

Fun in Youth Rugby: A Mixed-Methods Study

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Abstract

Research has identified fun as the central reason youth participate in sport and lack of fun as the primary reason they drop out (Crane & Temple, 2015; Visek et al., 2015). The role of fun in youth sport has gained growing attention from sport organisations. Sport New Zealand, New Zealand's Government's sport sector agency, has developed Balance is Better, an approach to youth sport emphasising fun and skill development (Sport New Zealand Ihi Aotearoa, 2021a). Understanding the factors that influence fun will inform policy and practice like Balance is Better and the design of Modified Sports.

The purpose of this research was to contribute to what is known about fun in youth sport by examining the construct of fun in the context of rugby. Five research questions were investigated: (i) Why do youth play rugby?, (ii) What do youth find fun about rugby?, (iii) What are the important fun facilitators for youth playing rugby in New Zealand?, (iv) Can players be segmented based on how they perceive the importance of *fun facilitators*? If so, are these perception differences associated with differences in specific characteristics of a player's Intrapersonal Profile? and (v) What are the important *fun inhibitors* for youth playing rugby in New Zealand?

The study took a pragmatic mixed-methods approach to the study of fun. In the Qualitative Stage of the study, 13 boys, age 13-16, took part in semi-structured group interviews. From these interviews, *Core Fun Elements* of rugby were identified along with factors positively (*Fun Facilitators*) and negatively (*Fun Inhibitors*) influencing fun in New Zealand youth rugby.

In the Quantitative Stage, a questionnaire was used to collect data on the importance of *Fun Facilitators* and *Fun Inhibitors*, along with demographic, psychographic and behavioural data associated with a player's Intrapersonal Profile. A total of 527 boys aged 12-17 completed the questionnaire. These data were analysed to identify the importance of *Fun Facilitators* and *Fun Inhibitors*. T-test, ANOVA and correlation analyses were used to investigate how Intrapersonal Profile variables related to the

player's perceptions of *Fun Facilitator* importance. Cluster analysis was used to identify players that perceived Fun Facilitators importance similarly. The t-test, ANOVA and the cluster analysis results were then compared to characterise these groups further and relate *Fun Facilitators* perceived importance to aspects of an individual's Intrapersonal Profile.

The evidence generated from the study shows that fun is the number one reason male youth play rugby. Furthermore, four *Core Fun Elements* of youth rugby were identified: *Physical Contact, Ball Play, Brotherhood, and Game Highlights*. The *Fun Facilitators* of primary importance were found to be associated with: *Positive team dynamics, Positive player attitudes, Learning and development, and Positive coaching*. These *fun facilitator* themes align with key literature informing the present study (Visek et al., 2015). Important *Fun Inhibitors* were *Bad or biased referees and Dirty players*.

A proposed model of Fun in Youth rugby is offered as a synthesis of the findings of this study. The model involves the six fun related themes (the four *Core Fun Elements* of rugby, *Fun Facilitators*, and *Fun Inhibitors*) and their relationship to increased or reduced fun while playing youth rugby. The proposed Fun in Youth Rugby model also integrates elements of the Hierarchical Model of Leisure Constraints (Crawford & Godbey, 1987, Crawford et al., 1991). This Hierarchical Model of Leisure Constraints outlines how an individual's Intrapersonal Profile determines what an individual likes and therefore finds fun. Within the Fun in Youth Rugby model, a relationship is proposed between the six fun related themes and the Intrapersonal Profile of an individual. It is concluded that the alignment of a player's Intrapersonal Profile with the four thematic *Core Fun Elements* may have a significant role in determining if, and how much, an individual finds rugby fun. It is also suggested in the model that *Fun Facilitators* and *Fun Inhibitors* may enhance or reduce the fun experience of youth rugby players and that the importance of these *Fun Facilitators*, and potentially the *Fun Inhibitors*, may differ based on the player's Intrapersonal Profile.

These findings, the proposed model and the conclusions have implications for sport delivery, design and modification. Firstly, care should be taken when altering the game

of rugby in a way that impinges on four *Core Fun Elements* of youth rugby, since player's fun and the attractiveness of the game to players may be affected. Secondly, to attract new players to a Modified Sport, due consideration needs to be given to the *Core Fun Elements* of the Modified Sport and how they may be perceived by the targeted players. Thirdly, to optimise a positive fun environment and experience for youth rugby players administrators need to focus on players, referees and coaches. The emotional and social competence of coaches is as important to player's fun as the coach's technical skills. Referees also have a key role to play in the fun experience of players. The availability of competent unbiased referees at all levels of youth rugby is very important to the overall fun experience of players. Lastly, a focus on developing players' skills and attitudes, and eliminating 'dirty play', are other key factors in maximising the fun experience of youth rugby players.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.



Signed _____

Gary Putt

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Ethical Approval

Ethical approval was gained from Auckland University of Technology Ethics Committee (AUTEC) on 22nd March 2018, ethics application number: 18/93 and amendments were approved on 12th September 2018 (Appendix B).

Chapter 1 Introduction

1.1 Researcher Background

Research and researchers have a context. A researchers' worldview impacts the research questions they ask, how they are asked, and how results are interpreted and presented (Guba & Lincoln, 1994). Five and a half years ago I went through a very tough time. This caused me to think deeply about my life and what it was about. I thought about why I was not enjoying life, what had given me joy and what I had found fun.

When I thought about fun, I remembered my childhood. Sport had been important to me, particularly cricket. I am still passionate about cricket. I remember labouring through the school week with my eyes firmly on the weekend. The weekend was when I would get out on the cricket field having fun. As a youth and a young adult, I played many sports and did so because they were fun. Some I enjoyed more than others. Some I was better at than others, but I played all because I enjoyed each of them. I found them fun.

I played rugby until I was 11 or 12 and found it a lot of fun. I then had a year with a coach I did not enjoy. His negative comments, the lack of playing time I got, and playing out of my favourite position contributed to my losing confidence in my rugby ability and reducing the fun I felt. When we finished that season, I wandered across the field and looked at the next team up in the club and thought how big they looked. I thought next year's rugby does not look like it is going to be that much fun. I did not play the next couple of rugby seasons, then went and played soccer. I scored in my first game, enjoyed it and never went back to rugby. Yet with cricket, it was always fun even when times got difficult. I never stopped playing cricket because it was not-fun.

These memories of fun in youth sport and the enjoyment I got out of coaching my son's cricket teams led me to study sport leadership and management. During this study, two things captured my interest, talent development and sport participation. Part of what intrigued me was exploring if and how they are related. Having strong elite teams is at

least somewhat dependent upon having strong youth participation. Much of youth sport is played in High Schools rather than sports clubs in New Zealand. The focus in High Schools seems often on the elite sport teams, the rest considered social and often ignored beyond simply facilitating participation.

Several theories emerge in the body of related research as to why individuals are motivated to participate in sport. I saw lots of justifications why sport participation was important to governments and sporting organisations, and even to an individual's health and fitness. However, one thing stood out to me. That was the conclusion, that fun was the primary reason that youth and children play sport. My first response to that was, *that is obvious*, why did we need research to work that out?

However, a couple of things intrigued me about fun. First and foremost, fun is important. Fun is not frivolous or simply being silly, which is how some perceive it when they become adults. Fun in itself is an important outcome of playing sport. It is why most of us play. Second, there had been very little research examining fun in sport, and specifically individual sports, nor much research on what factors contribute to or influence fun in sport.

Vissek et al. (2015) was the first detailed study on fun in youth sport, and for me, it further stimulated my interest and raised many questions. Were these results from soccer players in the United States applicable to New Zealand and in different sports like rugby? Vissek et al. called the 81 statements coming out of their research 'fun-determinants'. But do these 81 fun-determinants determine fun, or are there specific core attributes of a sport that make the sport fun to play (*Core Fun Elements*), while the 81 fun-determinants merely influence the fun experience? If there are *Core Fun Elements* of a sport like rugby, what are they and how do they differ from related sports such as rugby league or touch or very different sports like football? If they exist, are these sport-specific *Core Fun Elements* why a participant prefers one sport over another? Then, is this preference due to whether or how much an individual perceives these *Core Fun Elements* to be fun for them and is that perception related to the personality, physical characteristics, beliefs and perceived skill/competence of an individual? Finally, would

all of the above knowledge help in the design of Modified Sports to attract new/different groups of children and youth to sport?

While I recognise that research for the sake of research is interesting and exciting, I have always been interested in the impact research can have. My first degree was a pure science degree. My second postgraduate degree focused on product development, combining technology development, marketing and consumer research. My working career has been with research organisations in roles focussed on bringing in external research funding and creating impact from that research. That combination of university and work experience, together with my history with youth sport as a player and coach, led me to think about the importance of understanding fun both at the sport-specific level (product) and at the individual and group level (customer). It also influenced my decision to focus solely on what youth rugby players (the direct consumer) thought about fun and not-fun experiences while playing. Understanding youth perceptions could lead to better sport design, specifically targeted to meet the needs and perceptions of the youth population and groups within it. It could also lead to improved delivery of fun by coaches, referees, high schools and sports organisations (the producer or manufacturer) in existing sports. These outcomes could, in turn, lead to greater retention of participants and even new sport participants. Thus, I embarked on this study of fun in youth sport.

1.2 Research Context

Understanding sport participation levels and trends, as well as what influences participation, is important (Eime et al., 2015). Since the 1980s there has been considerable research focused on the motives of sport participants (Crawford et al., 1991; Lavalley et al., 2012; Nicholls, 1984; Rottensteiner et al., 2015; Scanlan, et al., 1993; Visek et al., 2015; Weinberg & Gould, 2011; Weiss & Chaumonton, 1992). The key conclusions coming out of this research are that fun is the primary driver of youth sport participation (Allender et al., 2006; Visek et al., 2015), and lack of fun the primary reason children and youth drop out of a sport (Crane & Temple, 2015; Kelley & Carchia, 2013). Knowing sport participation is affected by fun and lack of fun makes it important to

understand a whole range of factors. These include: what players perceive as fun about a sport; what factors positively and negatively influence a player's perception of fun; how important are fun influencing factors to players perceptions of fun; do the importance of these factors differ between players; and are there aspects of an individual's profile (physical, mental, emotional, values and beliefs) that drive these different perceptions?

There has been considerable debate around the conceptualisation of fun as a psychological construct. An exclusive definition or measure of fun has not evolved (Wankel, 1997). However, a single definition of fun may not be important. What is important, is how each person perceives and experiences fun for themselves. Crawford et al. (1991) in their Hierarchical Model of Leisure Constraints set out the idea that an individual's beliefs, psychology, values, physical attributes, competencies and masteries (their Intrapersonal Profile) directly affect what an individual likes or does not like, their preferences. This Intrapersonal Profile may also affect the degree of fun an individual experiences when participating in a sport or other activity. The ideas embedded within the Hierarchical Model of Leisure Constraints implies that the experience of fun will differ between individuals. This concept of individual perceptions and experiences of fun is supported by Hopple (2015), who suggested that children may differ in the factors that are important to their having fun. Hopple also suggested that the importance of these 'fun factors' may be difficult to predict. On the negative side of fun, not-fun experiences may also impact the overall fun experience. Hopple looked at not-fun factors in younger children's physical activity, however, limited research has so far focussed on factors that reduce fun in youth sport.

Exploring fun, Vissek et al. (2015) undertook a detailed study looking at the determinants of fun in youth sport context with soccer players, parents and coaches in a small region of the United States. They identified 11 fun-factors and 81 fun-determinants affecting soccer player's fun experiences. Further analysing this data (Vissek et al., 2018, 2020), Vissek et al. uncovered subtle differences between how players, coaches and parents perceived the importance of these fun-determinants. In contrast to the suggestion by

Hopple (2015) above, however, the differences between groups of players based on sex, age or level of play were relatively small (Vissek et al., 2020). The limited differences between these groups should not be unexpected. As Scanlan (1993) pointed out in their earlier study of enjoyment, players who have chosen to play sport typically tend to view their current involvement in sport positively, therefore it is not unreasonable to expect constrained variances in the data. However, small but significant differences in perception may be important signposts to operational initiatives and priorities, as well as to targeted delivery of sport to different groups of players.

As noted above, the Vissek et al. (2015, 2018, 2020) related papers pointed to a range of interesting questions for future studies. Firstly, are the results of the Vissek et al. study transferrable to other sports, countries and cultures? What factors reduce fun in youth sport? Integrating Vissek et al.'s study with that of Crawford et al. (1991) Hierarchical Model of Leisure Constraints, is the importance of fun-determinants associated with demographic or psychographic variables related to a player's Intrapersonal Profile, or other factors separate from biological sex, age and level of play? If this is so, can players be segmented or clustered into different groups and sports delivery customised to meet their needs? The opportunity to pursue some of these questions provided the impetus for the present study.

1.3 Research Significance

Accepting fun is the major reason youth play sport, it follows that fun also drives sport participation. Due to the benefits that derive from increased participation, increasing sport participation is a goal for Governments and sport organisations. These perceived benefits include healthier and more dynamic sports, elite success, improved physical and mental population health.

For national sporting bodies, higher participation numbers contribute to a healthier sport and organisation, a higher public profile, more spectators interested in the game and a wider player base for the elite programme (Sport New Zealand Ihi Aotearoa, 2019, 2020a). Success at the elite international level draws government and commercial

funding to a sport (New Zealand Herald, 2015; High Performance Sport New Zealand, 2019, 2021).

Maintaining and raising sport participation during adolescence also has important benefits at several levels of society. International evidence shows that sport can deliver mental, emotional, physical, financial, and social benefits to the individual (Sport New Zealand, 2017). However, insufficient physical activity is now common in developed countries such as New Zealand, Australia and the United States (Eime et al., 2015; Tucker et al., 2011). Lack of physical activity is considered the fourth leading cause of death globally (Kohl et al., 2012). Reduced physical activity contributes to overweight and obesity problems (Eime et al., 2015) and has been linked with several diseases including the obesity pandemic in developed countries (Kohl et al., 2012), heart diseases, stroke, type 2 diabetes, some cancers, depression and osteoporosis (US Department of Health and Human Services, 2008). Maintaining regular physical activity throughout life is important for good physical and mental health (US Department of Health and Human Services, 2008), while continued sport participation through adolescence is important to maintaining physical activity into young adulthood (Perkins et al., 2004; Telama et al., 2014).

Sport participation and active recreation can also contribute to educational outcomes as well as social cohesion (Sport New Zealand, 2017). Economic benefits accrue from sport participation through improved health outcomes and consumer expenditure on sporting goods and events. Employment opportunities also accrue from sport participation while many New Zealanders consider sport participation to be part of the New Zealand culture and identity (Sport New Zealand, 2017).

These benefits from sport participation need to be considered in the context of two important youth sport participation trends. The first of these is the rapid decline in sport participation during the teenage years. The second being static or declining organised sport participation.

International government, industry and peer-reviewed research have found that sport participation rates tend to peak before or in early adolescence, with dropout accelerating during the latter half of adolescence (Athletic Footwear Association, 1990, as cited in Petlichkoff, 1992; Gould, 1987; Sport New Zealand, 2018; Wall, et al., 2011). A study by Sport New Zealand found participation in competitive sport peaks between ages 12–14 and drops significantly between ages 15–17, both in terms of the number of sports played and time spent participating (Sport New Zealand, 2018).

Around the world, organised sport participation rates are static or declining (Allender et al., 2006; Eime et al., 2015; Ifedi, 2008; Vail, 2007; Wallerson 2014). New Zealand participation in adult sport and physical activity shows a downward trend. A Sport New Zealand (2018) report showed declines in adult participation in sport and active physical activity (7.7%), and more so in young adults (13.9%). Sports club membership declined by 11.1 %.

In terms of youth rugby, teenage participation in club and school rugby in New Zealand has shown a steady decline among 14-18-year olds, with the greatest decline in Auckland (Colmar Brunton, 2014). Secondary School Sports Council statistics showed a 29 per cent decline of teenage rugby player numbers in Auckland between 2012 and 2014, including 848 fewer males (Napier, 2015). Over the period 2013 – 2018, the number of Secondary School rugby teams in Auckland reduced from 225 to 181 (New Zealand Rugby, 2019). The New Zealand Rugby review of Secondary School Rugby (New Zealand Rugby, 2019) also highlighted a reduction in North Harbour teams (just over the Harbour Bridge from Auckland) in the same period.

Given these trends under current approaches to sport participation, a new approach is needed to reverse these current trends and to reduce dropout. As fun is the number one reason youth play sport, putting improvements to participants fun experience at the centre of sport management policies and practices could result in improved participation numbers and reduced dropout. A more nuanced and in-depth understanding of fun could inform new strategies for sport delivery. Alternate sport delivery design in which fun attributes align with new participant Intrapersonal Profile

would be innovative. Improving participation policies and practices at the youth level would support both grassroots participation and elite success (Snyder, 2014, as cited in Visek et al., 2018a).

Fun in youth sport has gained growing attention from sporting bodies. Sport New Zealand, the New Zealand Government's sport sector agency, has developed Balance is Better, an approach emphasising fun and skills development for youth sport participants (Sport New Zealand Ihi Aotearoa, 2021a). Fifteen New Zealand National Sport Organisations (Rugby, Cricket, Football, Hockey and Netball, Athletics NZ, Badminton NZ, Basketball NZ, Golf NZ, Gymnastics NZ, NZ Rugby League, Softball NZ, Touch NZ, Volleyball NZ and Waka Ama NZ) have joined the Balance is Better initiative, pledging collective and individual action in support of it (Sport New Zealand Ihi Aotearoa; 2020, 2021).

Sport New Zealand developed the 'Balance is Better' evidence-based philosophy to inform and provide a sport framework in New Zealand that puts the needs of the participant first. This philosophical approach focuses Sport New Zealand's participation strategies on why young people play sport, which is to have fun, to be challenged, to develop and improve, to be part of a team or group, and to enjoy time with friends (Sport New Zealand, 2021a).

To give effect to this 'Balance is Better' philosophy, Sport New Zealand is working with the National Sport Organisations and supporting them to bring about change by providing quality sporting experiences for young people aged 5-18. This philosophical approach includes both highly competitive young people aiming at elite sport and those who are playing just to have fun. Sport leaders, coaches, administrators, teachers and parents involved in delivering youth sport in New Zealand are all being encouraged to adopt the 'Balance is Better' philosophy.

Sport New Zealand and the National Sporting Organisations have committed to a range of strategies and actions to give effect to this Balance is Better philosophy including:

- Ensuring all young people can receive a quality sport experience, irrespective of the level at which they are involved.
- Leading attitudinal and behavioural change among the sport leaders, coaches, administrators, parents, and caregivers involved in youth sport.
- Providing leadership to support changes to competition structures, participation, and athlete development opportunities.
- Sports and schools identifying young talent later in their development, rather than sooner.
- Reviewing the role and nature of national and regional representative selections and tournaments to ensure skill development opportunities are offered to more young people.
- Supporting young people to participate in a range of activities and play multiple sports.
- Raising awareness of the risks of overtraining and overloading and proactively managing workload.
- Working collaboratively to encourage the widest possible change for the wellbeing and sport participation of young New Zealanders.
- All New Zealanders having the right to participate in sport in an inclusive, fair and safe environment.

Knowing what influences fun in the youth sports experience will aid initiatives like this, enabling sport managers and coaches to positively influence fun in youth sport and through that participation.

1.4 Research Purpose, Goals and Research Questions.

The overall purpose of this study was to examine the construct of fun in the context of youth rugby. Within this overarching purpose, the researcher's goal was to contribute to the understanding of fun in youth sport by confirming, extending and deepening the research of Visek et al. (2015, 2018, 2020). Confirming Visek et al. by exploring fun in a different sport, rugby, in a different country, New Zealand. Extending and deepening Visek et al. firstly by identifying the core elements of the sport of rugby that make it fun

to play. Secondly, by identifying factors that negatively contribute to the fun variable by being fun-inhibitors or not-fun for youth when playing rugby. Thirdly, by exploring differences in player's perceptions of *Fun Facilitator* importance and whether these differences are associated with characteristics of a player's Intrapersonal Profile.

Based on the previous research outlined earlier in this chapter, several premises were identified which underpin this research: (i) That youth play rugby primarily because they wish to experience fun, (ii) That there are core elements of rugby *Core Fun Elements* that make playing rugby fun for youth, (iii) That there are factors associated with playing rugby that facilitate (*Fun Facilitators*) or inhibit fun (*Fun Inhibitors*) for youth, (iv) That players perceive individual *Fun Facilitators* and *Fun Inhibitors* to be of differing importance to fun, and (v) That based on the characteristics of player's Intrapersonal Profile rugby players may perceive *Fun Facilitators* and the *Fun Inhibitors* to be of more or less importance.

With that intent and those premises in mind, it was important within this research to firstly understand the place of fun amongst the reasons why youth play rugby (RQ1 below). The expectation being, based on previous research in youth sport participation, that fun would be the predominant reason (Allender et al., 2006; Visek et al., 2015). However, it was important to confirm the role of fun in youth rugby participation, since the importance of fun in participation underpins the importance of the other research goals in this study and funs importance to youth participation in rugby.

With that foundation, an important aspect of the study was to identify the core elements of rugby contributing to youth having fun while playing (RQ2 below). Based on the research of Visek et al. the expectation was that multiple factors would be found that contribute to a fun variable and a youth rugby fun experience. However, there could be core elements of a sport, including rugby, which form the *Core Fun Elements* for youth in choosing to play that sport. Based on the research of Crawford et al. (1991) and their Hierarchical Model of Leisure Constraints, individuals with differing Intrapersonal Profiles may differ in their view of whether the *Core Fun Elements* of a sport are fun or how much fun, and therefore of the sport's attractiveness to play.

Identifying the important factors that positively influence a player's fun experience, *Fun Facilitators*, while playing rugby, then understanding how players perceive the relative importance of these factors to having fun, was another intention of the research (RQ3 below). This intent was similar to the research of Visek et al. (2015) but was undertaken to understand the similarity and therefore transferability of Visek et al.'s results to other team sports such as rugby. The results from this aspect of the research were also intended to uncover any distinct groups of youth rugby players that differed in their perceptions of the importance of these *Fun Facilitators* and investigate whether these differences were associated with characteristics of their Intrapersonal Profile (RQ4 below).

The final planned intent of this study of fun was to identify important factors that negatively contribute to the fun variable (RQ5 below). That is, those factors that are *Fun Inhibitors* or not-fun when playing youth rugby. These *Fun Inhibitors* run counter to the positively influencing fun factors in their effect on the fun variable and may contribute to dropout and reduced participation. It was hoped that by examining the construct of fun in the context of youth rugby in this way, that rugby administrators would gain new insights on how to design and deliver the rugby experience to maximise fun for participants.

The research was therefore guided by the following research questions:

1. Why do youth play rugby?
2. What do youth find fun about rugby?
3. What are the important *Fun Facilitators* for youth playing rugby in New Zealand?
4. Can players be segmented based on how they perceive the importance of *Fun Facilitators*? If so, are these perception differences associated with differences in specific characteristics of a player's Intrapersonal Profile?
5. What are the important *Fun Inhibitors* for youth playing rugby in New Zealand?

1.5 Methodology

This research used a pragmatic mixed-methods approach, utilising both quantitative and qualitative methods to address the research questions. The qualitative component involved group interviews and thematic analyses to explore player's perceptions of what was fun about rugby and what factors contributed positively and negatively to fun in youth rugby. Thirteen boys, age 13-16, participated in the qualitative part of the study. Based on the themes found in the participant responses, an initial model for fun in youth rugby was developed.

In the quantitative research component, a questionnaire was used to collect data on the importance of *Fun Facilitators* and what are the important *Fun Inhibitors*, along with potentially relevant demographic, psychographic and behavioural data. These respondent data included variables contributing to understanding an individual's Intrapersonal Profile (refer Section 2.8.1 Hierarchical Model of Leisure Constraints). A total of 527 boys aged 12- 17 participated in this part of the study. The data were analysed to firstly find the importance of *Fun Facilitators* and the important *Fun Inhibitors*. T-test analyses were used to investigate how demographic, psychographic and behavioural data, including those associated with an individual's Intrapersonal Profile, related to perceptions of *Fun Facilitator* importance. Cluster analysis was used to find groups of players that differed in their perceptions of *Fun Facilitators* importance. The t-test and the cluster analysis results were then compared to characterise these groups further and the results related to aspects of Intrapersonal Profiles.

Both the qualitative and quantitative results informed a proposed model for fun in youth rugby. Finally, suggestions were made for sport managers in implementing the findings and future research that might be undertaken.

1.6 Thesis Structure

This thesis is set out in six chapters. This first chapter is an introduction to the context, purpose, research questions, and methodology. Chapter 2 is an examination of relevant

academic literature across a range of youth sport participation related topics. Firstly, the range of benefits accruing from sport participation and current trends in youth sport participation rates are outlined. This literature provides a strong justification for the importance of this research. The literature review then outlines how fun is the primary reason youth play sport and lack of fun the primary reason for dropping out. Then, research into the concept of fun in youth sport is detailed. Finally, links are made between fun and other sport participation theories and models. Of particular note is that of Crawford et al. (1991) and their Hierarchical Model of Leisure Constraints (refer Section 2.8.1).

In Chapter 3 the theoretical perspectives that influenced the mixed methods research design adopted in this thesis are given. Next, an overview of participants in the study and how they were recruited is provided. Then the rationale, purpose, design and detailed methods used in the research are set out. Chapter 3 concludes with an outline of the ethical considerations and practices in the study.

The findings, analyses and discussion of the qualitative data are set out in Chapter 4. The construct of fun in youth rugby is examined and the research questions: 'Why do youth play rugby?' and the 'What do youth find fun about rugby' are addressed. The positive and negative factors that affect fun for youth playing rugby are also explored in this chapter. The research results are then discussed considering the earlier academic literature on sport participation and fun in youth sport. Finally, an interim model of fun in youth rugby based solely on the qualitative results is proposed.

In Chapter 5, the results and analyses of the quantitative questionnaire data are presented. These are then discussed in the context of the research questions – 'What are the important *Fun Facilitators* for youth playing rugby in New Zealand?', 'Can players be segmented based on how they perceive the importance of *Fun Facilitators*? If so, are these perception differences associated with differences in specific characteristics of a player's Intrapersonal Profile?' and 'What are the important *Fun Inhibitors* for youth playing rugby in New Zealand'. In the discussion of the results and analyses, comparisons and contrasts are drawn with earlier research.

The qualitative and quantitative results then feed into Chapter 6 Summary, Conclusions and Recommendations. In Chapter 6, conclusions from the quantitative study (Chapter 5) are integrated with those of the qualitative study (Chapter 4), to propose and discuss an updated model for fun in youth rugby. The limitations of the research are then discussed, and suggestions are made for further research. Finally, for sport managers in schools and sport organisations, insights and recommendations for implementation of the research results are made to enhance fun and hopefully encourage participation and reduce dropout.

Chapter 2 Literature Review

2.1 Introduction

Fun in youth sport is the focus of the literature review. The review firstly describes the benefits of and current trends in youth sport participation. Then the link between fun, not-fun and sport participation is discussed. To set out and provide the context and basis for the current research, and to highlight the novelty of the present study, the review then focuses on the current state of knowledge on motivations for participation and fun in youth sport.

In the first section, the benefits of sport participation and participation trends are set out to establish the importance of the present study and to highlight the need for, and challenge of, maintaining and growing participation numbers during adolescence. Fun is central to this thesis, so the concepts of fun and enjoyment are discussed next. The review summarises the evidence that fun is the number one reason that youth play sport and 'lack of fun' is the number one reason that youth stop playing sport. Then the review outlines the research which has investigated the concept of fun in youth sport. In particular, the research of Visek et al. (2015, 2018, 2020) is summarised. This research generated the Fun Integration Theory and provided the primary foundation upon which this thesis builds.

Five relevant sport participation/motivation theories and models are detailed. These theories and models have important connections to the concept of fun as a strong motivator for sport participation and with factors that may influence player's fun experience while playing youth sport. Visek et al. (2015) identified the connection between elements of these theories and their Fun Integration Theory. The relatedness of these theories to fun and the research in this thesis is explored later in the chapter (refer Sections 2.8.1 Hierarchical Model of Leisure Constraints; 2.8.2 Competence Motivation Theory; 2.8.3 Achievement Goal Theory; 2.8.4 Self Determination Theory; 2.8.5 The Sport Commitment Model).

The literature review chapter concludes with an overview of how the present study explores the transferability of Visek et al. (2015, 2018, 2020) results from youth soccer in a small region of the United States to youth rugby in New Zealand. Then, how this research significantly extends the current research status by examining and identifying: the *Core Fun Elements* of the sport of rugby; groups of players that perceive the importance of *Fun Facilitators* differently and linking these differences to variables associated with an individual's Intrapersonal Profile (refer Section 2.8.1 Hierarchical Model of Leisure Constraints); and identifying *Fun Inhibitors*, factors that negatively contribute to the fun variable when playing youth rugby.

2.2 Benefits of Youth Sport Participation

Sport participants should expect to have a mostly fun experience while playing. Knowledge on how to create a fun sporting environment for children and youth is important in assisting sports managers to achieve this goal for their participants. There is, therefore, heightened interest in this area of research within the sport management field, both because of its potential to positively impact participation rates and because of the benefits that can flow from sport participation.

There has been considerable international research focus on the health and social benefits of sport participation (Bailey et al., 2013a; Bangsbo et al., 2010; Eime et al., 2015; Eitzen & Sage, 2009; Faude et al., 2010; Hardman & Stensel, 2003; Ottesen et al., 2010; Randers et al., 2010; Randers et al., 2010a; Smoll & Smith, 1996). The results of this research highlight the important role sport participation can play in the emotional, financial, intellectual, physical, and social health of both individuals and societies (Bailey et al., 2013a; Hardman, & Stensel, 2003). As little as two to three hours participating in physically active sport per week has shown to result in significant musculoskeletal, metabolic and cardiovascular benefits (Bangsbo et al., 2010; Faude et al., 2010; Randers et al., 2010; Randers et al., 2010a). Other studies have shown psychological, emotional, cognitive, and social benefits of sport participation (Eitzen & Sage, 2009; Ottesen et al., 2010; Smoll & Smith, 1996).

While there are positive benefits from sport participation, it should be noted that sport participation can also have negative impacts. These negative impacts include heightened risk of acute sport and overuse injury, and negative psychosocial outcomes such as increased and binge alcohol consumption, stress, anxiety, and social pressure (Merkel, 2013; Mills et al., 2019). The evidence however indicates that the positives of moderate sport participation and physical activity outweigh the negatives and that potential harm is typically associated with low or high participation (Mills et al., 2019). Merkel (2013) also highlighted that an emphasis on having fun, while balancing physical fitness, psychological well-being, together with lifelong lessons for a healthy and active lifestyle, is important to reducing sport attrition in children and youth.

Due to these and other benefits of sport participation and physical activity, interest in sport participation has gone beyond the sport management research field, to a diverse range of stakeholders who have an interest in and benefit from higher levels of sport participation (Eime et al., 2015). These stakeholders include national and community sport organisations along with local and national government organisations. Within New Zealand, key stakeholders include government organisations such as Sport New Zealand, regional sporting trusts such as Sport Auckland and Active, and national sporting organisations (NSOs) such as New Zealand Rugby (New Zealand Rugby, 2020). Sport New Zealand is the New Zealand organisation responsible for operationalising sport participation strategies on behalf of the New Zealand Government (Sport New Zealand Ihi Aotearoa, 2019) Sport New Zealand is currently driving a new strategy around fun and youth sport participation called Balance is Better (Sport New Zealand Ihi Aotearoa 2020).

Much of sport at the youth level in New Zealand is managed within High Schools and Colleges and through College sport organisations such as College Sport Auckland. These organisations also have an interest in encouraging sport participation. There is currently controversy around some schools focus on the elite sport to the possible detriment of general sport participation (College Sports Media, 2018).

For NSOs, higher participation numbers contribute to healthier sports and organisations. High participation levels provide NSOs with a wider player base and more dynamic environments in both grassroots and elite programmes (New Zealand Rugby, 2019). They also contribute to a higher public profile and more spectators interested in the game. The government's interests overlap with those of NSOs, but Governments also have a keen interest in the national health benefits of sport (Sport New Zealand Ihi Aotearoa, 2019). This potential health and other societal benefits influence government policy to encourage sport participation (Sport New Zealand Ihi Aotearoa, 2019).

Sport New Zealand commissioned a report on the value of sport and active recreation, which outlined international evidence that sport delivered physical and mental health benefits, educational outcomes, and social cohesion (Sport New Zealand, 2017). This study also found sport brought economic benefits from improved health outcomes, consumer expenditure on sporting goods and events, and employment opportunities. Further, it reported that sport can help shape the identity of a country. Some New Zealanders believe that sport defines who New Zealanders are and that sport is part of the national identity, such that sport is "in our DNA" (Sport New Zealand, 2017, p. 19).

2.3 Sport Participation Trends

2.3.1 Introduction to Sport Participation Trends

Two trends in youth sport participation signal both the importance and the urgency of research into fun in youth sport. Firstly, sport participation tends to peak in early adolescence, with dropout accelerating during the latter half of adolescence (Athletic Footwear Association, 1990, as cited in Petlichkoff, 1992; Chalip & Hutchinson, 2017; Gould, 1987; Sapp, & Haubenstrieker, 1978, as cited in Petlichkoff, 1992; Sport New Zealand, 2018; State of Michigan, 1976, 1978, 1978a, as cited in Petlichkoff, 1992; Wall et al., 2011). Secondly, organised sport participation may be static or declining in New Zealand and around the world (Allender et al., 2006, Eime et al., 2015; Ifedi, 2008; Rowe et al., 2004; Wallerson, 2014).

2.3.2 Sport Participation Dropoff During Adolescence

A range of early American studies shows that drop-off in youth sport participation during adolescence is a consistent trend, with indications that sport participation peaks in the early teens and then declines (Athletic Footwear Association, 1990, as cited in Petlichkoff, 1992; Gould, 1987; Sapp & Haubenstrieker, 1978, as cited in Petlichkoff, 1992; State of Michigan, 1976, 1978, 1978a, as cited in Petlichkoff, 1992; Wall et al., 2011). More recently and closer to home, a New Zealand study found participation in competitive sport peaks between ages 12–14, then drops significantly between the ages of 15–17, both in terms of the number of sports played and time spent taking part (Sport New Zealand, 2018). Slowing this decline in participation during adolescence is beneficial, as continued sport participation through adolescence is important to maintaining physical activity into young adulthood (Perkins et al., 2004; Telama et al., 2014).

2.3.3 Decline in Overall Sport Participation

Participation rate research over the last 30 years by mostly government and industry sources has generally indicated that organised sport participation levels have been static or decreasing (Allender et al., 2006; Eime et al., 2015; Ifedi, 2008; Rowe et al., 2004; Wallerson, 2014). This research was undertaken in countries comparable to New Zealand culturally, such as Canada, United States, United Kingdom and Australia. These declining participation levels are often despite significant initiatives attempting to grow participation (Vail, 2007).

Limited academic research into sport participation rates has provided mixed results. Booth et al. (2015) undertook a comprehensive literature review to summarize overall physical activity trends, including those in organized sport. They found only limited research on temporal trends in children's and adolescents' physical activity, and only seven studies investigating organised sport participation trends. All studies of organised sport participation trends they reviewed employed self-report (six) or proxy-report (one) methodologies. These methodologies are open to errors in data collection. These

errors occur through poor recall, misinterpretation of the question and social desirability bias (Booth et al., 2015). The seven academic studies indicate that organised sport participation trends are somewhat inconsistent across countries. Mixed results and inconsistent magnitudes of change were identified. More studies reported an increase in participation than those that reported a decrease – three showed significant increases, two stable or slight increases and two showed declines (Booth et al., 2015). Despite these mixed results for participation rate trends, high dropout rates during adolescence should remain an ongoing concern given the benefits of sport participation and the generally low baseline rates for youth sport participation, (Chalip & Hutchinson, 2017).

In New Zealand, participation in sport and physical activity also appears to be declining. Sport New Zealand (2016) reported declines in participation for adults (18+), especially in young adults. Participation for all adults declined by 7.7% between 1998 and 2014 and by 13.9% for younger adults (18-24 years). The Sport New Zealand study also found sports club membership decreased by 11.1% over this period. In terms of New Zealand rugby, the context for this study, teenage participation in club and school rugby have shown a steady decline among 14-18year-olds (Colmar Brunton, 2014). Total teenage player numbers increased in 2019 after a couple of years of stabilisation (New Zealand Rugby, 2020), however, nationally between 2012 and 2018 U13 – U18 Secondary School male rugby players reduced by 16% (refer Appendix A) (M. Hester, personal communication, September 4, 2019).

This decline in youth rugby has been especially noted in Auckland, where numbers of U13-U18 Secondary School male players had reduced by 20% between 2012 and 2018 (refer Appendix A) (M. Hester, personal communication, September 4, 2019). On the other hand, Secondary Schools Sports Council (NZSSSC) statistics indicate a 29 per cent decline in teenage rugby player numbers in Auckland between 2012 and 2014, including 848 fewer males (Napier, 2015). Other statistics show that in the five years from 2011-2015, the number of boys and girls playing rugby union dropped by 1668 students. This decline was among boys playing rugby, dropping from 9665 in 2011, to 7997 in 2015

(Edens, 2017). Over the period 2013 - 2018 the number of Secondary School rugby teams in Auckland reduced from 225 to 181 (New Zealand Rugby, 2019). The New Zealand Rugby Review of Secondary School Rugby (New Zealand Rugby, 2019) also highlighted a reduction in North Harbour teams (just over the Harbour Bridge from Auckland) over that period.

Some reported declines in participation in specific sports are individuals switching sports (Butcher et al., 2002; Chalip & Hutchinson, 2017). This raises interesting questions. What are the reasons behind these changes in sports? Is this just trialling multiple sports or are these changes in sport participation driven by perceptions of fun attracting youth to a new sport or is lack of fun in the current sport driving them away, or a combination of both? To develop strategies, policies, and practices to drive participation up, influences on participation, such as fun, and trends in participation need to be understood (Eime et al., 2015). This argument can be applied to sport participation generally or to participation in a particular sport.

Taken together, the benefits of sport participation and participation trends highlight the importance of understanding what motivates children and youth to take part in sport and what causes them to drop out of sport. Furthermore, as part of a deeper and more nuanced understanding of motivations, it follows that there is a need to examine what drives fun or not-fun to create environments to maximise the fun participants have while playing. The benefits and participation trends highlight the importance of finding ways to create a better sport environment to keep more participants in sport and from an NSO perspective within specific sporting codes. This is the overarching sport participation context within which this study is set and indicates why researching fun in sport is both important and gaining significant interest within the sport management research community and sport managers generally.

2.4 Fun and Enjoyment

Researchers have long been intrigued by fun and enjoyment in sport. Jackson (2000, p. 137) said that “Sport always begins as a free-choice activity” and went on to suggest that “sport exists to make us feel good” (p. 137), and we must know more about how sport does this. In sport psychology, most studies on positive sport ‘feel good’ experiences have focussed on two positive emotions, fun and enjoyment (Jackson, 2000). While there have been debates around the concept of fun and enjoyment, there is a general understanding that fun and enjoyment are positive emotional states or positive affective responses (Jackson, 2000). Scanlan and colleagues defined enjoyment as “a positive affective response to the sport experience that reflects general feelings such as pleasure, liking and fun” (Scanlan et al., 1993, p. 275).

Sport psychology has tended to see enjoyment and fun as interchangeable terms, positive emotions generated, in this context, in response to playing sport (Jackson, 2000). Scanlan et al. (1993) and Visek et al. (2018a) also hold that fun and enjoyment are synonymous and may be used interchangeably. Scanlan et al. (1993) also suggested that enjoyment, liking, and fun are all similar terms, having used both fun and liking items to measure enjoyment reliably. Enjoyment has been the main term used in sport literature to describe how people feel about positive sport experiences. Children, however, more commonly use the word ‘fun’ when describing how they feel about their positive sport experiences (Bengoechea et al., 2004).

There has not been an exclusive definition of fun (Wankel, 1997). The lack of an exclusive definition may, however, not be important. As Jackson (2000) poses, “Everyone knows what fun is, right?” (p. 138). Individuals inherently know what fun is when they experience it. What is more important and more challenging is getting beyond sport just being fun (Jackson, 2000) and uncovering the specifics of what it is about sport or a sport that generates fun for individual players.

What stimulates fun may differ from individual to individual. Hopple (2015) found that factors important for fun are specific and unique, differing from person to person.

Hopple also suggests that the importance of these fun factors can be difficult to predict. Therefore, if we are to create a sport environment for youth tailored for generating fun and stimulating participation, it is important to hear directly from the voice of youth. The 'youth voice' is the focus of this study, while fun is left to individual participants to define for themselves.

2.5 Fun is the Primary Reason Youth Play Sport

Fun has consistently emerged in research over the last 30 years as the most common reason youth give for playing sport (Colmar Brunton, 2014; Ewing & Seefeldt, 1996; Gardner et al., 2017; Petlichkoff, 1992; Sadiman, 2017; Seefeldt et al., 1992; Sport New Zealand, 2018; Vallerand & Losier, 1999; Vierimaa et al., 2017; Visek et al., 2015). For instance, Ewing and Seefeldt (1996) surveyed 8000 youth involved in club and school sport and found fun was the number one reason for taking part in sport.

However, fun is not the only reason youth play sport. Studies have also reported a wide range of other motives for sport participation including social factors, physical fitness, staying in shape, competition, cooperation, success, and coaches' behaviours (Allender et al., 2006; Petlichkoff, 1992; Seefeldt, et al., 1992; Sport New Zealand, 2018; Vallerand & Losier, 1999). For instance, Allender et al. (2006) reviewed the qualitative research into sport participation published between 1990 and 2004 and found that motivations for youth sport participation included social networks, peer and family support.

Sport New Zealand (2018) found 76% of New Zealand young people cited fun as the reason they participated in sport. Other key reasons cited included hanging out with family and friends (45%), fitness and health (31%), learning a new skill (31%), physically challenging themselves or to win (28%) and having a parent or school make them (28%). In New Zealand, Sadiman (2017) found that fun was the main reason that children aged 7-13 years were playing in community-led tag rugby programmes. Sadiman also found that an 'ideal' sporting environment also involved socialisation with friends and team-mates; equal game time; opportunities to make their families proud; positive comments from the side-line for both teams playing; less emphasis on winning, and parents just

there and showing genuine interest in their child's sport. Children in the study did place some importance on winning, this may have been due to the desire to make their families proud. Winning has been rated significantly lower in importance as a motivator for youth sport participation than having fun (Petlichkoff, 1992). Petlichkoff, however, did hypothesise that future research might show that winning and fun overlap to some degree.

Interestingly, with ramifications for elite sport development, fun was found to play a key role in athlete development to the highest level (Vissek et al., 2018a). United States Olympians from the 1984–1998 Games and the 2000–2012 Games were asked to rate the importance of 12 potential motives for their early sport participation. Fun as a motive was ranked second and fourth by Olympians respectively (Snyder, 2014, as cited in Vissek et al., 2018a).

In direct relevance to the current study, New Zealand Rugby commissioned independent research into youth rugby participation in 2013. While the core purpose of the research was to identify what was causing young people aged 14 - 18 years old to disengage with school and club rugby, the study found that the main thing youth wanted out of rugby was enjoyment (Colmar Brunton, 2014). Other reasons given by youth for playing rugby in this study included competition, achievement, and social aspects such as hanging out with mates. The Colmar Brunton research helped stimulate and set the scene for the present study on fun in New Zealand youth rugby.

2.6 Lack of Fun is the Primary Reason Youth Drop Out of Sport

Assorted reasons have been provided by researchers, psychologists, and practitioners for why children and youth drop out of a sport. However, the most frequently cited reason for dropping out of sport is 'lack of fun/enjoyment' or a sport 'no longer being fun' (Allender et al., 2006; Bailey et al., 2013; Bengoechea et al., 2004; Butcher et al., 2002; Crane & Temple, 2015; Jakobsson, 2014; Klint & Weis, 1986; Petlichkoff, 1992; Vissek et al., 2015; Wiersma, 2001). For instance, Kelley and Carchia (2013) reported on

a study in the United States that had found that of those dropping out of a sport, 38% of girls and 39% of boys had given 'lack of fun' as their main reason for doing so.

Other reasons put forward for dropping out have included physical factors such as injury and maturation, competing priorities and other sports, social pressures, low perceptions of competence, limited playing time, negative coaching relationships, negative experiences, and lack of interest (Butcher et al., 2002; Carlman et al., 2013; Crane & Temple, 2015; Fraser-Thomas et al., 2008; Lindner et al., 1991; Seefeldt et al., 1992; Strube & Strand, 2016). Many of these reasons for dropping out can be viewed as not-fun experiences (low perceptions of competence, limited playing time, negative coaching relationships, negative experiences) or a result of reduced fun (choosing competing priorities including other sports, acceding to social pressures and lack of interest).

Crane and Temple (2015) undertook a systematic review of the research into the factors associated with children and youth dropping out of organised sports, covering 43 publications from Europe, North America, and Australia. They categorised the sport dropout variables from each study they analysed into intrapersonal, interpersonal, or structural constraint categories from Crawford and Godbey's (1987) Leisure Constraints model (refer Section 2.6.1 Hierarchical Model of Leisure Constraints). Three key findings came out of the review by Crane and Temple (2015). Firstly, a lack of enjoyment and lack of physical competence came out as the most frequent reasons for dropout. These two dropout factors may be strongly associated with a perceived lack of physical competence affecting the fun experienced. Secondly, Crane and Temple (2015) found five major areas were associated with dropout. These were: lack of enjoyment, physical factors like maturation and injury, competing priorities, social pressures, and feelings of low competence. Thirdly, intrapersonal, and interpersonal constraints were more often associated with dropping out from sport than structural constraints.

This third finding is operationally important. Sport managers and administrators have more control over structural factors than they do intrapersonal and interpersonal. However, they may have more influence over the latter two than they perceive or have

traditionally give attention to. Design of Modified Sports and what sport a participant might attempt may be influenced by an understanding of aspects of the player's, or potential player's, Intrapersonal Profile. In addition, sport managers and administrators may be able to influence coaches, referees, parents and players emotional/social intelligence and behaviour, as well as players skill development and self-perceived competence.

Intrapersonal constraints included lack of fun and physical competence plus factors such as internally generated stress to perform, and perceptions of negative team dynamics associated with teammates and the coach (Crane & Temple, 2015). Physical maturation related issues such as disadvantages associated with chronological age grouping in a sport or the 'relative age effect' were also mentioned. These two areas suggest why maturation and 'even play' may play an important role in fun for some youth. Interpersonal factors included external pressures from coaches, parents and teammates, and other social priorities including other sports. The most frequently cited structural constraint was time, which, given that everyone has the same time, is a matter of priorities.

Witt and Dangi (2018) also used Crawford and Godbey's (1987) Leisure Constraints model to categorise reasons youth drop out of sport. According to Witt and Dangi (2018), intrapersonal constraints included lack of enjoyment, not having fun and being bored; low perceptions of physical competence; personal identity, intrinsic pressures and stress, perceived negative team and coach dynamics. Interpersonal barriers included parental pressure and loss of feelings of ownership, not having enough time to take part in other age-appropriate activities, shifting social networks and keeping up with academics. Witt and Dangi proposed that structural constraints included time (for training and travel), injuries, the financial cost of participation, and inadequate or limited access to facilities nearby, and unsafe environments. It can also be argued that the organisation and structure of competitions, team composition, evenness of teams (in skill, weight and age) and size of fields may also be potential structural barriers or opportunities for some sport participants.

While Witt and Dangi (2018) and Crane and Temple (2015) both argued that perceptions of negative team dynamics associated with teammates and the coach are intrapersonal constraints, there is an argument these two factors also contain a strong interpersonal component. Team dynamics are not just about how an individual feels or what they perceive about the team and coach. Team dynamics can also be about the character and behaviour of the players and coach the individual interacts with. For instance, other players bullying, obnoxious behaviour or lack of other players giving 100% may contribute to negative team dynamics. A coach's negative attitudes and behaviour to players, reflected in things like limited playing time and negative feedback, may also contribute to negative team dynamics.

Walters (2011) and Walters et al. (2012), in a study across four sports, found that coaching behaviour was not always nurturing, positive or developmentally appropriate for children's team sports. They found over 20% of comments made by coaches could be considered by the players to be negative. The results of the Visek et al. (2015) study also indicated that interpersonal factors such as positive coaching, positive social networks and positive team dynamics are important factors associated with fun. One might also infer from the Visek et al. results, that negative coaching, team dynamics and negative social networks are important interpersonal constraints to sport participation and examples of not-fun experiences.

Bailey et al. (2013) suggested a build-up of negative experiences playing sport may result in a young person becoming 'progressively disaffected' from a sport. The build-up of these negative experiences may contribute to a sport becoming not-fun. West and Strand (2016) suggested that dropping out may be due to negative structural factors, such as inflexible practice routines and strict rules and guidelines, which take away the fun part of participating.

In the context of rugby, New Zealand Rugby's wider Auckland strategy manager stated that "the major factor why kids stop playing (rugby) is they are not having fun anymore" (Edens, 2017). The Colmar Brunton (2014) study already mentioned found that what children want from rugby is enjoyment (p. 18), but that "a number of competing

interests and ‘push and pull’ factors interplay to cause disengagement” (p. 8). From the Colmar Brunton study, coaches were perceived to have a disproportionate impact on the overall rugby experience, both negative and positive. Parents, referees, injury, losing all the time, and training were found to play key roles in whether players had a fun experience. Colmar Brunton also found that competing demands, negative social interactions, not feeling a sense of achievement, losing all the time, not getting game time, and getting injured or being worried about getting injured, push youth away from playing rugby. Not feeling a sense of achievement may be exasperated by losing all the time, not getting playing time, negative game experiences or even lack of personal game highlights.

2.7 What is Fun about Youth Sport

While many studies have shown that fun is the main reason for participating in sport, few researchers have looked in detail at what is fun about sport, or what influences the participant’s fun experience (Vissek et al., 2015). This section discusses the research to date, examining what youth find important for having fun and enjoying their sport. It also examines whether there are differences in player’s perceptions around what is important to having fun.

Early studies identified a range of factors that contributed to fun in youth sport (Athletic Footwear Association, 1990, as cited in Petlichkoff, 1992; Harris et al., 1995; Scanlan et al., 1993; Petlichkoff, 1992). These fun factors included greater player effort, mastery of the sport, a sense of competence, positive coach support, satisfaction with performance across a season, positive team interactions, family support, involvement in playing, and a balance between skill and challenge.

More recently, there has been interest in the coach’s role in fun (Bailey et al., 2013; Barnett et al., 1992; Bengoechea et al., 2004; North, 2007; Vallerand, 1999; Vierimaa et al., 2017; Vissek et al., 2015) and the social components of fun (Allen, 2003; Gardner et al., 2016; Schwab et al., 2010; Ullrich-French & Smith, 2009; Vissek et al., 2015). With coaches, there has been a focus on their behaviour, their approach to and relationships

with players, and their role in promoting fun. Regarding the social aspects of fun, positive team dynamics and social climates, coach and peer relationships, friendships, and players orientation to the social components of a sport, have come through as important factors in fun.

Vissek et al. (2015) undertook the most comprehensive study on fun-factors in youth sport, also looking at their respective importance. The context of the Vissek et al. study was soccer players, parents, and coaches in a mid-Atlantic metropolitan area in the United States. Vissek et al. found 11 fun-factors and 81 fun-determinants were important to fun in youth soccer. In a related paper, Vissek et al. (2020), found *Trying Hard*, *Positive Team Dynamics*, and *Positive Coaching* to be the fun-factors of primary importance. Then comparing player's perceptions with those of adults, Vissek et al. (2018) found there was relatively high congruence in the way adults and players perceived fun-factors and fun-determinants importance, with slightly greater differences between players and coaches. There was also a good consensus in the perception of fun-determinant importance between player groups; boys with girls, younger and older players, and players at different levels of competition (Vissek et al., 2020).

2.7.1 Early Studies of Fun in Youth Sport

A United States study involving 1,342 youth sport participants of diverse ages, ethnicity and gender from three sports – football, soccer and a non-school volleyball - found enjoyment was strongly related to greater effort and mastery, positive coach support, satisfaction with performance across a season, positive team interactions and support (Scanlan et al., 1993). Another early American study on fun was that of Harris et al. (1995). Their research involved a small qualitative study of youth (eight females and six males) in organised sport. They took an interpretive perspective using open interviews to develop a grounded theory of fun. They identified four dimensions to fun: involvement, sense of competence, opportunity to play the sport again, and free choice. Involvement and a sense of competence were expressed in several ways by participants in the study. Involvement was expressed as both social interaction and physical action, while competence was expressed as having an impact, doing well, and improving.

Researchers during this early period also suggested that fun is more likely when there is a balance between skill and challenge (Petlichkoff, 1992). An Athletic Footwear Association industry report in 1990 defined fun as “the quest for balance between challenge and skill” (Athletic Footwear Association, 1990, p. 5, as cited in Petlichkoff, 1992). It concluded that if challenge or skills are mismatched, this may result in player frustration, pressure or boredom, and a child dropping out of sport.

2.7.2 Positive Coaching and Fun

Coaches’ behaviour and approach to interacting with players have been shown to have a significant impact, both positive and negative, on athletes’ motivation and continued participation (Bailey et al., 2013; Barnett et al., 1992; North, 2007; Vallerand, 1999). Coaches have been shown to play an essential role in promoting fun in youth sport (Bengoechea et al., 2004; North, 2007; Vierimaa et al, 2017; Visek et al., 2015).

As North (2017) set out, there would seem obvious connections between coaching, making playing sport a fun experience, and continued participation. North (2007) sets out the case for coaches playing a strong role in increasing and sustaining sport participation, both through making playing and practising sport fun, but also by avoiding taking the fun out of playing sport.

In a highly informative field experiment in the United States, Barnett et al. (1992) examined the impact of coaches on athletes dropping out from Little League Baseball. Eight coaches attended a preseason sport psychology workshop designed to provide coaches with skills to develop desirable coach-athlete interactions. A comparison no-treatment ‘untrained’ control group consisted of 10 coaches. Children in both groups were interviewed before and after the season and were contacted again the following year.

At the end of the initial season, children in the experimental group evaluated their coaches, teammates, and the sport of baseball more positively than children who played for the control-group coaches. Player dropout was then assessed at the beginning of the next baseball season. The control-group children dropped out at a significantly higher

rate (26%) than those in the group of 'trained' coaches (5% dropout rate). The reasons given for dropping out by the two groups also differed. Children who had been coached by the 'trained' coaches were more likely to indicate that they had dropped out because they were playing another sport or activity, or that a structural barrier had prevented them from participating. Those who dropped out from the control group, more often indicated negative experiences had influenced their decision to drop out. These findings highlight the importance of the emotional capability of the coach to reducing dropout and not-fun experiences for children.

Vissek et al.'s research into fun-determinants of youth sport supports the contention that coaches play a significant role in athletes' experience of fun (Vissek et al., 2015, 2020). Vissek et al. (2020) found the fun-factor *Positive Coaching* to be of primary importance to youth for their fun sporting experience. Interestingly, as a result of Vissek et al.'s research methodology, only one fun-determinant within the fun-factor *Positive Coaching* was associated with the coach being skilled in the sport. The other 11 were associated with the emotional competence and the communications skills of the coach. High rated fun-determinants in this fun-factor included 'when a coach treats players with respect', 'when a coach encourages a team', 'having a coach who is a positive role model' and 'getting clear and consistent communication from coaches'.

Walters et al. (2012) examined the various behaviours of coaches with six to eleven-year-olds in four New Zealand sports; rugby union, touch rugby, soccer and netball. Looking at the coach behaviour at 72 sporting fixtures and with 10,697 recorded coach comments, Walters found that coaching behaviour was not always nurturing, positive or developmentally appropriate for children's team sports. Among the coach's comments, 35% were positive, 22% negative and 43% neutral. Rugby union had the lowest percentage of positive comments and the highest percentage of negative comments across the sports. There was also a dominant focus on competition and pressure in the coach's comments to children across the sports. Walters et al.'s results showed that coach behaviour is often at odds with the *Positive Coaching* primary fun-factor from Vissek et al., 2020.

Effective Coaching has been broadly defined as including three domains of coach knowledge: professional, interpersonal, and intrapersonal (Côté & Gilbert, 2009). Professional knowledge relates primarily to technical and tactical skills, interpersonal knowledge is focused on behaviours such as effective communication and leadership, while intrapersonal knowledge focuses on behaviours such as reflection and self-regulation (Walters et al., 2020). While these latter two knowledge areas are now recognised as being core competence for effective coaches and are of primary importance to players fun, coach development programmes have to date focused primarily on technical and tactical skill areas. A recent review of 285 coach development programs found that 261 focused on professional knowledge, only 18 on interpersonal, and only 6 on intrapersonal (Lefebvre et al., 2016). This suggests that for effective coaching and where player fun is a priority, coach development programmes need to shift their emphasis to include more focus on interpersonal and intrapersonal skills (Walters et al., 2020).

2.7.3 Social Component to Fun

Researchers have become increasingly interested in the social aspect of sport and its role in a fun experience. Podilchak (1991) suggested that fun is a social process and interaction with others is fundamental to having fun. Vissek et al. (2015) found that players, parents and coaches perceive the social component as important to having a fun sport experience. One of Vissek et al.'s four overarching fun-tenets was Social. This social fun-tenet related primarily to the social interaction of players with their teammates and included two of Vissek et al.'s 11 fun-factors - *Positive Team Dynamics* and *Team Friendships*.

Earlier, in a study of youth soccer players, Ullrich-French and Smith (2009) found that more positive friendship quality, a combination of mother relationship quality and peer relationships, along with greater perceived competence predicted players continuing to play soccer in the same team. A United Kingdom study of 100 female adolescent sport participants looked at how social goals and a sense of belonging contributed to youth sport motivation and enjoyment (Allen, 2003). Allen found three social-related

constructs or factors that contributed to explaining adolescent's interest/enjoyment of sport. These factors Allen labelled Affiliation Orientation, Status Orientation, and Social Recognition. The Affiliation Orientation factor grouped items such as making friends. Status Orientation brought together items associated with being part of the in-crowd, while Social Recognition brought together items associated with receiving recognition from others and impressing others by one's abilities. Allen found that the Affiliation Orientation factor was moderately positively correlated with enjoyment, while Status Orientation had a weak relationship with enjoyment. The three factors accounted for 57% of the common variance, while the factor Affiliation Orientation accounted for 33% of the variance on its own.

A more recent study involving 313 adolescent sport participants (Gardner et al., 2016), found four distinct social climate profiles exist amongst players: positive social climate, diminished social climate, positive coach relationship, and positive friendship quality. They also found players within the positive social climates and positive coach relationship profiles reported relatively higher levels of enjoyment and intention to continue playing sport compared with those in the positive friendship quality and diminished social climate profiles. Using a form of multiple regression statistical analysis called path analysis, they showed a direct link between a positive social climate and enjoyment, and through enjoyment to continued sport participation.

In the introduction to their research exploring differences between players' and parents' perspectives of a youth sport experience, Schwab et al. (2010) suggested that playing with friends may offset any negative effects on the fun experience from being less skilled than other players. The present study specifically explores whether youth rugby players would rather be in 'a team with their mates' or 'in the best team', examining differences in perceptions of factors influencing fun between these two groups.

2.7.4 Fun Integration Theory

In related papers, Visek et al. (2015, 2018, 2020) reported a study into factors that determine fun in youth sport. They looked at the respective importance of these determinants and developed their Fun Integration Theory. These scholars formulated a comprehensive theoretical framework around fun as the key motivator in youth sport. Their study is the most detailed examination so far of what influences fun for youth playing sport. It inspired and set the scene for the rugby-related research in this thesis.

According to Fun Integration Theory, “fun is the accumulation of immediate experiences derived from contextual, internal, social, and external sources of fun-determinants” (Visek et al., 2018a, p. 69). Visek et al. (2015) worked with youth soccer players (n = 142, aged 8-19 years), coaches (n = 37) and parents (n = 57) from one metropolitan area in the eastern United States. They used a mixed-methods approach to identify all the things that influence fun for children playing sport and then assessed their perceived importance to fun. Their study found 81 specific, actionable behaviours for fostering fun in youth sport, which they called fun-determinants. They clustered these fun-determinants thematically into 11 fun-factors which they then conceptualised into four discrete, overarching, and fundamental fun-tenets (Visek et al., 2015).

The four fun-tenets of Visek et al. (2015) are Contextual, Internal, Social, and External. The Contextual tenet brings together the fun-determinants associated with playing and practising a sport under two fun-factors: *Games* and *Practices*. Within the Contextual fun-tenet and *Games* and *Practices* fun-factors, 13 specific fun-determinants contribute to fun. Two of the highly-rated fun-determinants in these fun-factors were ‘Getting playing time’ and ‘Well-organised practices’ (Visek et al., 2015).

The Internal fun-tenet brings together an individual’s mental, physical and behavioural determinants of fun under three fun-factors: *Learning and Improving*, *Trying Hard*, and *Mental Bonuses* (Visek et al., 2015). Within the 23 fun-determinants in the Internal fun-tenet, there were three highly-rated fun-determinants ‘Trying your best’, ‘Being challenged to improve’, and ‘Keeping a positive attitude’.

The Social tenet covers fun-factors and fun-determinants that relate to the social interaction of players, primarily with other teammates. The fun-factors in this tenet were *Positive Team Dynamics*, *Team Friendships*, and *Team Rituals*. According to Vissek et al. (2015), these three fun-factors include 20 fun-determinants. Highly rated fun-determinants in these three fun-factors were 'Playing well as a team', 'Being supported by my teammates', and 'Getting along with teammates'. Fun-determinants under the *Team Rituals* fun-factor were not amongst the highly-rated fun-determinants.

The External tenet covers inputs to the sport that are external to the individual, the team, and practising and playing the sport. These fun-determinants include those that relate to, amongst other things, coaching, and parental and other game time support. Vissek et al. (2015) named the fun-factors in this fun-tenet *Positive Coaching*, *Game Time Support*, and *Swag*. High rated fun-determinants in these fun-factors include 'When a coach treats players with respect', 'When parents show good sportsmanship' and 'Referees make consistent calls'. *Swag* is about more miscellaneous activities and inputs to the sport, such as nice sport equipment, getting treats after the game and having pictures taken. Fun-determinants under the *Swag* fun-factor were not amongst the highly-rated fun-determinants.

Vissek et al. (2020) highlighted three distinct and significantly different strata of fun-factors based on perceived importance to the players (primary, secondary, and tertiary). The fun-factors of primary importance were *Trying Hard*, *Positive Team Dynamics*, and *Positive Coaching*. Of secondary importance were *Learning and Improving*, *Games*, *Practices*, *Team Friendships*, *Game Time Support*, and *Mental Bonuses*. According to players in the study, *Team Rituals* and *Swag* were the least important fun-factors and fell in the tertiary importance strata.

The Vissek et al. study with 11 fun-factors and 81 different fun-determinants supplies detailed insights on the factors that affect fun for players in youth team sports (Vissek et al., 2015). From a sport management viewpoint, managing 81 fun-determinants and 11 fun-factors could be considered an overwhelming task. However, the study does capture the importance of both individual fun-determinants and more overarching fun-factors.

For context to the current study, it is important to note that the primary fun-factors related firstly to the players own attitudes and behaviours *Trying Hard*, secondly to the character, approach and skills of the coach in their interactions with players, *Positive Coaching*, and thirdly, to the team dynamics *Positive Team Dynamics*, how the players interact together.

Outside of these three primary fun-factors, one of the highly-rated fun-determinants by players was 'Getting along with your teammates', representing the social aspect of the sport (Vissek et al., 2020). Another highly-rated fun-determinant was 'Getting playing time', which rated ninth out of 81 for players. The conclusion from this latter highly-rated fun-determinant is that getting sufficient playing time and being treated fairly in this regard by the coach is perceived by players as being important to having fun.

Several fun-factors and fun-determinants that do not rate as highly for importance in the Vissek et al. (2020) study are potentially interesting from a New Zealand Rugby perspective. The fun-factor *Game Time Support* was only perceived to be of secondary importance, while the fun-determinant "When parents show good sportsmanship" was only ranked 37th out of the 81 fun-determinants by players (Vissek et al., 2020). 'Having your parents watch your game' was ranked 55th out 81, and 'Playing against evenly matched teams' was ranked 44th out of 81 fun-determinants. These fun-determinants have a context in New Zealand given the emphasis placed in recent times on the sideline behaviour of parents and the development of weight-restricted grades for youth rugby teams. While these fun-determinants do not rank highly across the player population in the Vissek et al. study, there may be groups of players to which these fun-determinants are more important. Differences in perception between subgroups of players would be interesting to know, for instance, regarding the fun determinant: 'Playing against evenly matched teams" (or for evenly matched weights/size/maturity/age) when designing Modified Sports or modified sport structures/systems around specific groups of players. This might apply particularly to those at risk of dropout or when attempting to attract players into a sport.

It is also important to understand the potential transferability of results from a study such as Visek et al. (2015, 2018, 2020) to other sports such as rugby and other countries and cultures. The Visek et al. study involved one sport, soccer in one metropolitan area in the United States. Visek et al. (2015, 2020) recognised this limitation to establishing broader transferability of Fun Integration Theory. They advocated for future studies involving other team-based sports from other geographical regions. The present study aims to address this limitation using rugby in New Zealand as the context.

Visek et al. (2015) also suggested that there were elements that might impede youth's fun experience of sport and that these should be identified and explored. Hopple (2015) looked at not-fun factors in younger children's sport and physical activity. Hopple found that a range of both intrinsic and extrinsic factors contributed to physical activity not being fun. Intrinsic factors included being unskilled, lack of learning, disliking competition, performing poorly, feeling pressure to perform, and injury. Extrinsic factors included bullying, being on the end of other players bragging, arguments and fighting with other players. This thesis canvases the factors that impede or reduce the fun experience in rugby, exploring what's not-fun about playing rugby at the youth level in New Zealand.

Another interesting aspect of Visek et al.'s (2015) study was their method and approach. They looked to generate a comprehensive list of ideas on what makes playing sport fun, generalisable across all team sports. To do this they first asked participants "to think of all the things that make participating in sport fun across the many sports that they participate in" and complete the following prompt in a sentence stem format, "One thing that makes playing sports fun for players is" (p. 425). Then during analysis and synthesis of participant statements, they refined any sport-specific statements to be generalisable across sports. They ended up with 81 fun-determinants of differing importance.

For reasons of efficiency, participant time and questionnaire size, the present study sought to only use the top two rated fun-determinants from the top nine fun-factors in

the Visek et al. (2015). The present study also specifically explored what participants found fun about playing rugby, rather than generalised feelings about sport as a whole.

2.7.5 Perception Differences of Fun-factor Importance

A question left open by Visek et al. (2015) was, do adults (parents and coaches) perceive fun-determinant importance similarly or differently to children and youth players? Answering this question is key to understanding and avoiding projecting adult views of fun onto youth. Walters (2011) asked the question in the title of his thesis “Whose game are we playing?” and went on to advocate a child-centred approach be used in all children’s sport. Walters concluded, “Until the experiences of children participating in sport become a priority ... children will continue to be exposed to what would appear to be the normalised behaviours driven by a win-at-all-cost mentality. These are just young children who predominantly want to have fun, actively participate, and be treated equally” (p. 249). This same argument might equally apply to youth sport.

Visek et al. (2018, 2020) revisited their data from the 2015 study, undertaking secondary analyses to determine whether there was congruence in perceived fun-factor and fun-determinant importance between groups in their study. They firstly compared players, parents, and coaches (Visek et al., 2018) and then girls with boys, younger versus older players, and players across the playing levels (Visek et al., 2020).

They found there was a reasonable congruence between players and parents irrespective of the player's age. There were two significant perception differences around fun-factors. *Game Time Support* was ranked third by parents and only ninth by players. *Trying Hard* was ranked first by players and fourth by parents. Twenty-three fun-determinants were also perceived differently by parents and players, with small to medium effect sizes (Visek et al., 2018).

Coaches and players showed a greater degree of perceptual difference around the importance of fun-factors and fun-determinants, than those found between parents and players (Visek et al., 2018). The differences were greatest between adolescent players and coaches. For coaches and adolescent players (u14 - u19), the differences involved

fun-factors *Team Friendships*, *Trying Hard*, *Positive Coaching*, *Game Time Support*, and *Team Rituals* (Vissek et al., 2018). *Trying Hard* ranked number one for adolescent players but only fifth for their coaches. *Team Friendships* was sixth for adolescent players but second for their coaches. *Positive Coaching* was third for adolescent players but first for their coaches. *Game Time Support* was ranked ninth by adolescent players but third by their coaches. *Team Rituals* was 10th for adolescent players and coaches but was scored much lower by players. While adolescent players and coaches' perceptions differed for only 18 of 81 fun-determinants, the effect sizes ranged from medium to large. These findings suggest that where the differences exist, they are important.

In Vissek et al. (2020), they reanalysed their data to look for differences in perceptions amongst players based on age, gender and level of play. They found an extremely high consensus between players. The fun-factors and fun-determinants were grouped consistently in the same primary, secondary, and tertiary importance strata across these player groups. The only significant difference between boys and girls was for the *Learning and Improving* fun-factor. Boys rated this fun-factor of higher importance than girls.

Vissek et al. (2020) used 142 players in their study and three variables for making comparisons between groups of players. This meant player comparisons were made solely based on age, gender and level of play. Total participant numbers of 142, meant comparisons were made with low numbers in each comparison group. To validate Vissek et al.'s research, this study in youth rugby in New Zealand used much larger participant numbers for the statistical comparisons examined. To extend Vissek (2015, 2018, 2020), this study also drew on a greater range of demographic, psychographic and behavioural variables for comparison. Many of these variables link to a player's Intrapersonal Profile (refer Section 2.8.1 Hierarchical Model of Leisure Constraints) and/or are associated with elements of other sport participation theories (Refer Sections 2.8.2 Competence Motivation Theory; 2.8.3 Achievement Goal Theory; 2.8.4 Self Determination Theory). Variables used in this study included player ambition, perceived skill, commitment to rugby, ethnicity, and socioeconomic status.

The participant numbers in the present study were also sufficient for robust cluster analysis, enabling the identification of groups of players who differed in how they perceived *Fun Facilitators'* importance. Together, the variable comparisons and cluster analysis allowed a much more detailed look at how groups of players differed in their perceptions of *Fun Facilitators'* importance, and how variables associated with an Intrapersonal Profile might be linked to these groups.

2.8 Fun and Other Sport Motivation and Participation Theories

Beginning in the early 1980s, several theories developed to aid understanding of children and youth motives in sport participation. They are, the Hierarchical Model of Leisure Constraints (Crawford & Godbey, 1987, Crawford et al., 1991); Competence Motivation Theory (Weiss & Chaumenton, 1992); Achievement Goal Theory (Nicholls, 1984; Lavalley et al., 2012); Self Determination Theory (Deci and Ryan, 1985, 2000); and the Sport Commitment Model (Scanlan et al., 1993). These theories have connections with fun.

Crawford et al.'s (1991) Hierarchical Model of Leisure Constraints may explain why some players find one sport fun and another not so much fun. It may also help us understand why *Trying Hard* was a primary fun-factor for the players in Visek et al. (2020). Fun Integration Theory also aligns with key tenets of several of these other seminal theories of sport motivation. Visek et al. (2015) point out that 24 of their fun-determinants relate to Achievement Goal Theory, 32 are associated with Competence Motivation Theory, and as many as 68 of the 81 fun-determinants promote autonomy, competence, and social relatedness which underpin Self-Determination Theory (Visek et al., 2015).

2.8.1 Hierarchical Model of Leisure Constraints

While not mentioning fun directly, Crawford et al.'s (1991) Hierarchical Model of Leisure Constraints sets out some important underlying principles around sport, fun and participation. Crawford and Godbey (1987) conceived categorising barriers and constraints to leisure activities (including sport) into three categories. They called these

constraints and barriers; intrapersonal, interpersonal, and structural. Intrapersonal barriers arise directly from what an individual thinks, constraining what they like or do not like, their preferences. Interpersonal barriers, according to Crawford and Godbey (1987), are the result of an individual's need for interpersonal interactions in undertaking a leisure activity. They proposed these interpersonal factors also affect individual preferences and actual participation. Structural barriers to participation are environmental items impacting the possibility of participation. Structural factors as set out by Crawford and Godfrey include the availability of facilities or opportunities, scheduling, other commitments, and financial resources.

Crawford et al. (1991) built on the leisure constraint categorisations by conceptualising a hierarchical model for these leisure constraints. In their model, intrapersonal constraints are foundational to participation. An individual must like a sport for participation to have any chance of occurring. Only if an individual likes a sport do interpersonal factors become a constraint on participation. Finally, only when intrapersonal and interpersonal constraints are overcome do structural barriers play a role in preventing participation. Crane and Temple (2015), however, suggested that structural barriers have less association with dropout than intrapersonal and interpersonal factors.

Fundamental to Crawford et al. (1991) Hierarchical Model of Leisure Constraints is the idea that an individual's beliefs, psychological attributes and states, perceived physical attributes, self-skill, competence and mastery, along with personal values (an individual's Intrapersonal Profile) directly affects what an individual likes or does not like, that is, their preferences. Crawford et al. considered this Intrapersonal Profile the most powerful influence on an individual's choice to participate or continue to participate in a sport. The Intrapersonal Profile differs from person to person. Hopple (2015) found that factors important for one child to have fun are specific and unique, differing between children and that the importance of these factors is difficult to predict. Jackson (2000, p. 137) said that "Sport always begins as a free-choice activity", while fun is the primary reason youth play sport (Vissek et al., 2015). Scanlan et al. (1993) pointed

out that enjoyment, liking, and fun are all similar terms to describe the emotional appeal of a sport.

Putting Hopple (2015), Visek et al. (2015), Scanlan et al. (1993) together with Crawford et al. (1991), suggests that the unique and specific Intrapersonal Profile of an individual is the key factor in determining whether a person finds a sport fun and therefore participates in that sport. Potential participants may therefore only play a sport, where the sport aligns with their Intrapersonal Profile, and they perceive that sport to be sufficient fun to be attractive. This suggests that when Modified Sports are developed to encourage sport participation, the Intrapersonal Profiles of targeted players is an important consideration in the design of these sports. Understanding an individual's Intrapersonal Profile might also enable recommendations to be made on what sports an individual might try.

Since like to dislike and fun to not-fun are not on-off switches but a spectrum between two extremes, it might also be proposed that the greater the alignment between a person's Intrapersonal Profile and the *Core Fun Elements* of a sport, the more fun a player will find a sport. In turn, the more likely they are to choose to participate or continue to participate. A greater alignment may also lead to more positive player attitudes and be reflected in greater individual effort, possibly explaining the importance of the fun-factor *Trying Hard* (Visek et al., 2020). Conversely, one might also propose that less alignment results in less fun and increases the likelihood a player chooses not to participate, or where participating, in dropping out. Putting this another way, if the Intrapersonal Profile of an individual is misaligned with the fun characteristics and attributes of a sport, they are unlikely to like the sport, find it fun and decide to participate.

Fun-determinants include interpersonal and structural factors (Visek et al., 2015). Interpersonal factors include positive team dynamics, positive coaching and quality refereeing, while structural factors include even competitions, playing against teams of comparable size, age, and maturation, and availability of referees. Therefore, advancing Crawford et al.'s (1991) thinking, interpersonal or structural factors can either enhance

or detract from the sporting experience, facilitating or inhibiting fun, and influencing both positively and negatively the likelihood of continued participation. It is also possible that the more aligned a person's Intrapersonal Profile is to the *Core Fun Elements* of a sport, the more or less important they may consider fun-determinants.

One might also posit from Crawford et al. (1991), that these interpersonal and structural factors, as facilitators or inhibitors of fun, may play a more important role in influencing the likelihood, or not, of continued participation, where Intrapersonal Profile and the *Core Fun Elements* of a sport are not so strongly aligned. That is where the fun 'pull' of a sport is not that strong and a sport is only marginally attractive to an individual, *Fun Facilitators* may tip the balance in terms of playing a sport, or *Fun Inhibitors* or other barriers may make 'not to play' an easier choice.

Consideration of the Crawford et al. (1991) Hierarchical Model of Leisure Constraints, and the hypotheses arising, lead to important questions that provide the potential for future research. What are the *Core Fun Elements* of specific sports like rugby? Is the hypothesis that fun is determined by the alignment between the Intrapersonal Profile of an individual and the *Core Fun Elements* of a sport supported by evidence? If so, does the degree of alignment between the *Core Fun Elements* and the Intrapersonal Profile of a player determine how much fun is experienced? Does what is fun about playing sport change as you get older and your Intrapersonal Profile further evolves or is it inherent in the sport?

The question 'What do youth find fun about rugby?' or put another way 'What are the *Core Fun Elements* of rugby?' is addressed in this study. Also in this study, variables associated with an individual's Intrapersonal Profile were obtained from participants and used to explore if these variables are related to significant differences in players' perceptions of *Fun Facilitators'* importance. These variables included school year (as an alternative to age), school decile (as a substitute for socioeconomic status), ethnicity, players' self-perceived skill level, players' rugby ambition, players' commitment to playing rugby and players' team preference.

2.8.2 Competence Motivation Theory

As proposed in the previous section, the Intrapersonal Profile of an individual may help determine whether an individual finds playing a sport fun. A key part of the Intrapersonal Profile is perceived self-skill, competence, and mastery. Weiss and Chaumenton's (1992) Competence Motivation Theory also relates to perceived self-skill, competence, and mastery and therefore this area of fun related theory. Competence Motivation Theory was based on the earlier developmental psychology work of Harter (1978, 1981). Harter (1978) suggested that an individual's perception of competence influences both their initial decision to participate and their decisions to continue to participate. According to Harter (1981), perceived competence associated with successful performance is critical to continued motivation to participate. Competence Motivation Theory embraces the idea that individuals are motivated to feel competent in areas of achievement such as sport and that these feelings are a primary determinant of their motivation to play (Weiss & Chaumenton, 1992). To satisfy this desire for competence, individuals attempt to master their sport.

Competence Motivation Theory posits that athlete's perceptions of their control over their learning and performance skills, together with their feelings of self-worth and self-evaluations of competence, influence their motivation (Weinberg & Gould, 2011). Control, self-worth, and perceptions of confidence indirectly influence motivation by generating affective and emotional states such as fun, enjoyment, happiness, pride, anxiety and shame. When the result of an individual's effort is competency or successful performance, a person experiences positive affect towards that activity or sport, thus maintaining or enhancing their motivation to continue to participate.

Positive affect is a term used to encompass positive emotions such as contentment, interest, engagement, pride, love, like, enthusiasm and joy/fun. These emotional states then may reinforce motivation through positive reinforcement of the desire to participate. Therefore, those who perceive themselves as competent in a sport may be more likely to have fun and continue participating, while those with low perceived competence may be more likely to not have fun and drop out of a sport.

Competence Motivation Theory links back to Crawford et al.'s (1991) Hierarchical Model of Leisure Constraints, in that, low perceived competence is considered an intrapersonal barrier to participation in their model. Competence Motivation Theory also has links to Vissek et al.'s (2015) Fun Integration Theory. The Fun Integration Theory identified fun-factors *Learning and Improving* and *Trying Hard* as important to having fun.

Klint and Weiss (1987) study of child gymnasts found competence motivation theory could explain the relationship between competence perceptions and sport participation motives. They found that for children with a high perceived physical competence, skill development was a stronger reason to participate than for those with low perceived physical competence. Similarly, they found that for child gymnasts with high perceived social competence, social aspects of the sport were a stronger reason to take part than for those with low perceived social competence.

Competence Motivation Theory also links to Self Determination Theory (refer Section 2.8.4 Self Determination Theory). Athletes' perceived competence has been shown to play a key role in athletes' self-determined form of motivation. Ntoumanis (2001) showed that athletes' perception of competence positively predicted their intrinsic and extrinsic motivations. According to Rottensteiner et al. (2015), players with higher perceived competence reported higher levels of relative autonomous motivation toward team sports including soccer, ice hockey, and basketball, than players with lower competence.

Competence Motivation Theory, therefore, links to fun since perceived competence is a part of an individuals' Intrapersonal Profile and may affect whether they believe they will, or do, find a sport fun or not. These feelings of competence may influence affective and emotional states such as fun, along with positive attitudes and behaviours to a sport. Vissek et al. (2020) has shown that the primary fun-factor *Trying Hard* is important to players fun. Competence Motivation Theory may also help to explain why Vissek et al.'s *Learning and Improving* is perceived by players as an important fun-factor, aiding in the development of skill and competence. As seen later in this study, *Game Highlights* has a significant role in fun in rugby, *Game Highlights* may play a key role in reinforcing

or developing one's perceived competence and skill level. As mentioned earlier, in this study data on a player's self-perceived skill level was collected along with the player's perceptions of *Fun Facilitator* importance. This enables the relationship between perceived skill and a player's perceptions of *Fun Facilitator* importance to be explored.

2.8.3 Achievement Goal Theory

Achievement Goal Theory was originally developed to understand differences in achievement (Nicholls, 1984), but later applied to sport participation and motivation (Lavalley et al., 2012). This theory also has some relevance to fun. Achievement Goal Theory relates to and incorporates some aspects of Competence Motivation Theory. Achievement Goal Theory sets out three factors that determine a person's motivation for an activity or sport; their perceived ability or competence, their achievement goals; and their achievement behaviour (Weinberg & Gould, 2011). The theory identifies two achievement goal orientations: outcome goal orientation and task goal orientation. Outcome goal orientation is associated with setting goals to perform and defeat others, while task goal orientation focuses on goals associated with improving upon your past performances (Lavalley et al., 2012).

Sports psychologists suggest that individuals with stronger task goal orientation will tend to have a stronger work ethic and persist in the face of failure and achieve optimal performance. They also argue that task-oriented individuals select more realistic tasks and opponents, and do not fear failure. Because their perception of their ability is their reference, it is easier for them to feel good about themselves, have fun, while playing sport (Weinberg & Gould, 2011). *Learning and Improving* and *Trying Hard* fun-factors from Visek et al. (2015) are associated with task goal orientation. Visek et al. (2015) found that most of the fun-determinants in these two fun-factors are perceived as more important to fun than the fun-determinant 'Winning' which is associated with outcome goal orientation.

Task goal orientation also relates to the Competence Motivation Theory. Task-oriented individuals will tend to judge their competence to their previous performance rather

than their last competitor. Thus, where players set and achieve goals against their internal reference resulting in the building of perceived competence over time, players may experience positive affect and strengthen their desire to participate.

More recently a third goal orientation, social goal orientation, has been suggested to be a determinant of behaviour and motivation (Allen, 2003; Stuntz & Weiss, 2009). Social orientation is important because relates to participant competence, intrinsic motivation, and enjoyment/fun (Stuntz & Weiss, 2009). Individuals with high social goal orientation are motivated by the desire for social connections and the need to belong to a group. They judge their competence in terms of group affiliation and get recognition from being liked by others (Weinberg & Gould, 2011).

Social goal orientation also relates to fun, particularly in team sports. Social was one of four Visek et al. (2015) fun-tenets in their Fun Integration Theory. From Visek et al. (2020), *Positive Team Dynamics* was a primary fun-factor for players while *Team Friendships* was a secondary fun-factor. As we shall see from the results of this research, *Brotherhood* plays a key role in fun in youth rugby.

Data for several variables associated with Achievement Goal Theory were also collected in this study. These variables included the player's rugby ambition (task goal orientation), the player's self-perceived skill level (perceived ability), the player's commitment to playing rugby (intrinsic motivation) and the player's team preference (social goal orientation). These data along with the player's perception of *Fun Facilitator* importance were used to explore any relationship between these variables and the player's perceptions of *Fun Facilitators'* importance.

2.8.4 Self Determination Theory

Deci and Ryan (1985, 2000) developed a general theory of motivation called Self Determination Theory. This theory argues that people are motivated to undertake an activity or play a sport to meet three general needs; to feel competent, autonomous, and socially connected. This theory holds similarities to and elements of the two previous theories (Weinberg & Gould, 2011) and connects with fun in similar ways,

through each of the three needs: perceived competence, autonomy and to be socially connected.

A spectrum of motivations exists to meet these three needs (Lavallee et al., 2012). These motivations range from intrinsic to extrinsic and amotivation. Intrinsic motivations involve taking part in an activity or sport for its inherent satisfaction, that is, the sport or activity is interesting and enjoyable (or fun) to the individual. Extrinsic motivation involves undertaking activities to satisfy an external obligation or to avoid an external penalty. Amotivation refers to a lack of motivation when individuals are without motivation for an activity or sport.

Extrinsic motivation is subdivided into four types of motivated behaviours; two autonomous (integrated regulation and identified regulation) and two controlling (introjected regulation and external regulation) (Lavallee et al., 2012). Integrated regulation is where an athlete's behaviour is consistent with and important to other aspects of their sense of self, their Intrapersonal Profile. Identified regulation is where an athlete's behaviour is chosen because it is personally important. The behaviour to achieve social recognition or avoid internal pressures is described as introjected regulation, while behaviour due to external demands, such as awards or constraints, is described as external regulation (Lavallee et al., 2012).

Research suggests that individuals who are motivated either intrinsically or extrinsically in the two autonomous categories (integrated regulation and identified regulation) by their Intrapersonal Profile, tend to persist in their sport participation, more so than individuals whose extrinsic motivation is from introjected or external regulation (Pelletier et al., 2001; Sarrazin et al., 2007). According to Rottensteiner et al.'s (2015) in their Finnish study of team sports, higher levels of relative autonomous motivation indicated greater persistence of players in organised sport.

Vissek et al. (2015) point out that as many as 68 of the 81 fun-determinants promote autonomy, competence, and social relatedness which underpin Self-Determination Theory. In this study, data for several variables associated with Self-Determination

Theory were collected. These included a player's self-perceived skill level (perceived competence), and team preference (social goal orientation). Ambition, commitment to rugby and preference for rugby as their number 1 sport may also be reflective of autonomy to some degree. As previously noted, these variables along with the player's perception of *Fun Facilitator* importance were used to explore any relationship between these variables and the player's perceptions of *Fun Facilitators'* importance.

2.8.5 The Sport Commitment Model

The previous four theories haven't directly included fun and enjoyment, predating much of the understanding of the importance of fun as a motivator to participate in sport. They did however identify intrinsic motivators (competence, autonomy and social connection) and autonomous extrinsic motivators (being challenged to improve and be better at your sport) as being important sport participation motivators. These four theories also identified various factors that Visek et al. (2015) later identified, with different labels, as important to experiencing fun. These factors include skill competency (playing well, making a good play, learning new skills, being strong and confident), achievement goals (setting and achieving goals, winning, improving athletic skills to play at the next level, playing well together as a team), task goal orientation (learning new skills, getting/staying in shape, learning from mistakes), achievement task behaviour (trying your best, working hard) and social connectedness (being supported by my teammates, supporting my teammates, being congratulated for playing well, getting along with your teammates, being around your friends).

Scanlan et al. (1993) however were the first to specifically include enjoyment (fun) as a central element in a sport participation motivation model. They introduced the Sport Commitment Model to explain the commitment to participating in a sport. Scanlan et al. proposed that commitment to a sport was determined by several factors: personal investment of time, money and effort; social constraints to continuing; other alternatives to involvement; opportunities associated with continued involvement; and sport enjoyment. In their study of children participating in a Little League programme in the United States, they found that sport enjoyment and past and present personal

investment were the predominant predictors of sport commitment and accounted for 58% of the sport commitment variance.

Five constructs feature within their Sport Commitment Model. Four of these constructs positively affect sport commitment. These are sport enjoyment, personal investments, social constraints, and involvement opportunities. Interestingly, involvement alternatives were found to affect the sport commitment negatively (Scanlan et al., 1993a; Scanlan et al., 1993b). This generates an interesting future research question related to fun. Is the negative effect of involvement alternatives on the commitment to participating in their model due to these involvement alternatives being more aligned to the Intrapersonal Profiles of some children and therefore more fun than was Little League? Thus, was reduced fun a key factor in the negative effect of Investment Alternatives?

2.9 Summary and Conclusion

The literature has established that sport participation can benefit the physical, social, and psychological health of an individual. These positive health outcomes flow through to the population level and add to other economic and societal benefits. These benefits of sport participation provide significant justification for both why sport participation should be valued, maximised and maintained through life spans, and for the research that helps this to be achieved.

Voluminous research over time and geographical regions shows that participation in sport tends to drop off significantly as youth get older. There is also evidence from government and sport industry reports to suggest that overall sport participation numbers may be dropping, including youth rugby participation rates in Auckland and New Zealand. These trends lend urgency to research that helps to mitigate or reverse these trends.

To build youth participation numbers it is helpful to understand what motivates youth to take part in sport, what keeps them playing and what leads to players dropping out.

This understanding enables sport management practitioners to target interventions, train coaches, inform parents, develop Modified Sports, and create a sport environment that is optimally attractive to having fun, encouraging and maintaining sport participation, and reducing dropout.

Research studies show that fun is the primary reason youth play sport. Lack of fun is the main reason children drop out of sports. Other sport participation theories and models show that the Intrapersonal Profile of an individual and their perceptions of competence plays a key role in whether an individual finds a sport fun. Fun may have a complex and circular role in sport participation, both as an antecedent to motivation, as a motivation, and be a result of playing. Perceiving a sport as fun, seeing others having fun or having friends who find rugby fun may be antecedents of motivation to participate. The desire to experience fun is a key motivation to play while experiencing fun as a result of playing is hopefully the outcome. Experiencing fun may also fuel the motivation to play again, while experiencing not-fun may demotivate one from playing further.

Vissek et al. (2015) identified four key overarching fun-tenets for youth sport, made up of 11 thematic fun-factors and 81 specific fun-determinants, which they call the Fun Integration Theory. The results of Vissek et al. (2015, 2018, 2020) provides a sound basis for future studies and raises the question of transferability and applicability to other sports and countries. Thus, building on the Vissek et al. studies, the present research examines the construct of fun in the context of youth rugby in New Zealand and was guided by five research questions:

1. Why do youth play rugby?
2. What do youth find fun about rugby?
3. What are the important *Fun Facilitators* for youth playing rugby in New Zealand?
4. Can players be segmented based on how they perceive the importance of *Fun Facilitators*? If so, are these perception differences associated with differences in specific characteristics of a player's Intrapersonal Profile?
5. What are the important *Fun Inhibitors* for youth playing rugby in New Zealand?

Chapter 3 Methodology

3.1 Introduction

This chapter is an overview of the methodological framework, worldview and research paradigm that underpins this mixed-methods study. It includes an outline of the pragmatic and goal-directed thinking behind the research and a synopsis of the mixed methods research design. The participant focus of the study is described, along with the recruitment process for both the qualitative and quantitative research stages. Then, the specific methods in the qualitative and quantitative stages are outlined. The research goals and objectives for each methodology are presented, followed by an outline of the interview/questionnaire design, data collection processes and data analysis procedures. Finally, ethical considerations and procedures are detailed.

3.2 Research Paradigm and Worldview

The researcher's worldview and beliefs affect the research they are interested in, the research questions they ask, and the research approach they take (Crotty, 1998). The researcher's view of reality can be considered in terms of ontology and epistemology. Ontology is the study of the nature of existence and reality (Gray, 2014), while epistemology is the theory of knowledge, how we know things (Crotty, 1998). An epistemology flows naturally from a researcher's ontology.

There is a spectrum of possible ontological positions a researcher may take (Gray, 2014). These ontological positions stretch between two extremes. At one end, reality is what one sees; an objective, enduring, unchanging truth completely independent of what the researcher believes, perceives, and values. At the other end is the belief that reality cannot be separated from one's perceptions and values; that there is no absolute reality and reality cannot be independent of the researcher who observes it. A range of ontological positions exists between these two extremes, separated by degrees of objective reality and independence of the researcher from that reality (Gray, 2014; Guba & Lincoln, 1994).

Three main epistemological positions have been proposed: objectivism, constructivism, and subjectivism (Crotty, 1998). Two of these epistemological positions are most relevant for this research, objectivism and constructivism. Objectivism is where knowledge is considered discovered uninfluenced by, separate from and external to the researcher (Crotty, 1998). In Objectivism, the researcher is considered a remote observer. Constructivism, on the other hand, is an epistemological position where knowledge is constructed by the researcher and knowledge cannot be understood separate from the researcher. Therefore, with constructivism, there can be many different perceptions of reality (Crotty, 1998; Gray, 2014).

Several theoretical perspectives or paradigms have been proposed related to these epistemological positions. The post-positivism theoretical paradigm is strongly associated with objectivism (Gray, 2014). The post-positivism view is that there is an independent reality that can be studied, but that all observations of this reality have the potential to be fallible because of the human observer. The theoretical paradigm of interpretivism and its various subdivisions, on the other hand, are associated with constructivism. Interpretivism, popular in social science, involves multiple interpretations of reality which the researcher is part of. These interpretive realities are impacted by culture, history, other viewpoints and human classification systems (Gray, 2014).

These theoretical research paradigms influence the research questions that interest a researcher, along with the methodological approaches used to address these questions. Interpretivism is strongly associated with qualitative research methodologies so that the researcher can determine the human perspectives and meanings of reality. Post-positivism is closely associated with quantitative research methodologies, to determine the empirical 'truth' of reality (Gray, 2014).

This researcher's experience and worldview were set out in Section 1.1. The researcher combines a post-positivist worldview, believing that the world is generally measurable and tangible, together with a constructivist's belief that people interpret the world as

individuals, experiencing and responding to it differently and individually, particularly in a social and personal context.

The full conception of the research approach in this thesis has been determined by several additional considerations. Sport is a combination of (i) an objective tangible product with rules and regulations, (ii) a social activity involving interactions between people, and (iii) the natural and personal phenomena of an individual's personality, beliefs, perceptions, values and physical attributes (Crawford et al., 1991). Thus sport-related research is well suited to a mixed-methods approach (Smith, 2010).

Rudd and Johnson (2010) call for mixed methods to be used more in sport management research because of their usefulness in attaining a broader and deeper understanding of motivations. Crane and Temple (2015) have recommended that researchers use mixed methods and prospective approaches to examine how experiences shape motivations. While this research involves a tangible objective product, the focus was on how individuals (with different attributes, characteristics, experiences, values and beliefs) experience fun playing the sport of rugby.

Fun is a social-psychological construct poorly and diversely defined in literature but is considered a positive emotion or positive affective response. It goes without challenge, however, that what individuals consider fun varies from one to another. Individuals have unique interpretations of what fun is to them, and when and how they experience it. Therefore, individual perceptions of fun are best explored using an interpretive approach and qualitative methods. Qualitative research facilitates insights and enables the development of a depth of understanding of fun in the context of youth rugby, enhancing the ability to propose a model that reflects fun in youth rugby. The generalisation of findings across a wider population to facilitate population-wide sport management decisions, however, necessitates a deductive strategy using quantitative approaches.

The research questions used to guide this study (refer Section 3.3) therefore dictate the use of a pragmatic mixed-methods approach, utilising both qualitative and quantitative

methodologies. Pragmatism sets out that paradigms can be legitimately mixed or combined in research design, and in some cases is even necessary to achieve a purpose (Gray, 2014).

3.3 Research Design

As established above, mixed methods were deemed appropriate for examining fun in youth rugby. The mixed-methods design used in this study involved two integrated qualitative and quantitative research stages to address five research questions:

1. Why do youth play rugby?
2. What do youth find fun about rugby?
3. What are the important *Fun Facilitators* for youth playing rugby in New Zealand?
4. Can players be segmented based on how they perceive the importance of *Fun Facilitators*? If so, are these perception differences associated with differences in specific characteristics of a player's Intrapersonal Profile?
5. What are the important *Fun Inhibitors* for youth playing rugby in New Zealand?

The Qualitative Stage of the study was designed to gain an understanding of the drivers of fun and what youth perceive as fun and not-fun about playing rugby. Semi-structured, small group interviews followed by thematic analysis of the responses were used to address Research Questions 2, 3 and 5. These interviews sought to examine and understand both the core elements of fun in youth rugby and the factors that influence the fun experience. The analyses informed both an initial model for fun in youth rugby and the questionnaire in the Quantitative Stage of the research.

There were several reasons for selecting semi-structured group interviews as the most appropriate method of data collection for the Qualitative Stage. This type of interview fosters a level of interaction with participants and an understanding of thoughts and experiences (Bryman, 2008, Mertens, 2014). It also allows for a more structured approach to exploring fun than might be possible in a focus group. Focus groups were not used as they may have contributed to participants feeling uncomfortable under the

spotlight in discussions (Edwards & Skinner, 2009) and to mitigate the potential challenge of getting all participants to interact and contribute in an open forum.

The Quantitative Stage was designed to address Research Questions 1, 3, 4 and 5. A questionnaire was designed (Appendix D) based on the fun-determinants in Visek et al. (2015), the results from the Qualitative Stage of this study, and youth participation initiatives from New Zealand Rugby. Data collected in the questionnaire included the importance of *Fun Facilitators* and *Fun Inhibitors*, along with demographic, psychographic, and behavioural data reflecting some aspects of participants' Intrapersonal Profile. Descriptive statistics were used to determine which *Fun Facilitators* and *Fun Inhibitors* participants considered were more important to fun. T-tests and cluster analyses were then used to identify groups of players differing in their perceptions of *Fun Facilitator* importance. Finally, the results from the qualitative and quantitative studies were integrated and a more detailed and nuanced model proposed for 'Fun in Youth Rugby'.

3.4 Methods

3.4.1 Participants

The participants chosen for the study were male youth rugby players in school years nine through 11, from 14 High Schools across Auckland. Male players were selected as the focus for the study since male youth rugby players in Auckland were in decline (M. Hester, personal communication, September 4, 2019), while female youth rugby has a much smaller player base with player numbers increasing. The school years 9-11 were chosen as the focus age group since other research has indicated this is a key stage during adolescence when youth sport participation starts to decline (Sport New Zealand, 2018; Wall et al., 2011). The player participants were mostly 13 to 16-years-old, although one 12-year-old and one 17-year-old were included in the Quantitative Stage of the study. The 12-year-old was attending year nine at his school while the 17-year-old was attending year 11 and met the school year participant selection criteria for the study. The study was limited to 14 schools across Auckland as a matter of convenience

due to both time limitations and the number of schools making themselves readily available to the study. The number of schools included in the study also enabled a sufficiently large sample size reflecting the diversity of the youth playing population.

3.4.1.1 Participant Sample Size and Diversity

A total of 13 students from two schools participated in the group interviews. This number of participants and schools was considered an appropriate sample size for the qualitative component of the study given the indepth data generated from the group interviews (Edwards & Skinner, 2009). One school was low decile while the other was a higher decile school. In New Zealand, school deciles represent the socioeconomic status of a community of students rather than of an individual student. It is a measure of the socio-economic position of a school relative to other schools throughout New Zealand. School deciles are calculated using five socio-economic indicators (Ministry of Education, 2020) and indicate the extent to which a school draws its students from low socio-economic communities. For instance, decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students.

Questionnaire data were collected across 12 Auckland schools, with a total of 527 youth rugby players completing valid questionnaire responses. A key goal with the questionnaire was to get a large representative sample of the total male youth rugby population in Auckland, spanning players from low to high school deciles, co-educational and single-sex schools, and across the three main ethnicities playing youth rugby in Auckland. These 527 players represent approximately 8% of the youth rugby players in Auckland (a total of 6,302 in 2018, refer Appendix A) (M. Hester, personal communication, September 4, 2019). A large sample size with representative player diversity means that inferences drawn from the study results should apply to the whole community of youth rugby players in Auckland.

The demographic diversity of the youth rugby playing population in Auckland was well reflected in the sample. The participant sample included players from each of the three

school years, 9, 10 and 11, with more than 100 players in each school year (Table 5.1). Participants also came from both single-sex (241) and co-educational (286) schools. The participants completing the questionnaire came from schools across the range of school deciles (1-10), reflecting a diverse socioeconomic spectrum. Twenty five percent of respondents came from schools in deciles 1-5 and 75% from deciles 6-10 (Table 5.2).

School decile data was the closest approximation to the socioeconomic status of participants upon which comparisons could be made. Direct socioeconomic status data was not asked for from individual respondents. It was considered sensitive and potentially invasive to ask adolescents for this type of information. It was also thought participants would have been unlikely to be able to answer a direct socioeconomic question accurately.

Respondents were also obtained from each of the three main ethnicities playing rugby; Pacific Peoples (42.1%), European (33.6%), and Maori (19.5%) (Table 5.3). These percentages reasonably reflect the ethnic makeup in the youth rugby playing population in Auckland. New Zealand Rugby data for wider Auckland Secondary School male youth rugby players (refer Appendix A) shows the ethnic make-up of players in 2018 was 48% Pacific Peoples, 30% European, 14% Maori, with 8% from other ethnicities. A total of 155 out of 527 boys claimed multiple ethnicities. Players indicating multiple ethnicities were prioritised to a single ethnicity using New Zealand Government protocols for ethnicity prioritisation at Level 1 (Ministry of Health, 2017). These protocols prioritise Maori, followed by Pacific Peoples, Asian, Middle Eastern/Latin American/African, Other Ethnicity, then Europeans. The application of this prioritization had the effect of reducing Europeans in the sample by 80 and Pacific Peoples by 34.

3.4.1.2 Recruitment Process

Participants were recruited through their schools. The Principal or the Head of Sport in the school was approached by email. Where a school showed interest in assisting with the study, the researcher met with the Principal/Head of Sport. In this meeting, the research and its benefits were discussed, along with what was required from schools

and students participating in the study. Where the school committed to assisting with the research, the Principal signed a Principal Approval form permitting access to the school and potential participants.

For the group interviews, the School facilitated the recruitment of participants by issuing an Invite to meet the Researcher letter (Appendix C) to all students meeting the criteria of the study. Students who accepted the invitation met with the researcher where the research was explained. They were also provided with a detailed Information and Invite form, along with Parental Consent and Student Assent forms (Appendix C). The latter two forms were signed and returned to the researcher before a student participated in the group interviews.

To attract participants to the questionnaire session an Information and Invite form was given out by the School to all participants that met the criteria of the study. This Information and Invite form including the time and venue of the questionnaire session (Appendix C). Assent to participate in the research was given by participants through their arrival at the questionnaire session and their completion of the questionnaire.

3.4.2 Semi-structured Group Interviews

The purpose of the interviews was to address three of the research questions posed in the study. Firstly, what do youth find fun about rugby? Secondly, what are the important *Fun Facilitators* for youth playing rugby in New Zealand? Thirdly, what are the important *Fun Inhibitors* for youth playing rugby in New Zealand? The responses to the latter two questions were used to inform the questionnaire design where the importance of these factors was quantitatively assessed.

3.4.2.1 Groups

Two group interviews were run at two separate schools in Auckland. One a higher decile school and one a lower decile school. One group consisted of eight participants and the other had five participants. This difference in group size was an artifact of the

recruitment process and the number of participant volunteers received from each school.

3.4.2.2 Interview and Data Collection Process

The interviews took place at the selected schools in rooms set aside for this purpose. The group interviews were fifty minutes long. In a semi-structured group interview, participants were asked a series of questions:

1. What are three things that are fun about rugby?
2. What things associated with make playing rugby fun for you?
 - i. your team
 - ii. your coach
 - iii. your practices
 - iv. your games
 - v. you
3. What things make your rugby experience not-fun?

The questions were posed orally but the interview participants answered these questions by writing their responses individually on sticky notes. The participants were then given a chance to share their responses with the group. Responding verbally was voluntary and no pressure was applied to participants for a response. These verbal responses were sometimes followed by brief follow-up questions from the researcher, to explore and understand some answers. Participants would then place their sticky note responses on the wall, on an A3 page titled with the appropriate question. At the end of the focus groups, these question pages with the responses were collected by the researcher.

The approach to rely on sticky notes as the central source of data for the group interviews was taken because it was deemed most appropriate for the participant age group (Edwards & Skinner, 2009). This proved to be so, as participants in discussion time tended to read out their sticky notes rather than engaging in adlib discussion.

In terms of the questions posed, Question One was limited to three items to elicit participant responses that came top of mind to players, thereby drawing out what might be considered by player participants to be the core elements of fun in playing rugby. However, it should be noted that what comes top of mind may not necessarily be the most important things that are fun about playing rugby. To confirm relative importance requires further quantitative studies.

Question Two of the semi-structured group interview and its variations were chosen to draw out a comprehensive list of responses of factors that influence fun playing rugby. The 'your team, your coach, your practices, your games, you' variations to Question Two were chosen as part of the interview guide because they formed the main fun-factors from Visek et al. (2015) and because they reflected both the key activities of playing rugby (games and practices) and the core people within the game (you, the team and coach). These variations of Question Two also reflected the three levels of the Hierarchical Model of Leisure Constraints (refer Section 2.8.1), Intrapersonal (you), Interpersonal (team and coach) and Structural (games and practices), thus providing a full range of questions to stimulate participant's ideas about fun playing rugby.

Exploring the not-fun factors associated with playing youth sport has not been previously undertaken. Given this, Question Three was chosen to draw out a comprehensive list of responses of not-fun factors that influence fun playing rugby. No limitation was placed on the number of responses a participant could make to this question. In addition, after the group interviews, a group of 52 players from one school were asked to trial the questionnaire before the questionnaire was rolled out across Auckland schools. When the 52 participants had completed the trial questionnaire, they discussed the questionnaire with the researcher. As part of this discussion, participants were asked to individually review the response options to Question 11 of the questionnaire. That is, 'Tick the top three things from the list below that make rugby not-fun for you', and to make suggestions on any important options that were missing. From this feedback, two further response options were added to Question 11 in the final

questionnaire – ‘Bad or biased referees’ and ‘Missing out on playing time’ (refer Appendix D).

3.4.2.3 Thematic Analysis

Following a process similar to that outlined in Braun and Clarke (2006) and Braun et al. (2019), the sticky note responses were transcribed, reviewed and grouped into potential themes.

1. Responses were transcribed and reviewed to build familiarisation with the data.
2. Initial codes were generated for the response data set.
3. Relevant responses were collated to each code.
4. Collated codes were searched for potential themes.
5. All data relevant to each potential theme was gathered together.
6. The potential themes were reviewed and checked to assess whether the themes worked with the responses and the entire data set.
7. An initial thematic ‘map’ of the analysis was then generated, then refined.
8. Clear definitions and names were generated for each theme.
9. An overall story and model were built relating the themes to the research question and literature.

During this process, it was not necessary to select and analyse extract examples and selected extracts. Instead, the whole response data set was used and reported in Chapter 4. This was possible due to the limited number of group interviews and participants, along with the approach of having participants write brief responses to questions on sticky notes.

The responses to Question One: ‘What are the three things that are fun about rugby?’, and Question Two variation, ‘What things associated with playing your games make playing rugby more fun for you?’ were combined for thematic analysis to address the research question ‘What do youth find fun about rugby?’ These responses were combined because the responses to Question One were all associated with playing the game. They were not associated with practices or other aspects of rugby. Therefore,

combining the responses of these two questions for this thematic analysis seemed reasonable. The responses from the other variations of Question Two (your team, your coach, your practices, you) and from Question Three 'What things make your rugby experience not-fun?' were thematically analysed to address the research questions 'What are the important *Fun Facilitators* for youth playing rugby in New Zealand?' and 'What are the important *Fun Inhibitors* for youth playing rugby in New Zealand?'.

3.4.2.4 Influence of the Qualitative Results on the Quantitative Stage

While most *Fun Facilitators* utilised in the questionnaire were taken from Visek et al.'s (2015) high rating fun-determinants (refer Section 3.4.3.1 Questionnaire Design) one of the key goals of the group interviews was to identify any new *Fun Facilitators* in a New Zealand youth rugby context that might be added to the questionnaire used in the Quantitative Stage of the study. Another aim of the group interviews was to identify *Fun Inhibitors* so the importance of these *Fun Inhibitors* could also be explored during the Quantitative Stage. Finally, it was hoped that the in-depth qualitative interviews would suggest a model for fun in youth rugby that could be further refined by the quantitative results.

3.4.3 Quantitative Questionnaire

The questionnaire aimed to address the research questions: 'Why do youth play rugby?', 'What are the important *Fun Facilitators* for youth playing rugby in New Zealand?', 'Can players be segmented based on how they perceive the importance of *Fun Facilitators*?' If so, are these perception differences associated with differences in specific characteristics of a player's Intrapersonal Profile?' and 'What are the important *Fun Inhibitors* for youth playing rugby in New Zealand?'. The outputs from the questionnaire were also important in augmenting and proposing a more nuanced model of fun in youth rugby. To address these research questions, the questionnaire data collection process was designed to generate a large usable sample across a range of schools, with sizeable samples from high to low school deciles and the main ethnicities playing youth rugby in Auckland.

3.4.3.1 Questionnaire Design

The questionnaire instrument (Appendix D) was designed to collect three areas of information; the participant's perceptions on the importance of *Fun Facilitators* in youth rugby (Questionnaire Page 1), demographic, psychographic and behavioural data on participants including the reason(s) participants play rugby (Questionnaire Page 2 - School Year and Questions 1-10), and the top three things that contribute to participants not having fun while playing youth rugby (Question 11). The questionnaire was designed to fit on 2 A4 pages and be able to be completed by participants in no more than 20 minutes. This design was purposeful to reduce imposition on participant's time and make it easy for schools to organise participant's availability during the school day.

The *Fun Facilitators* used on page 1 of the Questionnaire were chosen based on the results of Visek et al. (2015), the results from the Qualitative Stage of this study and New Zealand Rugby youth participation initiatives. Due to the self-imposed questionnaire size restrictions, all 81 fun-determinants from Visek et al. could not be used as *Fun Facilitators* in the questionnaire. The top-ranked fun-determinants from each of the top nine Fun-factors from Visek et al. were selected for the questionnaire. The wording of the fun-determinants in the Visek et al. study was occasionally adjusted for the New Zealand rugby environment. For instance, the fun-determinant from Visek et al. "Scrimmaging during practice" was renamed in the questionnaire "Using games as part of practices".

A continuous numerical rating scale ranging from 1= Not Important to 10= Very Important with assumed equal intervals was used to collect the participant's perceptions of *Fun Facilitator's* importance. This scale was also used to collect psychographic information on participants perceived skill level and commitment to playing rugby. The research into *Fun Inhibitors* in youth rugby however was only an initial exploration of their importance. Participants in Question 11 were asked to choose the three most important *Fun Inhibitors* by ticking the top *Fun Inhibitors* that made rugby not-fun for them. Unlike the *Fun Facilitators*, the *Fun Inhibitors* were not scored on a 1-10 importance scale.

The questionnaire was piloted twice. Firstly, with both groups from the semi-structured interviews, and then again with a group of 50 youth rugby players at one school. The goal of the pilots was to get feedback on the understandability of the items in the questionnaire and the formatting of the questionnaire. Based on the feedback from the pilots, some additional item choices were added to Question 11 'Tick the TOP THREE things from the list below that make rugby NOT-FUN for you'.

3.4.3.2 Data Collection

The questionnaire data collection sessions were run in 12 schools, with at least one questionnaire session held at each school. At some of the larger schools, several group sessions were held. Each questionnaire session lasted no more than 30 minutes. The sessions started with an introduction to the purpose of the study. The importance of the study to rugby was explained, along with the importance of participant's honest and considered completion of the questionnaire. It was stressed to participants that responses needed to be their own, not their mates nor how they think their parents or coach might respond. However, it is acknowledged that parental, coach and peer influences cannot be completely removed from participants' responses due to the relationship they have with, and the influence they have on, players (Skinner & Lizzio, 2011).

These introductory steps were followed by a quick run-through of the questions in the questionnaire. This overview included an explanation of how to use the 1-10 numerical rating scale for the perceived importance of the *Fun Facilitators*, calibrating the use of the scale by participants. Participants were then allowed to ask any clarification questions. After this lead-in period, participants were given time to individually complete the questionnaire within a supervised group session. The questionnaires were generally completed in less than 20 minutes. Completed questionnaires were collected by the researcher as participants left the session.

3.4.3.3 Data Analysis

Questionnaire data analysis consisted firstly of generating descriptive statistics (refer Chapter 5). These descriptive statistics included frequencies, percentages, means, standard deviations, as set out in Table 3.1. The descriptive analyses characterised the sample by a range of demographic, psychographic and behavioural variables. Many of these variables are associated with previous sport participation and motivation theories and models including player's Intrapersonal Profile (Table 3.2). This characterisation was important to enable identifying and characterising groups of players based on differences in the perception of *Fun Facilitators* importance. These descriptive statistics also identified the relative importance of *Fun Facilitators* in the sample and the most frequently selected important *Fun Inhibitors*.

Analyses using the *Fun Facilitator* importance ratings followed the descriptive analysis. These analyses were approached in two ways. Firstly, comparative analyses using t-tests, analysis of variance and correlations were undertaken using demographic, psychographic and behavioural data (Table 3.1). The use of the parametric statistical analyses, analysis of variance and t-test, was appropriate given the use of continuous numerical rating scales with assumed equal intervals to rate the *Fun Facilitators* and the large sample size (Harpe, 2015; Mircioiu & Atkinson, 2017). K-means cluster analysis was the second approach used to investigate whether different groups of players could be identified based on how they rated the importance of *Fun Facilitators*. The intention was to cluster the sample using the *Fun Facilitators* to identify homogeneous groups of players based on the way they perceive the *Fun Facilitators*. Clustering is a common approach in marketing research and was considered a useful approach in this context. These analyses are all reported in Chapter 5.

Table 3.1 Descriptive Statistics and Quantitative Analyses (refer Chapter 5).

Descriptive Statistics and Analyses	Demographic, Psychographic and Behavioural Variables
Frequencies and Percentages	<ul style="list-style-type: none"> • School year • School deciles • Ethnicity • Number of sports played • Rugby my no. 1 sport • Preferred team • Rugby ambition • Preferred coach • Preferred playing day • Fun inhibitors
Means and Standard Deviations	<ul style="list-style-type: none"> • Commitment to playing rugby • Perceived skill level • Fun facilitators
T-tests	Fun facilitators, by <ul style="list-style-type: none"> • School year • School decile • Number of sports played • Rugby my no. 1 sport • Preferred team • Rugby ambition • Commitment to playing rugby • Perceived skill level
Pearson's Correlation	<ul style="list-style-type: none"> • School decile • Commitment to playing rugby • Perceived skill level
One-way ANOVA	<ul style="list-style-type: none"> • Ethnicity
K-means Cluster Analysis	<ul style="list-style-type: none"> • Fun facilitators

Table 3.2 Sources of Demographic, Psychographic and Behavioural Variables

Sources of Study Variables	Demographic, Psychographic and Behavioural Variables
Intrapersonal Profile Hierarchical Model of Leisure Constraints (refer Section 2.6.1)	<ul style="list-style-type: none"> • School year • School deciles • Ethnicity • Number of sports played • Rugby my no. 1 sport • Perceived skill level • Preferred team • Commitment to playing rugby • Rugby ambition
Competence Motivation Theory (refer Section 2.6.2)	<ul style="list-style-type: none"> • Perceived skill level
Achievement Goal Theory (refer Section 2.6.3)	<ul style="list-style-type: none"> • Commitment to playing rugby • Perceived skill level • Preferred team • Rugby ambition
Self Determination Theory (refer Section 2.6.4)	<ul style="list-style-type: none"> • Preferred team • Commitment to playing rugby • Perceived skill level • Rugby my no.1 sport • Rugby ambition
Fun Integration Theory (refer Section 2.5.4)	<ul style="list-style-type: none"> • Fun facilitators
Qualitative Stage of this Thesis (refer Chapter 4)	<ul style="list-style-type: none"> • Fun facilitators • Fun inhibitors
New Zealand Rugby	<ul style="list-style-type: none"> • Fun facilitators

Responses to the qualitative question in the questionnaire Question Two on page 2 “Why do you play rugby?” underwent a thematic analysis to deduce the main themes around why youth play rugby. The process used in this thematic analysis was as outlined in Section 3.4.2.4. As this question is qualitative and addresses a fundamental underpinning question to the rest of the study, the thematic analysis results are set out early in Chapter 4 (refer Section 4.2 and Table 4.1). Finally, the results from quantitative studies were integrated with those from the earlier qualitative research by identifying the important Fun Facilitators and Fun Inhibitors to update a proposed model for Fun Playing Youth Rugby (refer Figure 6.1).

3.5 Ethical Considerations

The research involved youth 13 to 16 years of age. This required ethics approval, which was obtained (Appendix B). Using the letter set out in Appendix C, the Principals of each school signed off on permission to access the school and students for both the group interviews and the questionnaire data collection.

For the group interviews, each School facilitated the recruitment of participants by advertising the study using the approved Invite to meet the Researcher letter (Appendix C). Potential participants who accepted that invitation and met with the researcher were provided with a detailed Information and Invite form (Appendix C). No pressure was placed on the youth to take part in the study. The students were also supplied with Parental Consent forms and Student Assent forms (Appendix C). These were signed and returned to the researcher before a student participated in the group interviews.

The group interviews involved face to face meetings with participants in their school environment. Participants were asked to share their thoughts and perceptions about rugby and fun. While fun is not a particularly invasive or sensitive subject, care was taken to create a trusted environment to avoid any potential for participants to feel exposed to their peers and peer pressure. Because participants were likely to be friends or acquaintances, care was used when asking individuals to reveal responses. Information was collected mostly individually, even though in a group setting, by answers to

questions being written on post-it notes and then stuck to large wall posters. No personally identifiable information was obtained in the post-it notes responses. Participants were not required or pressured to speak in front of the group. The group interviews were recorded but these recordings were not used in the research analysis and are kept confidentially.

For the questionnaire completion, participants were provided with a detailed Information and Invite form (Appendix C) which included the time and venue of the questionnaire session. This form was given by the school to participants that met the criteria to participate in the study. Assent was given by participants through their arrival at the questionnaire session and their completion of the questionnaire. Questionnaires were completed anonymously, and no personal information was collected. There was, therefore, no identification of individual participants in the results or findings. This was explained to potential participants in the Information and Invite form and was explained again to participants in their questionnaire session.

All ethics approved forms used can be found in Appendix C.

Chapter 4 Fun in Youth Rugby – a Qualitative Journey

4.1 Introduction

Chapter 4 examines fun in youth rugby from a qualitative approach. The findings presented and discussed in this chapter focuses on four research questions: (i) Why do youth play rugby?, (ii) What do youth find fun about rugby?, (iii) What are the important *Fun Facilitators* for youth playing rugby in New Zealand?, and (v) What are the important *Fun Inhibitors* for youth playing rugby in New Zealand?

The results are generated using thematic analysis of participant responses to questions about fun in rugby. These thematic results are then discussed in light of relevant academic research, particularly that of Visek et al. (2015).

The qualitative data analysed and discussed in this chapter comes from two sources within the study. The open-text responses to the question ‘Why do you play rugby?’ comes from the Quantitative Stage questionnaire but are analysed and presented here. This question is fundamental to substantiating the importance of this study and addresses the premise ‘That youth play rugby primarily because they wish to experience fun’.

The second source of qualitative data reported and analysed in this chapter are the responses to questions within the group interviews. These responses came from 13 youth rugby players attending two different high schools in Auckland. The collection and analyses of these qualitative responses from the group interviews were associated with addressing three research questions, ‘What do youth find fun about rugby?’, ‘What are the important *Fun Facilitators* for youth playing rugby in New Zealand?’ and ‘What are the important *Fun Inhibitors* for youth playing rugby in New Zealand?’. The intention of addressing the latter two research questions in the Qualitative Stage of the study was to identify the *Fun Facilitators* and *Fun Inhibitors* perceived to be important by youth rugby players. This was important to enable identification of rugby-related *Fun Facilitators* not identified in Visek et al.’s (2015) fun-determinants and *Fun Inhibitors* for

consideration for inclusion in the Quantitative Stage questionnaire. The relative importance of individual *Fun Facilitators* or *Fun Inhibitors* is addressed in the Quantitative Stage of the study (refer Chapter 5).

The approach of Visek et al., (2015) was to identify everything associated with fun in youth sport using soccer players, parents and coaches in the United States as the context. That may also have been a worthy goal for this study and enabled stronger comparisons to be drawn between youth rugby in New Zealand and soccer in the United States. However, it would also have resulted in significant duplication of the Visek et al. study. Rather this study not only drew comparisons with Visek et al. but also sought to extend that research significantly by examining in more detail the complexity of fun in youth sport as set out in the research questions described above and in totality in Section 3.3.

In considering the thematic analysis, it is important to understand the data collection methodology in the group interviews. Unlike the traditional approach of recording interviews, in this study participants wrote responses on small sticky notes. As mentioned in Section 3.4.2, this approach to rely on sticky notes as the central source of data for the group interviews was taken because it was deemed most appropriate for the participant age group (Edwards & Skinner, 2009). It proved so, as participants in discussion time tended to read out their sticky notes rather than engaging in adlib discussion. Responses on the sticky notes were necessarily succinct. These responses were collected at the end of the group interview, then transcribed, coded and thematically analysed. All responses are presented in Tables 4.2 and 4.3.

Fun was identified as the number one reason youth play rugby (refer Table 4.1). Four *Core Fun Elements* of rugby were identified thematically: *Physical Contact*, *Ball Play*, *Brotherhood* and *Game Highlights* (refer Table 4.2). It is proposed that to have fun playing rugby, there must be an alignment between one's Intrapersonal Profile and these four *Core Fun Elements*.

Fun Facilitators and *Fun Inhibitors* were also identified. Both of the *Fun Facilitators* and *Fun Inhibitors* themes have subthemes reflecting the main positive and negative influences on players' fun experiences. Finally, all six themes are captured in a model reflecting the results. This model shows the relationships between the themes and how they together contribute to the notion of 'Fun Playing Youth Rugby'.

4.2 Reasons for Playing Rugby

Key Finding 1: Fun is the number one reason youth play rugby.

A core premise upon which this study is based is 'That youth play rugby primarily because they wish to experience fun'. Other studies have shown that fun is the major reason youth play and continue to participate in sport (Allender et al., 2006; Colmar Brunton, 2014; Ewing & Seefeldt, 1996; Sadiman, 2017; Sport New Zealand, 2018). To test this premise participants completing the questionnaire were asked to state why they played rugby. Table 4.1 sets out the themes that were generated from the responses to the qualitative question in the questionnaire 'Why do you play rugby?', along with the number of responses coded to each theme.

Table 4.1 Thematic Analysis Results for 'Why Do You Play Rugby?'

Theme	Total no. of responses attributed to a theme
Fun (including enjoyment)	350
Other Positive Emotions (e.g. love, like etc.)	173
Social and Brotherhood	116
Fitness and Health	87
Physicality of Rugby	68
Family	62
Future Aspirations	44
Learning and Development	38
Winning	14

Note. N = 527. Dependent on response content a respondents response may have been coded to more than one theme.

Fun is identified in this study as the number one reason male youth play rugby in Auckland, New Zealand (Table 4.1). Most participants cited a positive emotion for playing, with the predominant reason being Fun. Several Other Positive Emotions were often cited by participants, such as love, like, enjoyment and passion for the game. Love, like, fun, passion and enjoyment are all positive emotional or positive affective responses that are closely related in a sports context. Jackson (2000) linked fun, enjoyment and liking by describing enjoyment as “a positive affective response to the sport experience that reflects general feelings such as pleasure, liking and fun” (p. 139). Scanlan et al. (1993) also suggested that enjoyment, liking, and fun are all similar terms, having used both fun and liking items to measure enjoyment reliably. Children tend to use the word *fun*, rather than *enjoyment*, when describing how they feel about positive sport experiences (Bengoechea et al., 2004).

Many participants responded to the question ‘Why do you play rugby?’ by simply stating “to have fun” or “because it’s a fun sport”, while others answered in more detail. Like the participant who stated, “it’s my first sport I’ve ever played and the one I enjoy the most”. Another said, “It’s a fun sport and good way to start the weekend”.

Players also cited specific aspects of rugby that are fun or which they loved, as reasons for why they played rugby. These aspects of rugby included social aspects the team environment and the physicality of rugby. The physical aspect of rugby and the brotherhood of a rugby team are thematically identified as *Core Fun Elements* of playing youth rugby (refer Section 4.3 *Core Fun Elements* of Playing Rugby).

The following statements capture some of the common sentiments around *Social and Brotherhood*: “to have fun with my mates”, “because I love the brotherhood and the rush to play for a team”, “grow bonds with my friends” and “I enjoy playing with and supporting my teammates”, “for the contact and meeting people”, “it’s fun, keep fit, socialise” and “because I like socialising with my friends”. While the following statements capture some of the common sentiments from participants around the *Physicality of Rugby*: “it’s fun to smash people”, “because it’s fun and a rough sport”, “I really love the physical aspect of the game” and “because I enjoy the contact”.

A proposed concept built upon throughout this discussion and thesis is that the level of alignment between an individual's Intrapersonal Profile and the *Core Fun Elements* of a sport may determine if, and how much, an individual perceives that sport to be fun. It is also proposed that the amount of fun experienced may strongly influence continued participation. Crawford et al. (1991) signposted the link between positive emotional responses to a sport and the *Intrapersonal Profile* of an individual. In their Hierarchical Model of Leisure Constraints, they outlined how an individual's personal beliefs, psychological and physical attributes and states, including their perceived self-skills and competence, and personal values (their *Intrapersonal Profile*), directly affects what an individual thinks they like or don't like, finds fun or not fun, their preferences, and whether they choose to participate or continue to participate in a sport.

Some players answering the questionnaire (qualitative component) identified other thematic reasons for playing youth rugby. Two of the more frequently cited themes related to *Fitness and Health* and *Family*. *Fitness and Health* responses were predominantly aligned to keeping fit and staying active. Examples of participant responses in this theme included: "it is fun to play and keeping fit" and "for my health, for fitness", while another wrote, "because to keep me active and because I like rugby". Responses in the *Family* theme varied from parents having involved them in rugby at a young age, to other family members playing rugby, being inspired by a successful family member, and desire to make parents proud. Example responses in the *Family* theme included: "to make my family proud, mostly my dad" and "because I grew up knowing my parents loved it". Others responded, "because I wanna be like my Uncle xxxxxx and because I want to buy my parents a house and a car" and "cause my Dad played for Manu Samoa and to continue my Dad's legacy".

Family as a reason for playing rugby might be expected to have featured more predominantly earlier in childhood. As children get older entering adolescence, personal choice would be expected to play a stronger role in decisions to play a sport. However, even in adolescence, some participants cited their parent's introducing them to rugby at a young age as the reason they were still playing. For instance, one participant wrote,

“because it is what I grew up playing with and it just makes me feel united and I just love playing it!!!!”. Another said, “it is a sport I fell in love with aged 3”, while a further respondent wrote, “my Dad dragged me in with a mate for when I was young and enjoyed it ever since”. Future investigations might look at how reasons for playing rugby or other sports evolve through childhood and adolescence, and the role of parents and family in that decision making.

Other themes associated with reasons for playing rugby were *Future Aspirations*, *Learning and Development* and *Winning*. *Winning* was the theme with the least responses. Coded under the *Future Aspirations* theme were participant responses such as “cause that what u want to do for the future”, “try carve my future” and “because I like the game one day I want to play professional”. While examples of responses in the *Learning and Development* theme were “because I enjoy learning and developing my skills”, “excel my skills and social skills” and “to improve skills and learn more about the game”.

4.3 Core Fun Elements of Playing Rugby

Key Finding 2: Four themes describe the *Core Fun Elements* of rugby for youth players: *Physical Contact*, *Ball Play*, *Brotherhood* and *Game Highlights*.

The group interviews were utilised to explore the legitimacy of the premise that ‘There are core elements of rugby that make playing rugby fun for youth’. Responses to two questions were used to understand what male youth perceived as fun about the game of rugby: (i) What are three things that are fun about rugby? and (ii) What things associated with your games make playing rugby fun for you? The responses to these questions were then thematically analysed.

Four themes emerged from the data collection and thematic analysis (Table 4.2). All responses coded to these four themes. Table 4.2 sets out the themes generated, along with all the coded responses to those themes. Two of these themes are directly associated with the core elements of the game itself, *Physical Contact* and *Ball Play*. A

third theme, *Brotherhood*, relates to the team nature of the sport. The fourth fun theme, called *Game Highlights*, is associated with the highlights that occur during the game for players. These four themes set out the *Core Fun Elements* of the game of rugby for youth players.

The analysis and interpretation of these results are conceptualised in Figure 4.1. More specifically, Figure 4.1 captures the interplay between the four themes as they relate to the *Core Fun Elements* of playing rugby. At the centre of the Figure is 'Fun Playing Rugby', which is made up of three themes around the outside of Figure 4.1: *Physical Contact*, *Ball Play*, and *Brotherhood*. The other theme *Game Highlights* represents moments of success related to the other three themes with associated heightened feelings and emotional peaks. It is proposed therefore that *Game Highlights* provides an intensification of the fun emotion through specific highlights in those three themes and is thus presented as the second circle in Figure 4.1.

There are some similarities but also significant differences with previous studies looking at fun in youth sport. Earlier studies had identified positive team and social interactions, greater personal effort, positive coaching, developing mastery and a sense of competence as being important to having fun during sport (Allen, 2003; Gardner et al., 2016; Harris et al., 1995; North, 2007; Scanlan et al., 1993; Ullrich-French & Smith, 2009). These studies, however, did not specifically examine what is fun about a specific sport.

Vissek et al. (2015) focussed on generating an exhaustive list of ideas on what makes playing sport fun. They asked the participants to brainstorm "all the things that make participating in sport fun across the many sports that they participate in" (p. 425) and to do so by answering the question, "One thing that makes playing sports fun for players is" (p. 425). Additionally, when Vissek et al. (2015) analysed and synthesised the participant statements/ideas, they refined any sport-specific statements to be generalisable across sports. They ended up with 81 ideas they call fun-determinants. Their approach intended to collect all ideas of what influences fun positively and generically across all sports. An important and valuable exercise not done previously.

Table 4.2 Thematic Analysis Results for 'What's Fun About Playing Rugby?'

Theme	Responses	No. of responses
Physical Contact	<ul style="list-style-type: none"> tackling (x2) hitting people doing big hits defence defending (x2) physicality physicality, not as soft as other sports e.g. soccer contact watching people fight getting hit 	12
Ball Play	<ul style="list-style-type: none"> running with the ball (x3) running attacking with the ball attacking taking the ball up kicking the ball kicking 	9
Brotherhood	<ul style="list-style-type: none"> play with the boys (x3) team bonding (x2) stronger bond with people that you haven't met before brothers playing with the brothers having fun with the boys teamwork (x2) working as a team to win the game working as a team the vibe you get when you play with your teammates team vibes, - playing, joking around the vibe when we all get along favourite team u14's Auckland because all the boys had a strong bond and we had good coaches 	18
Game Highlights	<ul style="list-style-type: none"> winning (x3) getting tries scoring tries (x2) scoring the most tries in the team feeling good when you play well as a team being the captain getting highlights playing in front of a big crowd get highlights (x2) not losing by a lot if we lost 	13

Note. N = 13. (x2) = response made by two participants. (x3) response made by three participants.



Figure 4.1 The Core Fun Elements of Rugby

However, their approach did not look to identify what the core elements of a sport are which determine fun playing that sport, an initial focus of this study.

4.3.1 Physical Contact and Ball Play

Physical Contact and *Ball Play* were the two game-related themes identified as being *Core Fun Elements* for youth rugby players in this study. The *Physical Contact* theme includes the physical elements of the sport such as tackling, hitting and getting hit and physical defence. Examples of participant responses coded to this theme included “tackling”, “getting hit”, “physicality”, “hitting people” and “defending”.

While participants in the study found physicality to be a core element of fun playing rugby, Visek et al. (2015), within the parameters of their methodology, arrived at only one fun-determinant related to a physical contact theme. This fun-determinant was

'Playing rough' which was ranked lowest for importance amongst the fun-determinants in their primary fun-factor *Trying Hard*. Also, of interest, Visek et al. (2018) found 'Playing rough' was ranked significantly higher in importance by players and more so by older players, than by parents or coaches. As noted earlier, Visek et al. (2015) drew their study participants from soccer, a limited physical contact game, so it is not surprising that the fun-determinant 'Playing rough', did not rate high for importance to fun. On the other hand, the boys from the present study in rugby which is a high contact/collision sport, found physicality to be a core element of their rugby fun.

With the *Ball Play* theme, the obvious ball related aspects of rugby were mentioned by respondents including attacking with the ball and kicking. Specific examples of participants responses included "running with the ball", "kicking the ball", "attacking" and "taking the ball up". Visek et al. (2015) again arrived at one fun-determinant relevant to *Ball Play*. This was 'Ball touches (dribbling, passing, shooting, etc.)' which was placed in the *Learning and Improving* fun-factor and was rated highly.

While the above responses may seem obvious as handling the ball and physicality are core components of rugby, it would have been interesting to have explored these two themes in more detail in follow up focus groups with players and with ex-players. Detailed comparisons of the *Core Fun Elements* of different or related ball sports may also be interesting and provide insights that could contribute to the evolution of sports and the design and development of Modified Sports. It would be interesting, for instance, to explore whether players with different Intrapersonal Profiles (perceived skills, competencies, physical attributes, physical maturity in their age group etc.) perceive the fun of ball handling and physicality differently. Rugby Union and Rugby League may, for instance, attract players with similar Intrapersonal Profiles concerning levels of perceived ball skills and competencies, physical attributes such as strength, and attitudes and beliefs around the ability to withstand physical collisions; because of comparable levels of physicality and ball handling involved in these sports. Rugby Sevens may attract players who prefer more handling and running with the ball in more space, and less physicality from large mauls, rucks and close-quarter hits and wrestling. While

Touch Rugby may attract an entirely different set of players with Intrapersonal Profiles that prefer running with the ball and very limited physical contact. Further perspective on the similarities and differences of individuals' perceptions, likes and dislikes, to ball play and physicality between similar sports like Rugby Union, Rugby Sevens, Rugby League and Touch Rugby may produce interesting insights from the perspective of sport modification and the design of Modified Sports.

4.3.2 Brotherhood

The third team-related theme is *Brotherhood*. The term *Brotherhood* came out in discussions during the group interviews. This label appears to reflect the thoughts and responses of the participants in this theme. The most common response given under the *Brotherhood* theme is "playing with the boys" provided by three different participants. Other responses given by participants included "brothers", "playing with the brothers", "having fun with the boys", "working as a team to win the game" and "the vibe you get when you play with your teammates" (Table 4.2).

That there is an important social aspect to fun in a youth team sport for many players should not be surprising. The social side of sport has long been recognised as a part of what makes sport fun and enjoyable. Podilchak (1991) suggested that fun is a social process and interaction with others is fundamental to having fun. One of Visek et al.'s (2015) four overarching fun-tenets was *Social*, relating primarily to the social interaction of players with their teammates across two of 11 fun-factors - *Positive Team Dynamics* and *Team Friendships*. Visek et al. (2020) showed that positive team dynamics was for players a primary determinant of fun in a youth team sport, and that team friendship also had an important, if secondary role. The *Positive Team Dynamics* fun-factor of Visek et al. (2015, 2020) included many high rated fun-determinants including 'Being supported by my teammates' and 'Supporting my teammates'. Visek et al. (2015, 2020) also included another high rated fun-determinant 'Getting along with your teammates' under the fun-factor *Team Friendships*. All three of these fun-determinants appear to be related to the concept of *Brotherhood*.

The social component of sport has also played a significant role in other sport participation theories. Deci and Ryan's (1985, 2000) Self Determination Theory argues that people are motivated to play a sport to meet three general needs; one of which is to be socially connected. Klint and Weiss (1987), using Competence Motivation Theory, found that for athletes with high perceived social competence, the social aspects of the sport are a strong reason to participate. Stuntz and Weiss (2009) advocated a third goal orientation, social, be added to Achievement Goal Theory because it is related to enjoyment/fun. Weinberg and Gould (2011) reported that individuals with a high social goal orientation are motivated by the desire for social connections and the need to belong to a group. One might also surmise from this, that a player whose Intrapersonal Profile is aligned with high social competence and/or high social need might be driven more towards team sports, and that the social aspects of a sport would make up a strong component of their fun.

However, *Brotherhood* as conceived in this theme, while including social and team aspects of playing rugby, seems a more serious and important endeavour than just playing a game with friends. The responses seem to indicate it includes comradeship, like soldiers in arms working together, a sense of belonging, united by a common purpose and goal. As the youth players view *Brotherhood* as a core element of fun playing rugby, this has implications for coaching. While creating a good social environment is important, there is a need for the coach to look to engender a level of spirit beyond the purely social and create a sense of *Brotherhood* amongst the players. This insight highlights the importance of the development of the coach's leadership skills and emotional intelligence and their ability to create this sense of *Brotherhood*.

4.3.3 Game Highlights

The *Game Highlights* theme covers aspects or moments of playing when players feel good and extra special, where they have emotional peaks. These *Game Highlights* include events such as the team winning or playing especially well or as individuals, scoring a try, making an important tackle, making a turnover, breaking a tackle, making an extra good play or being made captain. Responses from participants in this theme

included “winning”, “getting tries”, “feeling good when you play well as a team”, “being the captain” and just “getting highlights” (Table 4.2).

Several of Visek et al. (2015) fun-factors included fun-determinants that might be considered relevant to this *Game Highlights* theme. These fun-factors included two primary fun-factors: *Trying Hard* with fun-determinants such as ‘Playing well during a game’ and ‘Making a good play’, and the *Positive Team Dynamics* fun-factor including the fun-determinant ‘Playing well together as a team’. A secondary fun-factor Visek et al. called *Mental Bonuses* included the fun-determinant ‘Winning’.

The events listed by respondents under the *Game Highlights* theme could be conceived of as significant successes or intense emotional experiences, mostly related to aspects of the first three themes. These *Game Highlight* events may strongly reinforce the feelings of fun and protect against not-fun experiences. A positive feedback relationship may also exist between *Game Highlights* and an individual’s sense of fun. Experiencing frequent *Game Highlights* may reinforce an individual’s belief in their competence and skills, thus positively impacting their sense of fun over time and through that their alignment with and commitment to the sport.

The *Game Highlights* theme also has implications for sport managers and coaches. If *Game Highlights* is one of the *Core Fun Elements* of rugby for youth players, then it behoves managers whose goal is to maximise fun and participation to influence player’s opportunities to receive *Game Highlights* through organisation, structure and coaching. *Game Highlights* is not just about, or even mostly about being in a winning team. Only one team can win any game and some teams will end up at the top of a competition and some will be at the bottom. Opportunities to receive *Game Highlights* can be influenced by the structuring of competitions and access to competitions where players are playing with and against teams of equal skill level, size and weight. *Game Highlights* also emphasises the importance of skill development in coaching so that players can develop the skills necessary to obtain *Game Highlights* regularly. It also emphasises the importance of playing time and players playing in positions they are suited to so that the opportunity to have *Game Highlights* is maximised.

4.3.4 Integration of the *Core Fun Elements* of Rugby and the Hierarchical Model of Leisure Constraints

Crawford et al. (1991) set out in their Hierarchical Model of Leisure Constraints the fundamental importance of an individual's Intrapersonal Profile in determining what sports an individual likes. Integrating this Hierarchical Model of Leisure Constraints with the above findings of four *Core Fun Elements* of Rugby suggests a new concept for the determination or perception of fun in rugby. That is, that the four *Core Fun Elements* of Rugby (*Physical Contact, Ball Play, Brotherhood, and Game Highlights*) when strongly aligned to the Intrapersonal Profile of a player may determine whether a player perceives rugby to be fun and have a strong influence on how much fun they perceive rugby to be. Furthermore, some individuals may be greatly attracted to these four *Core Fun Elements*, some less so and some not all. This concept is presented in Figure 4.2.

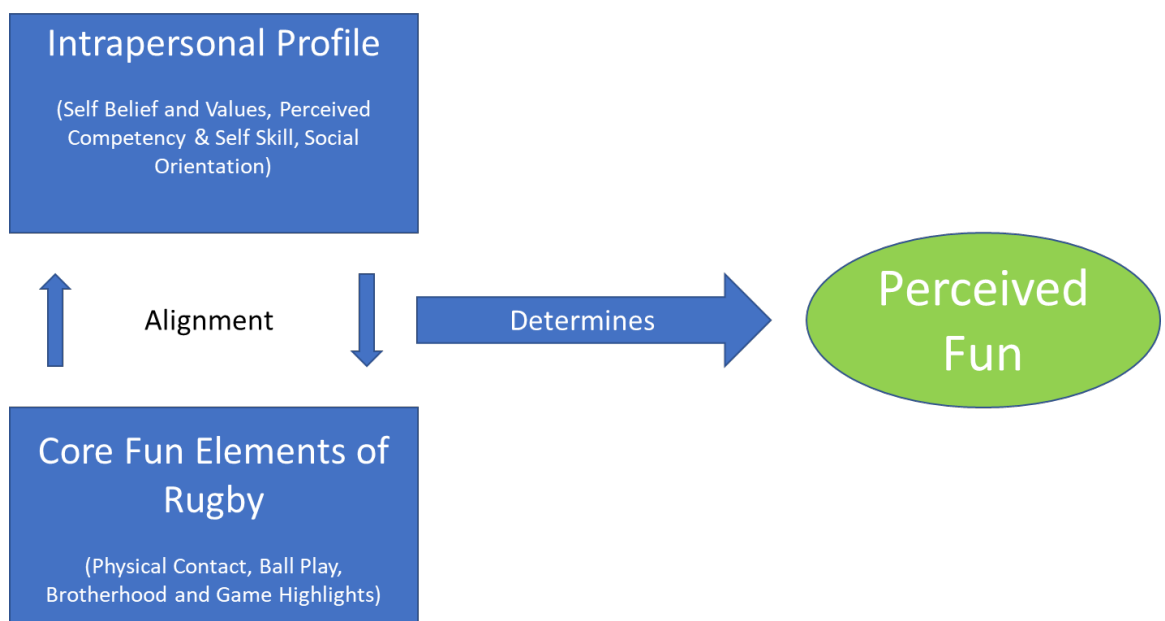


Figure 4.2 Fun, Intrapersonal Profile and the *Core Fun Elements* of Rugby.

As set out above, it is suggested that for an individual to find rugby fun there must be a congruence or alignment between the Intrapersonal Profile of the individual and the *Core Fun Elements* of a sport. Crawford et al. (1991) saw a link between positive

emotional responses to a sport and the Intrapersonal Profile of an individual. They suggested that an individual's Intrapersonal Profile directly affects what an individual thinks they like or do not like (finds fun or not fun), their preferences, and whether they choose to participate or continue to participate in a sport.

An Intrapersonal Profile includes personal beliefs about one's abilities, psychological and physical attributes, perceived competence, and self-skills. Based on this definition and linking the Intrapersonal Profile to the *Core Fun Elements* of Rugby derived, it follows that an individual who finds rugby fun would have an Intrapersonal Profile which is attracted to and aligned with the *Physical Contact*, the *Ball Play*, and the *Brotherhood* between players in a rugby team.

Self-belief in one's ability to handle and enjoy the physicality of rugby would be expected to be an important attribute to the Intrapersonal Profile of an individual attracted to rugby. Perceived competence or self-skill around ball handling, such as catching, running, passing, breaking tackles and kicking would also be expected to be an important attribute in their Intrapersonal Profile.

Other sport participation and motivation theories, such as Competence Motivation Theory and Achievement Goal Theory, also claim the importance of competence, perceived ability, and mastery as fundamental to sport participation and motivation. Aligned to these theories, Vissek et al. (2015) in their Fun Integration Theory suggested that 24 of their fun-determinants related to Achievement Goal Theory and 32 fun-determinants were associated with Competence Motivation Theory.

The above concept around the alignment of the Intrapersonal Profile raises interesting questions around fun, sport selection, participation and dropout for both rugby and other sports. Might an individual find one sport more fun than another because the *Core Fun Elements* of that sport are more aligned to their Intrapersonal Profile? Might this alignment or lack of it, play a factor in why players drop out of a sport and take on a different sport? For those who never choose to play rugby, are the *Core Fun Elements* insufficiently attractive and not considered fun by them? Do players who drop out, do

so because they perceive the *Core Fun Elements* of Rugby less appealing and less fun than for those players who remain in the game? Do players drop out because other activities are more aligned, more appealing, more fun? Does this concept explain why Scanlan et al. (1993a) in their Sport Commitment Theory found involvement alternatives affected sport commitment negatively? Does receiving *Game Highlights* reinforce a player's self-belief, perceived skills and competency and alignment to the *Core Fun Elements* of a sport? Does Poor performance (see Section 4.4.2.2) have the reverse effect?

For sport managers, this concept of alignment of a player's Intrapersonal Profile with the *Core Fun Elements* of a sport leads to other important practical questions and considerations. That is, if you modify, reduce or remove *Core Fun Elements* of a sport to make it more attractive to some youth, are you at the same time making the sport less attractive, less fun, to youth already playing the sport? For instance, is touch rugby still rugby, now that you have removed the physical element or is it an entirely different sport? Are Rugby League and Rugby Union more similar because they include the same four *Core Fun Elements* – *Physical Contact*, *Ball Play*, *Brotherhood* and *Game Highlights* and are therefore competing for the same players? Does Rugby Sevens attract players who prefer more space, more ball-handling and running with the ball and less physical contact from large mauls, rucks and close-quarter hits and wrestling? Does Touch Rugby attract an entirely different set of players with Intrapersonal Profiles that prefer running with the ball and no physical contact? Would understanding the Intrapersonal Profile of targeted participants assist in the design of a Modified Sport by having identified the necessary *Core Fun Elements* of a Modified Sport to optimise fun for this group? Might understanding a player's Intrapersonal Profile and the *Core Fun Elements* of specific sports assist in suggesting what sports a player might try under a Balance is Better philosophy?

4.4 Factors Influencing Fun Playing Rugby

Key Finding 3: Some factors enhance or reduce fun for youth rugby players. These factors fall into two themes: *Fun Facilitators* and *Fun Inhibitors*

The qualitative group interviews next addressed the research questions ‘What are the important Fun Facilitators for youth playing rugby in New Zealand?’ and ‘What are the important Fun Inhibitors for youth playing rugby in New Zealand?’. Addressing these questions in the Qualitative Stage was designed for two reasons. Firstly, to identify the positive influences on fun in a New Zealand youth rugby context, thereby identifying any factors that positively influenced fun in rugby that had not been identified by Visek et al. (2015). Visek et al. had comprehensively identified fun-determinants in the context of youth soccer in the United States. Secondly to identify factors that negatively influence fun in youth rugby. Visek et al. had identified this as an international research gap in youth sport. Beyond the immediate use to address the above research questions, these research outputs informed the questionnaire in the Quantitative Stage of the study (refer Chapter 5).

To address these research questions, players in the group interviews were firstly asked to identify all the things associated with their Teams, Coaches, Practices, Games and Themselves that contribute to making playing rugby fun. They were then also asked to volunteer from their experience what was not-fun about playing youth rugby. Specifically, participants were asked to identify the top three things that they experienced that are not-fun. Responses to all these questions were coded and considered thematically.

Thematic analysis of responses to the interview questions identified two overarching themes for factors influencing fun, *Fun Facilitators* and *Fun Inhibitors*. The characteristic of the *Fun Facilitators* theme responses is that they have a positive influence on players’ fun experiences. The characteristic of the *Fun Inhibitor* responses is that they have a negative influence on the player’s fun experience. To an extent, these two overarching themes are a characteristic of the questions that were asked, seeking both positive and

negative influences on fun. However, a key research output coming out of this research is that negative influences of fun (*Fun Inhibitors*) were identified. A second output is detailed sub-themes identified for both *Fun Facilitators* and *Fun Inhibitors*, providing New Zealand rugby specific components under these two overarching themes.

The earlier finding of four *Core Fun Elements* (*Physical Contact, Ball Play, Brotherhood* and *Game Highlights*) suggests that other factors, including many of the fun-determinants in Visek et al. (2015), while not *Core Fun Elements* of the sport of rugby, may be important influences on players' fun experience. These other fun factors may assist in enhancing the fun experience (*Fun Facilitators*) when present. Additionally, other factors may act negatively (*Fun Inhibitors*), detracting from the fun experience.

Several subthemes within the *Fun Facilitator* and *Fun Inhibitor* themes are identified. The *Fun Facilitator* subthemes are *Positive player attitudes and behaviours, Enhanced practices, Positive coaching, Game preparation* and *Game time support*. The *Fun Inhibitor* subthemes are *Negative player attitudes and behaviours, Poor performances, Negative supporters and feedback, Biased or poor referees, Poor coaching, Insufficient playing time* and *Practice content*. Both the themes and subthemes are described in more detail in the sections below, while Table 4.3 provides details of the themes, subthemes and all full responses provided by the participants.

Table 4.3 Thematic Analysis Results for Influences on Fun Playing Rugby

Theme	Sub Themes	Codes	Responses	No. of theme relevant responses
<i>Fun Facilitators</i>	Positive player attitudes and behaviours	Positive player attitudes	<ul style="list-style-type: none"> • We go hard but still stay humble. Makes everyone feel good not just the winners • Boys supporting • Enthusiasm • Supportive • Enthusiastic • Everyone else is on the same page • Actually want to be there • Joking around • Being happy 	9
		No negative behaviours	<ul style="list-style-type: none"> • No put downs • When your team says no negatives • No beef with your teammates • And that your team will say no negative about what happen • Don't be cocky 	5
	Enhanced Practices	More games at practices	<ul style="list-style-type: none"> • When we do more game type stuff • More games (at practices) • Have fun with da boys, games (at practices) 	3
		Learning Skills	<ul style="list-style-type: none"> • Having fun but at the same time learning new things as well • Skill drills and using those skills in a game scenario • Learning skills from each other 	3
		Fitness work	<ul style="list-style-type: none"> • Fitness 	3

			<ul style="list-style-type: none"> • Fitness • Fit for the game 	
		Intensity	<ul style="list-style-type: none"> • If we are more intense (x2) • All the boys turning up to training 	2
	Positive coaching	Coach's emotional competence	<ul style="list-style-type: none"> • Came with sweets to training and game time • He has not got angry when we did something wrong unless we did it a lot • He isn't strict • He is chill but we still got work done • He had humour and wise nice • Made the team feel like that they are a family • Genuinely cared about the players and is more like a friend than a coach • Didn't put players down, always wanted to improve them • Keeping the team together • Good mindset • Inspires • Intake from team • Motivation/Motivates us 	13
		Coach's rugby skills	<ul style="list-style-type: none"> • Always giving tips on how to improve • Make the game easier • Help the team • Making our gameplays 	4
	Game preparation	Physical preparation	<ul style="list-style-type: none"> • Have a good sleep • Eat well before the game • Good nutrition before the game • Make sure you stretch or you will have cramps • Have a good warm up • Good warm up • Good breakfast 	11
		Mental preparation	<ul style="list-style-type: none"> • Good mentality • Clear mind • Get in the zone and enjoy the game even when you are losing or winning 	8

			<ul style="list-style-type: none"> • Prayers before the game – humble • Getting in the zone before games with music • Pay attention in training by taking it seriously but also having fun as well 	
	Game time support	Playing for family	<ul style="list-style-type: none"> • Playing for the fam • Playing in-front of my family 	2
		Positive game time support	<ul style="list-style-type: none"> • Having the sideline cheering and supporting us. 	1
	Other	Social	<ul style="list-style-type: none"> • Meeting new people 	1
<i>Fun Inhibitors</i>	Negative player attitudes and behaviours	Negative player behaviours	<ul style="list-style-type: none"> • Dirty players (x3) • People bully their own teammates. • Other team mocking us. • Fights (x2) • Having fights in your own team 	8
		Negative player attitudes	<ul style="list-style-type: none"> • When the boys going to the game are scared and not giving 100%. • Cocky players • People's attitudes in opposing team 	3
	Poor Performances	Poor team performance	<ul style="list-style-type: none"> • Not playing as a team • When our training doesn't pay off • If we had open tries but we didn't score them. • Losing • Teams that are average • Losing • Frustration with teammates 	7
		Poor player performance	<ul style="list-style-type: none"> • If I miss an important tackle 	1
	Negative supporters and feedback	Negative sideline feedback	<ul style="list-style-type: none"> • People on the sidelines putting down the players • Sideline being negative • Getting told I'm doing bad. 	3

		Negative parental feedback	<ul style="list-style-type: none"> • Parents on the side • When my parents scream at me when I do something wrong or lose the game. 	2
	Biased or poor referees	Biased or poor referees	<ul style="list-style-type: none"> • Bad calls • When the ref favours the opposing team • When the Ref botches it • Unfair decisions 	4
	Practice content	Fitness	<ul style="list-style-type: none"> • Fitness (x2) • Not running • less fitness (at practices) 	4
	Poor coaching	Poor coaching	<ul style="list-style-type: none"> • Annoying coaches • Coaches • Under 15's is bad because of our coach 	3
	Insufficient playing time	Not playing enough	<ul style="list-style-type: none"> • Being benched for the whole year • Missing out on playing time 	2

Note: N = 13.

4.4.1 *Fun Facilitators*

Key Finding 4: Five *Fun Facilitator* subthemes were identified: *Positive player attitudes and behaviours, Enhanced practices, Positive coaching, Game preparation and Game time support*.

The characteristic of responses in the *Fun Facilitators* theme and subthemes is that they have a positive effect on boys' fun experience while playing youth rugby. The theme is labelled *Fun Facilitators* as responses coded to this theme create a sport environment that is more conducive to having fun. The responses are not considered the *Core Fun Elements* of rugby, but they do appear to contribute to the fun variance by assisting to create a positive fun environment and by influencing the fun experience.

The *Fun Facilitator* subthemes identified are *Positive player attitudes and behaviours, Enhanced practices, Positive coaching, Game preparation and Game time support* (Table 4.3). However, it is important to note that the process used to draw out the *Fun Facilitators* from players in this study was more limited than the process Visek et al. (2015) used to generate their 81 fun-determinants. However, the present study was not designed to be as comprehensive, nor to repeat the work of Visek et al. (2015). Rather it was to add to Visek et al. while drawing significantly upon Visek et al.'s fun-determinants for the Quantitative Stage of this study. The group interviews intended to explore what fun influencing factors came to participant's minds using a range of questions. These questions reflected the key activities of playing rugby (games and practices) and core people within the game (you, the team and the coach) to stimulate participant's ideas about fun playing rugby. The variations of Question Two also reflected the three levels of the Hierarchical Model of Leisure Constraints (refer Section 2.8.1), Intrapersonal (you), Interpersonal (team and coach) and Structural (games and practices). The group interviews also sought to identify, in a New Zealand youth rugby context, any factors that are missing from the Visek et al. fun-determinants list. The thematic analysis identified many similarities and a few differences between the *Fun Facilitator* subthemes and the fun-factors and fun-determinants from Visek et al..

4.4.1.1 Positive Player Attitudes and Behaviours

This subtheme reveals the importance of positive team attitudes and behaviours and the absence of negative attitudes and behaviour to a fun rugby environment. The players value positive attitudes such as enthusiasm, humility, happiness and supportive behaviour. They also valued the absence of negativity, put-downs and cockiness. Later under the theme *Fun Inhibitors* (refer Section 4.4.2.1), players indicate that the presence of negative player attitudes and behaviours is not-fun.

Responses in the *Positive player attitudes and behaviours* subtheme were firstly coded to 'Positive player attitudes' and 'No negative behaviours' (Table 4.3). Examples of responses coded to 'Positive player attitudes' included "being happy", "we go hard but still stay humble", "boys supporting" and "enthusiasm". Under the 'No negative behaviours' code, example responses included "no put downs", "when your team says no negatives", "no beef with your teammates", "that your team will say no negative about what happen" and "don't be cocky".

Several fun-factors and fun-determinants from Visek et al. (2015) are relevant to the *Positive player attitudes and behaviours* subtheme. Three fun-determinants in the Visek et al. (2020) primary fun-factor *Positive Team Dynamics* had commonalities with this subtheme. For example, the fun-determinants 'Being supported by my teammates', 'Supporting my teammates' and 'Getting help from teammates'. Visek et al. (2020) also had a highly-rated fun-determinant under the fun-factor *Mental Bonuses* called 'Keeping a positive attitude'. 'Trying your best' and 'Working hard' were two other high-rating fun-determinants under the Visek et al. (2020) primary fun-factor *Trying Hard*.

4.4.1.2 Enhanced Practices

In the subtheme *Enhanced practices*, participant responses coded to four areas, signalling four ways in which practices can be enhanced to improve the fun experience. These four enhancements areas are more games at practices, learning new skills, greater intensity, and fitness work (Table 4.3).

Participant responses coded to 'More games' included "when we do more game type stuff" and just "more games". Learning skills is important to players but doing so in a fun way. Responses coded to 'Learning skills' included "Having fun but at the same time learning new things as well", "Skill drills and using those skills in a game scenario" and "Learning skills from each other".

Practices are considered more fun when all players turn up to practice and there is an intensity to the practice. Fitness is a mixed bag. Some boys thought fitness work at practice is fun, while others thought that too much fitness work at practices is a *Fun Inhibitor*. The context around fitness as well as an individual's likes and not likes may be important as to whether practices are fun or not-fun. It is possible that whether fitness is fun or not might be dependent upon the way fitness is done and the setting in which it is undertaken. However, the view of fitness may also relate to the values and beliefs of the individual involved, their Intrapersonal Profile. *Learning and Improving* and *Practices* were both fun-factors in the Visek et al. (2015). One fun-determinant in the *Practices* fun-factor was called 'Scrimmaging during practice'. Scrimmaging means a game played to practice. Visek et al. also had fun-determinants in the fun-factor *Learning and Improving* called 'Learning new skills' and 'Improving athletic skills to play at the next level'. While fitness training is not identified as a fun-determinant in Visek et al., under the fun-factor *Trying Hard* there are two partially relevant fun-determinants called 'Exercising and being active' and 'Working hard'.

Learning and development and motivation to participate have been linked together in other sport participation theories. The central tenet of Competence Motivation Theory is individuals being motivated to feel competent in a sport, with, according to this theory, those feelings of competency being a primary driver of motivation to play (Weiss & Chaumonton, 1992). To satisfy the desire for competence, individuals attempt to master their sport. Similarly, Self Determination Theory (Deci & Ryan, 1985, 2000) argues that people are motivated to play a sport to meet three general needs, one being to feel competent and another autonomy. Competency and autonomy can be developed through *Learning and development*. Like Visek et al. (2015), this study

identifies *Learning and development* as being important to a fun experience. While learning and development can itself be fun in many situations, it also acts through building competence. *Game Highlights* may also reinforce a sense of competence.

4.4.1.3 Positive Coaching

Positive coaching is about both the emotional competence of the coach and their rugby skills (Vissek et al., 2015). However, in this qualitative study, the vast majority of responses coded to this subtheme are coded under a 'Coach's emotional competence' (Table 4.3). Less common are responses that are coded to a 'Coach's rugby skills'. Positivity, relatability, caring nature, and the ability to motivate are key attributes of a coach that contributes to a fun experience for players. Responses coded the 'Coach's emotional competence' included "genuinely cared about the players", "didn't put players down, always wanted to improve them", "he had humour and was nice" and "he is chill, but we still got work done". Responses coded to 'Coach's rugby skills' included "make our gameplays", "make the game easier" and "always giving tips on how to improve". However, while the majority of responses were coded to the 'Coach's emotional competence' rather than a 'Coach's rugby skills', this does not suggest the relative importance of these subthemes. Relative importance requires quantitative studies to determine. Vissek et al. (2020) found that knowledge of the sport was highly rated in terms of the importance of the coach-related fun-determinants, second only to 'A coach treating players with respect'.

Perhaps the strongest similarities between *Fun Facilitator* subthemes in this study and the fun-factors of Vissek et al. (2015) are in *Positive Coaching*. The *Positive Coaching* fun-factor in the Vissek et al study is one of three that are of primary importance to players fun (Vissek et al., 2020). It is also the fun-factor in their study which had the most (12) fun-determinants. Most of those coach associated fun-determinants that Vissek et al. derived from their participants' responses were associated with the emotional competence of the coach (11), rather than the coach's knowledge of the sport (1). This Vissek et al. (2015, 2020) results draws strong comparisons with the responses coded under this subtheme. That is, it appears that responses associated with the emotional

competence of a coach and the impact of this aspect of coaching on fun are more detailed, in comparison to those associated with the coach's rugby skills and knowledge of the game. Again, this does not necessarily establish the relative importance of these two aspects of coaching but does suggest that the emotional competence of the coach is of considerable importance.

Walters (2011, 2012) study found coaches in rugby union had the lowest percentage of positive comments and the highest percentage of negative comments to players. That result suggests *Positive coaching* may be an important area for rugby to focus on when attempting to improve the fun experience of players. Although some time has gone by since Walter's study was completed, that result suggests that the behaviour of some coaches at that time was at odds with maximising a fun environment in youth rugby.

4.4.1.4 Game Preparation

When the spotlight was placed on the individual player's contribution to influencing their own fun experience, participants responses focused on game-day preparation. *Game preparation*, both physically and mentally, is perceived by the players as an important prerequisite for getting the most fun out of a game of rugby (Table 4.3). Responses related to physical preparation included "have a good sleep", "eat well before the game" and "have a good warm-up". Responses related to mental preparation included "good mentality", "clear mind", "get in the zone" and "prayers before the game – humble". There are no similar fun-determinants in the Visek et al. (2015) study. One fun-determinant called 'Warming up and stretching as a team' does allude to match preparation but the emphasis in that fun-determinant is on preparation as a team and is found in the Visek et al. fun-factor *Positive Team Dynamics*.

4.4.1.5 Game Time Support

Negative issues around game time support at the local level have made the news over recent years. From a positive perspective, *Game time support* was identified by some participants as being important to a fun environment. However, there were very few responses coded to this subtheme. Responses in this subtheme are coded to 'Playing for

family' and 'Positive game time support' and their responses were "playing for the fam" and "playing in front of my family" and "having the sideline cheering and supporting us". Two points should be noted about this subtheme. Firstly, several participants cited family as a reason they played the game (Table 4.1). Making family proud by playing well was one of the reasons cited for playing rugby. Secondly, "playing in front of a big crowd" is cited as a *Game Highlight* (Table 4.2). *Game Time Support* is also a fun-factor in the Visek et al. (2015) study, although not amongst the primary fun-factors.

4.4.2 Fun Inhibitors

Key Finding 5: Seven *Fun Inhibitor* subthemes were identified: *Negative player attitudes and behaviours, Poor performances, Negative supporters and feedback, Biased or poor referees, Poor coaching, Insufficient playing time and Practice content.*

'No fun' or 'lack of fun', is the main reason children drop out of sport (Kelley & Carchia, 2013). Negative experiences during sport may impact the overall fun experience and Bailey et al. (2013) suggested that a build-up of negative experiences while playing sport may result in a young person becoming 'progressively disaffected' so that they no longer find a sport fun. Colmar Brunton research found that "a number of competing interests and 'push and pull' factors interplay to cause disengagement" from rugby (Colmar Brunton, 2014, p.8). Visek et al. (2015) suggested that there are likely to be elements that impede the fun experience of sport and that these should be explored to determine the degree to which these elements do so. With that context, it seems both important and reasonable to understand the factors that reduce the fun experience, pushing children and youth from a sport.

Previous research has suggested reasons for dropping out of sport include social pressures, low perceptions of competence, limited playing time, negative coaching behaviour and relationships, and negative team dynamics (Butcher et al., 2002; Carlman et al., 2013; Crane & Temple, 2015; Fraser-Thomas et al., 2008; Fraser-Thomas et al., 2008a; Seefeldt et al., 1992; Strube & Strand, 2016; Witt & Dangi, 2018). From rugby in New Zealand, the Colmar Brunton study found negative social interactions, not feeling

a sense of achievement, losing all the time, not getting game time, and getting injured or being worried about getting injured, push youth away from playing rugby (Colmar Brunton, 2014). Building on that research, this study sought first to identify the factors that negatively influence fun for youth rugby players in New Zealand by asking the participants in the group interviews about their not-fun experiences while playing rugby. Later in the questionnaire stage of the research, participants were also asked to select their top three not-fun experiences in rugby (refer Section 5.2.5 Important *Fun Inhibitors* and Table 5.21).

Under the *Fun Inhibitors* theme, seven subthemes were identified from participant responses to the question ‘What things make your rugby experience not-fun?’. These subthemes are *Negative player attitudes and behaviours*, *Poor performances*, *Negative supporters and feedback*, *Biased or poor referees*, *Poor coaching*, *Insufficient playing time* and *Practice content*.

4.4.2.1 Negative Player Attitudes and Behaviours

The largest group of responses in the *Fun Inhibitor* theme are coded to the subtheme *Negative player attitudes and behaviours*. Responses in this subtheme were firstly coded to ‘Negative player behaviours’ and ‘Negative player attitudes’. The subtheme includes a range of negative behaviours and attitudes by players, such as being cocky, arrogant, mocking opponents, dirty play, fights between and within teams and bullying behaviour. One response spoke about boys turning up to the game scared and not giving 100% effort to playing the game. Examples of responses coded to ‘Negative player behaviours’ included “dirty players”, “people bully their own teammates”, “other team mocking us”, “fights” and “having fights in your own team”. Responses coded to ‘Negative player attitudes’ included “when the boys going to the game are scared and not giving 100%”, “cocky players” and “people’s attitudes in opposing team” (Table 4.3).

This *Fun Inhibitor* subtheme stands out in stark opposition to a *Core Fun Element* of rugby, *Brotherhood* and the *Fun Facilitator* subtheme *Positive player attitudes and behaviours*. This suggests that player behaviours and attitudes are an important area of

focus in managing and influencing a fun sport experience for youth rugby players. This result aligns with the findings of the Colmar Brunton study which found that negative social interactions push youth away from playing rugby (Colmar Brunton, 2014).

4.4.2.2 Poor Performance

The next most prevalent group of not-fun responses related to the subtheme *Poor performance*. Responses in this subtheme initially coded to 'Poor team performance' and 'Poor player performance'. Responses around *Poor performance* relate mostly to poor team performances. Only one response related to poor personal performance. Responses coded to the 'Poor team performance' included "not playing as a team", "if we had open tries but we didn't score them", "losing", "teams that are average" and "frustration with teammates". The single response coded to 'Poor player performance' was "if I miss an important tackle". These responses highlight again the importance of the team dynamics to fun and not-fun. Poor team performances over time may also affect the feeling of Brotherhood. However, it would be interesting to explore whether it was losing that depressed fun or was not-fun, or whether it was the reaction of others to the loss that was not-fun.

Previous research has suggested reasons for dropping out of sport include low perceptions of competence, while the Colmar Brunton study found not feeling a sense of achievement (perhaps related to a lack of Game Highlights) and losing all the time were factors in pushing youth away from playing rugby (Colmar Brunton, 2014). The competence factor may not just pertain to the individual, but also the team. Poor individual performance might provide negative feedback into the Intrapersonal Profile, reducing self-belief and perceptions of competency, self-skill and mastery. A possible result over time being a developing misalignment between an individual's Intrapersonal Profile and the *Core Fun Elements* of the sport. Poor team performance while not so personal, may have a similar effect over time. While *Game Highlights* is a *Core Fun Element* of rugby and may reinforce feelings of competence, *Poor performance* may impact the fun experience for a player both immediately and build over time with

repeated poor performance. *Poor performance* may act counter to *Game Highlights*, reducing feelings of competence and the fun experience.

4.4.2.3 Negative Supporters and Feedback

Negative supporters and feedback was another *Fun Inhibitor* subtheme. Responses in the *Negative supporters and feedback* subtheme coded to 'Negative sideline feedback' and 'Negative parental feedback'. 'Negative sideline feedback' responses included "people on the sideline putting down the players" and "getting told I'm doing bad", while responses coded to 'Negative parental feedback' included simply "parents on the side" or more specifically "when my parents scream at me when I do something wrong or lose the game". This *Fun Inhibitor* subtheme may also impact fun and feelings of competence in a similar way to the *Poor performance* subtheme. As well the obvious immediate negative effect on a player's feeling of fun, regular feedback of this type from parents, coaches and teammates will impact a player's self-belief, and perceptions of competency, self-skill and mastery.

4.4.2.4 Biased or Poor Referees

The *Biased or poor referees* subtheme is in an interesting and somewhat controversial one. Responses in the group interviews coded to this subtheme included "bad calls", "when the ref favours the opposing team", "when the Ref botches it" and "unfair decisions". In Visek et al. (2020), the fun-determinant 'A ref who makes consistent calls' is highly-rated by players and was ranked as more important than the fun-determinants 'Parents show good sportsmanship', 'Having people cheer at the game' and 'Having your parent(s) watch your games'. These results highlight the importance of players perceiving they are receiving good quality and fair refereeing.

Claims of biased or poor refereeing are often viewed as being a poor response to losing. Such claims are also often connected with bad sideline behaviour by parents and others. Youth player's feelings of poor or biased refereeing may be thought of as projections of poor adult behaviour around them. A reluctance to consider and address bad or biased refereeing is understandable since referees are in short supply and are largely

volunteers helping the game in essential roles. However, responses in this study were made in a context outside of a specific game and not on a game day.

4.4.2.5 Other Subthemes

The other subthemes under the *Fun Inhibitors* theme have limited coded responses. These are *Poor coaching*, *Insufficient playing time* and *Practice content*. Colmar Brunton (2014) also identified not getting playing time as a push factor in youth rugby, while Witt and Dangi (2018) identified ‘not being given playing time’ along with ‘not getting on with coaches’ as reasons for dropping out of a sport. Limited playing time will limit the player's ability to experience at least three of the *Core Fun Elements* of rugby; *Physical Contact*, *Ball Play* and *Game Highlights*.

4.5 A Proposed Model for Fun Playing Youth Rugby

This study identified fun as the number one reason youth play rugby (Table 4.1). Some questionnaire participants specifically pointed to the physicality of rugby and the sense of brotherhood in a rugby team as being fun and reasons they played the game. *Physical Contact*, *Ball Play*, *Brotherhood*, and *Game Highlights* emerged as the four *Core Fun Elements of Rugby* that generate the fun in youth rugby (Table 4.2).

Two further fun influencing themes emerged from the thematic analysis, *Fun Facilitators* and *Fun Inhibitors* (Table 4.3). *Fun Facilitators* positively influence the player's fun experience, while *Fun Inhibitors* negatively influence the fun experience. *Fun Facilitator* subthemes are *Positive player attitudes and behaviours*, *Enhanced practices*, *Positive coaching*, *Game preparation* and *Game time support*. *Fun Inhibitor* subthemes are *Negative player attitudes and behaviours*, *Poor performances*, *Negative supporters and feedback*, *Biased or poor referees*, *Poor coaching*, *Insufficient playing time* and *Practice content*. It is proposed that these *Fun Facilitator* and *Fun Inhibitor* subthemes are key factors influencing the fun environment and experience of players. The relative importance of these factors is examined in the Quantitative Stage of this study (refer Chapter 5 Importance of *Fun Facilitators* and inhibitors – a quantitative study).

From the results and discussion above, an initial model is proposed for Fun Playing Youth Rugby (Figure 4.3). The model is composed of several elements. The central circle in Figure 4.3 presents four *Core Fun Elements* of Rugby (*Brotherhood*, *Physical Contact*, *Ball Play* and *Game Highlights*). It captures the interplay between the four themes as they relate to the core elements of playing rugby. At the centre of the circle is 'Fun Playing Rugby'. Around the outside is three themes: *Physical Contact*, *Ball Play*, and *Brotherhood*. The other theme *Game Highlights* relates to moments of heightened feelings of success mostly related to the other three themes. It is proposed that *Game Highlights* provides an intensification of the fun through specific highlights in those three themes and is thus presented as the second circle in the centre of Figure 4.3.

Fun Facilitators and *Fun Inhibitors* also influence the fun experienced. *Fun Facilitators* influence fun positively thus enhancing the fun experience of players. *Fun Inhibitors* influence fun negatively, thus detracting from the fun experience. The boxes in the model list the *Fun Facilitators* and *Fun Inhibitors* identified from the group interviews.

The upward-directed arrow presents the concept of a greater presence of *Fun Facilitators*. Similarly, the downward arrows present the concept of a greater presence of *Fun Inhibitors*. The implication being that for those that are attracted, or somewhat attracted, by the four *Core Fun Elements* of rugby and are playing rugby, that the greater the presence of the *Fun Facilitators* the more fun the player will experience and the greater the presence of *Fun Inhibitors* the less fun a player will experience.

Integrating Crawford et al.'s (1991) Hierarchical Model of Leisure Constraints with this initial proposed model for Fun Playing Youth Rugby suggests that to find the game of rugby fun a player's Intrapersonal Profile needs to be sufficiently aligned with the four *Core Fun Elements*. Some individuals may be greatly attracted to these four *Core Fun Elements*, some less so and some not all. The implication of this proposed integration of these two models is that those attracted by the four *Core Fun Elements* are more likely to play rugby and that those not attracted to the four *Core Fun Elements* are unlikely to play rugby. Whereas those only partially attracted to the four *Core Fun Elements* may or may not play depending upon other circumstances and if playing may be more prone to

dropout. This proposal also suggests that for a player who is only partially attracted to the four *Core Fun Elements* of rugby the strong presence of *Fun Facilitators* may be enough to keep them playing the game while the strong presence of *Fun Inhibitors* may be enough to cause them to dropout.

The Quantitative Stage of the study in Chapter 5 addresses the relative importance of the *Fun Facilitators* and the *Fun Inhibitors* based on players perceptions. Chapter 5 also addresses whether there are groups of boys who perceive the importance of *Fun Facilitators* differently. These results are presented and discussed in Chapter 5. While in Chapter 6, the qualitative and quantitative results are brought together, conclusions are drawn, further research proposed, and limitations discussed.

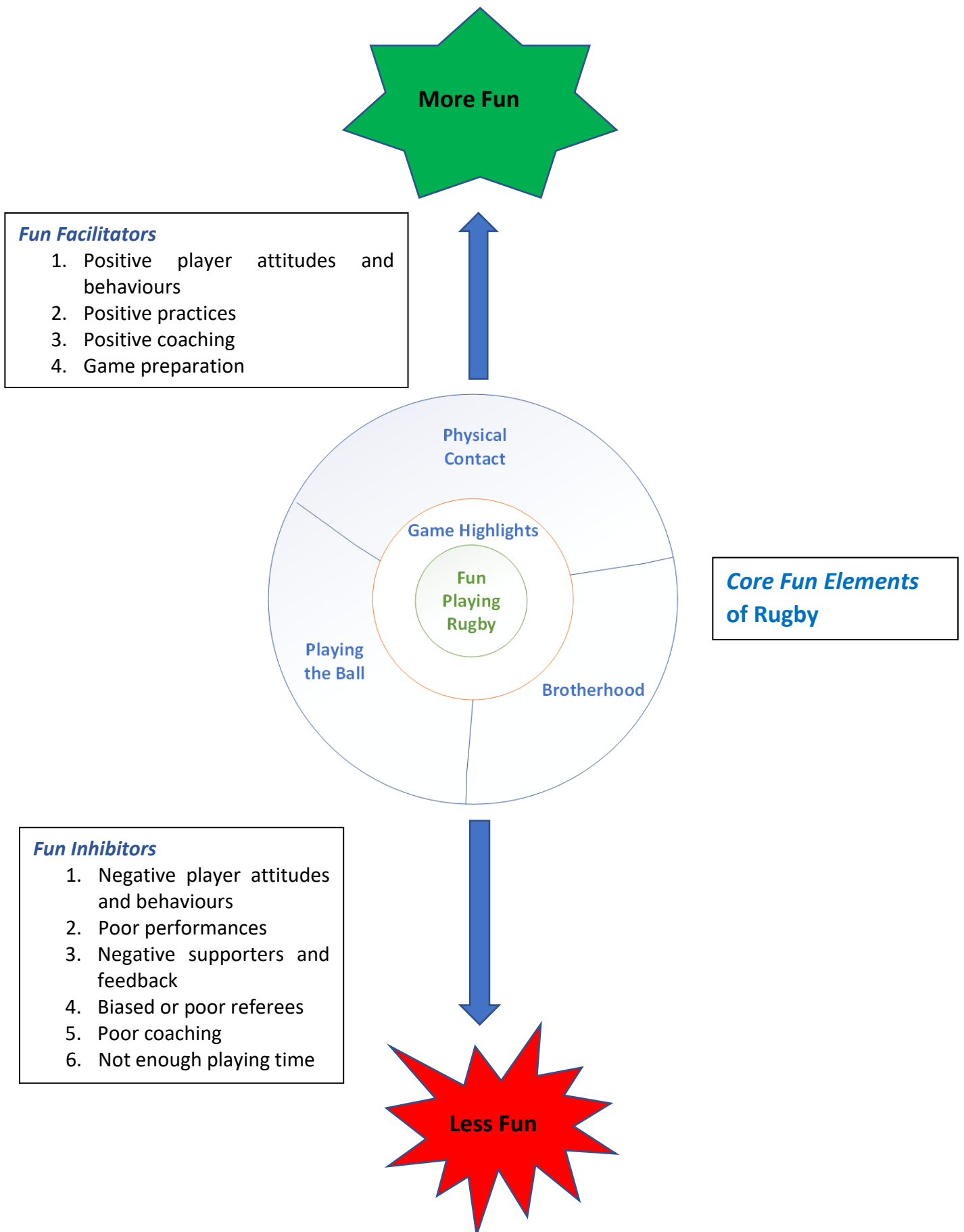


Figure 4.3 Proposed Initial Model for Fun Playing Youth Rugby

Chapter 5 Importance of Fun Facilitators and Inhibitors – a Quantitative Study

5.1 Introduction

This chapter is an overview of the questionnaire results from this mixed-methods study of fun in youth rugby. It includes a discussion of these results in the context of the research questions: ‘What are the important *Fun Facilitators* for youth playing rugby in New Zealand?’, ‘Can players be segmented based on how they perceive the importance of *Fun Facilitators*? If so, are these perception differences associated with differences in specific characteristics of a player’s Intrapersonal Profile?’ and ‘What are the important *Fun Inhibitors* for youth playing rugby in New Zealand? *Fun Facilitator* and *Fun Inhibitor* are the theme names developed in Chapter 4, representing factors that influence fun positively and negatively.

In this part of the research project, 527 male youth rugby players in Auckland, New Zealand, completed a questionnaire (refer Appendix D). In this chapter, demographic, behavioural and psychographic descriptive statistics are presented first. These variables are mostly associated with and describe characteristics of participant’s Intrapersonal Profile. This is followed by descriptive statistics for the *Fun Facilitators*. Then, the results of segmentation analyses using the *Fun Facilitator* importance data are presented. These segmentation analyses firstly include t-tests, analysis of variance and correlations using Intrapersonal Profile demographic, psychographic and behavioural variable data, and, secondly, cluster analyses. Finally, descriptives for *Fun Inhibitors* in youth rugby are presented.

The second part of the chapter is a discussion of these results. Groups of youth rugby players who perceive *Fun Facilitators* differently with their associated Intrapersonal Profile characteristics are discussed. Comparisons and contrasts are drawn with previous research, in particular the Visek et al. (2015, 2018, 2020) related papers. The *Fun Inhibitors* results and analyses are then discussed. Finally, implications for youth

rugby players and organisations are discussed. All of this is then brought together in a summary section at the end of the chapter.

5.2 Results

5.2.1 Intrapersonal Profile and Other Variable Data

The sample of 527 male high school rugby players included more than 100 players from each school year 9-11 (Table 5.1). According to M. Hester (personal communication, September 4, 2019), 6,302 youth rugby players played in Auckland in 2018 (refer Appendix A), thus approximately 8% of the total male youth rugby players in Auckland completed questionnaires. Participants ranged in age from 12 to 17, and all but two participants were age 13 to 16. The players came from twelve High Schools across Auckland, including a mix of single-sex (241 participants) and co-educational (286 participants) schools. The participants were spread across a range of school deciles, from decile 1 to decile 10, 27% of respondents were from schools in deciles 1-5 and 73% from deciles 6-10 (Table 5.2). In New Zealand, school deciles are an indication of the extent to which a school draws its students from low socio-economic communities (Ministry of Education, 2020).

The largest ethnic groups were Pacific Peoples (42%), followed by European (34%), and Maori (20%) (Table 5.3). This breakdown of respondent ethnicity reflects that of the youth rugby playing population in Auckland. The ethnicity of male youth rugby players in Auckland in 2018 was 48% Pacific Peoples, 30% European, 14% Maori and 8% from other ethnicities (M. Hester, personal communication, September 4, 2019) (refer Appendix A).

Table 5.1 School Year of Participants

School Year	Frequency	Percentage
9	173	33
10	217	41
11	125	24
Missing	12	2
Total	527	100

Table 5.2 School Deciles of Participants

Decile	Frequency	Percentage
1	109	21
2	0	0
3	14	3
4	20	4
5	0	0
6	24	5
7	96	18
8	19	4
9	176	33
10	69	13
Total	527	100

Table 5.3 Ethnicity of Participants

Ethnicity	Frequency	Percentage
Maori	103	20
Pacific Peoples	222	42
Asian	12	2
Other	13	2
European	177	34
Total	527	100

Note: Those indicating multiple ethnicities were prioritised into a single ethnicity using prioritisation. at Level 1 (Ministry Health, 2017).

Over 50% of the boys play only rugby during the New Zealand winter, although a significant number (42%) also reported playing two or more sports (Table 5.4). Rugby was the number one sport for over 80% of respondents (Table 5.5). A small majority of the participants would prefer to play in a team with their mates, rather than in the best team (Table 5.6). For the data presented in Table 5.6 and later in Table 5.16, participants were specifically instructed that they needed to choose between playing in the Best Team and a Team with My Mates. There was no option whereby the Best Team was the Team with My Mates.

Table 5.4 Number of Sports Played in Winter

No. of Sports	Frequency	Percentage
1	303	58
2	165	31
3	45	9
4+	7	2
Missing	6	1
Total	527	100

Table 5.5 Is Rugby the No. 1 Sport for Participants

No. 1 Sport	Frequency	Percentage
Yes	433	82
No	84	16
Missing	10	2
Total	527	100

Table 5.6 Participant's Team Preference

Team	Frequency	Percentage
Team with my Mates	287	55
Best Team	236	45
Missing	4	18
Total	527	100

When asked about rugby ambition, most participants (54%) indicated they had a desire to play professional rugby, while 10% indicated they wanted to play social rugby (Table 5.7). Most boys indicated a high level of commitment to playing rugby, with a mean rating of 8.45 (on a 10-point scale) and a standard deviation of 1.62. Nearly all players claimed to be committed, with 95% rating their commitment at six or above. Most players were highly committed. Fifty-four per cent rated their commitment at nine or above.

Table 5.7 Participants Highest Level of Rugby Ambition

Team	Frequency	Percentage
Professional	283	54
First 15	118	22
Premier Club	70	13
Social	52	10
Missing	4	1
Total	527	100

The players rated their rugby skill level from one (poor) to ten (excellent). The mean was 6.67, with a standard deviation of 1.60. While perceptions of skill ranged from one to ten, most (71%) rated their skill between six to eight.

Most boys indicated they prefer that an ex-rugby player coach their team. Their next preference of coach was for a current rugby player. There was limited support for a teacher or parent coaches (Table 5.8). Nearly a quarter of respondents preferred playing their rugby after school during the week (23%), while the large majority preferred Saturdays (Table 5.9).

Table 5.8 Participants Preferred Coach

Coach	Frequency	Percentage
Former Rugby Player	344	65
Current Rugby Player	81	15
Teacher	34	7
Parent	30	6
Missing	38	7
Total	527	100

Table 5.9 Participants Preferred Playing Day

Day	Frequency	Percentage
Saturdays	398	76
After School during the Week	121	23
Missing	8	1
Total	527	100

5.2.2 Fun Facilitators

Some observations of the *Fun Facilitator* descriptive statistics are noteworthy and are discussed in this section. Those *Fun Facilitators* perceived to be of greatest importance by the boys can be grouped into four themes: *Positive team dynamics*, *Positive player attitudes*, *Learning and development* and *Positive coaching* (Table 5.10). *Positive team dynamics* is characterised by four high ranking *Fun Facilitators*: ‘A good team spirit, a brotherhood, a great vibe’ (1), ‘Getting along with your teammates’ (2) ‘Playing well together as a team’ (6) and ‘Being supported by my teammates’ (13). *Positive player attitudes* were characterised by high ranking *Fun Facilitators* ‘Trying your best – being in the zone’ (3), ‘Having pride in playing for your school’ (4) and ‘Keeping a positive attitude’ (7). These two themes, *Positive team dynamics* and *Positive player attitudes* include six of the first seven highest-rated *Fun Facilitators*. *Learning and development* was another theme players perceived to be important for fun. This was demonstrated by high ranking *Fun Facilitators* ‘Learning from my mistakes’ (5) and ‘Being challenged to improve and get better’ (9). The final

Table 5.10 Importance of *Fun Facilitators*

Rank	Fun Facilitator	Mean Importance Rating	Standard deviation
1	A good team spirit, a brotherhood, a great vibe	9.30	1.12
2	Getting along with your teammates	9.21	1.10
3	Trying your best – being in the zone	9.09	1.20
4	Having pride in playing for your school	9.09	1.28
5	Learning from my mistakes	9.08	1.16
6	Playing well together as a team	9.06	1.27
7	Keeping a positive attitude	9.01	1.23
8	When a coach motivates and inspires the team	8.94	1.29
9	Being challenged to improve and get better	8.93	1.29
10	When a coach treats players with respect	8.91	1.39
11	A good ref who makes consistent calls	8.89	1.71
12	The physical aspects of the game	8.86	1.31
13	Being supported by my teammates	8.81	1.31
14	Having a coach who knows a lot about rugby	8.74	1.49
15	Exercising, fitness and being active	8.55	1.46
16	Having well-organized practices	8.51	1.46
17	Family & friends support on touchline	8.23	1.95
18	Avoiding injury and concussion	8.09	2.15
19	When parents show good sportsmanship	8.02	2.06
20	Being around your friends	8.01	1.80
21	Getting playing time, not being benched	7.96	1.82
22	Touching the ball	7.86	1.92
23	Playing well. Having highlights	7.83	1.97
24	Meeting new people	7.70	2.19
25	Using games as part of practices	7.62	1.87
26	Having the freedom to play creatively at practices	7.38	2.07
27	Playing in your favourite position	7.32	2.16
28	Winning	7.25	2.50
29	Playing against players of similar age	7.10	2.51
30	Being congratulated for playing well	6.98	2.44
31	Playing against an evenly matched team	6.76	2.59
32	Playing against players of similar size and weight	6.61	2.82
33	Playing on smaller fields	4.04	2.81

Note: n = 527; Mean importance rating is a 1-10 scale 1= Not Important to 10= Very Important

Fun Facilitator theme which stands out from the results was *Positive coaching*, characterised by *Fun Facilitators* ‘When a coach motivates and inspires the team’ (8) and ‘When a coach treats players with respect’ (10) (Table 5.10).

All individual *Fun Facilitators*, except 'Playing on smaller fields', have mean ratings above 6 and relatively low standard deviations (Table 5.10), showing consistent high ratings across the respondents. Among the *Fun Facilitators* perceived as relatively less important are the *Even Play Fun Facilitators*. The *Even Play Fun Facilitators* include the *Fun Facilitators* 'Playing against players of similar age' and 'Playing against players of similar size and weight' and 'Playing against an evenly matched team'. These *Even Play Fun Facilitators* are structural, in the sense that they relate to how competitions are organised. 'Playing on small fields', a suggestion made by New Zealand Rugby as a possible initiative to attract some boys back to the game was generally perceived as relatively unimportant. The relatively low importance result for 'Playing on small fields' may have been due to sampling only current players, who are not the priority target group for this initiative.

5.2.3 Fun Facilitator Segmentation Analysis

One goal of this study was to explore whether groups of boys could be identified based on how they perceived the importance of *Fun Facilitators*. To this end, two approaches were employed. The perceived importance of the *Fun Facilitators* was analysed across demographic, psychographic and behavioural variables using t-tests, one-way analysis of variance and correlation. Many of these demographic, psychographic and behavioural variables related to an individuals' Intrapersonal Profile including school year, school decile, ethnicity, team preferences, highest ambition in rugby, the player's perceived skill level and their commitment to playing rugby. K-means cluster analysis of *Fun Facilitator* importance data was also used in an attempt to identify homogeneous player groups based on their perceptions of *Fun Facilitator* importance.

5.2.3.1 Segmentation Analysis by Intrapersonal Profile Variables

School Year

The extreme School Year groups from within the sample (Years 9 and 11) were compared for differences in perceptions of *Fun Facilitator* importance. This strategy

was chosen on the basis that if differences existed, they would show up between these extreme groups. Only nine out of 33 *Fun Facilitators* (27%) were perceived differently by rugby players in Year 9 and those in Year 11 at school. Where there was a significant difference in perceptions, the effect sizes were small (Table 5.11). All significant *Fun Facilitators* were perceived as more important by players in Year 9. This included the *Even Play Fun Facilitators*.

School Deciles

Boys from both high and low decile schools rated the importance of the *Fun Facilitators* in a similar order (Table 5.12). However, 22 of 33 *Fun Facilitators* (66%) were perceived differently by the players from these two groups. Differences were mostly found in the *Primary Fun Facilitators* (*Fun Facilitators* ranked 1-17). Sixteen out of 17 of these *Primary Fun Facilitators* were perceived differently. The top-rated *Fun Facilitator* 'Good referee who makes consistent calls' was perceived similarly by the two groups.

Rugby players from low decile schools generally perceived the significant *Fun Facilitators* as more important than players from high decile schools. Exceptions to this trend were *Fun Facilitators* 'Getting playing time, not being benched' and 'Playing against players of similar size and weight', which were perceived as more important by rugby players from higher decile schools.

Effect sizes ranged from small to medium. The largest effect size (medium) was exhibited by the *Fun Facilitator* 'Family & friends support on touchline'. This *Fun Facilitator* was perceived as more important by players from low decile schools (Table 5.12).

Ethnicity

A one-way ANOVA was used to compare the perceived importance of *Fun Facilitators* by ethnicity. As with school deciles, the players from different ethnicities perceived

Fun Facilitator importance in similar rank order of importance (Table 5.13), however, there were perceptual differences of importance due to ethnicity.

Post hoc comparisons using the Tukey HSD test indicated that 16 out of 33 *Fun Facilitators* (48%) were perceived differently across ethnicities, however, all effect sizes (partial eta squared) were small. Comparing Pacific Peoples with Europeans, 15 *Fun Facilitators* were perceived differently. Between Pacific Peoples and Maori, eight *Fun Facilitators* were perceived differently, while one was perceived differently between Maori and Europeans (Table 5.13).

Players of Pacific Peoples' ethnicity generally rated *Fun Facilitators* as more important than European players. This tendency was more evident in the *Primary Fun Facilitators*. Eight of the first ten *Primary Fun Facilitators* were perceived as more important by Pacific Peoples. It was noticeable that players of Pacific Peoples ethnicity perceived *Fun Facilitators* associated with the themes *Positive team dynamics*, *Learning and development* and around family involvement as more important than European players, with larger partial eta squared effect sizes. For instance, within the theme, *Positive team dynamics*, the *Fun Facilitator* 'A good team spirit, a brotherhood, a great vibe', 'Playing well together as a team' and 'Being supported by my teammates' were rated higher by Pacific Peoples players. Similarly, for *Learning and development*, the *Fun Facilitators* 'Learning from my mistakes' and 'Being challenged to improve and get better' were perceived as more important by those of Pacific Peoples ethnicity, with some of the higher effect sizes. Family-related *Fun Facilitators*, while lower-rated, were also perceived as more important to Pacific Peoples. This was exemplified by the *Fun Facilitators* 'Family & friends support on touchline' and 'When parents show good sportsmanship'. The only *Fun Facilitator* perceived as more important by European players was 'Playing against players of similar size and weight'. Interestingly, however, while Pacific Peoples and European players rated the *Fun Facilitator* 'A good ref who makes consistent calls' similarly, for Pacific Peoples players it was ranked 15th while European players ranked it noticeably higher at 4th (Table 5.13).

Pacific Peoples tended to perceive the *Fun Facilitators* as more important or similar to Maori players. Differences in perception existed for *Primary Fun Facilitators* 'Learning from my mistakes', 'Playing well together as a team', 'Keeping a positive attitude', 'When a coach motivates and inspires the team', 'Being challenged to improve and get better' and 'Being supported by my teammates'. The only difference in perception between Maori players and European players was for the lower-ranked *Fun Facilitator* 'Being congratulated for playing well', which was perceived as more important by European players.

Number of Sports Played

Only eight rugby *Fun Facilitators* (24%) were perceived differently by those that only played rugby and those that played multiple sports. Where differences in perception existed between these two groups, the effect sizes ranged from very small to small. The players who only play rugby perceived the *Fun Facilitators* as more important (Table 5.14).

My Favourite Sport

Only five rugby *Fun Facilitators* (15%) were perceived differently between players for whom rugby was their number one sport and those for whom another sport was preferred. The effect sizes were all small. Rugby players for whom rugby was their number one sport perceived the significant *Fun Facilitators* as more important (Table 5.15).

Team Preference – Best Team versus Team with my Mates

Twelve *Fun Facilitators* (36%) were perceived differently between players who prefer to play in the Best Team and those who prefer to be in a Team with their Mates. These significant *Fun Facilitators* are spread across high, moderate and lower-ranked *Fun Facilitators*. The effect sizes ranged from very small to small (Table 5.16). The players who wanted to play for the Best Team mostly rated these *Fun Facilitators* as more important. This included the *Fun Facilitator* 'Winning', however, 'Being around

your friends’, ‘Having freedom to play creatively at practices’, ‘Playing against players of similar age’ and ‘Playing against players of similar size and weight’ were perceived to be more important by those who preferred to play in a Team with their Mates (Table 5.16).

Playing Ambition

There were significant differences in perceptions between rugby players oriented to social rugby and those with ambitions to play professionally. Perceptions differed on more than half (18) of the *Fun Facilitators*. These differences included 15 of the *Primary Fun Facilitators*. Effect sizes ranged from very small to large (Table 5.17).

Players who harboured professional ambitions generally perceived the significant *Fun Facilitators* as more important. Notably, the *Fun Facilitators* ‘A good team spirit, a brotherhood, a great vibe’, ‘Trying your best – being in the zone’, ‘Having pride in playing for your school’, ‘Being challenged to improve and get better’, ‘Exercising, fitness and being active’, and ‘Having well-organized practices’ are perceived as more important by these players, with large effect sizes. However, the *Fun Facilitators* ‘Having the freedom to play creatively at practices’, ‘Playing against players of similar age’ and ‘Playing against players of similar size and weight’ were perceived more important by those inclined to social rugby. The effect sizes for the first two of these *Fun Facilitators* were small, while the latter had a medium effect size (Table 5.17). While both groups perceived the *Fun Facilitator* ‘A good ref who makes consistent calls’ of similar importance, those inclined players to social rugby ranked it first in importance amongst the *Fun Facilitators*, while those with professional ambitions ranked it 13th. Similarly, those inclined to social rugby ranked the *Fun Facilitator* ‘Being around your friends’ seventh, while those with professional ambitions ranked it 22nd.

Commitment to Playing Rugby

The majority of rugby *Fun Facilitators* (18; 55%) were perceived differently by players more or less committed to rugby. Effect sizes ranged from small to medium (Table

5.18). The *Fun Facilitators* are generally perceived to be more important by more committed players. The *Fun Facilitators* 'Trying your best – being in the zone', 'Being challenged to improve and get better' and 'Exercising, fitness and being active' had the largest effect sizes, a medium effect. In contrast, the *Fun Facilitator* 'Playing against players of similar size and weight' was perceived as more important by those less committed to playing rugby.

Perceived Skill Level

A majority of *Fun Facilitators* were viewed differently by players who perceived themselves as more or less skilled. The only Primary Fun Facilitator not perceived differently by these two groups was 'Learning from my mistakes'. The more skilled perceived the significant *Fun Facilitators* as more important (Table 5.19). Effect sizes ranged from small to medium effect sizes. 'Trying your best – being in the zone' was the only significant *Fun Facilitator* with a medium effect size. It was ranked the second equal for importance by the 'more skilled' group and only 10th by those 'less skilled'.

Table 5.11 T-Test and Descriptive Statistics by School Year

Fun Facilitators	School Year						95% CI for Mean Difference	t	df	Hedges' g
	Year 9			Year 11						
	M	SD	n	M	SD	n				
A good team spirit, a brotherhood, a great vibe	9.29	1.21	173	9.33	1.11	125	-0.30, 0.24	-0.24	296	0.03
Getting along with your teammates.	9.27	1.03	170	9.09	1.06	125	-0.06, 0.42	1.49	293	-0.17
Trying your best – being in the zone	9.13	1.09	172	9.14	1.34	125	-0.29, 0.27	-0.06	295	0.01
Having pride in playing for your school	9.12	1.17	169	9.01	1.34	125	-0.17, 0.41	0.79	292	-0.09
Learning from my mistakes	9.15	1.03	172	8.87	1.42	125	-0.02, 0.57	1.87	215	-0.23
Playing well together as a team	9.20	1.06	172	8.82	1.45	125	0.08, 0.68	2.48*	216	-0.30
Keeping a positive attitude	8.99	1.26	173	8.98	1.36	125	-0.30, 0.31	0.03	296	-0.01
When a coach motivates and inspires the team	8.97	1.35	171	8.90	1.36	123	-0.24, 0.39	0.45	292	-0.05
Being challenged to improve and get better	9.05	1.02	173	8.64	1.56	125	0.09, 0.72	2.56*	198	-0.32
When a coach treats players with respect	8.95	1.37	171	8.68	1.59	123	-0.07, 0.63	1.55	238	-0.19
A good ref who makes consistent calls	8.88	1.65	172	8.75	1.97	125	-0.29, 0.54	0.60	295	-0.07
The physical aspects of the game	8.90	1.15	172	8.72	1.46	125	-0.14, 0.49	1.12	226	-0.14
Being supported by my teammates	8.77	1.25	172	8.83	1.43	125	-0.37, 0.24	-0.41	295	0.05
Having a coach who knows a lot about rugby	8.87	1.42	173	8.46	1.61	125	0.07, 0.76	2.36*	296	-0.28
Exercising, fitness and being active	8.67	1.40	173	8.41	1.61	125	-0.08, 0.61	1.52	296	-0.18
Having well-organized practices	8.66	1.34	173	8.22	1.67	125	0.10, 0.78	2.53*	296	-0.30
Family & friends support on touchline	8.30	1.90	173	8.26	1.78	125	-0.38, 0.47	0.21	296	-0.02
Avoiding injury and concussion	8.15	2.02	170	7.88	2.43	124	-0.24, 0.78	1.04	292	-0.12
When parents show good sportsmanship	8.08	2.05	171	7.86	2.29	125	-0.28, 0.72	0.87	294	-0.10
Being around your friends	8.08	1.76	171	7.92	1.99	125	-0.27, 0.59	0.74	294	-0.09
Getting playing time, not being benched	8.20	1.69	172	7.73	1.95	124	0.05, 0.89	2.21*	294	-0.26
Touching the ball	7.90	1.85	171	7.81	1.95	125	-0.35, 0.53	0.42	294	-0.05
Playing well. Having highlights.	7.80	1.81	171	7.66	2.24	125	-0.34, 0.63	0.60	232	-0.07
Meeting new people	7.79	2.14	173	7.90	2.15	124	-0.60, 0.39	-0.41	295	0.05
Using games as part of practices	7.82	1.78	172	7.29	2.09	123	0.08, 0.97	2.34*	293	-0.28
Having the freedom to play creatively at practices	7.45	2.32	172	7.23	1.99	121	-0.30, 0.73	0.83	291	-0.10
Playing in your favourite position	7.58	2.23	172	7.07	2.03	125	0.01, 1.01	2.02*	295	-0.24
Winning	7.11	2.51	171	7.34	2.49	124	-0.81, 0.35	-0.78	293	0.09
Playing against players of similar age	7.44	2.31	171	6.33	2.80	125	0.51, 1.71	3.62**	235	-0.44
Being congratulated for playing well	6.92	2.66	172	6.94	2.35	124	-0.60, 0.58	-0.04	294	0.01
Playing against an evenly matched team	7.04	2.52	173	6.20	2.69	124	0.23, 1.43	2.73**	295	-0.32
Playing against players of similar size and weight	7.09	2.59	173	6.20	2.85	125	0.27, 1.52	2.82**	296	-0.33
Playing on smaller fields	4.19	2.73	171	3.76	2.87	124	-0.21, 1.08	1.32	293	-0.15

Note: Levene Test used to determine unequal variance, Satterthwaite approximation employed where unequal group variances. Bolding denotes Fun Facilitators for which there is a significant difference between groups. * p < .05. **p<.01.

Table 5.12 T-Test and Descriptive Statistics by School Decile

Fun Facilitators	Pearson Correlation	n	School Decile						95% CI for Mean Difference	t	df	Hedges' g
			Low Decile			High Decile						
			M	SD	n	M	SD	n				
A good team spirit, a brotherhood, a great vibe	-0.25**	526	9.68	0.79	143	9.16	1.19	383	-0.70, -0.34	-5.78**	380	0.47
Getting along with your teammates.	-0.18**	522	9.45	0.83	142	9.12	1.17	380	-0.51, -0.15	-3.59**	355	0.30
Trying your best – being in the zone	-0.12**	525	9.32	0.98	143	9.01	1.27	382	-0.51, -0.10	-2.90**	330	0.26
Having pride in playing for your school	-0.17**	523	9.34	1.12	143	8.99	1.33	380	-0.57, -0.12	-2.97**	301	0.27
Learning from my mistakes	-0.20**	525	9.39	0.95	143	8.96	1.21	382	-0.63, -0.24	-4.30**	323	0.38
Playing well together as a team	-0.20**	526	9.36	1.15	143	8.94	1.30	383	-0.66, -0.18	-3.42**	524	0.33
Keeping a positive attitude	-0.23**	523	9.41	0.97	141	8.86	1.29	382	-0.76, 0.35	-5.29**	329	0.45
When a coach motivates and inspires the team	-0.24**	522	9.38	1.03	141	8.78	1.34	381	-0.81, -0.38	-5.38**	322	0.47
Being challenged to improve and get better	-0.24**	527	9.38	1.03	143	8.76	1.33	384	-0.83, -0.40	-5.59**	326	0.49
When a coach treats players with respect	-0.16**	522	9.23	1.31	139	8.79	1.40	383	-0.71, -0.17	-3.23**	520	0.32
A good ref who makes consistent calls	-0.02	525	8.96	1.76	142	8.86	1.70	383	-0.43, 0.24	-0.57	523	0.07
The physical aspects of the game	-0.14**	523	9.14	1.04	142	8.76	1.39	381	-0.60, -0.16	-3.38**	337	0.29
Being supported by my teammates	-0.22**	524	9.24	0.97	142	8.66	1.38	382	-0.80, -0.37	-5.43**	356	0.46
Having a coach who knows a lot about rugby	-0.12**	527	9.02	1.53	143	8.63	1.46	384	-0.67, -0.10	-2.66**	525	0.26
Exercising, fitness and being active	-0.15**	526	8.84	1.33	143	8.44	1.49	383	-0.68, -0.12	-2.79**	524	0.28
Having well-organized practices	-0.24**	527	8.96	1.20	143	8.35	1.51	384	-0.86, -0.36	-4.84**	318	0.43
Family & friends support on touchline	-0.27**	526	8.97	1.49	143	7.96	2.03	383	-1.37, -0.64	-6.21**	345	0.53
Avoiding injury and concussion	-0.03	517	8.10	2.28	141	8.09	2.11	376	-0.43, 0.41	-0.05	515	0.00
When parents show good sportsmanship	-0.22**	524	8.58	1.90	142	7.80	2.08	382	-1.17, -0.39	-3.92**	522	0.38
Being around your friends	-0.07	521	8.19	1.66	139	7.94	1.85	382	-0.60, 0.10	-1.41	519	0.14
Getting playing time, not being benched	0.09*	525	7.63	1.93	142	8.08	1.77	383	0.10, 0.80	2.52*	523	0.25
Touching the ball	-0.08	525	8.01	1.91	143	7.81	1.93	382	-0.58, 0.17	-1.09	523	0.10
Playing well. Having highlights.	-0.03	523	7.91	2.16	141	7.79	1.90	382	-0.50, 0.26	-0.63	521	0.06
Meeting new people	-0.20**	526	8.36	2.14	143	7.45	2.16	383	-1.33, -0.50	-4.34**	524	0.40
Using games as part of practices	-0.03	522	7.65	2.17	141	7.62	1.74	381	-0.43, 0.37	-0.14	211	0.08
Having the freedom to play creatively at practices	-0.02	522	7.49	2.19	141	7.33	2.03	381	-0.56, 0.25	-0.76	520	0.08
Playing in your favourite position	-0.06	523	7.38	2.33	141	7.30	2.10	382	-0.51, 0.33	-0.42	521	0.04
Winning	-0.07	524	7.49	2.73	142	7.16	2.40	382	-0.84, 0.18	-1.26	227	0.13
Playing against players of similar age	-0.04	525	7.11	2.75	142	7.09	2.43	383	-0.51, 0.46	-0.10	523	0.01
Being congratulated for playing well	-0.11*	522	7.33	2.44	142	6.85	2.43	380	-0.95, -0.01	-2.01*	520	0.20
Playing against an evenly matched team	-0.05	526	6.83	2.91	143	6.73	2.47	383	-0.64, 0.43	-0.38	223	0.04
Playing against players of similar size and weight	0.13**	526	6.06	3.02	143	6.81	2.72	383	0.18, 1.32	2.59**	233	0.27
Playing on smaller fields	-0.19**	519	4.82	2.97	141	3.75	2.70	378	-1.60, -0.52	-3.88**	517	0.39

Note: Levene Test used to determine unequal variance, Satterthwaite approximation employed where unequal group variances. Bolding denotes Fun Facilitators for which there is a significant difference between groups. * p < .05. **p<.01. Low decile <6. High decile >= 6

Table 5.13 One-way ANOVA and Descriptive Statistics by Ethnicity

Fun Facilitators	Ethnicity									95% CI for Mean Difference	F	df	Partial Eta ²
	Pacific Island			Maori			European						
	M	SD	n	M	SD	n	M	SD	n				
A good team spirit, a brotherhood, a great vibe	9.58 ^a	0.92	222	9.28 ^{ab}	1.28	103	9.02 ^b	1.13	176	9.20, 9.40	7.56**	4	0.055
Getting along with your teammates.	9.40 ^a	0.98	220	9.15 ^{ab}	1.13	102	9.09 ^b	1.04	175	9.12, 9.31	4.55**	4	0.034
Trying your best – being in the zone	9.19	1.22	222	9.17	1.08	102	9.00	1.20	176	8.99, 9.20	2.87	4	0.022
Having pride in playing for your school	9.32 ^a	1.15	222	8.99 ^{ab}	1.36	101	8.88 ^b	1.31	175	8.98, 9.20	4.29**	4	0.032
Learning from my mistakes	9.42 ^a	0.91	221	9.04 ^b	1.25	102	8.71 ^b	1.23	177	8.98, 9.18	11.60**	4	0.082
Playing well together as a team	9.37 ^a	1.18	222	8.87 ^b	1.44	103	8.84 ^b	1.18	176	8.95, 9.17	6.69**	4	0.049
Keeping a positive attitude	9.30 ^a	1.05	220	8.83 ^b	1.43	103	8.78 ^b	1.28	175	8.90, 9.11	5.81**	4	0.043
When a coach motivates and inspires the team	9.27 ^a	1.09	219	8.81 ^b	1.37	102	8.67 ^b	1.35	176	8.83, 9.05	6.69**	4	0.049
Being challenged to improve and get better	9.27 ^a	1.11	222	8.84 ^b	1.49	103	8.65 ^b	1.24	177	8.82, 9.04	8.56**	4	0.062
When a coach treats players with respect	9.09	1.36	219	8.89	1.39	101	8.73	1.41	177	8.79, 9.03	2.43	4	0.018
A good ref who makes consistent calls	8.90	1.76	220	8.76	1.92	103	8.97	1.53	177	8.74, 9.03	0.33	4	0.003
The physical aspects of the game	9.00	1.18	221	8.95	1.47	102	8.73	1.31	175	8.75, 8.98	2.69	4	0.020
Being supported by my teammates	9.11 ^a	1.24	220	8.68 ^b	1.33	102	8.50 ^b	1.27	177	8.70, 8.93	6.59**	4	0.048
Having a coach who knows a lot about rugby	8.92	1.53	222	8.52	1.56	103	8.63	1.33	177	8.61, 8.87	1.79	4	0.014
Exercising, fitness and being active	8.75	1.42	221	8.53	1.47	103	8.37	1.39	177	8.43, 8.68	2.37	4	0.018
Having well-organized practices	8.92 ^a	1.13	222	8.35 ^b	1.64	103	8.11 ^b	1.58	177	8.39, 8.64	8.84**	4	0.063
Family & friends support on touchline	8.69 ^a	1.69	222	8.30 ^{ab}	1.85	102	7.84 ^b	2.00	177	8.06, 8.40	9.76**	4	0.070
Avoiding injury and concussion	8.22	2.20	216	7.88	2.33	102	8.09	1.96	174	7.91, 8.28	0.97	4	0.007
When parents show good sportsmanship	8.40 ^a	1.99	220	7.93 ^{ab}	2.02	102	7.59 ^b	2.13	177	7.84, 8.19	4.04**	4	0.030
Being around your friends	7.91	1.95	216	8.17	1.57	103	8.04	1.81	177	7.85, 8.16	0.43	4	0.003
Getting playing time, not being benched	7.82	2.03	220	7.89	1.85	103	8.19	1.47	177	7.81, 8.12	1.05	4	0.008
Touching the ball	8.09	1.84	221	7.64	2.05	102	7.78	1.90	177	7.70, 8.03	2.07	4	0.016
Playing well. Having highlights.	7.82	2.13	220	7.67	1.84	103	7.97	1.74	176	7.66, 8.00	0.79	4	0.006
Meeting new people	8.08 ^a	2.29	222	7.52 ^{ab}	2.01	102	7.41 ^b	2.12	177	7.51, 7.89	4.28**	4	0.032
Using games as part of practices	7.65	2.01	220	7.49	2.05	102	7.64	1.59	175	7.46, 7.78	0.33	4	0.003
Having the freedom to play creatively at practices	7.31	2.21	220	7.21	2.20	103	7.52	1.82	174	7.20, 7.55	0.55	4	0.004
Playing in your favourite position	7.41	2.29	220	7.48	1.96	103	7.19	2.09	175	7.13, 7.50	0.71	4	0.005
Winning	7.47	2.61	220	7.03	2.39	102	7.05	2.46	177	7.03, 7.46	1.18	4	0.009
Playing against players of similar age	7.05	2.65	221	6.79	2.30	103	7.23	2.50	176	6.88, 7.31	1.23	4	0.009
Being congratulated for playing well	6.97 ^{ab}	2.60	219	6.38 ^a	2.36	102	7.25 ^b	2.34	177	6.77, 7.19	2.53*	4	0.019
Playing against an evenly matched team	6.58	2.89	221	6.52	2.38	103	7.09	2.29	177	6.53, 6.98	1.19	4	0.009
Playing against players of similar size and weight	6.07 ^a	3.03	222	6.36 ^{ab}	2.52	103	7.27 ^b	2.60	176	6.37, 6.85	6.14**	4	0.045
Playing on smaller fields	4.55 ^a	2.94	220	3.58 ^b	2.68	102	3.62 ^b	2.61	174	3.80, 4.28	4.21**	4	0.032

Note: Levene Test used to determine unequal variance, Satterthwaite approximation employed where unequal group variances. Bolding denotes Fun Facilitators for which there is a significant difference between groups. * p < .05. **p<.01. ^a denotes significant difference from ^b. ^{ab} denotes not significantly different from ^a or ^b

Table 5.14 T-Test and Descriptive Statistics by Number of Sports Played

Fun Facilitators	Sports Played						95% CI for Mean Difference	t	df	Hedges' g
	Play Rugby Only			Play rugby and other sports						
	M	SD	n	M	SD	n				
A good team spirit, a brotherhood, a great vibe	9.38	1.09	302	9.17	1.15	218	-0.41, -0.02	-2.13*	518	-0.19
Getting along with your teammates.	9.23	1.14	300	9.19	1.05	216	-0.24, 0.15	-0.49	514	-0.04
Trying your best – being in the zone	9.14	1.20	302	9.04	1.18	217	-0.31, 0.11	-0.97	517	-0.09
Having pride in playing for your school	9.17	1.24	300	8.96	1.35	217	-0.43, 0.02	-1.82	515	-0.16
Learning from my mistakes	9.20	1.11	301	8.90	1.21	218	-0.51, -0.10	-2.96**	517	-0.26
Playing well together as a team	9.09	1.35	303	8.99	1.16	217	-0.33, 0.12	-0.92	518	-0.08
Keeping a positive attitude	9.04	1.19	302	8.94	1.30	215	-0.31, 0.12	-0.88	515	-0.08
When a coach motivates and inspires the team	9.07	1.22	301	8.75	1.37	215	-0.55, -0.09	-2.73**	426	-0.25
Being challenged to improve and get better	9.01	1.30	303	8.79	1.26	218	-0.45, -0.00	-1.97*	519	-0.17
When a coach treats players with respect	8.96	1.41	301	8.82	1.38	215	-0.38, 0.11	-1.11	514	-0.10
A good ref who makes consistent calls	8.85	1.81	302	8.94	1.59	217	-0.21, 0.39	0.61	517	0.05
The physical aspects of the game	8.90	1.30	300	8.82	1.34	217	-0.31, 0.15	-0.71	515	-0.06
Being supported by my teammates	8.92	1.30	303	8.67	1.30	216	-0.48, -0.02	-2.15*	517	-0.19
Having a coach who knows a lot about rugby	8.81	1.45	303	8.64	1.56	218	-0.44, 0.08	-1.33	519	-0.12
Exercising, fitness and being active	8.68	1.40	303	8.37	1.51	217	-0.56, -0.06	-2.40*	518	-0.21
Having well-organized practices	8.63	1.37	303	8.34	1.55	218	-0.54, -0.03	-2.22*	519	-0.20
Family & friends support on touchline	8.34	1.88	303	8.11	2.05	217	-0.57, 0.11	-1.34	518	-0.12
Avoiding injury and concussion	8.11	2.19	299	8.08	2.11	212	-0.41, 0.36	-0.13	509	-0.01
When parents show good sportsmanship	8.25	1.93	301	7.72	2.16	217	-0.89, -0.18	-2.93**	516	-0.26
Being around your friends	8.00	1.76	300	8.01	1.87	215	-0.31, 0.32	0.02	513	0.00
Getting playing time, not being benched	7.86	1.86	301	8.11	1.76	218	-0.06, 0.57	1.57	517	0.14
Touching the ball	7.94	1.86	303	7.79	2.01	216	-0.49, 0.18	-0.90	517	-0.08
Playing well. Having highlights.	7.94	1.95	300	7.67	2.02	217	-0.61, 0.08	-1.50	515	-0.14
Meeting new people	7.70	2.21	302	7.70	2.11	218	-0.38, 0.38	-0.01	518	0.00
Using games as part of practices	7.65	1.93	300	7.61	1.78	216	-0.38, 0.28	-0.28	514	-0.02
Having the freedom to play creatively at practices	7.31	2.17	301	7.47	1.95	216	-0.20, 0.53	0.90	515	0.08
Playing in your favourite position	7.43	2.16	299	7.20	2.18	218	-0.61, 0.15	-1.19	515	-0.11
Winning	7.33	2.46	301	7.15	2.57	217	-0.62, 0.26	-0.82	516	-0.07
Playing against players of similar age	7.13	2.47	303	7.05	2.57	216	-0.53, 0.35	-0.38	517	-0.03
Being congratulated for playing well	6.85	2.44	300	7.14	2.46	216	-0.14, 0.72	1.34	514	0.12
Playing against an evenly matched team	6.79	2.54	302	6.68	2.66	218	-0.57, 0.34	-0.50	518	-0.04
Playing against players of similar size and weight	6.41	2.79	302	6.89	2.86	218	-0.01, 0.97	1.91	518	0.17
Playing on smaller fields	4.06	2.80	298	4.02	2.83	215	-0.54, 0.45	-0.16	511	-0.01

Note: Levene Test used to determine unequal variance, Satterthwaite approximation employed where unequal group variances. Bolding denotes Fun Facilitators for which there is a significant difference between groups. * p < .05. **p<.01.

Table 5.15 T-Test and Descriptive Statistics by Number One Sport

Fun Facilitators	Is Rugby my No. 1 Sport?						95% CI for Mean			
	Yes			No			Difference	t	df	Hedges'
	M	SD	n	M	SD	n				
A good team spirit, a brotherhood, a great vibe	9.33	1.03	433	9.11	1.48	83	-0.11, 0.56	1.33	98	-0.20
Getting along with your teammates.	9.21	1.10	429	9.16	1.10	83	-0.20, 0.32	0.44	510	-0.05
Trying your best – being in the zone	9.17	1.17	432	8.71	1.34	83	0.14, 0.77	2.89**	107	-0.38
Having pride in playing for your school	9.13	1.26	430	8.83	1.44	83	-0.03, 0.64	1.78	107	-0.23
Learning from my mistakes	9.14	1.09	432	8.72	1.48	83	0.07, 0.75	2.42*	99	-0.36
Playing well together as a team	9.11	1.22	432	8.79	1.44	84	-0.01, 0.66	1.93	108	-0.26
Keeping a positive attitude	9.04	1.22	431	8.77	1.29	83	-0.02, 0.56	1.85	512	-0.22
When a coach motivates and inspires the team	8.96	1.28	428	8.79	1.36	84	-0.13, 0.47	1.11	510	-0.13
Being challenged to improve and get better	8.99	1.21	433	8.57	1.59	84	0.06, 0.78	2.29*	103	-0.33
When a coach treats players with respect	8.90	1.43	429	8.90	1.25	83	-0.34, 0.32	-0.04	510	0.01
A good ref who makes consistent calls	8.85	1.73	431	8.96	1.70	84	-0.52, 0.29	-0.56	513	0.06
The physical aspects of the game	8.93	1.29	431	8.49	1.43	82	0.13, 0.75	2.78*	511	-0.34
Being supported by my teammates	8.81	1.30	432	8.77	1.35	82	-0.27, 0.35	0.28	512	-0.03
Having a coach who knows a lot about rugby	8.74	1.47	433	8.73	1.59	84	-0.34, 0.36	0.05	515	-0.01
Exercising, fitness and being active	8.59	1.43	432	8.30	1.60	84	-0.05, 0.63	1.67	514	-0.20
Having well-organized practices	8.59	1.38	433	8.05	1.77	84	0.14, 0.95	2.66*	103	-0.37
Family & friends support on touchline	8.30	1.90	432	7.88	2.20	84	-0.04, 0.88	1.80	514	-0.21
Avoiding injury and concussion	8.11	2.18	425	7.95	2.08	82	-0.35, 0.67	0.62	505	-0.07
When parents show good sportsmanship	7.97	2.05	430	8.12	2.15	84	-0.63, 0.34	-0.59	512	0.07
Being around your friends	7.98	1.86	429	8.13	1.47	82	-0.52, 0.21	-0.84	136	0.09
Getting playing time, not being benched	7.91	1.89	431	8.23	1.48	84	-0.74, 0.12	-1.45	513	0.17
Touching the ball	7.82	1.97	432	7.94	1.71	83	-0.57, 0.33	-0.52	513	0.06
Playing well. Having highlights.	7.88	1.94	429	7.46	2.09	84	-0.05, 0.87	1.76	511	-0.21
Meeting new people	7.77	2.15	432	7.26	2.41	84	0.00, 1.03	1.96	514	-0.23
Using games as part of practices	7.60	1.87	428	7.70	1.86	84	-0.54, 0.33	-0.47	510	0.05
Having the freedom to play creatively at practices	7.36	2.11	428	7.37	1.93	84	-0.50, 0.48	-0.05	510	0.00
Playing in your favourite position	7.30	2.21	429	7.31	1.98	84	-0.52, 0.50	-0.03	511	0.00
Winning	7.29	2.52	430	7.13	2.29	84	-0.42, 0.74	0.54	512	-0.06
Playing against players of similar age	7.11	2.53	431	6.98	2.54	84	-0.46, 0.72	0.43	513	-0.05
Being congratulated for playing well	7.00	2.47	429	6.76	2.37	83	-0.33, 0.82	0.84	510	-0.10
Playing against an evenly matched team	6.78	2.57	432	6.60	2.72	84	-0.42, 0.79	0.60	514	-0.07
Playing against players of similar size and weight	6.63	2.82	432	6.56	2.79	84	-0.59, 0.73	0.20	514	-0.02
Playing on smaller fields	4.10	2.85	426	3.95	2.68	83	-0.52, 0.81	0.43	507	-0.05

Note: Levene Test used to determine unequal variance, Satterthwaite approximation employed where unequal group variances. Bolding denotes Fun Facilitators for which there is a significant difference between groups. * p < .05. **p<.01.

Table 5.16 T-Test and Descriptive Statistics by Preferred Team

Fun Facilitators	Which Team?						95% CI for Mean Difference		t	df	Hedges' g
	Best Team			A Team with my Mates							
	M	SD	n	M	SD	n					
A good team spirit, a brotherhood, a great vibe	9.44	0.93	236	9.18	1.25	286	0.07, 0.44	2.67**	515	-0.23	
Getting along with your teammates.	9.22	1.03	234	9.20	1.16	284	-0.17, 0.21	0.21	516	-0.02	
Trying your best – being in the zone	9.27	1.04	236	8.94	1.31	285	0.13, 0.53	3.19**	518	-0.28	
Having pride in playing for your school	9.33	1.07	233	8.87	1.41	286	0.24, 0.67	4.19**	515	-0.36	
Learning from my mistakes	9.12	1.15	235	9.03	1.18	286	-0.11, 0.29	0.90	519	-0.08	
Playing well together as a team	9.13	1.18	235	9.00	1.34	287	-0.09, 0.35	1.16	517	-0.10	
Keeping a positive attitude	9.11	1.07	236	8.92	1.35	283	-0.02, 0.40	1.76	516	-0.15	
When a coach motivates and inspires the team	8.98	1.18	234	8.90	1.38	284	-0.14, 0.30	0.70	516	-0.06	
Being challenged to improve and get better	9.09	1.25	236	8.80	1.31	287	0.07, 0.51	2.59*	521	-0.23	
When a coach treats players with respect	8.91	1.3	233	8.91	1.47	285	-0.24, 0.24	-0.01	516	0.00	
A good ref who makes consistent calls	8.95	1.68	236	8.82	1.75	285	-0.16, 0.43	0.90	519	-0.08	
The physical aspects of the game	8.92	1.25	236	8.81	1.37	283	-0.11, 0.35	1.02	517	-0.08	
Being supported by my teammates	8.93	1.24	235	8.71	1.36	285	-0.09, 0.45	1.91	518	-0.17	
Having a coach who knows a lot about rugby	9.01	1.25	236	8.52	1.64	287	0.24, 0.74	3.88**	518	-0.33	
Exercising, fitness and being active	8.69	1.39	235	8.43	1.51	287	0.01, 0.52	2.08*	520	-0.18	
Having well-organized practices	8.68	1.4	236	8.37	1.49	287	0.06, 0.56	2.39*	521	-0.21	
Family & friends support on touchline	8.4	1.7	235	8.09	2.12	287	-0.02, 0.64	1.86	520	-0.16	
Avoiding injury and concussion	8.19	2.00	230	8.02	2.24	283	-0.20, 0.54	0.91	511	-0.08	
When parents show good sportsmanship	8.03	1.98	236	7.99	2.12	284	-0.32, 0.40	0.22	518	-0.02	
Being around your friends	7.58	1.92	236	8.36	1.62	281	-1.09, -0.47	-4.94**	462	0.44	
Getting playing time, not being benched	8.00	1.91	235	7.93	1.76	286	-0.25, 0.38	0.41	519	-0.04	
Touching the ball	7.79	2.07	235	7.92	1.81	286	-0.47, 0.20	-0.80	519	0.07	
Playing well. Having highlights.	7.96	1.99	234	7.74	1.94	286	-0.12, 0.56	1.27	518	-0.11	
Meeting new people	7.78	2.14	236	7.63	2.23	286	-0.22, 0.53	0.80	520	-0.07	
Using games as part of practices	7.55	1.82	234	7.67	1.91	284	-0.45, 0.20	-0.76	516	0.06	
Having the freedom to play creatively at practices	7.09	2.1	234	7.62	2.03	284	-0.89, -0.18	-2.94**	516	0.26	
Playing in your favourite position	7.25	2.23	234	7.37	2.11	285	-0.50, 0.25	-0.64	517	0.06	
Winning	7.66	2.32	235	6.89	2.59	285	0.35, 1.20	3.61**	515	-0.31	
Playing against players of similar age	6.82	2.65	235	7.36	2.34	286	-0.98, 0.11	-2.47*	472	0.22	
Being congratulated for playing well	7.00	2.32	235	6.99	2.52	284	-0.42, 0.43	0.03	517	0.00	
Playing against an evenly matched team	6.63	2.55	235	6.88	2.61	287	-0.70, 0.19	-1.12	520	0.10	
Playing against players of similar size and weight	6.31	2.94	236	6.89	2.67	286	-1.07, -0.09	-2.32*	481	0.21	
Playing on smaller fields	3.81	2.79	231	4.25	2.82	285	-0.93, 0.05	-1.78	514	0.16	

Note: Levene Test used to determine unequal variance, Satterthwaite approximation employed where unequal group variances. Bolding denotes Fun Facilitators for which there is a significant difference between groups. * p < .05. **p<.01.

Table 5.17 T-Test and Descriptive Statistics by Ambition

Fun Facilitators	Highest Team						95% CI for Mean			Hedges' g
	Social			Professional						
	M	SD	n	M	SD	n	Difference	t	df	
A good team spirit, a brotherhood, a great vibe	8.53	1.70	51	9.53	0.90	283	-1.49, -0.51	-4.10**	55	0.94
Getting along with your teammates.	8.73	1.67	52	9.32	1.03	281	-1.07, -0.11	-2.45**	58	0.51
Trying your best – being in the zone	8.23	1.47	51	9.39	0.95	282	-1.59, -0.74	-5.48**	58	1.12
Having pride in playing for your school	8.25	1.71	52	9.34	1.04	281	-1.58, -0.60	-4.45**	58	0.93
Learning from my mistakes	8.52	1.44	52	9.31	0.97	282	-1.21, -0.38	-3.83**	60	0.75
Playing well together as a team	8.39	1.67	52	9.31	1.09	282	-1.41, -0.45	-3.86**	59	0.77
Keeping a positive attitude	8.31	1.85	52	9.21	0.99	280	-1.44, -0.38	-3.44**	57	0.77
When a coach motivates and inspires the team	8.46	1.66	52	9.10	1.15	280	-1.12, -0.16	-2.67**	60	0.52
Being challenged to improve and get better	8.21	1.76	52	9.23	1.04	283	-1.53, -0.52	-4.05**	58	0.87
When a coach treats players with respect	8.73	1.44	51	9.00	1.36	281	-0.68, 0.14	-1.29	330	0.20
A good ref who makes consistent calls	9.10	1.46	52	8.96	1.70	283	-0.36, 0.63	0.52	333	-0.08
The physical aspects of the game	8.12	1.89	51	9.10	1.20	283	-1.53, -0.43	-3.56*	57	0.74
Being supported by my teammates	8.12	1.58	52	8.99	1.18	282	-1.33, -0.41	-3.80**	62	0.70
Having a coach who knows a lot about rugby	8.06	2.06	52	8.92	1.36	283	-1.45, -0.26	-2.89**	59	0.57
Exercising, fitness and being active	7.44	1.84	52	8.84	1.26	282	-1.93, -0.87	-5.27**	60	1.02
Having well-organized practices	7.40	1.99	52	8.90	1.17	283	-2.07, -0.93	-5.26**	58	1.13
Family & friends support on touchline	6.94	2.66	52	8.57	1.67	282	-2.39, -0.86	-4.26**	59	0.87
Avoiding injury and concussion	7.63	2.34	51	8.25	2.11	276	-1.26, 0.02	-1.90	325	0.29
When parents show good sportsmanship	7.69	2.52	51	8.18	1.99	282	-1.24, 0.25	-1.32**	62	0.23
Being around your friends	8.41	1.55	51	7.92	1.88	279	-0.06, 1.04	1.76	328	-0.27
Getting playing time, not being benched	8.12	1.69	52	8.00	1.93	281	-0.45, 0.67	0.39	331	-0.06
Touching the ball	8.04	1.93	52	7.94	1.96	282	-0.48, 0.68	0.35	332	-0.05
Playing well. Having highlights.	7.51	2.28	51	7.85	2.04	282	-0.96, 0.28	-1.08	331	0.16
Meeting new people	7.17	2.42	52	7.88	2.16	282	-1.36, -0.05	-2.13	332	0.32
Using games as part of practices	7.79	1.68	52	7.54	1.95	279	-0.32, 0.82	0.86	329	-0.13
Having the freedom to play creatively at practices	7.96	1.86	52	7.30	2.10	281	0.05, 1.28	2.13*	331	-0.32
Playing in your favourite position	7.14	2.63	52	7.36	2.11	281	-0.99, 0.55	-0.58*	64	0.10
Winning	6.81	2.73	52	7.37	2.52	281	-1.32, 0.20	-1.46	331	0.22
Playing against players of similar age	7.54	2.33	52	6.75	2.62	283	0.03, 1.56	2.03*	333	-0.31
Being congratulated for playing well	6.81	2.38	52	6.93	2.48	280	-0.86, 0.61	-0.34	330	0.05
Playing against an evenly matched team	7.15	2.53	52	6.43	2.72	282	-0.08, 1.52	1.78	332	-0.27
Playing against players of similar size and weight	7.46	2.68	52	5.90	2.90	283	0.71, 2.41	3.61**	333	-0.54
Playing on smaller fields	4.59	2.74	51	3.83	2.77	278	-0.07, 1.59	1.80	327	-0.27

Note: Levene Test used to determine unequal variance, Satterthwaite approximation employed where unequal group variances. Bolding denotes Fun Facilitators for which there is a significant difference between groups. * p < .05. **p<.01.

Table 5.18 T-Test and Descriptive Statistics by Commitment

Fun Facilitators	Pearson Correlation r	n	Commitment Level						95% CI for Mean Difference	t	df	Hedges' g
			Less Committed (<8)			More Committed (≥8)						
			M	SD	n	M	SD	n				
A good team spirit, a brotherhood, a great vibe	0.16**	525	8.97	1.47	112	9.39	0.99	413	0.12, 0.71	2.82**	139	0.37
Getting along with your teammates.	0.11*	521	9.00	1.33	111	9.27	1.02	410	0.04, 0.5	2.27*	519	0.24
Trying your best – being in the zone	0.27**	524	8.52	1.59	112	9.25	1.02	412	0.42, 1.04	4.61**	137	0.62
Having pride in playing for your school	0.22**	522	8.70	1.66	112	9.19	1.14	410	0.17, 0.83	2.98**	141	0.39
Learning from my mistakes	0.19**	524	8.77	1.34	112	9.16	1.09	412	0.12, 0.67	2.87**	153	0.34
Playing well together as a team	0.17**	525	8.65	1.58	113	9.18	1.13	412	0.22, 0.85	3.36**	145	0.43
Keeping a positive attitude	0.16**	522	8.70	1.50	112	9.09	1.14	410	0.09, 0.69	2.57*	148	0.32
When a coach motivates and inspires the team	0.12**	521	8.64	1.41	112	9.02	1.24	409	0.09, 0.67	2.58*	162	0.29
Being challenged to improve and get better	0.24**	526	8.42	1.57	113	9.07	1.16	413	0.33, 0.95	4.05**	147	0.51
When a coach treats players with respect	0.08	521	8.71	1.51	112	8.96	1.35	409	-0.05, 0.53	1.64	519	0.17
A good ref who makes consistent calls	0.14**	524	8.45	2.14	113	9.00	1.56	411	0.13, 0.98	2.57*	146	0.32
The physical aspects of the game	0.30**	522	8.37	1.64	110	8.99	1.18	412	0.29, 0.95	3.72**	141	0.48
Being supported by my teammates	0.07	523	8.54	1.56	112	8.89	1.22	411	0.03, 0.66	2.15*	150	0.26
Having a coach who knows a lot about rugby	0.09*	526	8.45	1.61	113	8.83	1.44	413	0.05, 0.71	2.25*	164	0.25
Exercising, fitness and being active	0.24**	525	7.97	1.67	113	8.71	1.36	412	0.41, 1.08	4.37**	155	0.52
Having well-organized practices	0.19**	526	7.96	1.80	113	8.66	1.31	413	0.34, 1.06	3.84**	146	0.49
Family & friends support on touchline	0.10*	525	7.92	2.13	113	8.31	1.89	412	-0.01, 0.8	1.89	523	0.20
Avoiding injury and concussion	0.10*	516	7.65	2.50	109	8.21	2.04	407	0.04, 1.07	2.14*	149	0.26
When parents show good sportsmanship	0.03	523	8.05	2.03	112	8.00	2.07	411	-0.48, 0.38	-0.23	521	-0.02
Being around your friends	-0.06	520	8.12	1.64	113	7.97	1.84	407	-0.52, 0.23	-0.75	518	-0.08
Getting playing time, not being benched	0.15**	524	7.58	1.99	113	8.07	1.77	411	0.10, 0.86	2.50*	522	0.26
Touching the ball	0.00	524	7.76	1.79	113	7.89	1.96	411	-0.27, 0.53	0.63	522	0.07
Playing well. Having highlights.	0.08	522	7.54	2.05	112	7.90	1.94	410	-0.05, 0.78	1.75	520	0.19
Meeting new people	0.04	525	7.60	2.27	113	7.72	2.16	412	-0.34, 0.57	0.50	523	0.05
Using games as part of practices	0.02	521	7.56	1.83	113	7.65	1.87	408	-0.30, 0.48	0.46	519	0.05
Having the freedom to play creatively at practices	0.02	521	7.33	1.98	112	7.38	2.10	409	-0.38, 0.49	0.24	519	0.03
Playing in your favourite position	-0.06	522	7.49	2.08	111	7.27	2.19	411	-0.67, 0.24	-0.93	520	-0.10
Winning	0.06	523	6.84	2.30	112	7.37	2.52	411	0.02, 1.05	2.02*	521	0.22
Playing against players of similar age	-0.12**	524	7.48	2.42	113	6.99	2.54	411	-1.01, 0.04	-1.83	522	-0.19
Being congratulated for playing well	-0.04	521	6.88	2.55	112	7.01	2.41	409	-0.38, 0.65	0.53	519	0.06
Playing against an evenly matched team	0.00	525	6.69	2.57	113	6.78	2.60	412	-0.46, 0.63	0.31	523	0.03
Playing against players of similar size and weight	-0.14**	525	7.06	2.64	112	6.49	2.86	413	-1.16, 0.02	-1.90	523	-0.20
Playing on smaller fields	-0.09*	518	4.23	2.70	112	3.99	2.84	406	-0.83, 0.35	-0.81	516	-0.09

Note: Levene Test used to determine unequal variance, Satterthwaite approximation employed where unequal group variances. Bolding denotes Fun Facilitators for which there is a significant difference between groups. * p < .05. **p<.01.

Table 5.19 T-Test and Descriptive Statistics by Perceived Skill Level

Fun Facilitators	Pearson Correlation	n	Perceived Skill Level						95% CI for Mean Difference	t	df	Hedges' g
			Less Skilled (<8)			More Skilled (≥8)						
			M	SD	n	M	SD	n				
A good team spirit, a brotherhood, a great vibe	0.12**	523	9.08	1.28	197	9.42	0.98	326	0.13, 0.55	3.27**	333	0.31
Getting along with your teammates.	0.11*	519	9.00	1.25	198	9.33	0.96	321	0.12, 0.53	3.19**	339	0.31
Trying your best – being in the zone	0.25**	522	8.69	1.49	197	9.33	0.91	325	0.41, 0.87	5.44**	285	0.55
Having pride in playing for your school	0.15**	520	8.80	1.48	197	9.25	1.11	323	0.20, 0.69	3.66**	330	0.36
Learning from my mistakes	0.05	522	8.98	1.26	198	9.12	1.09	324	-0.00, 0.35	1.29	372	0.12
Playing well together as a team	0.17**	523	8.86	1.42	198	9.18	1.13	325	0.08, 0.54	2.61**	349	0.26
Keeping a positive attitude	0.08	520	8.82	1.41	197	9.11	1.10	323	0.05, 0.52	2.45*	340	0.24
When a coach motivates and inspires the team	0.12**	519	8.75	1.44	197	9.05	1.17	322	0.06, 0.53	2.46*	353	0.23
Being challenged to improve and get better	0.15**	524	8.70	1.40	198	9.05	1.19	326	0.11, 0.58	2.93**	364	0.27
When a coach treats players with respect	0.08	519	8.73	1.49	196	9.00	1.32	323	0.01, 0.52	2.11*	373	0.19
A good ref who makes consistent calls	0.15**	522	8.58	1.96	198	9.06	1.51	324	0.16, 0.80	2.96**	338	0.28
The physical aspects of the game	0.19**	520	8.54	1.53	196	9.04	1.12	324	0.25, 0.75	3.99**	320	0.39
Being supported by my teammates	0.16**	521	8.63	1.47	197	8.92	1.18	324	0.04, 0.53	2.33*	347	0.22
Having a coach who knows a lot about rugby	0.16**	524	8.39	1.72	198	8.95	1.27	326	0.28, 0.83	3.95**	327	0.38
Exercising, fitness and being active	0.12**	523	8.27	1.63	198	8.71	1.31	325	0.16, 0.70	3.19**	350	0.31
Having well-organized practices	0.15**	524	8.22	1.65	198	8.68	1.29	326	0.18, 0.73	3.33**	342	0.32
Family & friends support on touchline	0.15**	523	7.79	2.20	198	8.49	1.73	325	0.34, 1.06	3.83**	344	0.36
Avoiding injury and concussion	0.04	514	7.99	2.20	193	8.13	2.12	321	-0.20, 0.53	0.73	512	0.07
When parents show good sportsmanship	0.03	521	7.87	2.12	197	8.08	2.02	324	-0.10, 0.57	1.14	519	0.10
Being around your friends	0.00	518	7.95	1.77	194	8.01	1.81	324	-0.20, 0.37	0.36	516	0.03
Getting playing time, not being benched	0.09*	522	7.70	1.94	198	8.12	1.70	324	0.09, 0.73	2.58*	520	0.23
Touching the ball	0.03	522	7.78	1.94	198	7.92	1.88	324	-0.10, 0.47	0.80	520	0.07
Playing well. Having highlights.	0.09*	520	7.64	2.07	196	7.93	1.90	324	-0.00, 0.64	1.66	518	0.15
Meeting new people	-0.02	523	7.79	2.02	197	7.64	2.27	326	-0.50, 0.24	-0.70	521	-0.07
Using games as part of practices	0.05	519	7.60	1.85	196	7.65	1.84	323	-0.20, 0.38	0.31	517	0.03
Having the freedom to play creatively at practices	-0.03	519	7.44	1.96	196	7.34	2.11	323	-0.40, 0.26	-0.50	517	-0.05
Playing in your favourite position	0.04	520	7.20	2.16	196	7.39	2.15	324	-0.10, 0.57	0.97	518	0.09
Winning	0.12**	521	6.89	2.50	197	7.46	2.45	324	0.12, 1.00	2.53*	519	0.23
Playing against players of similar age	-0.03	522	7.15	2.45	198	7.04	2.55	324	-0.50, 0.33	-0.40	520	-0.04
Being congratulated for playing well	0.02	519	6.87	2.52	196	7.06	2.38	323	-0.20, 0.62	0.86	517	0.08
Playing against an evenly matched team	0.01	523	6.69	2.57	198	6.78	2.60	325	-0.30, 0.55	0.39	521	0.03
Playing against players of similar size and weight	0.01	523	6.73	2.79	198	6.54	2.83	325	-0.60, 0.31	-0.70	521	-0.07
Playing on smaller fields	-0.02	516	4.13	2.72	197	3.96	2.85	319	-0.60, 0.32	-0.60	514	-0.06

Note: Levene Test used to determine unequal variance, Satterthwaite approximation employed where unequal group variances. Bolding denotes Fun Facilitators for which there is a significant difference between groups. * p < .05. **p<.01.

5.2.3.2 Cluster Analysis Using Participant's Ratings of Fun Facilitator Importance

K-means clustering of the *Fun Facilitator* importance data was used to generate two, three, four and five cluster solutions. The 3-cluster solution (Table 5.20) was deemed most useful based on how the *Fun Facilitator* mean ratings differed across the three clusters. This choice of the 3-cluster solution was informed by descriptive differences in mean scores, with the group sizes being large and of relatively similar size. While few significant differences exist across the *Fun Facilitator* groups, the subtle differences and overall pattern represent a worthwhile discussion point.

Cluster 1 had 117 (22%) participants, Cluster 2 with 120 (23%), Cluster 3 with 217 (41%), while 73 participants (14%) were missing from all three clusters. Analysis of variance confirmed significant differences between these three clusters. The three clusters were explored based on demographic, psychographic and behavioural variable data using independent t-tests and chi-square analyses. Statistically significant differences were found on four variables associated with the Intrapersonal Profile of players - school decile, ethnicity, level of commitment and ambition.

Players in Cluster 1 perceived most of the *Primary Fun Facilitators* (1-17) as less important than players in the other two clusters. Cluster 1 perceived mid-range *Fun Facilitators* as less important than players in Cluster 3, but similarly to Cluster 2. Cluster 1, however, perceived the *Even Play Fun Facilitators* as more important than Cluster 2, but similarly if a little less important than players in Cluster 3.

Cluster 2 players (23%) are characterised somewhat differently. Cluster 2 perceives the *Primary Fun Facilitators* more important than Cluster 1, but of similar importance to Cluster 3. For the lower mid-ranked *Fun Facilitators* (18-28) the reverse was the case. Cluster 2 perceives these *Fun Facilitators* as less important than Cluster 3, but similar to Cluster 1. Cluster 2 perceives the *Even Play Fun Facilitators* as less important than players in Cluster 1 and 3.

Table 5.20 3-Cluster Group Mean Importance Scores

Rank**	Fun Facilitator	Clusters		
		1 Rating *	2 Rating *	3 Rating *
1	A good team spirit, a brotherhood, a great vibe	8.35	9.66	9.60
2	Getting along with your teammates	8.52	9.26	9.57
3	Trying your best – being in the zone	8.27	9.41	9.36
4	Having pride in playing for your school	8.08	9.48	9.41
5	Learning from my mistakes	8.14	9.38	9.38
6	Playing well together as a team	8.27	9.24	9.38
7	Keeping a positive attitude	7.95	9.28	9.47
8	When a coach motivates and inspires the team	7.94	9.28	9.36
9	Being challenged to improve and get better	7.91	9.38	9.27
10	When a coach treats players with respect	7.95	9.01	9.38
11	A good ref who makes consistent calls	8.37	8.63	9.27
12	The physical aspects of the game	8.05	9.08	9.19
13	Being supported by my teammates	7.83	9.09	9.14
14	Having a coach who knows a lot about rugby	8.07	8.51	9.19
15	Exercising, fitness and being active	7.32	8.93	8.98
16	Having well-organized practices	7.26	8.76	9.06
17	Family & friends support on touchline	6.85	8.20	8.92
18	Avoiding injury and concussion	7.26	7.72	8.84
19	When parents show good sportsmanship	6.90	7.64	8.73
20	Being around your friends	7.33	7.29	8.75
21	Getting playing time, not being benched	7.46	7.65	8.47
22	Touching the ball	6.99	7.23	8.72
23	Playing well. Having highlights.	7.12	7.09	8.71
24	Meeting new people	6.42	7.68	8.46
25	Using games as part of practices	6.95	6.83	8.39
26	Having the freedom to play creatively at practices	6.91	6.53	8.16
27	Playing in your favourite position	6.60	6.48	8.18
28	Winning	6.32	6.43	8.24
29	Playing against players of similar age ^a	7.12	4.61	8.44
30	Being congratulated for playing well	6.15	5.57	8.13
31	Playing against an evenly matched team ^a	6.73	4.19	8.25
32	Playing against players of similar size and weight ^a	7.12	4.61	8.44
33	Playing on smaller fields	3.87	2.25	5.06

Note. n = 527. * Mean importance rating is a 1-10 scale 1= Not Important to 10= Very Important.
 ** Fun facilitator ranking for the total populations of players. **Bold** denotes the higher ratings for *Fun Facilitators* that help define the cluster. ^a denotes the *Even Play Fun Facilitators*

Cluster 3 makes up approximately 41% of the player population. The defining characteristic of players in Cluster 3 was that they perceive all *Fun Facilitators* as either more important than, or of equal importance to, players in Clusters 1 and 2. This includes the *Even Play Fun Facilitators*. Combining Cluster 1 with Cluster 3, 63% of the players perceive the *Even Play Fun Facilitators*, playing against even teams based on performance, weight, size and age, as relatively more important to their fun than Cluster 2.

5.2.4 *Fun Inhibitors*

Participants were asked to pick their top three *Fun Inhibitors* from a list. 'Bad or biased referees' was selected by 56% of participants, followed by 'Dirty players' (41%) (Table 5.21). 'The team not giving 100%' and 'Cocky players' were also selected frequently, 31% and 28% respectively. 'Not playing well as a team' (22%), 'Missing out on playing time' (19%) and 'Annoying coaches' (18%) were not chosen as frequently. Other choices such as 'Losing' (15%), 'Making mistakes on the field' (14%), 'Being told I am playing bad' (14%) and 'Sideline or parents being negative' (13%) were selected less commonly, while 'Being mocked by the opposition' was selected by only 5% of players.

Table 5.21 Important *Fun Inhibitors*

Rank	<i>Fun Inhibitors</i>	Percentage Cited
1	Bad or biased referees	56
2	Dirty players	41
3	The team not giving 100%	31
4	Cocky players	28
5	Not playing well as a team	22
6	Missing out on playing time	19
7	Annoying coaches	18
8	Losing	15
9	Making mistakes on the field	14
10	Being told I am playing bad	14
11	Sideline or Parents being negative	13
12	Playing over age teams	12
13	Bullies in the team	11
14	Being mocked by the opposition	5

Note: n=527

5.2.5 Summary

While each *Fun Facilitator* was important, some are perceived as being more so than others. The most important facilitators fit into four themes: *Positive team dynamics*, *Positive player attitudes*, *Learning and development* and *Positive coaching*. These four themes are consistently high rated across demographic, psychographic and behavioural variables. Groups of players emerged across Intrapersonal Profile variables who perceived *Fun Facilitator* importance differently - school decile, player ambition, commitment to rugby, perceived skill level and ethnicity. When participants were asked to pick their top three *Fun Inhibitors*, 'Bad or biased referees' (56%) and 'Dirty players' (41%) were selected most often. 'Sideline or parents being negative' was selected by only 13%.

5.3 Discussion

The Quantitative Stage of this study was designed to gain insight into the perceived importance of the *Fun Facilitators* and *Fun Inhibitors*, and whether players can be segmented based on their perceptions of *Fun Facilitator* importance, specifically concerning variables associated with a players' Intrapersonal Profile. In this section, the current results are discussed in the context of earlier research results and analyses, particularly Visek et al. (2015, 2018, 2020). The implications of the results for sport managers who wish to improve the youth sport fun experience are also discussed.

5.3.1 Important Facilitators of Fun

Key Finding 6: *Positive team dynamics*, *Positive player attitudes*, *Learning and development* and *Positive coaching* are perceived as the Primary Fun Facilitator themes in youth rugby.

Four themes appear to be the most important for facilitating youth rugby player's fun experience. These are *Positive team dynamics*, *Positive player attitudes*, *Learning and development* and *Positive coaching*. These four themes are uniformly important across

the rugby players in this study, demonstrated by the high rating and low variance of the *Fun Facilitators* associated with these themes.

Each of these four priority themes seems to be associated with a Core Fun Element of rugby or an aspect of the Intrapersonal Profile, or both. For instance, *Positive team dynamics* is closely associated with developing a sense of *Brotherhood* in a team. *Learning and Development* is important in building competency, perceived self-skill and a sense of mastery. *Positive player attitudes* could be argued to be a reflection of, or derived from, strong alignment between a player's Intrapersonal Profile and a sports *Core Fun Elements*. While *Positive coaching* is an important factor in building a player's positive self-belief, competence and mastery, as well as facilitating *Positive team dynamics* and a sense of *Brotherhood*.

Positive coaching is delivered by a coach with the correct training and emotional competency. Coaches are also key influencers of team dynamics, attitudes of players and players' learning and development. For sports organisations that are focused on providing a fun environment for youth players, the following should be important development areas for coaches across youth sport: developing positive team dynamics, motivating positive player attitudes, leading player learning and development and a positive coaching approach.

Earlier studies around fun in sport also identified positive team and social interactions, greater personal effort, positive coaching, developing mastery and a sense of competence as important to players' fun (Allen, 2003; Gardner et al., 2016; Harris et al., 1995; North, 2007; Scanlan et al., 1993; Ullrich-French & Smith, 2009). Competence Motivation Theory (Harter, 1978, 1981), Achievement Goal Theory (Nicholls, 1984; Lavallee et al., 2012) and Self Determination Theory (Deci and Ryan, 1985, 2000) also incorporated the importance of competency, learning and development, personal effort, autonomy and social orientation in motivating individuals to participate in sport (refer to both Chapter 2 Literature Review and Chapter 4 Fun in youth rugby – a qualitative journey).

These four themes *Positive team dynamics*, *Positive player attitudes*, *Learning and development* and *Positive coaching* are a clear priority for sport managers focussed on creating and delivering a fun environment for youth rugby players. The challenge is that these are not areas where change and impact can be brought about quickly and easily. Sport managers have more influence over structural factors like playing on smaller fields, reducing the size of teams, shortening games and restricting competitions below certain weights. Being able to manipulate these structural elements of the game may well be important to attracting players back, bringing new players to the game, or keeping some players in the game. This notion is supported by the greater importance some players place on the *Even Play Fun Facilitators* (refer Section 5.3.2). However, coach development that combines skill and emotional competence can play an important role in influencing these four themes; as can a wider focus on skill development across all players. Sport New Zealand's philosophy 'Balance is Better' bringing together fun and skill development, is a good start in that direction (Sport New Zealand Ihi Aotearoa, 2021a), as are coach development programmes which include emotional and social competence. That these four fun-facilitator themes are more widely applicable across youth sport or at least youth team sports is supported by Key Finding 7.

Key Finding 7: Primary fun-factors from Visek et al. (2015), *Trying Hard*, *Positive Team Dynamics*, and *Positive Coaching* and the secondary fun-factor *Learning and Improving* align with the important Fun Facilitator themes from this study.

Visek et al. (2015, 2018) identified limitations of their study, including the studies inclusion of solely soccer-related participants from one region of the United States, with relatively small numbers of participants. They saw testing their study's findings with larger samples, in other team-based sports and internationally, as a future research opportunity. One goal of this study was to validate, or not, Visek et al.'s findings in rugby in New Zealand with a larger number of participants.

The primary fun-factors from Visek et al. (2015, 2020), *Trying Hard*, *Positive Team Dynamics*, *Positive Coaching* and the secondary fun-factor *Learning and Improving* align

closely with those priority themes obtained in this study (Table 5.22). Table 5.22 sets out a comparison of fun-factor importance ratings between the two studies. In Table 5.22, the Fun-factors and 'Vissek et al. Ratings 1' were taken directly from Vissek et al. (2015) Table 2 Importance, Frequency, Feasibility, and Bridging Index for the 81 Fun-Determinants by Dimension (p. 429-430). 'Vissek et al. Ratings 2' were derived using the data from this same table but modified in a fashion to enable a more direct comparison between the two studies. 'Vissek et al. Importance Ratings 2' were generated for the fun-factors using only the ratings of the fun-determinants that were used as *Fun Facilitators* in the current study.

The comparative rating data from this study in Table 5.22, Rugby 1 and Rugby 2, were generated in two slightly different ways. The Rugby 1 ratings used only rating data from the *Fun Facilitators* that had direct equivalent fun-determinants in the Vissek et al. (2015) study. The Rugby 2 ratings used the *Fun Facilitator* data used in the Rugby 1 ratings plus other *Fun Facilitators* allocated by the investigator to a Fun-factor based on a judgement of fit. Then, to make the comparison between the studies easier to visualise, the importance ratings in Rugby 1 and Rugby 2 were divided by 2, taking account of the one to ten scale used in this study versus the one to five scale used by Vissek et al. (2015). This interpretation is inexact given the different scales, but useful for discussion purposes.

The results in Table 5.22 show that both studies have the same four high rating fun-factors/fun themes. This result lends support to the conclusion that the primary fun-factors from Vissek et al. (2020) and their secondary fun-determinant *Learning and Improving* are generically important to fun in youth team sports and potentially transferrable across countries and sports.

There are also many similarities between the high rating fun-determinants from Vissek et al. (2015) and the *Fun Facilitator* ratings from this study (Table 5.23). However, there also appear to be some minor differences between the two studies. In Vissek et al. (2015), the top ten ranked fun-determinants indicate more emphasis on the individual and what they invest in and get out of playing sport. This is highlighted by the high rating of fun-

Table 5.22 Comparison of Fun-factor Importance Ratings

Vissek et al. Ranking *	Fun-factor *	Vissek et al. Importance Ratings 1 *	Vissek et al. Importance Ratings 2 *	Rugby Importance Ratings 1	Rugby Importance Ratings 2
1	Positive Team Dynamics	4.22	4.44	4.47	4.53
2	Trying Hard	4.19	4.53	4.25	4.20
3	Positive Coaching	4.13	4.45	4.43	4.43
4	Learning and Improving	3.75	4.23	4.31	4.31
4	Game Time Support	3.75	3.84	4.02	4.02
6	Games	3.71	4.07	3.67	3.48
7	Practices	3.69	3.94	3.92	3.92
8	Team Friendships	3.68	3.90	4.15	4.15
9	Mental Bonuses	3.58	4.05	4.07	4.23
10	Team Rituals	2.85	N/A	N/A	N/A
11	Swag	2.61	N/A	N/A	N/A

Note: * Data is drawn from Vissek et al. (2015)

Table 5.23 Comparison of the Fun Facilitator importance with Vissek et al. (2015)

Rank	Rugby Study Fun Facilitator	Importance rating *	Rank	Vissek et al. (2015) **	Importance rating
1	A good team spirit, a brotherhood, a great vibe	4.65	1	Trying your best	4.68
2	Getting along with your teammates.	4.61	2	When a coach treats players with respect	4.57
3	Trying your best – being in the zone	4.55	3	Playing well together as a team	4.55
3	Having pride in playing for your school.	4.55	3	Getting playing time	4.55
5	Learning from my mistakes.	4.54	5	Getting along with your teammates	4.49
6	Playing well together as a team	4.53	6	Exercising and being active	4.48
7	Keeping a positive attitude	4.51	7	Working hard	4.47
8	When a coach motivates and inspires the team	4.47	7	When a coach encourages the team	4.47
8	Being challenged to improve and get better	4.47	9	Having a coach who is a positive role model	4.45
10	When a coach treats players with respect	4.46	10	Playing well during a game	4.44
			10	Keeping a positive attitude	4.44

Note:

* Rugby study mean importance ratings have been divided by 2 to move them from a 1-10 scale to a 1-5 Likert scale used by Vissek et al. (2015) to make an easier comparison.

** Taken from Vissek et al. (2015) Table 2 Importance, Frequency, Feasibility, and Bridging Index for the 81 Fun-determinants by Dimension (p. 429-430).

determinants such as 'Getting playing time', 'Exercising and being active', 'Working hard' and 'Playing well during the game'. In the current study, players appear to place more importance on *Learning and Improving* (Table 5.22) with *Fun Facilitators* such as 'Learning from my mistakes' and 'Being challenged to improve and get better' featuring more highly (Table 5.23). *Team Friendships* may also have a slightly higher importance in a New Zealand context, although the inexact nature of the comparison makes this difficult to judge accurately. These differences call for further investigation and consideration. Some caution, however, does need to be taken when drawing these specific *Fun Facilitator* comparisons with Visek et al. (2015). Different methodologies were used in both studies and only the top 2 or 3 fun-determinants from each Fun-factor in the Visek et al. study were used as *Fun Facilitators* in this study.

Key Finding 8: 'A good ref who makes consistent calls' is an important fun facilitator.

'A good ref who makes consistent calls' stands out as a fun facilitator. Firstly, it ranks relatively highly, 11th out of 33 *Fun Facilitators* in this study (Table 5.10). Secondly, the standard deviation for this *Fun Facilitator* was a little higher than the *Fun Facilitators* rated above it, and those immediately below it. This suggests greater variability in this *Fun Facilitator's* perceived importance to players. Thirdly, 'Bad or biased referees' was the most frequently selected *Fun Inhibitor* (Table 5.21). These results strongly suggest that refereeing has a significant effect on a player's fun, both positively and negatively.

Judgements on the quality of refereeing are controversial in an environment where referee abuse is prevalent and where abuse is an expected and accepted part of the role of refereeing (Kellett & Shilbury, 2007; Ridinger, 2015; Ridinger et al., 2017; Tingle, et al., 2014). Also, where retention of refereeing is an issue (Jacobs et al., 2020; Phillips & Fairley, 2014, p. 185). Referees often get blamed when a team loses, or a call goes against a team. Player's complaints about refereeing may also be in part a reflection of coaches and parents expressed negative perceptions of refereeing. The results of this study, however, show that players perceive referees' performance as important to their fun experience. While this result may be in part a reflection of the negative example of coaches and parents and biased perceptions of players, it does suggest that refereeing

quality should not be ignored as an important factor in facilitating and inhibiting fun. While refereeing performance and fun warrants further investigation and examination, in the meantime the results advocate addressing refereeing quality and how it's perceived to facilitate fun in youth rugby.

Refereeing quality as a factor in facilitating and inhibiting fun has both an interpersonal and a structural component aspect to it. Both aspects need to be considered when sport managers address referees' impact on fun. Training of referees needs to consider values, emotional and social competency as well as their technical skills. From a structural perspective, the quality of referees allocated to games needs to be considered, particularly at more social levels of rugby. As we see later on in Section 5.3.2, players whose ambition is to play social rugby rate referee quality as the most important *Fun Facilitator* influencing their fun experience.

A recent focus in rugby has been on poor sideline behaviour, concussion and weight restriction grades. These factors are believed to have an impact on safety but also fun and therefore continued participation. The *Fun Facilitators* most closely aligned to these initiatives (i.e., friends on the touchline, parent sportsmanship, injury avoidance, similar size players) were deemed *somewhat* important by the current sample, less than other *Fun Facilitators* but with higher variability in the player sample. These results suggest that poor sideline behaviour, concussion and weight restriction grades are important, but not as important to some players. This may be further evidence of distinct "*Fun Facilitator* profiles" amongst youth players.

5.3.2 Participant Segmentation Based on Fun Facilitator Importance

Vissek et al. (2020) re-examined their data from their 2015 study to see whether they could differentiate between groups of players (based on age, gender, and level of competitive play). They found a very high consensus in fun-factor and fun-determinant importance ratings between these player groups. The fun-factor ratings are consistently grouped in the same strata of primary, secondary and tertiary importance. There was also a high consensus between fun-determinant importance ratings across the groups.

Between boys and girls, there were only six significant differences across the 81 fun-determinants. Between younger and older players there were only three significant differences. Between youth playing at different levels of competition, there were only five differences.

In the current study, *Fun Facilitator* importance ratings were also analysed in an attempt to segment players using specific Intrapersonal Profile variables. It is important to note that the *Fun Facilitators* used in this study are already known to be perceived as being important to fun. Most of the *Fun Facilitators* used in the questionnaire either derived from the Visek et al. (2015) study or the Qualitative Stage of this study. Scanlan et al. (1993) also pointed out that the self-selective nature of youth sport and the positive way in which young athletes typically view their current involvement in a sport would lead to skewed enjoyment data with constrained variances. It is prudent then, not to expect large variances in participant's perceptions of *Fun Facilitator* importance. This expectation was borne out by the small standard deviations in *Fun Facilitator* ratings (Table 5.10). However, even relatively small but significant differences may be important from an operational perspective. These differences may enable tailoring delivery of sport to participants with different Intrapersonal Profiles to maximise their fun and minimise their risk of dropping out.

This study has some important differences from the Visek et al. (2020) study. Players were able to be compared across a more diverse range of Intrapersonal Profile variables including demographic, psychographic and behavioural variables such as school year, school deciles, ethnicity, perceived skill level, preferred team, commitment to playing rugby and rugby ambition. The current study also had a larger player sample size (527) for segmentation analyses, than the Visek et al. (2020) study.

Key Finding 9: The themes *Positive team dynamics, Positive player attitudes, Learning and development* and *Positive coaching*, and related individual *Fun Facilitators*, are consistently rated highly across player subgroups.

In congruence with Visek et al. (2020), the *Fun Facilitator* themes *Positive team dynamics*, *Positive player attitudes* (similar to *Trying Hard* in Visek et al.), *Learning and development* and *Positive coaching*, and their component *Fun Facilitators* were consistently rated highly across player groups. This high rating of these themes was also evident in the K-means cluster analysis three-cluster solution. This reinforces a priority operational focus on these fun factors in influencing all players' fun experiences. Given the results of Visek et al. (2020) and those from this study, it appears these four *Fun Facilitator* themes may be universally the more important *Fun Facilitators* across youth team sports and participants of diverse Intrapersonal Profiles. Thus, confirming the priority that should be given to them for facilitating fun in youth sport settings.

Key Finding 10: Fun facilitators 'A good ref who makes consistent calls' and 'Being around your friends' are highly ranked by players oriented to social rugby.

The *Fun Facilitator* 'A good ref who makes consistent calls' was ranked first by those whose ambition was to play social rugby. 'Being around your friends' was ranked seventh in importance by these same players. In comparison, those players who indicated they had professional ambitions ranked 'A good ref who makes consistent calls' 13th and 'Being around your friends' 22nd (Table 5.17).

These results tell us that refereeing quality is perceived to be very important to fun by players oriented to social rugby. Good quality referees in social rugby may be an important factor in assuring their fun and retention in the sport, particularly where social rugby players are less committed to rugby and more at risk of dropping out. This result may also be reflective of lower grades of youth rugby not being allocated better referees, and more typically having new, parent or coach referees.

The high rating of the *Fun Facilitator* 'Being around your friends' for social-oriented rugby players may not be surprising, but it has implications for designing the rugby environment for these players. Forty five per cent of participants in this study saw their highest ambition in the game as being at levels below professional level (Table 5.7), while 55% would currently prefer to play in a Team with their Mates rather than in the

Best Team (Table 5.6). These results suggest that for social rugby oriented players, consideration needs to be given to how teams are put together and managed so that players can be around their friends and play with their mates.

Deci and Ryan's (1985, 2000) Self Determination Theory argues that individuals are motivated to play a sport to meet three general needs; autonomy, competence and being socially connected. Autonomy and competence are addressed by the *Primary Fun Facilitator* themes: *Learning and development*, *Positive coaching* and *Positive player attitudes*. While the theme *Positive team dynamics* and the *Fun Facilitator* 'Being around your friends' goes some way to addressing the socially connected need, as does the Core Fun Element of Rugby, *Brotherhood*.

That there is an important social aspect to fun in youth sport for many players is not surprising. A social component has played a significant role in other sport participation theories. As well as Deci and Ryan's (1985, 2000) Self Determination Theory, Klint and Weiss (1987), using Competence Motivation Theory, found that for athletes with high perceived social competence the social aspects of the sport are a strong reason to participate. Stuntz and Weiss (2009) advocated a third goal orientation, social, be added to Achievement Goal Theory, as social orientation is related to intrinsic motivation and fun. Weinberg and Gould (2011) reported that individuals with a high social goal orientation are motivated by the desire for social connections and the need to belong to a group. One might surmise from this, that a player with an Intrapersonal Profile high in social competence or social need might be driven towards team sports and the social aspect making up a strong component of their fun.

Key Finding 11: Fun facilitator importance is viewed differently by players whose Intrapersonal Profiles are differentiated by school decile, ethnicity, rugby ambition, commitment to rugby and perceived skill level.

Some groups of players whose Intrapersonal Profile is associated with specific demographics, psychographics and clusters have different perceptions of the importance of specific *Fun Facilitators*. These differences are reflected in the number of

Fun Facilitators perceived differently and by the effect size of the differences. The groups showing the greatest number of differences in *Fun Facilitator* rating are those associated with Intrapersonal Profile variables: school deciles, ethnicity, rugby ambition, commitment to rugby, and perceived skill level. Different team preferences, Playing with Mates or selecting to play for the Best Team showed a moderate level of perceptual differences of importance. Larger effect sizes are found between players with professional and social rugby ambitions, while medium effect sizes were associated with school deciles, commitment to the sport and perceived skill levels.

These results suggest that focussing on particular *Fun Facilitators* may have a significant effect on fun for players with different levels of rugby ambition, and to a lesser extent where there are different levels of commitment to rugby, perceived skill level and school decile. For instance, to facilitate a fun experience for players with an ambition to play professional rugby, practices should be well organised, have more emphasis on exercise and fitness and on players being challenged to improve and put in their best effort. When building teams and competitions for this group, there should be more focus on getting the best out of the players, enabling them to be in the best team possible, promoting pride in playing for their school and a strong focus on developing teamwork.

To facilitate fun for players more oriented to social rugby, practices should focus more on creative play, plenty of time in games and with the ball, while enabling time spent together with friends. With this group, there would also be more emphasis on organising teams that included friends and assuring that they are playing in evenly balanced competitions, against teams with similar skills, weight, size and age.

Key Finding 12: Those players whose Intrapersonal Profile is characterised by a greater commitment to rugby, higher perceived skills, having professional rugby ambitions, wanting to be in the best team, are Pacific Peoples or from lower decile schools – tend to rate *Fun Facilitators* importance more highly.

Some groups of players saw *Fun Facilitators* as generally more important than other groups of players. In some cases, this trend was more noticeable amongst the *Primary*

Fun Facilitators, but in other groups, this trend flows right down the list of *Fun Facilitators*. This higher rating trend was most evident for players from lower decile schools, those who are Pacific Peoples, those who would choose to play in the Best Team, have professional ambitions, are more committed to rugby, perceive their skills to be higher or are in clusters 2 and 3 of the 3-cluster analysis. Further investigation of the meaning of this trend is necessary, however, a conclusion suggested by the groups of players exhibiting this tendency (best team, more skilled, more committed, professional ambitions) is that these players are ‘more engaged’ with rugby. It would have been interesting to find out, but not included in this study, whether these players also considered rugby to be more fun than players who did not rate the *Fun Facilitators* as being generally as important to their fun.

This ‘more engaged’ group also appears to be associated with Pacific Peoples and players from lower decile schools. These latter two groups are somewhat aligned since the low decile schools sampled in this study predominantly consisted of Pacific Peoples. Anecdotally, the lower decile and the Pacific Peoples groups more frequently cited future career prospects in rugby as the reason they played rugby. Further analysis would need to be undertaken to gain clarity around this association.

Key Finding 13: ‘Even play’ *Fun Facilitators* are more important to some youth rugby players. Players who perceive the *Even Play Fun Facilitators* as more important to fun tend to: be in Year 9 at school, from higher decile schools, prefer to play rugby with their mates, be oriented towards social rugby, be less committed to rugby; or are in clusters 1 and 3 of the 3-cluster analysis.

The *Even Play Fun Facilitators* ‘Playing against an evenly matched team’, ‘Playing against players of similar age’ and ‘Playing against players of similar size and weight’ are perceived to be more important to boys who prefer to play rugby with their mates, whose ambition is social rugby or are less committed to rugby. Players from Year 9 at school, in higher decile schools and Clusters 1 and 3 in the 3-cluster analysis also rate the *Even Play Fun Facilitators* higher than their comparative groups. Clusters 1 and 3

includes 63% of participants completing the questionnaire, suggesting that there are a large group of players for which these *Even Play Fun Facilitators* are more important.

One might infer from the groups of players tending to rate the *Even Play Fun Facilitators* higher (prefer to play with mates, social rugby ambition and less committed to rugby), that these players are 'less engaged' or committed to playing rugby. However, the explanation may be more nuanced than this. Year 9 players and those from higher decile schools also rate the *Even Play Fun Facilitators* higher in comparison to Year 11 players and players from lower decile schools.

The 3-cluster solution provides a slightly more complex explanation to the higher rating of the *Even Play Fun Facilitators*. Players who rate the *Even Play Fun Facilitators* higher are split across Clusters 1 and 3, while players who rate the *Primary Fun Facilitators* higher are split across Clusters 2 and 3 (Table 5.20). One possible explanation for this pattern is that Cluster 1 consists of 'the less engaged' players (more social rugby oriented, less committed and prefer to play rugby with mates), and for this cluster having a competition against players of similar weight, size and age are more important to their fun.

There is a conceptual fit in the three cluster solution based on the way respective *Fun Facilitator's* rate. Clusters 2 and 3 appear to be 'more engaged' with rugby, rating the *Primary Fun Facilitators* as more important than Cluster 1. A major difference between Cluster 2 and 3 though is on the rating of the *Even Play Fun Facilitators*. Cluster 3 rates these *Fun Facilitators* as more important than Cluster 2. One way of interpreting this difference is that while both these clusters are highly engaged with rugby, Cluster 2 is more confident about taking on all oppositions (bigger, heavier, older and better) and still having fun. They are happy to play against whoever is put in front of them. Cluster 2 might therefore be defined as 'highly engaged and confident'.

Cluster 3 finds all the *Fun Facilitators* important to their fun including the *Even Play Fun Facilitators*. This profile might be interpreted as players highly engaged with rugby but believe that playing against teams of even weight, size, age and ability is important to

have more fun. This cluster might be defined as ‘highly engaged but less confident’. Highly engaged because the higher rated *Fun Facilitators* were very important to these players and less confident because of the heightened importance of the *Even Play Fun Facilitators* to their fun. However, ‘highly engaged’ wasn’t measured and therefore not operationalised in the research.

This third cluster may also explain the association of the higher rating of the *Even Play Fun Facilitators* by younger players in year 9. Players may get more confident about playing against bigger larger and older players as they mature. Cluster 1 makes up roughly 22% of the player population, Cluster 2 approximately 23% and Cluster 3 around 41%. Cluster 3 is, therefore, a significant proportion of the ‘highly engaged’ player population.

5.3.3 Important *Fun Inhibitors*

Lack of fun is the main reason children drop out of sport (Allender et al., 2006; Bailey et al., 2013; Bengoechea et al., 2004; Butcher et al., 2002; Crane & Temple, 2015; Edens, 2017; Jakobsson, 2014; Klint & Weis, 1986; Petlichkoff, 1992; Visek et al., 2015; Wiersma, 2001). Negative experiences impact fun and sport dropout. Bailey, et al. (2013) suggested that a build-up of these negative sporting experiences results in youth becoming disaffected with a sport, no longer finding the sport fun. Colmar Brunton found that “a number of competing interests and ‘push and pull’ factors interplay to cause disengagement” from rugby (p. 8) (Colmar Brunton, 2014). This implies that fun is not just influenced positively, but also negatively. Visek et al. (2015) suggested that there are likely to be factors associated with sport that impede the fun experience, that these should be explored to determine what they are and the degree to which they impact.

Some factors relevant to fun have been suggested as reasons for dropping out of sport. These include social pressures, low perceptions of competence, limited playing time, negative coaching behaviour and relationships, negative team dynamics and general lack of enjoyment and fun (Butcher et al., 2002; Carlman et al., 2013; Crane & Temple,

2015; Fraser-Thomas et al., 2008, Lindner et al., 1991; Seefeldt et al., 1992; Strube & Strand, 2016, Witt & Dangi, 2018). Colmar Brunton found that coaches have a disproportionate impact, both negatively and positively on the overall rugby experience. They also found that parents, referees, injury, losing all the time, and training all impact fun, while negative social interactions, not feeling a sense of achievement, losing all the time, not getting game time, and getting injured or being worried about getting injured push youth away from playing rugby (Colmar Brunton, 2014).

In considering the *Fun Inhibitors* and interpreting the results in this study, it should be kept in mind that there were 6,302 youth rugby players in Auckland in 2018 (M. Hester, personal communication, September 4, 2019) (refer Appendix A) and that 527 youth rugby players answered the questionnaire in this study in 2019. This sample equates to approximately 8% of the youth playing population. The ramification of this sample size is that where a *Fun Inhibitor* was cited by 10% of participants, extrapolated to the whole youth rugby playing population this reflects about 630 players. So, where the *Fun Inhibitor* 'Poor and biased referees' was cited by over 50% of participants, this represents the perceptions of over 3,150 players.

How the *Fun Inhibitor* data was collected in the present study did not allow a cluster analysis to be undertaken to ascertain whether there are groups of players who view the *Fun Inhibitors'* importance differently. No assumption has been made in this study as to whether there was one cluster or more amongst the players regarding *Fun Inhibitor* importance.

Key Finding 14: 'Bad or biased referees' was the most often cited *Fun Inhibitor* by boys in rugby.

'Bad or biased referees' was cited as a top-three not-fun experience by 56% of the players participating in the study. This result was largely unexpected based on previous research results. Referees had, however, been mentioned as an issue in the Colmar Brunton study in youth rugby (Colmar Brunton, 2014).

Refereeing can be a difficult issue for sport organisations to consider. Most referees are volunteers, particularly at the youth level. Sports are dependent upon these volunteers to operate and referees are often in short supply. There is also an underlying belief that referees are an easy target for the losing side to criticise and blame for a loss, particularly directly in the aftermath of a loss. In this study, the questionnaire was completed at schools during the week away from the games and far from matchday. This should have moderated the effects on responses in the direct aftermath of a loss. This overwhelming response by participants also mitigates against this result being due solely to player perception around losses.

Even if this result was ‘just’ a mass perception issue, the widely held belief that biased and poor-quality refereeing strongly impacts fun is important to address. When this *Fun Inhibitor* result is placed together with the importance rating of the *Fun Facilitator* ‘A good ref who makes consistent calls’, a strong message is sent that referee quality and fairness should be a major focus if the goal is to maximise player’s fun.

Key Finding 15: Other players negative behaviour can influence fun.

The next most prevalent *Fun Inhibitors* are around other players negative behaviour. ‘Dirty players’ was cited as an important *Fun Inhibitor* by 41% of the players while or other player’s ‘Cocky’ and arrogant behaviour was cited by 28%. Less frequently cited *Fun Inhibitors* associated with player attitudes and behaviours are bullies in the team (11%) and being mocked by the opposition (5%) (Table 5.21).

Negative social interactions have been suggested as a push factor in rugby by the Colmar Brunton study (Colmar Brunton, 2014), while negative team dynamics is a suggested reason for drop out (Witt & Dangi, 2018). Specific negative behaviours from players such as dirty play, arrogance, bullying and mocking were not found cited as *Fun Inhibitors* in earlier sport-related literature. That many players perceive these behaviours as being important not-fun experiences suggest these behaviours need to be addressed in creating an optimal fun environment. Clubs, coaches and parents have a leadership role in this regard and an ability to moderate and influence this behaviour, assisting to create

an environment where these types of behaviours are not tolerated on or off the playing field. A clear message within this research is that while the physicality of the game is a *Core Fun Element* of rugby, attracting players to it, dirty play and bullying has the opposite effect for many players and inhibits their fun. Positive coaching skills are important for a coach who is a fun facilitator. A key area for the application of these positive coaching skills is in reducing negative player behaviour and attitudes such as dirty play, cockiness and bullying.

Key Finding 16: The key ‘actors’ inhibiting fun are referees and other players, but coaches can inhibit fun too.

The key ‘actors’ contributing to the most frequently cited *Fun Inhibitors* are referees and other players. Less frequently, *Fun Inhibitors* directly involve coaches and parents (Table 5.21). For those managing sport, this finding provides insight into actions that may dampen *Fun Inhibitors*.

However, when *Fun Facilitator* and *Fun Inhibitor* findings are considered together, the importance of the coach is highlighted. Colmar Brunton (2014) noted that coaches have a disproportionate impact on the overall rugby experience, both negative and positive. *Positive Coaching* is a primary theme in youth sport fun (Table 5.22), which is consistent with the results in Visek et al. (2015, 2018, 2020). Previous research has also indicated a lack of playing time, along with negative coaching behaviour and negative coach relationships are factors in dropout (Colmar Brunton, 2014; Crane & Temple, 2015). Coach controlled ‘Missing out on playing time’ (19%), and ‘annoying coaches’ (18%), were also cited as *Fun Inhibitors* in this study.

The coach can prevent, mitigate or influence many of these *Fun Inhibitors*, if aware, motivated and skilled. For instance, playing time and balancing winning against fairness to all players, is directly under the control of coaches. Walters et al. (2012) found that over 20% of comments made by rugby coaches could be considered negative. Rugby Union had the lowest percentage of positive coach comments and the highest percentage of negative comments in the sports Walters et al. investigated. While the

current study did not explore the meaning of 'Annoying Coaches', it is reasonable to assume that negative coaching comments and lack of playing time fall within this concept. Further research is required to draw out the meaning players ascribe to 'Annoying Coaches'.

Positive Team Dynamics and *Positive Player Attitudes* are important *Fun Facilitator* themes. *Trying Hard* and *Positive Team Dynamics* were also identified as primary fun-factors in the Vissek study (Vissek et al., 2020) (Table 5.22). Equally, creating a positive team environment is important in reducing *Fun Inhibitors*. 'The team not giving 100%' (31%) and 'Not playing well as a team' (22%) were cited as important *Fun Inhibitors* in this study. While players should take responsibility for their attitudes and behaviours, the coach as the leader of a youth team has a key role in fostering positive team dynamics, motivating players, and influencing and controlling player behaviour.

Parents appear to have a lower impact on youth fun than referees, coaches and other players. This conclusion is based on the low ranking of the *Fun Inhibitor* 'Sideline or Parents being negative' (Table 5.21) and is supported by the lower ranking of the *Fun Facilitators* 'Family & friends support on touchline' (17th) and 'When parents show good sportsmanship' (19th) (Table 5.10). While there is a lot of focus on parents bad sideline behaviour in New Zealand, from a youth fun perspective more focus on other *Fun Inhibitors* may be appropriate, such as improving the overall quality of referees, including those officiating 'social' rugby, reducing poor player behaviour, and developing positive coaching skills.

5.4 Summary

This chapter explored three specific research questions: 'What are the important *Fun Facilitators* for youth playing rugby in New Zealand?', 'Can players be segmented based on how they perceive the importance of *Fun Facilitators*? If so, are these perception differences associated with differences in specific characteristics of a player's Intrapersonal Profile? and 'What are the important *Fun Inhibitors* for youth playing rugby in New Zealand?

The questionnaire results and analyses from the 527 youth rugby player participants in this chapter provided insights into all three of the research questions. The research identified the *Fun Facilitators* and *Fun Inhibitors* players considered to be more important. *Fun Facilitators* associated with *Positive team dynamics*, *Positive player attitudes*, *Learning and development* and *Positive coaching* are perceived as very important. This remained true even when participants were segmented by a range of Intrapersonal Profile variables and under K-means cluster analysis. These results align with the important fun-factors from Visek et al. (2015), suggesting they may be generically important to youth fun and transferable across team sports and countries. 'A good ref who makes consistent calls' was also considered one of the more important *Fun Facilitators* by players.

'Bad or biased referees' is the most frequently cited *Fun Inhibitor* in youth rugby (56% of players). 'Dirty players' were cited by 41% of the players, while 'Cocky' or arrogant behaviour was cited by 28% of participants. Key 'actors' involved in the more important *Fun Inhibitors* are referees and other players, but coaches also have a key role in contributing to and reducing youth experiences of *Fun Inhibitors*.

Segmentation analyses using the *Fun Facilitator* importance ratings identified groups of players that exhibited significant perceptual differences in *Fun Facilitator* importance based on characteristics of their Intrapersonal Profiles, along with two overarching trends. The players that showed the greatest differences in perceptions of the importance of the *Fun Facilitators* were those whose Intrapersonal Profile was differentiated by school decile, ethnicity, ambition, commitment and perceived skill level. Larger effect sizes were found comparing players with professional ambitions versus those oriented to social rugby, while medium effect sizes were exhibited comparing players based on school deciles, commitment to rugby and perceived skill levels. Individual *Fun Facilitators*, 'A good ref who makes consistent calls' (1st) and 'Being around your friends' (7th) were highly ranked by social rugby oriented players, while those with professional ambitions ranked the same *Fun Facilitators* 13th and 22nd respectively.

Two trends stand out from the segmentation analysis. Youth whose Intrapersonal Profile shows they are more committed to rugby, have higher perceived skills, harbour professional ambitions, want to be in the best team, are Pacific peoples or from lower decile schools, rate *Fun Facilitator* importance higher than their comparative groups. *Even Play Fun Facilitators* are more important to youth who prefer to play with their mates, are oriented to social rugby, are less committed to rugby, are in Year 9 at school, are from higher decile schools, or are in clusters 1 and 3 of the 3-cluster analysis.

Chapter 6 Conclusions, Limitations, and Implications

The overall purpose of this research was to examine the construct of fun in the context of youth rugby. The research was guided by the following research questions:

1. Why do youth play rugby?
2. What do youth find fun about rugby?
3. What are the important *Fun Facilitators* for youth playing rugby in New Zealand?
4. Can players be segmented based on how they perceive the importance of *Fun Facilitators*? If so, are these perception differences associated with differences in specific characteristics of a player's Intrapersonal Profile?
5. What are the important *Fun Inhibitors* for youth playing rugby in New Zealand?

It was hoped that investigating these questions would foster new insights into fun, sport participation and dropout in rugby. The key findings generated from the study are set out in Table 6.1, then integrated to present a proposed model for 'Fun in Youth Rugby' in Figure 6.1. Finally, limitations, future research, and practical implications for sport administrators are offered from the outcomes of the study.

6.1 Fun is the Number One Reason Male Youth Play Rugby

Fun is the number one reason male youth rugby players play rugby according to the evidence generated from the qualitative question 'Why do you play rugby?' in the questionnaire from the Quantitative Stage of the study. Youth also cited other positive emotions such as love, like, and passion as their reason for playing rugby. Liking, enjoyment and fun are similar terms for expressing positive emotions about playing sport (Scanlan et al., 1993), while love is a primary positive emotion like joy (Jackson, 2000; Lazarus, 1991b, as cited in Jackson, 2000). Many boys also cited the physicality of the game and the brotherhood of rugby as specific aspects of the game they liked, loved, or found fun.

6.2 Core Fun Elements of Youth Rugby

Physical Contact, Ball Play, Brotherhood, and Game Highlights emerged as the ***Core Fun Elements of Rugby*** (Table 4.2, Table 6.1). *Physical Contact* and *Ball Play* are key aspects of the game, while *Brotherhood* is strongly aligned to the team nature of rugby. *Game Highlights* stand out as a little different. *Game Highlights* are best understood as significant successes or intense emotional experiences of *Physical Contact, Ball Play* and *Brotherhood*, reinforcing feelings of fun and love for rugby.

Crawford et al.'s (1991) Hierarchical Model of Leisure Constraints outlines that an individual's Intrapersonal Profile determines what they like and don't like. Scanlan (1993) proposed that like, fun and enjoyment are synonymous terms. Hopple (2015) argued that factors important for a child to have fun are specific and unique to that child and differ from those of another child. Taken together these three assertions suggests that an individual's Intrapersonal Profile might determine if an individual finds a sport lots of fun, some fun or no fun at all. Integrating this conclusion with the results in this study of four *Core Fun Elements* in youth rugby, it would follow that for a player to find rugby fun their Intrapersonal Profile needs to be aligned to liking the *Core Fun Elements* of rugby. At the most simplistic level, their Intrapersonal Profile must be aligned to liking the collision physicality and the ball play of rugby, together with the brotherhood of being in a team, while feeling success and achievement from getting highlights in each of those areas.

An extension of this thinking leads to the conclusion that the more aligned a player's Intrapersonal Profile is with those *Core Fun Elements*, the more fun that sport will be for them. The less aligned a player's Intrapersonal Profile is with those *Core Fun Elements*, the less fun the sport will be. It may also be proposed that experiencing frequent *Game Highlights* may reinforce an individual's belief in their competence, mastery and self-skills, thus increasing the alignment of their Intrapersonal Profile with rugby and the fun they experience. This proposal also aligns with Competence Motivation Theory which sets out that an individual's perception of competence influences their decisions to

participate in a sport, and that perceived competence associated with successful performance is critical in continued motivation to participate (Harter, 1981).

6.3 Important *Fun Facilitators* in Youth Rugby

The relative importance of *Fun Facilitators* in youth rugby players was examined in the Quantitative Stage of the research. The most important ***Primary Fun Facilitators*** in youth rugby were associated with ***Positive team dynamics, Positive player attitudes, Learning and development*** and ***Positive coaching*** (Table 5.10., Table 6.1). This result aligns with those found in the related papers by Visek et al. (2015, 2018, 2020). These *Primary Fun Facilitators* also remained the most important *Fun Facilitators* even when players are compared by demographic, psychographic and behavioural variables associated with their Intrapersonal Profiles and when the participant data was subjected to cluster analysis.

The concept that fun occurs when there is an alignment between a player's Intrapersonal Profile and the *Core Fun Elements* may suggest why *Positive team dynamics, Positive player attitudes, Learning and development* and *Positive coaching* are *Primary Fun Facilitators*. All four *Primary Fun Facilitator* themes can be argued to be associated with either the Intrapersonal Profile of players or with a Core Fun Element of Rugby. For instance, *Positive player attitudes* may reflect positive self-belief and competence in the *Core Fun Elements* of Rugby. *Learning and development* is important to building competency, perceived self-skill and a sense of mastery in a sport. *Positive team dynamics* is strongly associated with a sense of *Brotherhood* in a team and social connection. *Positive coaching* also has a key role in building players self-belief, competence and mastery, as well as in facilitating *Positive team dynamics* and *Brotherhood*. These potential relationships between the *Primary Fun Facilitator* themes, the *Core Fun Elements* of Rugby and a player's Intrapersonal Profile hints at why these *Primary Fun Facilitator* themes and the equivalent fun-factors from Visek et al. (2015) are consistently perceived as the most important across both studies.

6.4 Fun Facilitator Importance and Player's Intrapersonal Profile

Segmentation analyses indicated players whose Intrapersonal Profiles were differentiated by school decile, ethnicity, rugby ambition, commitment to rugby and perceived skill level had the greatest number of significant differences in *Fun Facilitator* importance ratings. These differences were reflected in the number of *Fun Facilitators* perceived differently and by the effect size of the differences. Larger effect sizes were found between players with professional ambitions and those with social rugby ambitions, while medium effect sizes were found between players attending high and low decile schools, those more or less committed to rugby and those with high or lower perceived skill levels. Different team preferences, Playing with their Mates or selecting to play for the Best Team, showed a moderate level of differences in perceived *Fun Facilitator* importance. These significant differences in *Fun Facilitator* importance ratings and the associated Intrapersonal Profile variables might indicate to whom and to how sport delivery might be tailored to the greatest effect to positively impact some player's fun experience.

The *Fun Facilitator* importance segmentation analyses also showed that players responses can be differentiated in two significant ways. Firstly, those **players whose Intrapersonal Profile is characterised by a greater commitment to rugby, higher perceived skills, having professional rugby ambitions, wanting to be in the Best Team, are Pacific Peoples or from lower decile schools – tend to rate *Fun Facilitator* importance more highly** than those in their comparison groups. For some players, this perception difference in the importance of *Fun Facilitators* is only evident for the *Primary Fun Facilitators*. For others, it involves all the *Fun Facilitators*. The reason for and the meaning behind the higher *Fun Facilitator* importance ratings needs to be explored further.

Secondly, the *Even Play Fun Facilitators* are more important to some youth rugby players. A large group of players rated the *Even Play Fun Facilitators* as significantly more important, relative to other players. **Players who perceived the *Even Play Fun Facilitators* as more important to their fun tend to be in Year 9 at school, from higher**

decile schools, prefer to play rugby with their mates, be oriented towards social rugby, be less committed to rugby; or are in clusters 1 and 3 of the 3-cluster analysis. Again, the reason for and the meaning behind this higher importance rating for the *Even Play Fun Facilitators* raises questions and needs to be explored further. Are these players less confident about playing those who are bigger, older or better than them? Or is some other reason behind the higher rating of these *Even Play Fun Facilitators*? These players may also consist of two slightly different groups. One group appears to generally rate the importance of *Fun Facilitators* higher including the *Even Play Fun Facilitators*. This group might be considered very engaged with rugby but less confident about playing against opponents who are bigger, older and more skilled. The second group consists of players who tend to be oriented to social rugby, prefer to play with their mates, and less committed to rugby. This group might be considered less engaged rugby players, to whom rugby is less important and possibly less fun.

6.5 Important *Fun Inhibitors* in Youth Rugby

Fun Inhibitors in youth rugby consisted of several subthemes (Table 4.3, Table 6.1). These subthemes were *Negative player attitudes and behaviours, Poor Performances, Negative supporters and feedback, Biased or poor referees, Poor coaching, Not enough playing time* and *Practice content*. In the Quantitative Stage of the study, player participants were asked to select their top three *Fun Inhibitors*. **Bad or biased referees and dirty play were the most frequently selected *Fun Inhibitors*.** The highly-rated *Fun Facilitator* 'A good ref who makes consistent calls' reinforces the importance of referees to fun. Four times as many participants selected the *Fun Inhibitor* 'Bad or biased referees' and three times as many selected 'Dirty players' than those participants that selected the *Fun Inhibitor* 'Sideline or parents being negative'. This result suggests where the emphasis and effort might need to be focussed to have the greatest impact on reducing the *Fun Inhibitors* that are of greatest concern to youth.

6.6 Towards a Model of Fun in Youth Rugby

The key findings from both stages of this research are brought together and summarised in Table 6.1 below.

Table 6.1 Key Research Findings

Key Finding 1:	Fun is the number one reason youth play rugby.
Key Finding 2:	Four themes describe the <i>Core Fun Elements</i> of rugby for youth players: <i>Physical Contact, Ball Play, Brotherhood</i> and <i>Game Highlights</i> .
Key Finding 3:	Factors influencing fun fall into two themes: <i>Fun Facilitators</i> and <i>Fun Inhibitors</i> .
Key Finding 4:	Five <i>Fun Facilitator</i> subthemes were identified: <i>Positive player attitudes and behaviours, Enhanced practices, Positive coaching, Game preparation</i> and <i>Game time support</i> .
Key Finding 5:	Seven <i>Fun Inhibitor</i> subthemes were identified: <i>Negative player attitudes and behaviours, Poor performances, Negative supporters and feedback, Biased or poor referees, Poor coaching, Insufficient playing time</i> and <i>Practice content</i> .
Key Finding 6:	<i>Positive team dynamics, Positive player attitudes, Learning and development</i> and <i>Positive coaching</i> are perceived as the <i>Primary Fun Facilitator</i> themes in youth rugby.
Key Finding 7:	Primary fun-factors from Visek et al. (2015), <i>Trying Hard, Positive Team Dynamics</i> , and <i>Positive Coaching</i> and the secondary fun-factor <i>Learning and Improving</i> align with the <i>Fun Facilitator</i> themes from this study.
Key Finding 8:	‘A good ref who makes consistent calls’ is an important <i>Fun Facilitator</i> .
Key Finding 9:	The themes <i>Positive team dynamics, Positive player attitudes, Learning and development</i> and <i>Positive coaching</i> , and related individual <i>Fun Facilitators</i> , are consistently rated highly across player subgroups.
Key Finding 10:	<i>Fun Facilitators</i> ‘A good ref who makes consistent calls’ and ‘Being around your friends’ are highly ranked by players oriented to social rugby.
Key Finding 11:	<i>Fun Facilitator</i> importance is viewed differently by players whose Intrapersonal Profiles are differentiated by school decile, ethnicity, rugby ambition, commitment to rugby and perceived skill level.

- Key Finding 12: Those players whose Intrapersonal Profile is characterised by a greater commitment to rugby, higher perceived skills, having professional rugby ambitions, wanting to be in the best team, are Pacific Peoples or from lower decile schools – tend to rate *Fun Facilitator* importance more highly.
- Key Finding 13: *Even Play Fun Facilitators* are more important to some youth rugby players. Players who perceive the *Even Play Fun Facilitators* as more important to fun tend to: be in Year 9 at school, from higher decile schools, prefer to play rugby with their mates, be oriented towards social rugby, be less committed to rugby; or are in clusters 1 and 3 of the 3-cluster analysis.
- Key Finding 14: ‘Bad or biased referees’ is the most often cited *Fun Inhibitor* in youth rugby.
- Key Finding 15: Other players negative behaviour can influence fun.
- Key Finding 16: The key ‘actors’ inhibiting fun are referees and other players, but coaches can inhibit fun too.
-

A proposed model for Fun Playing Youth Rugby is set out in Figure 6.1. For clarity and transparency, Figure 6.1 sets out an updated proposed model for Fun Playing Youth Rugby derived from the results of this study. That is, the proposed initial model for Fun Playing Youth Rugby set out in Figure 4.3 on page 88 of this thesis is updated with elements of the quantitative results presented in Chapter 5. Additionally, the updated proposed model also incorporates and integrates the concept that an individual’s Intrapersonal Profile determines what an individual finds fun together with the research findings from this study.

The model is composed of several elements. The central circle in Figure 6.1 presents four *Core Fun Elements* of rugby (*Brotherhood*, *Physical Contact*, *Ball Play* and *Game Highlights*). It captures the interplay between the four themes as they relate to the *Core Fun Elements* of playing rugby. At the centre of the circle is ‘Fun Playing Rugby’, which is made up of three themes around the outside: *Physical Contact*, *Ball Play*, and *Brotherhood*. The other theme, *Game Highlights*, relates to moments of heightened feelings of success in the other three themes. It is proposed that *Game Highlights* provides an intensification of the fun through specific highlights in those three themes and is thus presented as the second circle in the centre of Figure 6.1.

The model then depicts that rugby is a fun experience where an individual's Intrapersonal Profile is aligned with the four *Core Fun Elements* of Rugby. The upward-directed arrows present the concept that the more aligned the Intrapersonal Profile is with the four *Core Fun Elements* the more fun is experienced playing rugby. Similarly, the downward arrows present the concept that the less aligned a player's Intrapersonal Profile is with the *Core Fun Elements* of Rugby the less fun they will find rugby.

Fun Facilitators and *Fun Inhibitors* also influence the level of fun experienced. *Fun Facilitators* influence fun positively, enhancing the fun experience of players. *Fun Inhibitors* influence fun negatively, detracting from the fun experience. The boxes in the model list the *Fun Facilitators* and *Fun Inhibitors* in order of importance found from the Quantitative Stage of this study. Figure 6.1 is offered as the major conceptual implications of the study but also as a hypothesis for future research.

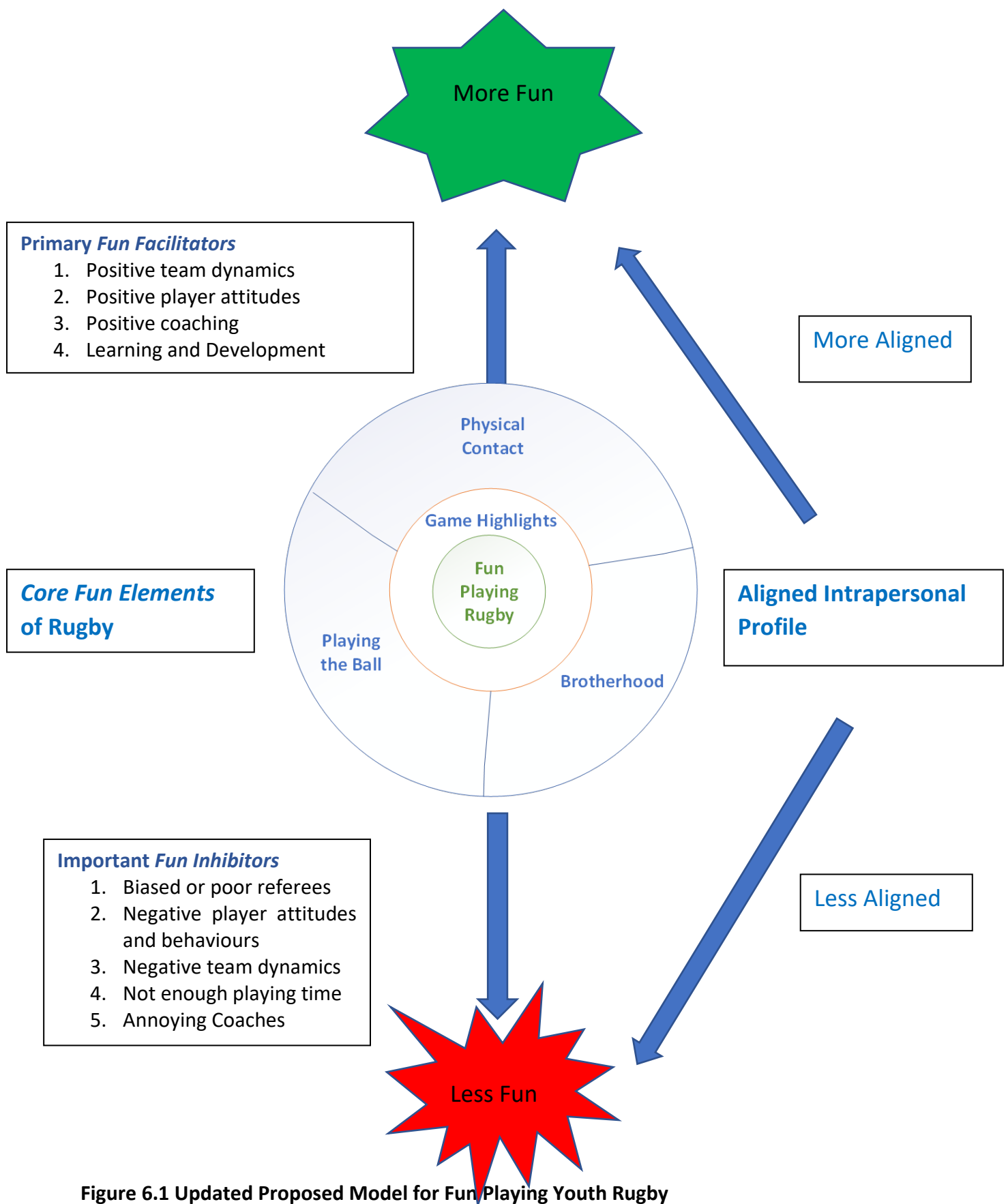


Figure 6.1 Updated Proposed Model for Fun Playing Youth Rugby

6.7 Research Limitations

The Qualitative Stage of this study consisted of two group interviews with 13 participants. This was deemed enough to generate the insights needed for the present research. However, further group interviews with different schools and age groups would potentially have extended these insights, including those around the *Core Fun Elements* of rugby. Focus groups to explore these findings in more depth after the completion of the Quantitative Stage would also have been interesting. In this study, participants were not asked to score how much fun they found rugby to be. If this had been done it may have provided additional information and enabled additional analyses linking Intrapersonal Profiles to perceived fun.

The *Primary Fun Facilitators* that emerged in this study align with those found in Visek et al. (2015), showing their applicability across two team sports, countries, and cultures. However, the wider transferability still needs to be carefully considered (e.g., for older and younger boys). McCarthy and Jones (2007) found when working with children between 7 - 12 years of age that there were differences in sources of enjoyment and non-enjoyment, possibly due to developmental differences.

The transferability of the results to other groups such as youth female rugby players is also a question. The non-inclusion of girls in this study was considered from the outset and was raised with the researcher several times during the study. There was an informed decision made to focus on male youth rugby players, as male youth rugby players in Auckland were in decline. This limitation to male youth rugby players does not affect the robustness of the study, just its scope.

There are other questions of transferability within New Zealand and across rugby. Auckland has a highly diverse ethnicity, not entirely reflected in the rest of New Zealand. Similarly, New Zealand is also only a small part of the international rugby community. An Auckland only study may raise questions about the applicability of the study to youth rugby players in other parts of New Zealand or other countries.

The research is only an initial exploration of the role of *Fun Inhibitors* in youth sport. *Fun Inhibitors* were only explored broadly in this study. How the *Fun Inhibitor* data was collected in the present study is a limitation. It is unclear whether participants chose the three most important *Fun Inhibitors* based on their impact or because they experience them the most often, both or neither. The research did not specifically address the importance and frequency of occurrence of *Fun Inhibitors*. Unlike the *Fun Facilitators*, the *Fun Inhibitors* were not scored on a 1-10 importance scale by participants. This in turn meant that cluster analyses were unable to be undertaken on the *Fun Inhibitor* data.

6.8 Future Research

Coming out of this research are several recommendations for further research. Firstly, it will be important to confirm and deepen our understanding of the *Core Fun Elements* of rugby through a wider study of youth rugby players. The concept that the level of fun experienced by individual players is determined by the alignment of their Intrapersonal Profile with the *Core Fun Elements* of Rugby should be investigated further. This concept has important ramifications for the design and modification of rugby and other sports. Investigations should involve both current rugby players, those who have already dropped out of rugby and those who have never played rugby. It would also be very interesting to expand this research to explore the ‘alignment of Intrapersonal Profiles with the Core Fun Elements of a sport determining fun’ concept across different team and individual sports.

Pursuing this line of inquiry may inform the area of sport participation, choice and drop out in interesting ways and answer some important questions. For instance, for those who never chose to play rugby are the *Core Fun Elements* insufficiently attractive and not considered fun by them? For boys who drop out of rugby, are the *Core Fun Elements* of rugby less appealing and less fun compared with those who stay in the game? Does an individual find one sport more fun than another because the *Core Fun Elements* of that sport are more aligned to their Intrapersonal Profile? Does misalignment or limited alignment with the Intrapersonal Profile of a player play a role in drop out from a sport

and choice of a different sport? Does this concept explain why Scanlan et al. (1993a) found involvement alternatives negatively affected commitment to a sport? Does receiving *Game Highlights* reinforce a player's self-belief, perceived skills, competency and alignment to a sport, and does the lack of *Game Highlights* or persistent poor performance have the reverse effect?

It appears from the present study that *Fun Facilitators* are more important to more engaged players. It would be important to know if *Fun Inhibitors* are less or more important to engaged players and whether *Fun Inhibitors* are more important to less engaged players. A possible theoretical and practical extension associated with sport participation is that when participants are less aligned and engaged with a sport, *Fun Facilitators* may have a key role in keeping participants in the sport. At the same time, less engaged participants may be more vulnerable to *Fun Inhibitors*, and/or more aligned with alternatives, taking them away from the sport. It will be important and valuable to explore these ideas further.

For *Fun Facilitators*, it will be important to extend the study within rugby to gain a wider perspective across age groups, sexes, across New Zealand and other countries. Then, this *Fun Facilitator* research could be further extended across other sports to compare similarities and differences. To date, detailed research into fun in youth sport has only been undertaken in team sports, so examining more individualistic sports would be an important contrast and comparison.

In terms of *Fun Inhibitors*, it will be useful to do more detailed studies of their relative importance, frequency of occurrence and impact within rugby. Future studies may wish to use a 1 – 10 importance scale, similar to that which was used to collect *Fun Facilitator* data in this study. This would enable the relative importance of the *Fun Inhibitors* to be determined with more accuracy. It would also allow a cluster analysis to be undertaken to ascertain whether there are groups of players who view *Fun Inhibitor* importance differently.

Taking this *Fun Inhibitor* research forward it would be useful to directly explore *Fun Inhibitor* importance, impact and frequency across multiple sports, genders, countries and cultures. It will also be interesting to explore, as already done with the *Fun Facilitators*, how the perception of the *Fun Inhibitors* changes with player's perceived skill level, commitment to the sport, ambition in the sport, ethnicity and economic status.

6.9 Practical Implications for Rugby Administrators

Based on the research conclusions, administrators should focus on players, referees, and coaches to optimise a positive fun environment for youth rugby. For players' fun, emphasis needs to be on developing positive player attitudes to teammates and opposition players, as well as creating positive dynamics within teams. *Learning and development* including skill development is important to creating a fun experience for players at all levels of youth rugby. While *Learning and development* may directly be fun, particularly if delivered positively and interestingly during practices, it is also important in building greater competence to facilitate fun. *Learning and development* is considered by players as more important to fun than winning.

Good quality refereeing is an important *Fun Facilitator* in general, while 'Bad and biased referees' was the number one cited *Fun Inhibitor*. Referee quality is also the most important *Fun Facilitator* for players who are oriented to social rugby. This suggests that while referees need to be an area of focus to optimise fun in a youth rugby experience, there needs to be particular attention paid to this aspect of the game for players not playing in top teams and competitions.

Positive coaching is critically important for fun at all levels of youth rugby. *Positive coaching* is associated with both the rugby skills and the emotional competency of the coach. These emotional competencies include the way coaches engage and interact with youth players, creating an enjoyable environment at games and practices. *Positive coaching* would also limit the occurrence and impact of some of the *Fun Inhibitors* such as dirty play and arrogant player attitudes, reduce instances of players missing out on

playing time consistently, and reduce the occurrence of negative coach-player relationships.

While positive coaching directly influences players' fun, one would expect it to also have a positive flow-through impact on players attitudes, positive team dynamics, and the development of a sense of brotherhood in teams. Fundamentally, coaches can play a role in influencing the alignment of a player's Intrapersonal Profile with the other *Core Fun Elements* of the sport by developing competence and self-belief in both physical and mental skills.

Equally, constant negative feedback, which Walters (2012) showed to have a significant presence in children's rugby, can have the opposite effect. Feeling competent and having personal successes in a sport helps to build alignment between a player's Intrapersonal Profile and their sport. Thus, positive feedback, avoiding non-constructive feedback and supplying opportunities for both individual and team highlights are important.

For most youth players in Auckland, playing consistently against similar weights, sizes, ages and skilled teams is important for fun. There is also a significant number of players who would prefer playing with their mates. For those more inclined to playing social rugby, this is particularly important and needs to be considered in team/squad selections at the youth level.

The concept that fun may be determined in the first instance by a strong alignment between the *Core Fun Elements* of a sport and a player's Intrapersonal Profile, leads to important considerations for researchers and sport administrators at both national and international levels. This concept implies that while it is possible to modify core elements of a sport to make it more attractive to more youth, this could also make the sport less attractive and less fun to those already playing the sport. Thus, important questions for rugby administrators could include: if the *Core Fun Elements* of a sport are significantly changed or affected, does it attract the same players and is it still just as attractive to participants already playing it? For instance, does rugby sevens attract

players who prefer more space, more ball handling, running with the ball and less physical contact? Does touch rugby attract an entirely different set of players with Intrapersonal Profiles who prefer running with the ball and little physical contact? Do Rugby League and Rugby Union compete for the same players whose Intrapersonal Profiles are aligned to the same four *Core Fun Elements* – *Physical Contact*, *Ball Play*, *Brotherhood* and *Game Highlights*? While further study is also needed to explore these questions, what is clear from the present research is that the people involved in the game (players, referees and coaches) are central to creating a fun environment for players.

6.10 Concluding Statement.

Rugby is a great New Zealand sport with a growing global reach. Youth primarily play rugby for fun. As adults, we need to remember this and create an environment where more youth have more fun playing rugby.

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Appendix A: New Zealand Rugby's Youth Player Statistics

U13 - U18 Secondary School Males Players: 2009 - 2018

Year	u13	u14	u15	u16	u17	u18	Total
2009	1478	5198	5317	4716	4137	2565	23411
2010	1412	5189	5509	4870	4405	2715	24100
2011	1580	5132	5325	4830	4259	2836	23962
2012	1743	5388	5908	5075	4705	2908	25727
2013	1562	5500	5500	5062	4384	2839	24847
2014	1449	5489	5591	4708	4401	2850	24488
2015	1442	5276	5517	4859	4233	2809	24136
2016	1349	4819	5161	4809	4310	2521	22969
2017	1539	4880	4817	4496	4263	2724	22719
2018	1419	4743	4777	4186	3891	2579	21595
% Change - 2009 to 2018	-4%	-9%	-10%	-11%	-6%	1%	-8%

Wider Auckland U13 - U18 Secondary School Males Players: 2009 - 2018

Year	u13	u14	u15	u16	u17	u18	Total
2009	373	1389	1545	1411	1380	868	6966
2010	331	1366	1513	1472	1418	913	7013
2011	449	1449	1619	1486	1417	1009	7429
2012	433	1469	1790	1553	1581	1018	7844
2013	397	1471	1566	1564	1435	979	7412
2014	392	1576	1665	1382	1389	940	7344
2015	432	1457	1575	1527	1343	921	7255
2016	376	1392	1526	1452	1442	822	7010
2017	466	1381	1447	1303	1399	922	6918
2018	375	1299	1300	1214	1220	894	6302
% Change - 2009 to 2018	1%	-6%	-16%	-14%	-12%	3%	-10%

Dedup	0
Organisation Type	Secondary School
Registration Type	
2	Player
Gender	Male
Provincial Union	(Multiple Items)

Count of Gender	Column Labels							Grand
Row Labels	12.00	13.00	14.00	15.00	16.00	17.00	18.00	Total
Asian	9	20	19	29	28	25	2	132
Maori	46	201	207	172	162	119	5	912
NZ European	127	416	420	378	343	246	4	1934
Other	16	73	60	64	88	55	6	362
Pacific Islander	177	589	594	571	599	449	43	3022
Grand Total	375	1299	1300	1214	1220	894	60	6362

(M. Hester, personal communication, September 4, 2019)

Appendix B: AUTECH Approval for Study

AUTEC Secretariat

Auckland University of Technology
D-88, WU406 Level 4 WU Building City Campus
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

22 March 2018

Lesley Ferkins
Faculty of Health and Environmental Sciences

Dear Lesley

Ethics Application: 18/93 Fun playing rugby! Exploring the meaning of fun in youth sport

Thank you for submitting your application for ethical review. I am pleased to advise that the Auckland University of Technology Ethics Committee (AUTEC) approved your ethics application at their meeting on 19 March 2018, subject to the following conditions:

1. Alteration of the recruitment protocol to ensure that the schools are not selecting and do not know who participates in the research;
2. Amendment of the Principal's agreement form to make it clear that the principal is not giving consent for participation but rather giving permission for the researcher to access students or staff at the school;
3. Alteration of the Information Sheet, removing unnecessary punctuation, moderating the overly persuasive style, and clearly identifying the location for the interviews.

AUTEC suggests that the researcher may get better data by having a choice labelled 'Other' with the ability to enter a reason not already listed when asking participants why they do not play rugby.

Please provide me with a response to the points raised in these conditions, indicating either how you have satisfied these points or proposing an alternative approach. AUTEC also requires copies of any altered documents, such as Information Sheets, surveys etc. You are not required to resubmit the application form again. Any changes to responses in the form required by the committee in their conditions may be included in a supporting memorandum.

Please note that the Committee is always willing to discuss with applicants the points that have been made. There may be information that has not been made available to the Committee, or aspects of the research may not have been fully understood.

Once your response is received and confirmed as satisfying the Committee's points, you will be notified of the full approval of your ethics application. Full approval is not effective until all the conditions have been met. Data collection may not commence until full approval has been confirmed. If these conditions are not met within six months, your application may be closed and a new application will be required if you wish to continue with this research.

To enable us to provide you with efficient service, we ask that you use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

I look forward to hearing from you,

Yours sincerely



Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: gary.putt@aut.ac.nz; Michael Naylor



Auckland University of Technology Ethics Committee (AUTC)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

AUT

TE WĀNANGA ARONUI
O TĀMAKI MAKĀU RAU

12 September 2018

Lesley Ferkins
Faculty of Health and Environmental Sciences

Dear Lesley

Re: Ethics Application: **18/93 Fun playing rugby! Exploring the meaning of fun in youth sport**

Thank you for your request for approval of amendments to your ethics application.

The amendment to the data collection and recruitment protocols, including the addition of a prize draw, and refinement of aims is approved.

I remind you of the **Standard Conditions of Approval**.

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through <http://www.aut.ac.nz/research/researchethics>.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through <http://www.aut.ac.nz/research/researchethics>.
3. Any amendments to the project must be approved by AUTC prior to being implemented. Amendments can be requested using the EA2 form: <http://www.aut.ac.nz/research/researchethics>.
4. Any serious or unexpected adverse events must be reported to AUTC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. If the research is undertaken outside New Zealand, you need to meet all locality legal and ethical obligations and requirements.

For any enquiries please contact ethics@aut.ac.nz

Yours sincerely,

Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: gary.putt@aut.ac.nz; Michael Naylor

Appendix C: Ethical Documentation

Principal "Permission to Access" Form

Project title: **Fun Playing Rugby! Exploring the Meaning of Fun in Youth Sport**

Project Supervisor: **Lesley Ferkins**

Researcher: **Gary Putt, Lesley Ferkins, Michael Naylor**

- ☐ I have read and understood the information provided about this research project in the Information Sheets dated 6 March 2018.
- ☐ I have had an opportunity to ask questions and to have them answered.
- ☐ I give permission for the researcher to access students or staff at the school.
- ☐ I give permission for interviews/pre-test questionnaires/questionnaires associated with this research be undertaken at my school.
- ☐ I agree to use the schools resources to:
- Identify all the Years 9 and Year 10 Rugby Players at the School
 - To issue the invites to the Years 9 and Year 10 Rugby Players to attend the various stages (Group interviews/Pre-test Questionnaire/Questionnaire) of the research as appropriate.
 - Provide suitable space within the school at suitable times for the boys to undertake the Group interviews/Pre-test Questionnaire/Questionnaires.
- ☐ I understand that boys taking part in this study will do so voluntary with their parent's/legal guardians consent and that they may withdraw from the study at any time without being disadvantaged in any way.
- ☐ I wish to receive a summary of the research findings (please tick one): Yes ☐ No ☐

School's name:

Principal's Signature:

Principal's name:

Relationship to the Participant :

Principal's Contact Details:

.....
.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 12th September 2018 AUTEK Reference number 18/93
Fun playing rugby! Exploring the meaning of fun in youth sport

Note: The School should retain a copy of this form.

Project title: Fun Playing Rugby! Exploring the Meaning of Fun in Youth Sport

Project Supervisor: Lesley Ferkins

Researcher: Gary Putt, Lesley Ferkins, Michael Naylor

Fun Playing Rugby!

Date

My name is Gary Putt.

I am a Masters Student at Auckland University of Technology (AUT).

I am undertaking research to help us to understand more about what parts of playing rugby contribute the most to Year 9 and 10 boys having fun while involved with the game.

The school has passed this invitation on to you, on my behalf, because they have identified you as a year 9 or 10 boy who plays rugby for the school.

This research is an opportunity for you to share your experiences, knowledge and insight, and contribute to improving the school rugby playing experience for boys coming after you.

The research consists of a **two** small group discussions, a week apart, which will take no more than 55 minutes each of your time. In the second session you will get to pre-test a questionnaire which will later go to over 400 year 9 and 10 rugby players across Auckland.

Every participant who attends both sessions and participates fully in these sessions will get a small All Black gift from New Zealand Rugby at the end of Session 2.

If you are interested in participating in the research, please come, meet me, and find out more about how you can participate and what is involved!

Venue:

Times:

I look forward to meeting you.

Gary Putt

Approved by the Auckland University of Technology Ethics Committee on, AUTEK Reference number:

Project title: *Fun Playing Rugby! Exploring the Meaning of Fun in Youth Sport*

Project Supervisor: *Lesley Ferkins*

Researcher: *Gary Putt, Lesley Ferkins, Michael Naylor*

Interview Participant Information Sheet

Date Information Sheet Produced:

6 March 2018

Project Title

Fun Playing Rugby! Exploring the Meaning of Fun in Youth Sport

An Invitation

My name is Gary Putt. I am a Masters Student at Auckland University of Technology (AUT).

We are undertaking research to understand more about what aspects of playing rugby contribute to the most fun for boys.

You have been identified as someone who may be suitable to assist us with our research. We would like to invite you to participate in this study – would you be willing to help us with this research?

What is the purpose of this research?

Fun and enjoyment have been shown to be an important, or even the most important reason young people participate in sport.

Despite fun and enjoyment's importance to retaining youth participation in sport, very little research has been undertaken to understand what aspects of sports, or a particular sport like rugby, contribute most to young people fun and enjoyment. That is what we aim to do with this rugby related research.

The overall purpose of the research is to improve the male youth rugby player experience for a wider group of boys and retain those that might potentially be lost from the sport.

How was I identified and why am I being invited to participate in this research?

Getting a clear youth voice is essential to this research. We are interviewing and surveying School year 9 and year 10 youth male rugby players and getting them to share their experiences, knowledge and insight.

We have contacted you based on your current status, as identified by your school, as a year 9 or 10 male rugby player.

How do I agree to participate in this research?

Your participation in this research is voluntary, and whether or not you choose to participate will neither advantage nor disadvantage you. If you choose to participate you can change your mind at any time and withdraw from the study. If you choose to withdraw, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

You have been provided with a Consent Form. Your parents or legal guardians must complete and sign this Consent Form and return it to Gary Putt by email to register you to participate in the research.

What will happen in this research?

You will be in a two group discussions of 8-10 fellow youth rugby players a week apart. Each discussion will last for up to 55 minutes (max) per session. You will be asked about your perspectives and

experiences as a youth rugby player as it relates to having fun. The group discussions will be led by Gary Putt and will be confidential discussions. Data will only be used for the purposes in which it is collected.

During the first session, you will be asked to think of three things you find fun about playing rugby and to share with the group what you find fun and why you find it fun.

During the second session a week later you will get to pre-test a questionnaire which will later go to 400 year 9 and 10 rugby players across Auckland. You will be asked questions about your experience in completing the questionnaire to help us improve it.

Where and when will the interviews take place?

The interview will take place at your school during school hours.

<u>Date</u>	<u>Time</u>	<u>Venue</u>
.....
.....

What are the discomforts and risks?

Minimal discomfort is expected given the topic of the research, however it is a possibility that you may feel at risk with disclosing information that is sensitive to you about your rugby experience in front of other boys.

How will these discomforts and risks be alleviated?

Should reflecting upon your rugby playing experience make you feel uncomfortable, you can choose to withdraw from the interview and/or choose not to answer any questions that you do not want to. To ensure this risk is minimised, care will also be taken to ensure as much confidentiality as possible.

What are the benefits?

This study is an opportunity to share your experiences, knowledge and insight and contribute to improving the youth rugby player experience. The schools and/or NZ Rugby may use the outcomes of the research to meet youth interests.

Every participant who attends both sessions and participates fully in these sessions will get a small All Black gift from New Zealand Rugby at the end of Session 2.

How will my privacy be protected?

All information collected in this study is confidential. Names are confidential to the interviewer/researcher(s). Transcription of the interviews will be completed by an external third party who will not know the identities of participants. Any material paraphrased or quoted from transcripts will not be identifiable. The information in the write up will only identify participants using pseudonyms or e.g. as "Youth Rugby Player 1" etc. Thus there will be no identification of individual participants (or the schools they are associated with) in the findings.

What are the costs of participating in this research?

The cost of participation is just time. The interview will take approximately 45 minutes.

What opportunity do I have to consider this invitation?

You have two weeks to consider whether or not you would like to participate. However, participants will be accepted on a first come basis (on submission of completed and signed Consent Forms by email to Gary Putt), subject to getting a mix of rugby skill levels and ethnicities in the groups.

Will I receive feedback on the results of this research?

When the research is completed a 1-2 page summary PDF of the research results will be published at this URL: <https://sprinz.aut.ac.nz/areas-of-expertise/sport-leadership-and-management/research-activity>

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Lesley Ferkins, Lesley.ferkins@aut.ac.nz, 022 072 9787.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTECH, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext. 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Gary Putt, gary.putt@aut.ac.nz, Ph. 021988881.

Project Supervisor Contact Details: Lesley Ferkins, lesley.ferkins@aut.ac.nz; Ph: 022 072 9787; Michael Naylor, michael.naylor@aut.ac.nz,

Approved by the Auckland University of Technology Ethics Committee on 12th September 2018 AUTECH Reference number 18/93 Fun playing rugby! Exploring the meaning of fun in youth sport

Interview Consent Form

Project title: *Fun Playing Rugby! Exploring the Meaning of Fun in Youth Sport*

Project Supervisor: *Lesley Ferkins*

Researcher: *Gary Putt, Lesley Ferkins, Michael Naylor*

Please tick each circle and sign at bottom and return to school office by .

- ☐ I have read and understood the information provided about this research project in the Information Sheet dated 6th March 2018.
- ☐ I have had an opportunity to ask questions and to have them answered.
- ☐ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- ☐ I understand that taking part in this study is voluntary (my choice) and that I may withdraw my child/children from the study at any time without being disadvantaged in any way.
- ☐ I understand that if I withdraw my child/children from the study then I will be offered the choice between having any data that is identifiable as belonging to my child/children or allowing it to continue to be used. However, once the findings have been produced, removal of our data may not be possible.
- ☐ I agree to my child/children taking part in this research.
- ☐ I wish to receive a summary of the research findings (please tick one): Yes ☐ No ☐

Childs name/s :

Parent/Guardian's signature:

Parent/Guardian's name:

Parent/Guardian's Contact Details (if appropriate):

.....
.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 12th September 2018 AUTEK Reference number 18/93 Fun playing rugby! Exploring the meaning of fun in youth sport

Note: The Participant should retain a copy of this form.

Assent Form

Project title: *Fun Playing Rugby! Exploring the Meaning of Fun in Youth Sport*

Project Supervisor: *Lesley Ferkins*

Researcher: *Gary Putt, Lesley Ferkins, Michael Naylor*

Please tick circles sign at the bottom and return to School Office by .

- ☐ I have read and understood the sheet telling me what will happen in this study and why it is important.
- ☐ I have been able to ask questions and to have them answered.
- ☐ I understand that identity of my fellow participants and our discussions in the group interview is confidential to the group and I agree to keep this information confidential.
- ☐ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- ☐ I understand that I can stop being part of this study whenever I want and that it is perfectly ok for me to do this.
- ☐ If I stop being part of the study, I understand that then I will be offered the choice between having any information that that other people can know is about me removed or letting the researcher keep using it. I also understand that sometimes, if the results of the research have been written, some information about me may not be able to be removed.
- ☐ I agree to take part in this research.

Participant's signature:

Participant's name:

Participant Contact Details (if appropriate):

.....
.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 12th September 2018 AUTEK Reference number 18/93 Fun playing rugby! Exploring the meaning of fun in youth sport

Note: The Participant should retain a copy of this form.

Project title: **Fun Playing Rugby! Exploring the Meaning of Fun in Youth Sport**

Project Supervisor: **Lesley Ferkins**

Researcher: **Gary Putt, Lesley Ferkins, Michael Naylor**

Invite: Fun Playing Rugby!

Date 25th October 2016

My name is Gary Putt.

I am a Masters Student at Auckland University of Technology (AUT).

I am undertaking research to help us to understand more about what parts of playing rugby contribute the most to Year 9 and 10 boys having fun.

The school has passed this invitation on to you, on my behalf, because they have identified you as a year 9 or 10 boy who plays rugby for the school.

This research is an opportunity for you to share your experiences, knowledge and insight, and contribute to improving the school rugby playing experience for boys coming after you. The research consists of a questionnaire, which will take no more than 20 minutes of your time. There is more about the research in the attached Information Sheet.

If you are a year 9 or year 10 rugby player interested in participating in this research, please come and complete the questionnaire, at any of the following times and venues:

<u>Date</u>	<u>Time</u>	<u>Venue</u>
.....
.....

Thank you in advance for helping with this research.

Regards

Gary Putt

Questionnaire Participant Information Sheet

Date Information Sheet Produced:

6 March 2018

Project Title

Fun Playing Rugby! Exploring the Meaning of Fun in Youth Sport

An Invitation

My name is Gary Putt. I am a Masters Student at Auckland University of Technology (AUT).

We are undertaking research to understand more about what aspects of playing rugby contribute to the most fun for boys.

You have been identified as someone who may be suitable to assist us with our research. We would like to invite you to participate in this study – would you be willing to help us with this research?

What is the purpose of this research?

Fun and enjoyment have been shown to be an important, or even the most important reason young people participate in sport.

Despite fun and enjoyment's importance to retaining youth participation in sport, very little research has been undertaken to understand what aspects of sports, or a particular sport like rugby, contribute most to young people fun and enjoyment. That is what this research does.

The overall purpose of the research is to improve the experience of youth rugby players for a wider group of boys and retain those that might potentially be lost from the sport.

How was I identified and why am I being invited to participate in this research?

Getting a clear youth voice is essential to this research. We are surveying School year 9 and year 10 youth male rugby players and getting them to share their experiences, knowledge and insight.

We have contacted you based on your status, as identified by your school, as a year 9 or 10 male rugby player.

How do I agree to participate in this research?

Your participation in this research is voluntary, and whether or not you choose to participate will neither advantage nor disadvantage you. By completing the questionnaire, you give your assent to participating in the research.

What will happen in this research?

The research consists of a small questionnaire, which will take no more than 20 minutes of your time. The questionnaire will be completed anonymously and confidentially. Gary Putt will supervise completion of the questionnaire. Data will only be used for the purposes in which it is collected.

Where and when will I complete the questionnaire

You will complete the questionnaire at your school during school hours.

What are the discomforts and risks?

Minimal discomfort is expected given the topic of the research; however, you may feel at risk with disclosing information that is sensitive to you about your rugby experience.

How will these discomforts and risks be alleviated?

The questionnaire will be entirely anonymous and confidential to the researcher. .

What are the benefits?

This study is an opportunity to share your experiences, knowledge and insight and contribute to improving the experiences of youth rugby players. Schools and or NZ Rugby may use the outcomes of the research to meet youth interests.

Prize Draw

New Zealand Rugby are providing three All Black UE Booms for a prize draw. Participants, who complete the Questionnaire fully with due consideration, will be eligible to go into the prize draw. Entering the draw will be entirely at your choice. You will enter the draw when you hand in their completed questionnaire, by putting your name, email address and phone number on an entry form and placing it into a special container. All prize draw entries will be destroyed after the draw

is made and the prizes delivered to the winners.

**How will my privacy be protected?**

All information collected in this study is confidential and the questionnaire will be completed anonymously.

What are the costs of participating in this research?

The cost of participation is just time. The questionnaire will take approximately 20 minutes to complete.

What opportunity do I have to consider this invitation?

You have until the last date and time in the invite to consider whether you would like to participate. All participants who are year 9 and 10 male rugby players will be accepted to complete the questionnaire.

Will I receive feedback on the results of this research?

When the research is completed a 1-2 page summary PDF of the research results will be published at this URL: <https://sprinz.aut.ac.nz/areas-of-expertise/sport-leadership-and-management/research-activity>

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Lesley Ferkins, Lesley.ferkins@aut.ac.nz, 022 072 9787.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTC, Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext. 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Gary Putt, gary.putt@aut.ac.nz, Ph. 021988881.

Project Supervisor Contact Details: Lesley Ferkins, lesley.ferkins@aut.ac.nz; Ph. 022 072 9787; Michael Naylor, michael.naylor@aut.ac.nz,

Approved by the Auckland University of Technology Ethics Committee on 12th September 2018 AUTC Reference number 18/93 Fun playing rugby! Exploring the meaning of fun in youth sport

Appendix D: Questionnaire

Fun in Rugby Questionnaire



Rate the extent to which the following are Important to YOU having Fun in Rugby?										
	Not Important		Circle your response						Very Important	
Playing well together as a team	1	2	3	4	5	6	7	8	9	10
Being supported by my teammates	1	2	3	4	5	6	7	8	9	10
Trying your best – being in the zone	1	2	3	4	5	6	7	8	9	10
Exercising, fitness and being active	1	2	3	4	5	6	7	8	9	10
When a coach treats players with respect	1	2	3	4	5	6	7	8	9	10
When a coach motivates and inspires the team	1	2	3	4	5	6	7	8	9	10
Being challenged to improve and get better at your sport	1	2	3	4	5	6	7	8	9	10
Learning from my mistakes.	1	2	3	4	5	6	7	8	9	10
When parents show good sportsmanship (encouraging, not yelling)	1	2	3	4	5	6	7	8	9	10
Having a good ref who makes consistent calls	1	2	3	4	5	6	7	8	9	10
Playing well. Having highlights such as scoring tries	1	2	3	4	5	6	7	8	9	10
Rate the extent to which the following are Important to YOU having Fun playing Rugby?										
	Not Important		Circle your response						Very Important	
Getting playing time, not being benched	1	2	3	4	5	6	7	8	9	10
Playing in your favourite position	1	2	3	4	5	6	7	8	9	10
Touching the ball (attacking with the ball, running the ball up, passing, kicking)	1	2	3	4	5	6	7	8	9	10
Having well-organized practices	1	2	3	4	5	6	7	8	9	10
Having the freedom to play creatively at practices	1	2	3	4	5	6	7	8	9	10
Using games as part of practices.	1	2	3	4	5	6	7	8	9	10
Getting along with your teammates.	1	2	3	4	5	6	7	8	9	10
Being around your friends.	1	2	3	4	5	6	7	8	9	10
Keeping a positive attitude	1	2	3	4	5	6	7	8	9	10
Winning	1	2	3	4	5	6	7	8	9	10
Having a coach who knows a lot about rugby	1	2	3	4	5	6	7	8	9	10
Rate the extent to which the following are Important to YOU having Fun playing Rugby?										
	Not Important		Circle your response						Very Important	
Playing against an evenly matched team	1	2	3	4	5	6	7	8	9	10
Playing against players of similar age.	1	2	3	4	5	6	7	8	9	10
Having pride in playing for your school.	1	2	3	4	5	6	7	8	9	10
Having your family & friends support you on the touchline.	1	2	3	4	5	6	7	8	9	10
A good team spirit, a brotherhood, a great vibe	1	2	3	4	5	6	7	8	9	10
The physical aspects of the game (contact, defending, tackling, being tackled, rucks and mauls).	1	2	3	4	5	6	7	8	9	10
Playing against players of similar size and weight.	1	2	3	4	5	6	7	8	9	10
Avoiding injury and concussion	1	2	3	4	5	6	7	8	9	10
Playing on smaller fields	1	2	3	4	5	6	7	8	9	10
Being congratulated for playing well	1	2	3	4	5	6	7	8	9	10
Meeting new people	1	2	3	4	5	6	7	8	9	10

Year at School (circle): Year 9 Year 10 Year 11 Age: _____
1. How many sports do you play at least once a week? _____
2. Why do you play rugby? _____
3. Please rate your rugby skill level. (1 Poor through to 10 Excellent) _____
4. What is the highest level of rugby you want to play? (Circle your answer) a. Social b. First 15 c. Premier Club d. Professional
5. Please indicate your Ethnicity by ticking the appropriate box(s) below European <input type="checkbox"/> Maori <input type="checkbox"/> Samoan <input type="checkbox"/> Tongan <input type="checkbox"/> Asian <input type="checkbox"/> Other Pacific Islander <input type="checkbox"/> Other <input type="checkbox"/>
6. Is rugby your number one sport? Yes / No (Circle your answer)
7. If you had to choose to be in a team, which team would you choose to be in: (Circle your answer) The Best Team Or A team with my Mates
8. Rate your commitment to playing rugby (1 Not Committed to 10 Very Committed) _____
9. When would you prefer to play your rugby games? Please tick the appropriate box below. <input type="checkbox"/> Saturdays <input type="checkbox"/> After school during the week
10. Who would you rather have coach your team? Please tick the appropriate box below. <input type="checkbox"/> teacher <input type="checkbox"/> parent <input type="checkbox"/> former rugby player <input type="checkbox"/> current rugby player
11. Tick the TOP THREE things from the list below that make rugby NOT FUN for you: (Tick only 3 boxes) <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> Annoying Coaches</div> <div style="width: 33%;"><input type="checkbox"/> Dirty Players</div> <div style="width: 33%;"><input type="checkbox"/> Losing</div> <div style="width: 33%;"><input type="checkbox"/> Cocky Players</div> <div style="width: 33%;"><input type="checkbox"/> Playing over age teams</div> <div style="width: 33%;"><input type="checkbox"/> Bad or biased referees</div> <div style="width: 33%;"><input type="checkbox"/> Being told I am playing bad</div> <div style="width: 33%;"><input type="checkbox"/> Making mistakes on the field</div> <div style="width: 33%;"><input type="checkbox"/> Bullies in the team</div> <div style="width: 33%;"><input type="checkbox"/> Being mocked by the opposition</div> <div style="width: 33%;"><input type="checkbox"/> The team not giving 100%</div> <div style="width: 33%;"><input type="checkbox"/> Not playing well as a team</div> <div style="width: 33%;"><input type="checkbox"/> Missing out on playing time</div> <div style="width: 33%;"><input type="checkbox"/> Sideline or Parents being negative</div> </div>