Provincial Union. You are most welcome to request a copy of the results of the project when completed.

The data collected will be securely stored in such a way that only those mentioned below will be able to gain access. At the end of the project any personal information will be destroyed immediately except that, as required by the University's research policy, any raw data on which the results of the project depend will be retained in secure storage for five years, after which it will be destroyed.

Can participants change their mind and withdraw from the project?

You may withdraw from participation in the project at any time and without any disadvantage to yourself.

What if participants have any questions?

If you have any questions about our project, either now or in the future, please feel free to contact either:-

Andrew Hewetson
School of Physical Education
Telephone Number:- (09) 8154321
Email Address: ahewetson@unitec.ac.nz
vania.cassidy@otago.ac.nz

and

Dr Tania Cassidy
School of Physical Education
Telephone Number:- (03) 479 9070
Email Address:

This study has been approved by the Department stated above. However, if you have any concerns about the ethical conduct of the research you may contact the University of Otago Human Ethics Committee through the Human Ethics Committee Administrator (ph. 03 479-8256). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.

*TALENT IDENTIFICATION AND DEVELOPMENT: AN INVESTIGATION INTO THE
POLICIES AND PRACTICES OF ONE NEW ZEALAND RUGBY PROVINCIAL UNION*

CONSENT FORM FOR PARTICIPANTS

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:

1. My participation in the project is entirely voluntary;
2. I am free to withdraw from the project at any time without any disadvantage;
3. Personal identifying information (audio-tapes, observations) will be destroyed at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage for at least five years;
4. As a participant I am aware I will be asked a series of questions using an interview guide approach. This will include pre-determined questions on the topic of talent identification and development, but the majority of the questions that will be asked have not been determined in advance and will depend on the way in which the interview develops. In the event that the line of questioning does develop in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s) and/or may withdraw from the project without any disadvantage of any kind;
5. As a participant I am aware any documents I provide the researcher will be analysed and may be used in the results of the project;
6. The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve my anonymity and that of the Provincial Union.

I agree to take part in this project.

.....

(Signature of participant)

.....

(Date)

.....

(Printed Name)



