"BETTER PEOPLE MAKE BETTER PLAYERS": EXPLORING THE ROLE OF CHARACTER IN RUGBY UNION TALENT IDENTIFICATION

Nicholas Foan

A thesis submitted for the degree of MSD Sport and Exercise

School of Sport Exercise and Rehabilitation Science
University of Essex
Date of Submission for Examination (October 2020)

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Abstract

Character and rugby union are historically linked with governing bodies, stakeholders and media all citing its importance for rugby union performance. Recent years have seen an increase in the prevalence of talent identification programmes in professional sports, rugby union included. However, little is known about the importance of psychological characteristics, less so character in rugby union talent identification. A literature review of psychological components of talent identification was conducted, with a focus on the application to Rugby Union. A more concerted effort needs to be made by researchers to define and differentiate the psychological components clearly to allow for more diverse research methodologies to take place and further the rugby union talent identification literature. To investigate the role character in the talent identification process in rugby union, a qualitative design was used. Interviews were conducted with 9 rugby union talent identification experts which focused on the components of character they valued most in potential professional players. A multidimensional understanding of character was used to analyse the aspects most valuable. No unified understanding of character exists in rugby union. However, it was deemed as especially important by stakeholders especially performance character virtues such as industriousness, resilience, and perseverance. Moral character was second most valued by participants including virtues, self-regulation, self-awareness, and honesty. These findings were then discussed in relation to current practices and further research directions were outlined.

CHAPTER ONE : INTRODUCTION

After a bitterly disappointing loss to South Africa in the Tri-Nations Cup, newly appointed New Zealand head coach, Sir Graham Henry, gathered his coaching staff in an attempt to understand the reason for their loss. From this meeting a new team mantra was coined : "Better people make better players" (1). The new mantra was grounded in the idea that if a player's character was nurtured off field , then those improvements would be seen on the pitch. This concept has been propagated and like other aspects of sports psychology even anecdotally made its way into other performance driven domains such as business (2).

The English word "character" is derived from the ancient greek "kharaktēr" : a tool that was used to imprint a distinctive mark upon a coin. It is now defined as the mental and moral qualities distinctive to an individual (3). The concept of character is much discussed in academia and the media with different understandings being adopted (e.g., personality), however, this thesis shall adopt a virtue based account of character built on the definition from Book II of Aristotle's Nicomachean Ethics (4). Aristotle suggested two kinds of human excellence, excellence of thought and excellence of character. Excellence of thought was considered the collection of intellectual virtues such as philosophical wisdom, technical expertise and accomplishment. Excellences of character on the other hand, were seen as the embodiment of moral virtues such as honesty, courage, and fortitude. Aristotle suggested that an individual cannot truly embody these virtues, yet lies somewhere between deficiency and excess with the virtue being the mean of the two extremes. For example, the vice of deficiency of courage would be cowardice but an excess of courage would be the vice of rashness. Character can be seen as the collection of deficiencies or excesses from the mean across the intellectual and character virtues. More recent interpretations of a virtue based account of character have seen multidimensional concepts of character proposed (5–7). According to Bredemeier and Shields (6), character can be defined as a multidimensional set of dispositions that predispose an individual to experience specific emotions, cognize in particular ways and behave in a certain manner within similar situations.

Rugby Union

Character and the game of rugby union have been linked since its conception (8,9). As the now famed story goes; a young man by the name of William Webb Ellis, a pupil of Rugby school who had a blatant disregard for the rules of association football, once picked up the ball and ran. Thus, creating one of rugby union's most distinctive features (8). Despite a lack of proper evidence to suggest this is true, the story has persisted and made its way into sporting lore. If we are to understand why character and rugby union are so intertwined, greater attention should be paid to the school's headmaster; Thomas Arnold. The headmaster of Rugby School from 1828 to 1841 he was one of the most prominent proponents of Muscular Christianity a philosophical movement which believed that Chrisitian, imperialist and moral virtues could be developed through athletic pursuits (9). From the beginning Thomas Arnold used rugby as a means to cultivate the sort of character he felt imperialist Britain needed at the time. Indeed, as described in Thomas Hughes' novel 'Tom Brown's schooldays' (Set in 1830's Rugby school and thought to be based on the authors experiences) describes the school as "a little corner of the British empire which is thoroughly, wisely, and strongly ruled (10). As the sport spread to around the world, the idea that rugby union builds character remains. This is most clearly shown by World Rugby who adopted the motto "Building character since 1886" -- the date which World Rugby was founded (11). Just over 100 years later, in 1995 rugby union became one of the last major international sports to become professional when the unions from New Zealand, South Africa and Australia founded the Tri-Nations Cup (12).

Rugby union is a continuous contact team sport which is characterised by players having to alternate between attack and defence many times per game while having to focus on more specific positional roles (13). As a contact teamsport with sports which contains a mix of individuals (e.g., goal kicking etc.) and team components (e.g., tactical decision making), considerable physical and psychological demands are placed on the athletes. Therefore, the importance of a player's psychological make-up becomes a key factor in

success in rugby union. As financial incentives have increased in global sports, organizations have looked to optimize the recruitment, identification, and development process of potential elite performers (14). Therefore, understanding the pathway to producing elite performers still remains a constant objective for key stakeholders, and has led the vast majority of professional sporting organizations to develop talent identification programmes (15–17). Rugby union is no different, albeit relatively late to the party.

In order for talent identification and development pathways to be formed, there first must exist an understanding of talent itself. A truly universally applicable definition of talent has yet to be devised with terminology used to describe talent itself rooted in anthropomorphic, physical or psychological measurements perceived as predictors of success to the specific sport it is being applied to (18,19). Traditional models of talent identification have typically relied on snapshot measures to predict success (20) despite large methodological issues highlighted by Vayens et al: (i) Athletes may not retain said variable into adulthood; (ii) maturation rates are non-linear and inconsistent across athletes; (iii) training history may affect development of variables; (ix) the combination of a diverse range of variables comprise talent and athletes can compensate a weakness with a strength (21). This led some research to attempt to reposition talent identification to focus more on an athlete's potential for development by endorsing a dynamic conception of talent. From this, it is claimed that the key determining factors in an individual's capacity for growth are psycho-behavioural and should be considered as such in the talent identification and development process (20). Building on previous research which examined the psychological aspects of elite performance (22,23) MacNamara et al.(2010), identified what they termed psychological characteristics of developing excellence (PCDEs). These encompass all psychological characteristics of an individual that were identified to facilitate an athletes progression in talent development pathways to becoming elite performers (24,25). Despite a repositioning in talent identification research, it appears little progress has been made to unify academic 'best practice' with real world talent identification programmes (17,18). Rugby union talent

identification programmes vary by nation with the major difference competition structure and the relative influence of club, school, and university rugby.

Formal talent identification in rugby union typically begins around the ages 14-16 but can begin as early as 11 years old (26). Selection into professional academies commonly occurs at around 16-18 years old, however, as this varies from nation to nation and is greatly affected by the unique competition structure of the country (27). Similar to that observed in other sports, rugby union talent identification has assessed predominantly physical and anthropomorphic (28–33) measures. Less work has been conducted on the psychological factors (34–36) which may predict future performance levels. Despite, growing research suggesting psychological factors to be the greatest determinant of a player's ability to navigate talent development pathways (20,24,25). Using the PCDE's as highlighted above, Hill et al identified the psychosocial characteristics key stakeholders in the identification and development process in rugby union valued most. They identified the importance of the PDCEs while also identifying new psychological characteristics deemed to be facilitative of a players successful progression in the development pathway (34). However, this study was conducted within the English rugby pathway meaning further research needs to be conducted before findings can be applied to talent identification and development programmes in other countries.

As shown above, character and rugby union have been linked since the sports conception, and although limited research has shown the importance of psychological factors in rugby union talent identification (34), there is an even greater scarcity of research assessing the role of character in the talent identification process in rugby union. To date, only two studies have explicitly examined the role of character in rugby union talent identification (35,37). Both of which are case studies and were conducted in provincial regions of New Zealand. The aim of both studies was to gain knowledge on how key talent identification stakeholders understood and applied the concept of character to their talent identification practices. These studies highlighted that key stakeholders in the talent

identification process, believed a player's character to be an important factor when assessing a player's suitability for entry into talent development pathways. Furthermore, they reported an explicit (from the National Governing Body; NGB) and implicit (their own knowledge) understanding of character were being applied, which emphasized the complex nature of characters' role in rugby union talent identification. Last, the studies participants outlined the aspects of character they believed to be desirable for rugby players to possess. The findings from these studies, in combination, are limited by their small sample size and location as they were both conducted in separate regions within the New Zealand rugby macrosystem.

This thesis aims to expand the literature by assessing the role of psychological components play in rugby union talent identification practices. Further, it will seek to directly identify the aspects of character key talent holders of talent identification value most in players from a global perspective. To achieve this, a review of the literature was conducted to assess the current research landscape and examine how psychological components were understood and applied to rugby union talent identification. Secondly, talent identification stakeholders from the Tier One (classified by world rugby) (38) rugby nations were interviewed to gain deeper understanding of how character is understood and which aspects of character were valued most by those directly involved in rugby union talent identification practice.

CHAPTER TWO: REVIEW OF THE LITERATURE

Examining the Role of Psychological components in Rugby Union Talent Identification Programmes: A Review of the literature

Abstract

The importance of psychological components in elite sport and rugby union has been well documented within the literature. The notion of character is a complex one which has been discussed for millennia, however its introduction sport is not new. Particularly within rugby union, players are described as 'showing character' or character being something that is 'tested', but how much is really understood. Talent identification programmes in rugby union have developed rapidly over the last two decades. This review aims to better understand the role of psychological components   in the talent identification process, with a focus on character research and its application in Rugby Union. A review of the literature was conducted with articles exploring the role of psychological components and their relation to talent identification being included.. Particular attention was payed to the methodology and terminology used to investigate and describe psychological components in talent identification The most common methodology used was qualitive research, most likely due to the infancy of the research body. Furthermore, inconstant terminology used to describe psychological components makes other methodologies problematic. The understanding of character was varied and lacked consistency across the included articles. The notion of character is often confused with other psychological components in the context of rugby union. Furthermore, character in rugby union is not understood from a virtue model of character. Coaches place a large amount of importance on the character of a player, yet they may not fully understand the concept.

Examining the Role of psychological components in Rugby Union Talent Identification Programmes: A Review of the literature

Over the last two decades, national governing bodies (NGB's) and professional sports organisations have invested heavily in talent identification programmes (TID) viewing them as vital to producing future elite athletes (21,39). They aim to identify youth athletes with the greatest potential for future success in elite sport so they can be placed in a training environment which facilitates development into an elite athlete, often called a pathway (21). With the increased financial rewards of sporting success , NGB's and professional sports organisations regularly invest vast amounts of resources to develop effective TID programmes to give them the best chance at success (40). Furthermore, to gain a competitive edge, researchers and professional sports organisations have attempted to understand and implement sports psychology into talent identification pathways to improve their performance (41). The idea of assessing an athlete's psychology to find improvements in performance is commonplace in today's professional sporting environment (42).

As the body of literature has expanded, a range of psychological aspects have been identified as being paramount to success in elite performance (20,24,25). A prominent review found personality to be a clear determinate of long-term success in sport (43) . Furthermore, the review identified personality differences that could be used to differentiate between sub-groups of athletes and differentiate between individuals that participate in organised sport and those who do not. The findings highlight the importance of psychological aspects on sporting performance; however, personality is not the only aspect of psychology which has been researched as an avenue to improve performance. Gould et al. administered a battery of psychological inventories to 10 Olympic champions (23). The Olympic champion group were characterised by significantly greater levels of anxiety control, confidence and resilience alongside further psychological characteristics when compared with Olympic athletes who did not medal. Studies such as this further highlight the importance of psychological aspects have on sporting performance at all levels. Similar, sports specific,

findings have been observed across a range of sports; expert batsmen in cricket could be differentiated from less skilled batsmen using measures of resilience, for example (44). Professional golfers who made the first day cut in international competition, were characterised by a greater ability to control anxiety, emotions and attentional focus, when compared with golfers who did not make the cut (45). Comparable research undertaken in elite wrestling has differentiated between successful and non-successful elite wrestlers competing for Olympic team places. Self-confidence was identified as the most important factor and could discriminate between the successful and non-successful group (46,47). Curiously, emerging research from the E-sport arena, identified motivation and attentional control as key factors for success, giving a strengthening the apparent importance of psychology in all high performance domains (48). Findings such as this serve to demonstrate the importance psychological characterises can have in determining level and outcome of sporting performance.

The mental health model of sport performance asserts that psychopathology and athletic performance are inversely related. When applied, the model states that as a performer's mental health improves or declines, their performance will improve or decline accordingly. This assertion has been supported in the literature, with one review showing between 70-85% of successful and unsuccessful athletes can be discriminated between using simple psychological measures which assess mood state and personality (49). This demonstrates the complexity of the relationship between psychological aspects and athletic performance. A further aspect of sport psychology which has been an effective tool to improve performance, is psychological/ mental skills training. Psychological or mental skills training refers to "the systematic and consistent practice of mental or psychological skills for the purpose of improving performance" (50). These include techniques such as imagery, self-talk etc, and have a plethora of both sport specific research (51–53) and reviews supporting their efficacy (54,55).

Character

  The notion of character is a complex one which has been discussed for millennia, Aristotle's work Nicomachean ethics (the word ethics is derived from the Greek 'ethos' which literally translates as character) is considered the first comprehensive discussion on character (4). Further, Aristotle described two types of excellences: excellences of thought and excellences of character. Excellence of thought included virtues such as technical expertise, accomplishment, and philosophical wisdom. Virtues including fortitude, courage and honesty were considered necessary to excellence of character. Contemporary character research has furthered Aristotle's work by defining character as a complex group of psychological characteristics which enables an individual to act as a moral agent (57). Character is a multifaceted group of sociomoral competencies which allows the individual to act as a moral agent, the multifaceted complex nature of character has led other authors to create more detailed classifications for character. Shield's proposed a neo-Aristotelian virtue ethical account of character, dividing character into four distinct dimensions; intellectual, moral, civic, and performance character (7). This multidimensional understanding of character will be adopted henceforth. Performance character is associated with virtues such as perseverance, diligence, courage, resilience, optimism and are concerned with an individual's ability to accomplish intentions and goals (57). While it may appear performance character may be the most important in relation to sports performance, other dimensions of character likely have a significant role to play. It is of note that, performance character virtues, unlike other virtues cannot be considered inherently 'good'. To be considered good they must be directed at serving a 'good' end, which is dependent upon contextual factors (7). While the concept of character is relatively well understood within the domains of philosophy and sociology, it is less clear in the sports science literature. Characters' importance to sports performance and talent identification seems especially pertinent to rugby union. The notion of character has been historically intertwined with the sport since its conception and continues to be discussed in relation to rugby union in the media and increasingly in an academic setting (11). Despite the clear links between character and

rugby union, currently there is limited amount of research on their relationship. More so research which utilises a framework of character such as the one presented by Shields, which may provide a novel insight into the role of character within rugby union. Unfortunately, due to the scarcity of research it is currently no feasible to conduct a review which focuses on character in rugby union, therefore this review will include character in the umbrella term of psychological components and include papers which examine character in relation to rugby union talent identification.

Talent Identification Programmes

Rugby Union playing nations have developed their own talent identification programmes aimed at identifying future elite athletes, who they deem to have the greatest potential for success at international level (35,37,60). Rugby union is a full contact invasion game played by men and women of all ages. It is an intense test of a player's physical, technical, tactical and psychological ability (13). The ever-increasing financial climate of professional sports means organisations view the effective identification of talent as a financial necessity due to the increased costs of signing external athletes compared with athletes developed 'in house'(61).
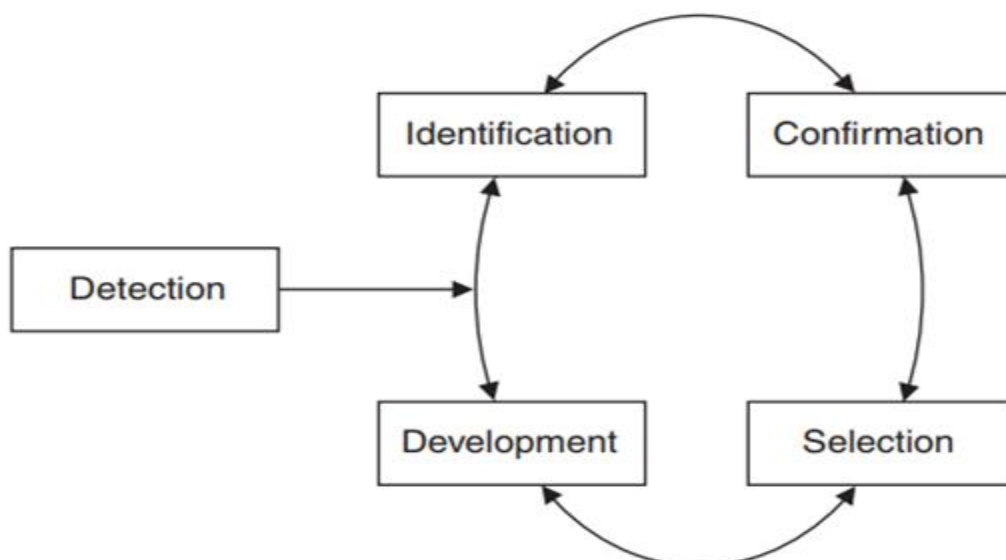
Figure 1: Stages in the talent identification and development process (adapted from Williams & Reilly, 2000).

The increased uptake of talent identification programmes has led to a rapid increase in research regarding the development of talent in sport and issues surrounding talent identification (14,15,18,62–64). Many theoretical models of talent identification have been proposed, the majority are rooted in the former soviet union's methods. This approach combined coaches' opinion with testing data to identify and direct athletes to the most appropriate sports environment as early as possible (39).

After the Soviet Union dissolved, western approaches to models of talent identification began to gain prominence with Côté and colleagues proposing a four-stage model of talent identification (later adapted by Williams & Reilly, Figure 1.) (65). The model places emphasis on sampling multiple sports in the early years and specialising in adolescence (66) . Much of the theoretical research claims talent identification programmes can improve the selection of athletes by producing reliable data which can be fed-back into the program to inform future changes and improve the number of elite senior athletes produced (67). Further, reviews of the effectiveness of talent identification programmes have shown the most effective talent identification programmes take a multidisciplinary approach meaning they include a range of physiological, psychological, technical, tactical and anthropomorphic measures when identifying talented youth athletes (63,68). Notable research has highlighted the importance psychological characteristics have on developing excellence and described their role in facilitating high-level performance (24,69). These were termed psychological characteristics for developing excellence (PCDEs) and allow athletes to develop into elite athletes. Literature has suggested a greater emphasis should be placed on development of psychological behaviours at an early age to develop and improve athletic performance (70) . The inclusion of multiple measures in talent identification programmes is

not just a theoretical one, in recent years researchers across different sports have adopted a holistic approach to talent identification. Studies which used this approach assessed its ability to differentiate between successful and unsuccessful youth athletes; finding the inclusion of multiple measures to be more effective at discriminating between successful and unsuccessful athletes than by using a singular measure (71,72). Building on these findings, a five-year longitudinal study following the progression of Swiss youth footballers compared the use of a singular measure (motor performance tests) with multidimensional measures (coach assessments, motor performance tests, psychological characteristics, familial support, training history, and biological maturation) and just coach's assessment (73). They found that the singular measure was the worst predictor of future success with the multidimensional measure being the most accurate. Interestingly, when the coach's assessment was combined with the multidimensional data It produced the most accurate predictions of future success. Simultaneously, this study highlights the potential problems surrounding subjective measures of talent (coaches' assessment) and also demonstrates the increasing objective nature of talent identification. The model of talent identification and development adapted from Williams & Reilly, proposes 5 key stages in the process (65). However, although the theoretical best practice of talent identification has been discussed, research has found inconsistencies between research and practice (18,64,74,75).

Baker and colleagues found issue with the practice of early selection of talent as it assumes that talent is a 'fixed capacity which can be identified early and does not change over time'(64). Retrospective studies have shown weak evidence to support the notion of early selection of talent. Results of which suggest, indicators of success at youth level e.g. weight, height are not linked to success at senior level (76,77). The assumption that talent is a fixed capacity has been disputed in the literature, Simonton's model talent describes talent as "a multi-faceted quality that reflects the relative contribution of physical, physiological, cognitive, and dispositional traits that facilitate or impede the acquisition of expertise in a domain" (78). In this model, the relative contribution of these factors will vary as the athlete develops. Therefore, making the early identification of these problematic as they do not

account for change over time (79). Coaches have been shown to perceive the physical viewing of an athlete to be the most important tool when identifying talent (80). However, this is problematic as subjective ratings based on ill-defined viewing criteria, lack of shared language around talent and the role of 'gut feel' all impact on selection. Furthermore, selectors in football asserted players need to be of 'good character' but had no formal way or assessing this and therefore, it was consistently overlooked while use of non-evidence-based methods are frequently used (80–82). It is suggested that expert coaches have a highly intuitive understanding of character that their assessments should be combined with more objective measures to increase the validity of assessments. While the inclusion of an expert coaches' opinion can improve talent predictions, it can become problematic when less experienced coaches are involved in the talent development process. This is because of the way talent identification programmes are commonly organised. Large groups of athletes are viewed at once e.g. open trials with athletes typically being put forward by clubs or school coaches. Problems arise when less experienced coaches submit what they believe to be talented athletes from their club/school. This automatically deselects many athletes from being viewed by expert coaches who are more highly attuned to make selection decisions (83,84). This issue is compounded by the lack of definitions and understanding around the conceptualisation of talent, making it difficult for expert coaches to articulate to less experienced coaches what they are looking for. This means that athletes with the largest potential may be being excluded from the identification process before it has begun (81,85).

A further issue highlighted in the literature is the failure of researchers to conduct longitudinal research (21,64), which is linked to the assumption that talent is fixed. However, recently longitudinal research has been conducted and offered insight into the multidimensional changing nature of talent, leading researchers to call for further to be done (65,86). Methodological issues also exist with the use of physical, anthropometric and physiological measures being overrepresented in the literature (63). Studies using measures such as height, weight and aerobic capacity (87,88) have been shown to be discriminative

between ability levels. However, little evidence exists that suggest these measures are a valid predictor of talent in the future. Measures such as height and weight can be very strong discriminatory factors between ability levels in youth sport however these have little effect in senior sport (63).

There exists a need for a more diverse body of research on talent identification, with one review finding a gender disparity between samples skewing 65% male, 10% female and 25% mixed (89). Furthermore, most of the research is focused on a small group of nations within Europe, the US and Australia. Finally, a vast amount of research has been conducted in football, presumably due to the high financial rewards for stakeholders involved, with other sports having minimal or no research conducted on the talent identification (18,63). This risk the talent identification models developed in football, from a limited group of nations, being applied across sports and countries; making their application problematic.

Perhaps the largest issue in the talent identification literature is the lack of a formalised language. For example, for many years the terms talent detection and talent identification were used interchangeably despite talent detection being the discovery of potential athletes who are not involved in the sport and talent identification referring to the recognition of potentially elite athletes who are currently involved in sport (90). This becomes even more problematic with the inclusion of psychological components, which are often used incorrectly or interchangeably to describe aspects of a players psychology. Research has attempted to create a shared language around psychological components to be used when discussing talent identification. However, it the review highlighted 17 different terms identified in the literature all used to describe psychological components. Further, only one third of authors attempted to define terms they used in their research, increasing confusion around the topic for researchers and practitioners (56). This makes the transmission of information difficult and decreases the opportunity for multidisciplinary research as lack of formalised language makes collaboration difficult.

Rugby Union Research

Substantial amounts of research has been conducted on talent identification in rugby union. There is an over reliance on physiological measures with researchers exposing athletes to test batteries despite a lack evidence as to their effectiveness (91,92). The reason measures such as this cannot consistently predict future ability is because the maturation status of the participants becomes a confounding variable for talent identification. The use of anthropomorphic and physiological measures during adolescence are disrupted by hormonal change which results in rapid, sporadic changes in characteristics which are deemed important for athletic performance (93). Similarly, a large amount of research has been conducted on the technical and tactical ability of youth players and their predictive power for future success at senior level (60,94). While these measures may have a greater predictive value compared to anthropomorphic and physiological it is likely due to the increased specificity of the testing, especially for certain skills and positions. These measures nevertheless have limited predictive ability. This is likely due to the rugby specific skill tests happening in isolation without the additional pressures of a full game situation.

Further issues with the size and depth of the literature have been found regarding talent identification in rugby union. From the limited body of research, the majority of studies were conducted in only three rugby playing nations: England, New Zealand, and South Africa. This creates a situation where practitioners in other nations may have difficulty making informed evidence-based decisions regarding the application of talent identification programmes in rugby union. Alongside this, talent identification models created in a singular Rugby environment may have been conceived with different aims and goals, therefore having differing criterion of effectiveness, making critical appraisal and feedback of the programme flawed from the beginning.

Consistent Terminology

A fundamental obstacle in the development of the talent identification literature is the lack of a formalised language to be used when discussing psychological terms e.g. character, psychological characterises, psychological skills (56). This has made the comparison and application of models and theories of talent identification problematic. Due to the holistic nature of recent talent identification programmes there exists a greater need for multidisciplinary research to better understand how all factors influence the talent identification programme. While attempts have been made to categorise the language used (56), it is vital that they are adopted by researchers to allow for collaborative and multidisciplinary research. Research on the role of character in the talent identification in rugby union has not escaped this problem, with a collection of studies attempting to assess character, all assessing different psychological variables. For example, a study of South African youth rugby players attempted to understand the role of biological maturity on psychological skills (95). A term which is used in the literature to describe a group of mental tools that can be applied to improve athletic performance (56). However, due to lack of consensus of formalised language this study has classified legitimate psychological skills such as imagery and goal setting alongside resilience and achievement motivation which are not psychological skills. These components are not psychological I skills, and in fact are more closely associated with components of performance character (7). This and other similar examples can be found throughout the literature, making the comparison and application of findings fraught with issues which can serve to deter multidisciplinary researchers as variables being tested are unclear. Attempts have been made to create a formalised language and recommendations have been made however they have not set out to create universal definitions and meanings for psychological terms, merely to encourage researchers to consider the language used (32).

Initially, this review aimed to examine the role of character within rugby union talent identification. However, due to lack of character research and inconsistency in the definition

and use of the concept of character, the scope will be broadened to include psychological components and their role in rugby union talent identification. By broadening this review, the role of psychological aspects can be comprehensively assessed in relation to rugby union talent identification.

Therefore, this review aims to better understand the role psychological components have in the talent identification process, with a focus on the research and application in Rugby Union. Character research will be included, and particular attention will be payed to its understanding within the literature.

Scope of review

This review aimed to examine the literature regarding psychological components in the talent identification practises of rugby union. To ensure appreciate and relevant studies were including for review a set of eligibly criteria were established for the papers to be included for review.. Studies of all research design (quantitative, qualitative, and mixed methods) were considered for full text review.

Eligibility criteria

A set of criteria were created to ensure that articles relevant to the aims of the study were included. To be included for full review articles had to meet specific eligibility criteria:

1.   Psychological consideration - For articles to be included in the review they must have shown consideration of at least one psychological component in relation to the rugby union talent identification processes. For example, mixed methodology studies could be included as long as at least one of the variables being studied was of a psychological component.

2.   Rugby Union specific- From the studies identified on rugby union and talent identification they could not focus on any other code or rule set of rugby i.e. rugby league or rugby sevens.

3.   Removal of grey area – Studies were not included if they focused on topics that may influence the talent identification process but do not necessarily directly related to talent identification such as: relative age effect, athlete development, maturation motivation, or the effects of specific genes. Many of which have extensive reviews published exploring their effect on talent identification.

Discussion

The aim of this review was to better understand the role of psychological components in the talent identification in rugby union. During the course of this review it became apparent that greater clarity around the language used to describe psychological components was needed. Therefore, the discussion will also highlight the importance of clear terminology used in research and talent identification practices. Finally, attention will be payed to rugby union character research as this an area of the research, that due to historical and contemporary links, is a growing area within rugby union talent identification. Current research is extremely limited in the methodologies, samples and variables measured. There are multiple reasons for this. Firstly, traditional talent indentation research, typically focussed on anthropometric and physical data and this can be seen in the literature. Promisingly however, an increase in the inclusion of psychological measures can be seen. Their inclusion allows researchers and stakeholders to take a more holistically ecological approach to talent identification, something which has been called for repeatedly in the literature (98,99).

A large amount of the article's reviews utilised qualitative methods, using coaches and staff as the participants. This is suggestive of the infancy of the research topic, with large amounts of rich data on the role of psychological characteristics in rugby union talent identification needing to be generated. By focusing on single or small samples, researchers can build a picture of the application of psychological components in a naturalistic high-performance setting, laying a strong base for future research utilising different methodologies. There exists a greater need for the better reporting of coach variables (Age, sex etc.) as this allows for greater insight into how they form opinions and make decisions. For example one study reported participants' age as "mid to late forties" (100) and some did not even report participants age or experience levels. The nature of qualitative research methods knowledge rich participants to produce large amounts of data, which can aid

understanding of a specific topic very quickly. This has created a body of research in which the thoughts and opinions of coaches/ staff on character in talent identification have begun to be explored (35,37). Coaches have the main responsibility of talent identification in rugby union. Therefore, by exploring their experiences and thoughts researchers can gain insight into factors most important to talent identification.

It has been suggested that due to the nature of the role, coaches can form a holistic view of an athlete through interaction and observation in an ecologically valid environment (101). Expert coaches have extensive sport-specific knowledge, findings in football suggest that years of experience and systematic sharing of knowledge means high level coaches can be described as experts in talent identification (102). However, the main criticism drawn against the use of coaches in the talent identification process, is the subjective nature of viewing talent (101). This has the potential to create issues some of which have been identified in the research. For example, biological maturity and amount of in game actions have been found to influence a coaches rating of athletic performance (103,104). Coaches and researchers also lack access to scientific data, which make it impossible to verify if what coaches highlight as 'talent' is related to athlete's long-term development (105). Furthermore, the use of coaches as the gatekeepers of talent identification can create further reaching problems. This is because coaches select players on certain 'talent criteria' which may be difficult for coaches to vocalise, meaning that players that are selected are often the ones who most closely match the specific coach's talent criteria (105). However, little is known around how exactly these criteria are formed. This could lead to situations in which coaches are unconsciously favouring players who most closely fit their idea of what a talented player is, but at the same time may be deselecting athletes with the potential to become elite.

A wide range of psychological variables have been assessed in the rugby union talent identification literature. This review sought to understand the role psychological components have in the talent identification research conducted in rugby union. It is apparent that researchers have been using a plethora of definitions to describe different

psychological phenomena, often being poorly defined and used interchangeably (56). One example of many, can be found regarding the notion of confidence. Levels of confidence have been shown to be an important factor influencing successful performance (106,107), yet there is disparity with the way confidence is applied to the research. One study (108) identified 11 psychological 'qualities' deemed important to rugby union, of which confidence was one. A similar study conducted on 16-year old rugby players, identified a list of similar variables, however in their study confidence is described as a psychological 'characteristics' (109). Although the difference may seem trivial, the language used is vital for clarity. In no way does this discredit the validity of the individual studies. However, it makes it challenging for interdisciplinary researchers to access and synthesise the body of knowledge with confidence. Numerous examples of that exist within the papers included for review and the wider literature, leading some authors to call for a formalised language to be adopted to improve clarity in the field, a call this author supports (56).

Limited studies went beyond the identification of important psychological variables and measured the effect of these variables on a player's future outcomes to assess which variables were most important for being identified as talented (109,110). From these, self-confidence was the only psychological variable which could consistently predict between skill levels of youth rugby players. Although self-confidence has been well documented in the literature as key to elite sport performance (106), there are other factors that relate to talent identification in rugby union and why talent may be able to discriminate between skill levels. One factor which may influence this was highlighted in a study on the maturation of youth rugby players (95). Early maturing players were significantly more likely to have higher self-confidence and self-esteem. Furthermore, a study of youth rugby players found anthropomorphic measures to be the single greatest predictor of future outcomes (109). This is further supported by research on bio-banding which shows early maturing players present a more adaptive motivational profile with higher perceptions of physical self, i.e., self confidence and self-esteem (111). These problems are confounded by the research presented earlier which suggests coaches' rate early maturing athletes' as more skilled

(103). It is clear to see how with knowledge of the above studies; it would be easy to create a cycle of selecting early maturing confident athletes and de-select potentially talented athletes who have matured later.

Character, talent identification and rugby union.

One of the initial aims of this review was examine the role of character in the talent identification process in rugby union however, this was changed due to a lack of research examining character in rugby union talent identification despite strong links existing between the two. Therefore, the aim of the review was broadened to incorporate all psychological components and their relation to rugby union talent identification, of which character is one. Only three studies were found that directly addressed the idea of character and its role in rugby union talent identification (35,112,113). Perhaps the best insight we have currently on the role of character in the talent identification process comes from Rosevear & Cassidy's study which gained a deep understanding of character in rugby union and how it is applied to talent identification within the New Zealand rugby macrosystem (35). In- depth interviews were conducted with national age grade coaches; it was found that there existed an implicit and explicit understanding of character. In this national union, they explicitly understood character as being made of 5 main components: 1) Work ethic, 2) Competitiveness, 3) Resilience, 4) Coachability, and 5) Motivation in rugby. It also described implicit understandings of character values that existed, with the idea of 'self-reliance' being one particularly important to the union. Coaches formed these assessments of a player's character through a number of avenues. Firstly, through observations of the player, actions such as "not cutting corners" during fitness drills and cleaning the changing rooms after games were seen as markers of good character (35,37). Coaches regarded interviews with the family to be an important tool for assessing character, suggesting a consideration for the environmental and social factors which influence character development (57).

Heweston (2016) conducted similar research, where a well-established coach was interviewed on multiple occasions to provide detailed insight into talent identification

practices. Many of the characterises highlighted in the previous study (92) were once again outlined by another coach who said: "We're not just looking at rugby ability; we are also looking at their character". Coachability, work ethic, tenacity, honesty, integrity, were all cited as aspects of good character which players could be selected based upon (37). An interesting concept that was detailed in this paper was the 'no dickheads policy', which was called an unofficial talent selection policy for the region and acted as a quick assessment of a player's character. The coach did not elaborate further on the characteristics which qualify an individual as a 'dickhead' however showed an implicit understanding of his own definition suggesting 'a coach's eye' may not just be for talent. The large focus on character is consistent with findings from studies in a similar field based-team sport; Australian rules football (114).Coaches in the studies understood aspects such as 'work ethic, coachability, etc. as part of good character. It is of note, that many of the aspects of character identified by the coaches in the character research overlap with Macnamaras's work, which proposed

PCDE's. These were first applied to rugby union talent identification by Hill et al. (2015) using interviews conducted with academy rugby coaches to determine the PCDE's most relevant to the sport. (34). The study identified the PCDE's seen as vital to a player progressing successfully through the development pathway PCDE's most relevant to rugby union talent development includes: Resilience, self-awareness, self-organisation, ability to focus on detail and control distraction and the ability to control pressure. These characteristics have been shown in the literature as being vital in realising their potential as elite performers and maintaining success in future performance (24,25). This study takes the definition of character from Shield's and Bredemeier (7,129) as a complex, multifaceted concept which encompasses all aspects of a individuals psychological make up. By adopting a multidimensional understanding of character; the virtues highlighted by the coaches in the above studies, more closely reflect 'performance character. Performance character includes the qualities: perseverance, diligence, courage, resilience, optimism, initiative, attention to detail, and loyalty (7). The overlap between some of the PCDE's and performance character virtues further highlights the importance of psychological components of the talent

identification and the need for character specific research in rugby union The inclusion of a range of psychological components in rugby union talent identification offers a nuanced viewpoint when considered against the typical physiological and anthropomorphic measures. However, despite character and rugby union being strongly linked there exists a sparsity of research examining their relationship. The crossover between character virtues, particularly performance character, and other psychological components deemed important to rugby union talent identification acts as further evidence of the importance of further research. This review will now outline limitations of the review and go on to illuminate new research directions which may serve to close the gap between talent identification research and practice.

Future research

The most striking finding from this review is the need for more diverse research to be conducted in talent ID in rugby union. Only one paper included a female sample and no research focussed solely on women's rugby. In recent decades, women's participation in rugby union was sparse and the desire for research appears to have been minimal. However, recently a World Rugby report showed an increase of 60% participation numbers from 2013-2017 in the women's game (38). If the women's game is to continue to grow and develop there needs to be an increase in research conducted in women's rugby union. It is unlikely talent identification programmes developed for use in the men's game will function in the same way and may have unintended negative consequences to athletes. Furthermore, longitudinal research needs to be undertaken to truly assess the effectiveness of talent identification practices. Without verifiable data it is impossible to test the assumption that talented youth athletes will develop into talented senior athletes. It also allows high performance sport organisations to assess their own talent identification processes. Talent identification research which assesses players using a combination of technical, tactical and psychological factors have a tendency to view sports performance as a series of movements which can be broken down and tested in isolation with the hope to predict sporting ability.

This is not ecologically valid, and that athletic performance should be viewed in context to provide the best base for effective talent identification.

Potentially, the most important consideration researchers must give to future research is the clarity around psychological components examined in the research. A more concerted effort needs to be made to define and ensure participants understand terminology being used. Terminology being used incorrectly or interchangeably creates confusion around the role of psychological components and only serves to reduce the likelihood of their inclusion in talent identification programmes or research as it unclear what is truly being discussed.

Conclusion

This is the first review which aims to synthesize the knowledge of the psychological components relevant in the talent identification process in rugby union. The review highlights the discrepancies that are found within the literature regarding language and terminology used to describe psychological phenomena. The findings of the review highlight the need for more diverse research in talent identification and rugby union. This is true of the samples, study design and methodologies of research, with a need for more longitudinal research being deemed as crucial for the effective assessment of talent identification programmes. Importantly, research needs to continue to address the issues around consistent terminology in order to create a clear language for researchers and practitioners to use when discussing psychological components and their relation to talent identification Rugby stakeholders place importance on the psychological components of athletes,, including character, psychological characteristics, mental skills, and personality. They can describe psychological aspects which they value however, these are often confused and used interchangeably with one another. A more concerted effort needs to be made by researchers to define and

differentiate the psychological components clearly and ensure all parties in the research understand this. This does not affect the usefulness of using psychological factors in the talent identification process and even the strengthens the need for their inclusion In the identification and development of talent. However, there is a need for better education for coaches to help verbalise their understanding of psychological components within rugby union talent identification practices and apply them in a way which is congruent with the current research.

CHAPTER THREE: STUDY ONE

An Exploration of the Role of Character in the Identification of Talent Across Tier One Rugby Nations

ABSTRACT

Background: Character is a complex concept which has been discussed by scholars for millennia. Recent interpretations have built on ethical virtue accounts to conceptualize character as a complex multidimensional collection of virtues which facilitate moral and social functioning. Since its conception, rugby union and character have been linked with rugby's ability to build character being widely accepted. However, little is known about stakeholders' conceptualizations of character or how it is applied when selecting potential players.

Aims: To examine the understanding of character within rugby union and identify the key aspects relevant to the talent identification process.

Method: A case study design was used. Interviews were conducted with nine rugby union talent identification experts from 8 different nations. Thematic analysis was used to analyse the data. *Results:* No consistent understanding of character existed within the sample. A multidimensional understanding of character was used to analyse the aspects most valuable. Performance character virtues were valued most and included virtues such as; industriousness, resilience, and perseverance. Moral character was second most valued by participants including virtues; self-regulation, self-awareness, and honesty. Further virtues were identified as valuable in potential rugby players and were discussed against the literature.

Conclusion: No unified understanding of character exists in rugby union. However, stakeholders can identify virtues they deem important in rugby players and feel confident using these to make selection decisions.

An Exploration of the Role of Character in the Identification of Talent Across Tier One Rugby Nations

"I think very high, that's why from the start we try to influence the behaviour of the players in that direction, and I think that's because we really believe that better quality men make better quality players." - Participant 9 when asked how highly he rates a player's character.

For millennia scholars have discussed the concept of character and it has permeated the discourse of many domains from philosophy (115–117) to sports psychology (58,118–121). In book II of Nicomachean ethics, Aristotle proposes two types of human excellence: excellence of thought and excellence of character. Excellences of thought refer to intellectual virtues such as technical expertise, accomplishment, and practical wisdom. The ancient Greek for excellence of character -êthikai aretai- translates as 'moral virtues'. It is this embodiment of moral virtues such as honesty, trustworthiness and fairness, which interact to produce excellence of character (122). However, since then the understanding of character within academia has been transient. Most notably, a shift from 'language of character' to 'language of personality' occurred in the late 19th century as academics of the time attempted to demystify philosophical concepts in medicine and replace them with more objective measures (e.g. personality) (59). The lack of a unified understanding of character exists between stakeholder and researchers (119) which has led to a modernist concept of character with defined moral and social components (120). The complex nature of character led Berkowitz (57) to propose a multifaceted taxonomy, identifying seven psychological aspects which make up character. He goes on to define character as "the complex set of psychological characteristics that enable an individual to act as a moral agent". Shields (7) builds on this taxonomy in asserting character development should be the goal of education by developing the four forms of personal character: I) Intellectual character, II) Moral character, III) Civic Character, IX) Performance character. Together these four forms of character describe what it means to be a "competent, ethical, engaged and effective adult

member of society" (15) which shields argues should be the goal of an effective education system.

Research has predominantly focused on physical education and sports ability to positively develop character in youth. The notion 'Sport builds character' is widely accepted in society and is typically lorded by policy makers (5,58,119,123). A cursory glance at the literature, however, shows that this statement should not be accepted based on what we want to be the case (58). There is limited research to support this claim. For example, the 'Fair play for kids' study showed a curriculum of physical education could enhance moral development in children (124). However, alternative research suggests sport may be linked to less desirable character. Using Kohlberg's theory of moral development (125) Bredemeier and Shields conducted a number of studies which linked sports participation and negative character development. Their research showed student athletes were less morally mature than non- student athletes (126). There has been a plethora of other work supporting the standpoint of sports' negative effect on character development (120,127,128). However, it is argued that studies which present empirical evidence to suggest sport is not suited to the development of character fail to consider the complex multidimensional nature of character (129). Furthermore, the large variance in the way the concept of character has been defined makes claims of sports' negative effect on character extremely difficult without a specified definition of character being provided.

This apparent conflict between whether sport builds character has led researchers to hypothesise a discrepancy between how key stakeholders' conceptualise character (130). It appears key practitioners of sport (e.g., coaches and athletes) understand character from a more social/civic perspective related to values such as teamwork, loyalty and self- sacrifice. Whereas researchers have mostly based their concept of character in an Aritosliean virtue based account of character with a focus on moral values such as honesty, justice, and fairness (131). Recent work by Bredemeier and Shield has argued that sport can be a powerful tool in the development of character if the shared norms of the team reflect the values and dispositions that are desired in the athletes (6). This cannot happen, they say,

without sustained and intentional effort on the part of the coaches to create opportunities for athletes to grow and develop their character in relation to the shared norms of the team. Although the vast majority of character research in sport comes from a view of development, little is known about character in relation to performance and processes like talent identification or development. Therefore, gaining a greater understanding of how key the stakeholders of sport conceptualise character is vital to understanding the role of character in sport.

Character and Rugby

A visit to World Rugby's homepage demonstrates how intertwined the concept of character and the sport of rugby are. At the top of the page sits a banner stating: "Building character since 1886" (11). Despite rugby union being a sport steeped in history and tradition, it was 2009 when world rugby officially established the five values of rugby union. They are called the "defining character-building characteristics of the game" that include: integrity, respect, solidarity, passion, and discipline (132). Subsequently, the national unions of each nation followed and installed the same or similar values into their organisations (133–137). In recent years the idea 'better people make better players' has emerged out of New Zealand after their national team the All blacks suffered an early exit from the 2007 world cup (1). It was underpinned by the idea that holistic development of the person off field, would translate to players on the field who could make effective decisions in high pressure situations. It appears to have persisted within the New Zealand rugby ecosystem but it is unclear as to what is meant by 'better people' which is difficult to understand objectively (37).

In spite of anecdotal evidence coming from the NGB's and the media around the importance of character in rugby union, there has been minimal research conducted on its role in rugby union talent identification. Talent identification is a systematic process in which current performers are selected based on their potential to excel in a particular sport talent (21,63). Their popularity has grown as national governing bodies (NBG's) and professional

sports teams view talent identification as imperative to achieving success on a domestic and global scale (138). Early talent identification systems were criticized for selecting athletes based on discrete, unidimensional measures of athletic talent, failing to recognize the dynamic multidimensional nature of talent (139). However, recently talent identification research has called for a greater emphasis on the holistic assessment of players, with some arguing that psychological factors are the most important to developing excellence in sport (24,25,75). Talent identification research in rugby union has identified psychological characteristics deemed by stakeholders as key for players to successfully navigate the development pathway (34). Since psychological factors are paramount to athlete progression and the concept of character is so linked with rugby union. The limited research body creates a need for a greater understanding of key stakeholders understanding and application of the concept of character in rugby union talent identification.

It is of note that character research *has* been conducted in other aspects of rugby union such as: coaching effectiveness (140), national identity (141) and morality (113). Recently, two studies from New Zealand have sought to investigate the role of character in rugby union talent identification; both used a case study design to garner large amounts of data by interviewing coaches and support staff working in regional rugby in New Zealand (35,37). Both studies found two understandings of character existed; One explicitly stated by New Zealand Rugby Union (NZRU), and one that was implicitly understood by coaches who use aspects of both when identifying talented players. Firstly, this echo's the discord which exists between how character is described in academia and in wider society (58). Perhaps more importantly, both studies highlight the importance all stakeholders of NZRU saw in a player's character, regardless of a unified understanding of the concept (35). Interestingly, it was seen as a 'swing factor' when selecting players. This is to say that when making a decision on two players of comparable ability, the player with perceived better character would be selected (35).

The studies also identified a range of character virtues which were seen as being key to success in rugby union. The main virtues identified in the two studies varied slightly but both highlighted resilience, selflessness, integrity, honesty and work ethic as virtues used to base selection decisions on (35,37). Both studies revealed a prevalence within the New Zealand rugby union macrosystem of the idea that players of 'poor character' would 'wilt' under pressure. This research further highlighted the need to understand the conceptualisation of character in rugby union as well as identifying virtues deemed integral for success. The aim of this study is to examine the understanding of character within rugby union and identify the key aspects relevant to the talent identification process.

Methods

Due to the exploratory nature of the conceptualisation of character in rugby union talent identification and the highly limited population to sample from, an intrinsic case study design was implemented (142). A case is defined by Miles and Huberman as "a phenomenon of some sort occurring in a bounded context" this context then the conceptualisation of character within rugby union was considered the case being studied (143). A case-study design was chosen as it offers an opportunity to understand particularities and seek both depth and breadth in the information around the research question. Case studies use questions such as *how* and *why to* gather information instead of aiming to collect quantified data. A critical realist approach was taken by the researcher throughout the study with participants offering information from a single ontological reality. This meant participants knowledge was considered 'real' to the participants but still acknowledging the data presented was subject to both the researchers and participants perceptions of the cultural, social and historical contexts in which they occurred (144–146). As noted by Baxter and Jack case studies do not aim to directly extend theory and because of the unique nature of the sample accept that findings may lack transferability (147). As in this study the findings may only be relevant to those working in professional rugby union.

Ethical considerations

Prior to interviews being conducted, all participants gave informed consent and were aware of their right to withdraw at any stage of the study. Participants were deemed to be at minimal risk of harm through their participation in the study. One potential risk was highlighted as possible psychological harm caused by the publication of identifying data. Steps were therefore taken to prevent psychological harm being caused to either the participant, affiliated organization or any individual mentioned in the interviews. This involved audio files being deleted once transcribed, participants being anonymised by assigning participant numbers and transcripts being redacted at source. All data was stored in-line with General Data Protection Regulation (GDPR) and data storage guidelines set forth by the University of Essex ethical committee. Ethical approval was obtained by the University of Essex ethical committee (Application No. ETH1920-0472).

Eligibility Criteria

To gain understanding of the conception of character in rugby union talent identification, participants were only invited to take part in this study if they were identified as meeting the eligibility criteria. To ensure the expertise of the participants, Abraham, Collins and Martindale's conception of expertise in sports coaching was modified to include who had worked in rugby union coaching and talent identification for a minimum of 10 years were considered expert (148). It was also crucial that participants had worked for their respective NGB's within the last two years. This ensured participants were aware of recent talent identification practices implemented at a national level.

Participants

Potential participants were contacted from all Tier One rugby union nations (as of 2019) either through the NGB or directly via correspondence with the participant. Once it was

assessed the participants met the eligibility criteria they were invited to take part in the study. In total nine participants were recruited from eight separate nations (see Table 1). Participants' experience (calculated as total years worked in professional rugby) ranged from 11 to 35 years (mean =19.9 ± 8.5 years) and years spent working for their respective NGB ranged from 1 to 13 years (mean= 6.8 ± 4.1 years). One participant was no longer working in a talent identification role within a NGB, however they had continued to work within professional rugby. All participants had worked in a variety of roles within professional rugby including coaching, talent identification, coach education and academy director/manager.

Nation	Years working in Rugby Union	Years working for NGB	Years since working for NGB
Australia	15	2	-
England	13	1	-
England	13	9	2
Ireland	35	3.5	-
Italy	30	4	-
NZ	14	11	-
Scotland	28	13	-
South Africa	11	8	-
Wales	20	10	-

Table 1. Participant career statistics (-indicated participant is still working for/in association with NGB**)**

Interviews

Interviews are a dynamic research method, which when conducted effectively, allow people to articulate their experiences and beliefs in rich detail and provide context and perspective to those experiences (149). Semi-structured interviews were used as it provided greater flexibility for discussion because of their conversational nature. It facilitated the detailed exploration of ideas and topics that arose during the interviews, which either the interviewer or participant found important (149). This was important because, unlike most situations, the participants were considered more knowledgeable on the topic than the interviewer. All interviews were conducted via a phone or video call. This contact method was used to accommodate the busy work schedules of the participants and the varying time zones.

An interview guide was formulated using relevant literature into three sections (i) Introductory questions, (ii) recurring themes from the literature (iii) generic prompts or probes (147,150). Open questions were formulated and reviewed and questions that did not relate to the research aim or were too similar in content were removed and refined. This meant the interview guide was structured around broad open questions which aimed to facilitate detailed conversation on the topic without being led by the question in a predetermined way (see appendix 1). Prior to the interview all participants were made aware and consented to being recorded. A total of nine interviews were conducted over a period of 12 weeks, interview length ranged from 35-82 min (mean=50± 15 min) and all interviews were conducted at a time chosen by the participants. The interviews were recorded and transcribed verbatim.

Data analysis

Interview data was analysed using a thematic analytical approach, as detailed by Braun et al (145,146). Thematic analysis was chosen for its "flexibility" and is seen as an effective method if the goal of the research is to understand people's everyday experience of reality in great detail and to understand more around the phenomenon in question (145). Thematic analysis in this sense is described as flexible not to mean 'an anything goes approach' but that thematic analysis can be applied across a range of theoretical and epistemological approaches. It is this freedom which makes thematic analysis a powerful tool to gain a rich yet complex account of the data (145). The thematic analysis process was conducted in five distinct stages (4):

(i) Familiarisation with the data. As the researcher who conducted the analysis also collected the data, they began this stage with a strong knowledge of the data. To reach full immersion in the data the researcher employed a number of methods. Firstly, verbatim transcripts of audio files were made, this is a time-consuming process but vital for the researcher to become immersed in the data. Once completed, transcripts were repeatedly

re-read in an active manner as to search for meanings and patterns (145). This stage is vital as it provides the 'bedrock' for the rest of the analysis to be built.

(ii) Generation of initial codes. Once the familiarisation process was complete, an initial list of ideas was generated which the researcher deemed interesting or relevant to the research topic. Data analysis software NVivo (version 12.0.0.71) was used to code the data set. Data was coded if it was deemed relevant to the research question. Code is defined as: "the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon" (151). As much of the data as possible was coded, including small extracts either side to provide context for later analysis. This led to the generation of initial codes.

(iii) Searching for themes. Codes were then sorted on a broader level and organised into themes so that relevant codes were grouped together. A theme is data which is important in relation to the research question and 'represents some level of patterned response or meaning within the data set' (145). This created a list of 'candidate themes' some of which began emerging as overarching main themes and others sub themes.

(ix) Reviewing and refining themes. A two-step review process was then employed to ensure themes were representative of the data set. First, coded extracts of the data were re-read to ensure they formed a coherent pattern within the theme. At this stage, themes and codes could be removed, merged or combined to create new themes that best captured the patterns of the coded data. Once the researcher was satisfied with this, the whole data set was re-read to ensure the themes 'worked' and were coherent in relation to the data set and the research question.

(x) Defining themes. At this stage themes are defined and named so that they are distinct from other themes and identify the 'essence' of what the theme is about.

All researchers reviewed codes independently and generated a list of sub-themes and themes. These were then reviewed critically to form the final list of themes and sub-themes. This process of investigator triangulation gave increased validity to the thematic analysis process.

Results

Understanding character

Before progressing further, it is worth briefly discussing how character is understood by the participants interviewed. The concept of character is a complex one, the definition can vary across domains in academia (psychology, sociology, philosophy etc.)(59) which partially explains the variance in definitions of character when discussed by the sporting media and lay members of the public (58). Predictably, therefore, the participants had unique interpretations of character that were changeable based upon the context they were discussed in. For example, Participant 1 took a traditional virtue ethical understanding of character. When asked how they personally define character in the context of rugby union, they said:

> *"So character traits are moral qualities. A lot of this is even just coming from dictionary definitions and then trying to turn those definitions into something right [. . .] so moral qualities are empathy, courage, honesty, fortitude and loyalty."*

This understanding of character is focused on moral character and is firmly rooted in Aristotelian virtue ethics (4) which asserts an individual's character is the complex interaction of excellences (virtues), or lack of excellences (vices) that allow an individual to function effectively. Defining character solely from a moralistic viewpoint like this was uncommon among the other participants, however, many did state the importance of these moral qualities. Participant 9 briefly spoke on the importance of having "*good ethics"* as they put it, but when questioned further on the idea of having "good ethics" it was conflated with being a *"good role model"* and having the *"right mindset"* . It is unclear from this understanding of character what the participant would look for in potential players, however, it speaks to an implicit understanding of a relationship between values, character and behaviour (152). Participant 8 showed an alternate view of character, understanding good character in the context of rugby as a set of social competencies;

"So, the question was about what do I see as being a good character? Well, the first thing that people are looking for is, you know, how they fit in? And what are they like socially, in the sense of, do they communicate well with other players? Do they communicate with their coaches?"

This interpretation seems to view character as the driving force behind an individual's ability to function effectively in a range of social settings, such as interacting with teammates and staff. This view is supported in the sport morality literature which identified two types of prosocial behaviour in sport, either towards teammates or opponents (153). Prosocial behaviours towards teammates could increase the receipts motivation and subsequently performance which in turn benefited the whole team. Participant 8 when on to elaborate why they viewed character as the social competency of the athlete; "There have been players that I've seen, who have the ability that I was talking about, but haven't functioned well, because they don't get on with coaches or the players and then are deselected because they don't fit into the jigsaw." The need for effective social functioning during tournaments was highlighted as a reason why social functioning was valued so highly; *"And equally obviously, [. . .] they go to the Junior World Cup and things like that, and you're away for three weeks. So you could be with the same people for a long time".* The desire for players to behave in a prosocial manner towards one another and staff is not purely about creating a healthy team environment. Research has shown that higher levels of perceived antisocial behaviour, the lower the perceived task cohesion and positively predicted athlete burnout (154). This emphasises the need for effective social functioning between teammates outlined by Participant 8, particularly when working together in a limited time frame to achieve a shared goal (Junior World Cup). When coaches were perceived to create a mastery climate, prosocial behaviour has also been shown to facilitate increased effort, perceived performance, commitment, and enjoyment (155–157). Further, studies have linked prosocial behaviour between teammates and performance in simulated competitive sports conditions, suggesting levels of prosocial behaviour may directly affect performance (158).

Character as a concept, was most commonly used as a term which encompasses seemingly all aspects of a player's psychology. When asked to speak on the importance of character in comparison to technical, tactical and physical abilities Participant 8 inadvertently began referring to personality; "*I think it depends on who you ask on that one [. . .] I suspect if you talk to the u20s coach, he might say that getting on, you know, personality wise might be more important*". Despite being questioned directly about the importance of character, the participant uses character as an overarching term that refers to the psychology of the player. Participant 4 further highlights the prevalence of character as an umbrella term to describe the psychological aspects of a player. When speaking on the culture-character interaction they said;

"A bit of both...Again, it's very hard to plan to develop a culture. There are so many variables within it.[. . .] If you can articulate it well, and the players in particular understand it and can articulate it to fellow players, new ones coming in, then it's a lot easier. You can then start to assess and you can start to look at players through psychometric tests and other methods to find out how best your player that you're looking at or the players, if you've got one position to fill up and several candidates, it might be best suited to looking at off field psychometric testing or cognitive ability and looking at different scores across resilience, personality profile questions. It's all considered in the top teams to make sure that it's somebody you want."

This is another example of a participant being asked to discuss character and uses it as a term to describe the psychological aspects of the player; "mindset" "attitude", and "personality" were other terms used when participants were directly questioned about character. As previously mentioned the concept of character is complex and influenced by the context in which it is discussed (58,59) and this is clearly reflected in the participant group. There existed no universal understanding of character within the sample, potentially creating problems applying their understanding in talent identification settings, a view shared by Participant 5;

"So it's interesting when you define it and use it (character) as a yardstick, then you have to be really careful what you're defining. If you can't define something, and coaches are saying, Yes, that's really important. That's an interesting perspective, You know? When a coach says yes, I look at the character of the player, even formally, then I really would worry. I would worry because they're using something but they can't define it."

This was a unique viewpoint that was not shared by other participants, who differed in their understanding of character and saw value in its application in talent identification. Interestingly, Participant 5 did not truly dismiss the concept of character saying; "Personality, though, is a core component in influencing maybe, how you are perceived as a character." This participant takes the view that personality decides and individuals' preferences, and it is this which drives behaviour. Character, in this understanding, is therefore not something that can be 'shown' but something which is perceived by others based on behavioural observations. Modern personality science is rooted in Jungian psychology, this participant's understanding of character is most similar to the 'persona' (159). An idealised identity which is projected to others, it is influenced by an individual's perception of the behaviours needed
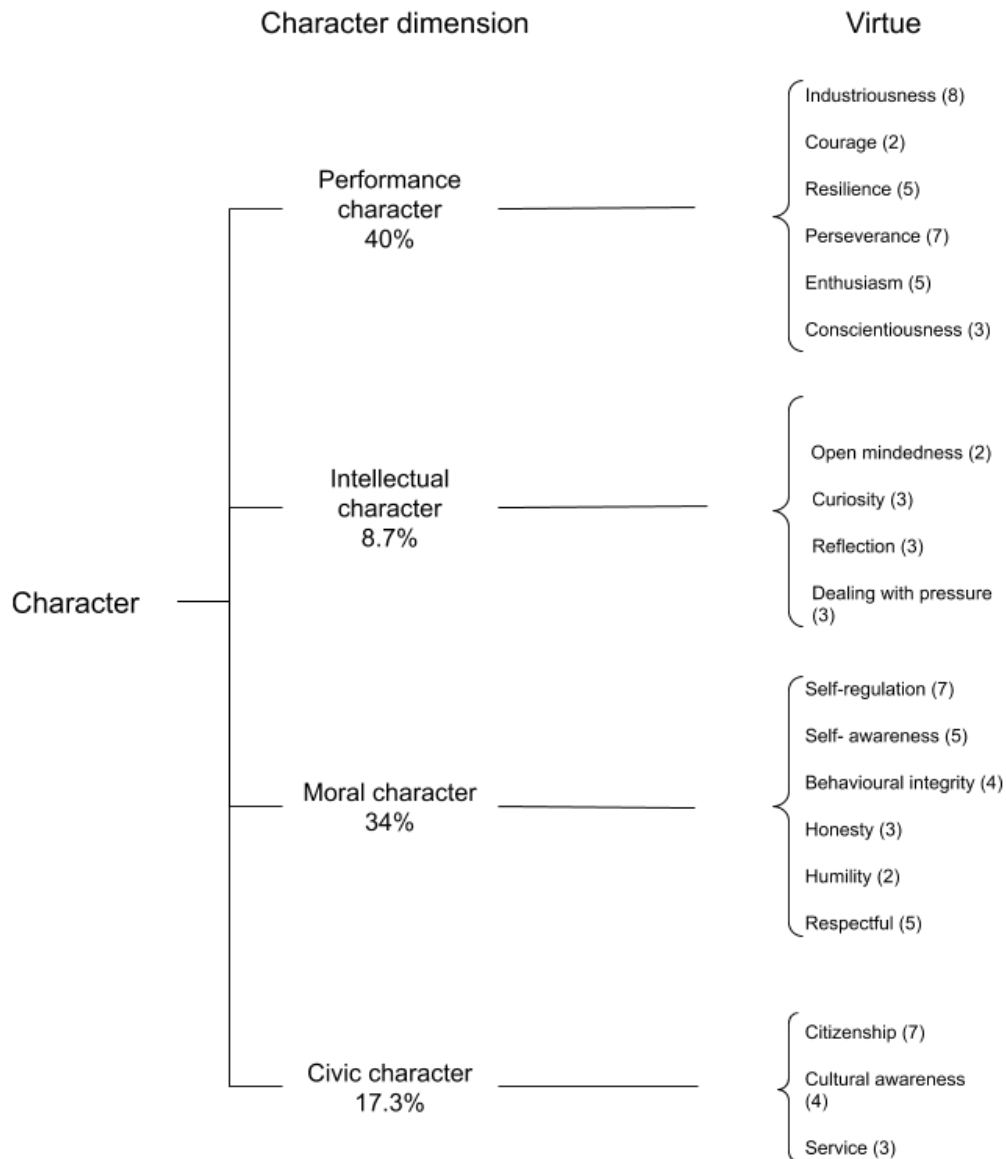
Figure 3. Content Analysis Hierarchical Results Diagram - (Percentage indicates share of total codes each character dimensions variables obtained)

to be effective in a specific context (160). Although this interpretation of character differs from those taken by the participants of this study and academic character research (7,57), it implies that players may attempt to display an idealist version of self, based on their perceptions of the behaviours coaches and selectors find valuable.

Further to gaining an insight into how character was understood, the study highlighted the aspects of character valued most by those responsible for talent identification. A neo-Aristotelian virtue ethical account of character was adopted and underpinned by a multidimensional account of character proposed by Lightshields (7). The dimensions of character are as follows: performance character, intellectual character, civic character and moral character. These dimensions will act as a framework for the most important aspects of character to be discussed within. The percentage of codes relating to the virtues within each dimension of character was used to determine its relative value to the talent identification process (Figure 3).

Aspects of good character in the talent identification process

Participants were asked to detail particular aspects of character most valued in rugby union talent identification settings. Aspects of character will be organised within the four dimensional of character stated in the previous section. Findings will be presented using direct quotes and a hierarchical tree (Figure 3) which has been organised into virtue and character dimensions.

Performance Character

As defined by Lightshields "performance character refers to the dispositions, virtues, or personal qualities that enable an individual to accomplish intentions and goals."(7). It includes virtues such as; perseverance, resilience, diligence and all relate to a purist of high-quality work and effort. Those with a highly developed performance character will take great pride and continually strive to improve in their work, the essence of this has

been described as an *ethic of excellence* (161). Interestingly in an Aristotelian virtue ethical account, the word virtue is used to mean an excellence, therefore performance character virtues relate to the ability of the individual to improve other virtues, making it unique from the other dimensions of character. Performance character virtues allow an individual to effectively exercise autonomy, however, unlike moral virtues, performance virtues cannot be viewed as intrinsically good. Performance virtues can only be considered 'good' when the goals they are serving are also 'good'. If one utilises a performance character virtue in the pursuit of a dishonourable action then it cannot be considered as intrinsically good, unlike moral virtues (7). As shown, 40% of all codes were related to performance character virtues, making it the most discussed dimension of character by participants. The following section will present the aspects of performance character valued most by the participants using direct quotes and comparison with relevant literature.

Industriousness

Although the term industriousness draws connotations of 18th century smog filled factories, it was first considered a character virtue by the Romans who knew it as industria (116). It was a virtue often attributed to the political elite for remarkable civic service, however, this study will define Industriousness as an individual's desire and capacity for hard work (162). It is of note that this definition focuses on the energy given to complete a specific task rather than the competency or meticulousness the task is completed with (7). Industriousness, or work ethic, as it was commonly referred to by participants, was identified as one of the most important aspects of a player's character. The importance of a good work ethic was highlighted by all but one participant, with a total of 39 separate references being made across the interviews. This was the most discussed aspect of character and seen by multiple participants as one of the most important character virtues a player could possess. When asked to describe their ideal player in terms of character, Participant 6 said;

"I think if I was heading to distil it down to the ones that are kind of non-negotiable, it would sort of be around respectful, team-first, honesty, integrity, and work ethic. Work ethic is the one for me, it's certainly the one for me when I'm out looking (for players)"

Interviews conducted with 15 academy directors/head coaches of English premiership rugby academies, found that 12 directly stated the importance of a positive work ethic in a players ability to succeed in a talent development setting (34). Further, two separate case studies conducted in New Zealand, of provincial rugby union talent identification practices, found industriousness/ work ethic to be one of the key components of a player's character that was considered when being assessed in a talent identification setting (35,37). These studies detail an explicit directive from the national governing body (NZRU) and the individual provinces, to judge a players work ethic when selecting for entry into talent development programmes. The definition of a 'good work ethic' varied slightly between organisations but a common focus was placed on; the individual knowing and demonstrating hard work and application in rugby, but also in other aspects of their lives, for example, schoolwork (35,37).

The use of a player's effort in school as a method to infer industriousness, was common among the participants with four participants directly citing it as a marker for industriousness. This was stated most simply by Participant 9; "So the fact is , if he's rubbish at school... Irrelevant. Irrelevant *if* he's got the right attitude." As Participant 6 put it, school at that age "that's their job, that's their nine to five." This view demonstrates that these participants do not care about an athlete's academic attainment, if they are showing the required effort, or 'attitude'. The importance placed on industriousness in school shows implicit support for the theory of learned industriousness (162,163). The theory of learned industriousness is centred around the idea that reinforced high effort can result in a transfer of said high effort to other tasks. When applied to the current study, the participants clearly believe that if players are industrious in school, this can be transferred into other aspects of

their lives. The reverse is also true as players could apply their industriousness in rugby into academic pursuits, this was best expressed by Participant 3;

"I've seen straight edge students who are doing as I said three to four A- levels and still get B's still get A's still get A stars, and yet they might be the best player. And you're thinking, actually, he gets it. He understands it and he understand if he works hard at rugby. He understands why he's doing it. He's improving just the same as if he's in math or science or English or geography."

Further implicit support of the learned industriousness theory by the participants was found as Participant 6 suggested industriousness could be learnt at a young age and that could be seen in certain players; "I think things like work ethic you can see from a relatively young age a kid that you know, had that ingrained in them, they know the value or they see the value of hard work and putting effort in". Support for the theory of learned industriousness appears to be widespread by key stakeholders in rugby union. Interviews conducted with experienced Australian coaches found they believed in the transfer of effort from one domain to the other (164) .This shows that those involved in talent identification in rugby union regularly use effort applied in other domains of a players life (most commonly schoolwork) as a marker for industriousness when selecting athletes into development programmes.

Industriousness was seen by participants as a discriminating factor between athletes that progress on to the upper echelons of the sport and those who don't. When asked on the differences between players that reach international level and those who don't, Participant 6 said;

"All those that have gone on to international or super rugby level, what sets them apart, you know, is the willingness to work harder than anyone else. You look at Player A. I remember watching him watching him fitness test and strength and conditioning coaches sort of saying: .'Here comes the freak' you know? He knew what the test was, how it should go and degradation should take place over a certain period of time. But it was almost like he was trying to beat the fitness test. It's like a video game, trying to clock a game, that was his mindset."

The idea of being able to differentiate between those who will go onto the top level of the game (and those who do not) based on levels of industriousness has been seen elsewhere in the literature. A study using experienced coaches found that they believed that a positive work ethic was needed to produce 'great' players (164) supporting the view taken by the participants of the current study. It is clear therefore, that those responsible for talent identification in rugby union value the industriousness of a player very highly and make selections into talent development pathways based on this

Resilience

Much like the concept of character, the term resilience is frequently defined differently based on the historical and sociocultural context in which the research is being conducted (165,166). However, a critique of definitions, concepts and theories underpinning psychological resilience highlighted the importance for researchers to be sensitive to the context in which resilience is being defined and justify their definition accordingly (165). Therefore, this study will take Fletcher and Sarkar's definition of psychological resilience as; the role of mental processes and behaviour in promoting personal assets and protecting an individual from the potential negative effect of stressors (167). In more lay terms resilience is often seen as the ability to 'bounce back' from failure, a viewpoint supported by Participant 4;

"So you want performance to increase and the mistakes to reduce, but you want to create an environment where they can make mistakes; and resilience for me is the ability to bounce back from those defeats and those mistakes, to embrace and say, okay, I'm better than that, and if I'm not better than that now, I will be by understanding what I've done and how I can improve."

Resilience was found to be valued highly by the participants of the study with 5 participants directly citing a player's resilience as being important 15 separate times. This is supported by current rugby union literature in which resilience was seen as key to players to cope with the demands of the development environment and could be used to differentiate between those who progress and those that do not (34). Further support for the importance of resilience in rugby union talent identification can be found in the NZRU's interpretation of character which includes resilience as one of its 5 values (35). They require regional/provincial selectors to conduct interviews with prospective players and use this to assess their perceived level of resilience, despite research highlighting the potential pitfalls of this exercise (168). Much like industriousness, high levels of resilience has also been highlighted as necessary to be a 'great player' with elite coaches and eight world cup winners naming it as vital to success at the elite level (164,169). Further support for the perceived value of resilience in potential future rugby players was shown by Participant 6, who when asked to describe what they perceived to be 'good character' to be; *"Resilience is another one [. . .]which is kinda an overarching aspect to character, you know do they bounce back from those initial setbacks and failures?" Or are they someone who you know has a very fixed mindset".* While the common understanding of resilience in this study was concerned with dealing with failure, participant 3 showed more nuance in their view of resilience;

"I think as well, we always talk about resilience, dealing with failure. It might be that I'm getting it right and I'm getting it right, because I've got a good coaching staff. I've got a good attitude and approach and I understand what I'm doing, but I'm having quite a lot of success. And I might be winning the gold medal, and I might be playing well, I might be a seven, eight out of ten every week, and then I do produce a nine out of ten or a ten out of ten performance, but I can then manage that. I.e. that I don't get too big for my boots. I don't get rest on my laurels and I'm like look; everything that's getting me to this stage. I need to keep doing it."

This view of resilience was unique among the participants of the current study, but it shows an understanding consistent with the definition presented in this study. This is because continued sporting success can place different pressures on the athlete which failure and setbacks do not (170). It is therefore important for practitioners to understand resilience as not merely an athlete's ability to cope with significant life events (e.g. large setbacks/failures) but coping with ongoing daily stressors faced by the athlete (e.g. pressure from continued success) (171). Once again, a player's perceived level of resilience was seen as a reason not to progress or be able to differentiate between those who go on to achieve from those who don't. However, the way participants formed a view of a player resilience, potentially raises some issues regarding player welfare. This is because participants had experienced players regularly presenting with small injuries when faced with challenging environments, Participant 6 stated;

"You'll see guys shy away from challenge and that could present itself in any way….it's the old tight hamstring when it comes to running a running a Yo-yo, whatever it is, they tend to give up and they don't have the resilience and they don't persist like the people with the growth mindset"

This statement treads a fine, yet understandable, line faced by participants who have to effectively balance player welfare while maximising a players potential through systematic exposure to appropriate training stimuli (172). However, as Participant 6 went on two say; "If it was an easy place to get by, in professional sport then we would all be in professional sports men wouldn't we". A physically gruelling training session would be considered as one of the ongoing stressors in the life of an rugby player and therefore practitioners need to be aware of why an athlete may present small injuries when faced with

a challenge and attempt to understand the motivation behind such avoidance behaviours (34).

Overall, the view of resilience as important when selecting players into development programmes seen in this study is consistent with the research. Hill et al interviewed 15 English premiership academy managers /head coaches, who highlighted resilience as a key requirement for players as it enabled them to cope with the demanding talent development environment and promote perseverance (34).

Perseverance

Perseverance and resilience are two closely related dimensions of character, and as mentioned above, perseverance is facilitated by an individual's levels of resilience. While resilience is concerned with the ability to cope with the effects of negative stressors, perseverance is concerned with the effort exerted in the face of challenging situations (34,173). Therefore, this study will define perseverance as the continuous application of effort to a task, despite challenges or setbacks. It was found the participants of this study placed value on how persevering a player was perceived to with 12 direct mentions across the data set. Although participants often used the term grit to describe persevering behaviours, which in the scientific literature is defined as the combination of perseverance and passion (174). However, there existed an understanding by the participants that it was not enough to be able to cope with setbacks, there was a need for players to be able work towards overcoming the setback. Participant 6 said;

> *"So that ability to take a couple of setbacks and experience failure, but to frame those failure up to a chalk them up to a learning opportunity and actually go away and learn form that [. . .] the ones that have the ability to strategize and problem solve they can do it a lot quicker"*

Research in rugby union has shown that, like the current study, coaches and other stakeholders value perseverance in players, however, the terms grit and commitment are used interchangeably to describe persevering behaviours (34,35,37). Regardless of the

terminology, the benefit of sustained effort towards overcoming tasks is clear as setbacks around selection or injury are almost certain to occur over the course of a playing career. As Participant 1 put it:

"And we do talk to the kids about that. You know, can you handle getting told your dropped or you're not selected, or your tackle technique is rubbish? So you have be able to go back to the drawing board and work to do it all again"

Three of the current study's participants included curious and persevering behaviours with a 'growth mindset' which was directly stated by two participants who highlighted behaviours such as seeking feedback, learning from mistakes and enjoyment of challenges. However, as exemplified by Participant 2, most participants placed emphasis on the specific qualities which may be included within a 'growth mindset' rather than labelling it as such; *"I wouldn't talk explicitly using things like Dweck and stuff on growth but like when I'm standing at the side of the pitch, and the first team coach says to me 'Player A can't do this' . I'll just say….yet."* This shows an understanding of a view of talent as changeable as opposed to fixed but does not place over emphasis on the theory of a growth mindset, a view which was shared by the participants of Hill et al. who emphasized the qualities which lead to success over the theory.

As mentioned previously, resilience and perseverance are heavily linked, and it is important for key stakeholders of talent identification in rugby union to understand their relationship. Resilience allows the athlete to reframe negative stressors in a way which allows perseverance towards overcoming the challenge caused by the stressor.

Intellectual character

Intellectual character can be defined as "the overarching conglomeration of habits of the mind, patterns of thought and general dispositions toward thinking that not only direct but also motivate one's thinking-oriented pursuits"(174). Six dispositions have been identified as

being key to intellectual character; curious, open-minded, sceptical, strategic, reflective, and truth-seeking (7). Intellectual character virtues were the least valued virtues by share of total codes with on 8.7% being related to the importance of intellectual character virtues.

Curiosity

Curiosity has been called the psychological manifestation of wisdom (175), however, as this study takes multidimensional virtue based approach to character and will take the definition of curiosity as; the disposition of wanting to know or learn more about a wide range of things (176). Much like the other aspects of character identified by the participants of this study, they were described in terms of the behaviours observed from which aspects of character can be inferred. In the instance of curiosity, participants stated the importance of curious behaviours but did not necessarily define them as curiosity. For example, three participants spoke at length about the importance of a player actively wanting to learn and seeking support on how to improve. When asked if they felt any aspects of a player's character were more important than others, Participant 8 said;

"Hmm, that's an interesting one. I think it depends on who you ask on that one I think it depends on who you are talking to and their position will be different. But for me I'd be more interested in, you know, are they keen to learn?"

A similar emphasis was placed on curious behaviours by the participants in Hill's study in which 'asking questions and taking responsibility for development' were noted as valuable traits in players entering rugby talent development programmes(34). The importance of players actively seeking knowledge or opportunities to improve appears to be common across the rugby union talent identification. One of the current studies participants used the term 'coachability' to encompass these curious behaviours. Participant 6 stated;

"That said coachability [. . .] as the name obviously suggests is their ability to be coached and their willingness to learn. Sometimes, they're gonna need some prompting but, you know, as opposed to probably the old school didactic way of just firing answers at players, coachability is a willingness to learn and take advice on."

This view is consistent with the NZRU's criteria of good character in which the coachability of the player is seen as integral for a player to play at international level (37). Additional research conducted on provincial level rugby found that another term was used to describe curious behaviours coaches made judgements about, this was 'self-reliance'. The participant of this study who placed value on players being self-reliant, explained it as the player taking responsibility for their own development and seeking ways to improve (35). This highlights that across rugby union talent identification, key stakeholder place value in players demonstrating curious behaviours towards their own development but use different terms to describe them such as; self-reliance, coachability or 'willingness to learn'.

Curiosity was seen by some of the participants in this study as a reason a player may not progress or not be selected into a talent development programme. When asked to elaborate on reasons they may be hesitant about selecting a player, Participant 8 said;

> *""Fundamentally if they are not willing to learn; if there's an air of arrogance about what they are. Then you know generally speaking that they will fail"*

This is further evidence to support the importance of a players curiosity in rugby union talent identification, as Baumgarten said; an important feature of curiosity is its fecundity, that is, it leads to the development of other virtues (176). While it does not guarantee development, it implies a level of care and concern being taken towards the object of curiosity. Therefore, if a player is curious towards their own development it implies a level of concern leading to a two-way approach to their development.

Self-Reflection

The process of self-reflection has existed in philosophical and psychological discourse for millennia. Buddha identified self-reflection as the key to self-understanding, yet it is fundamentally difficult to define as the process occurs internally and cannot be observed objectively through experimentation (177). Sports psychology researchers have built on

Zimmerman's (2000) (178) theory to define self-reflection in sport. It is viewed as the ability of individuals to a) critically value their learning process by evaluation of previous performances and b) use new information in subsequent learning situations to improve performance (179). This study will adopt this definition when discussing the virtue of self-reflection. Three participants of the current study stated they felt it was important for players who are being considered for entry onto the development pathway to be self-reflective. When asked to on what they felt constitutes good character, Participant 3 said:

[. . .] "Erm...reflection. Which is a bit of let's watch the game back. Let's watch my clips back. Or I've been working on this skill for the last six weeks. Let's look (back) at six weeks ago when I was doing it.. My follow through wasn't very good. But now look at my follow through it is very, very good"

This view was supported by talent identification research in rugby union which found key stakeholders saw value in a player's ability to self-reflect. It was further suggested that staff members should avoid over-supporting athletes on the development pathway as the inevitable challenges that occur can provide valuable opportunities for reflection and growth by the athletes (34,131). By observing how athletes respond to challenges and reflect upon ways they can adapt their behaviour or attitude to a problem, it can facilitate enhanced support from coaching staff leading to an athlete better equipped to cope with the stressors of the development pathway (34). This view of self-reflection being a process that needs to occur naturally in a player was supported by the current studies participants, when asked to what extent they believe aspects of character could be developed, Participant 8 said;

"Whether you can actually make them more positive or make them more reflective or things like that...I'm not sure because I think you can show them the doors to those things but I don't know whether you can actually pull them all the way through."

Theoretical and experimental support has been shown for self-reflection post sporting performance being beneficial for the development and growth of athletes (180,181).

Moral character

Moral character is perhaps the dimension of character most commonly thought of when discussing a virtue-based account of character. It has been defined by Berkowitz et al. as "the composite of those characteristics of the individual that directly motivate and enable him or her (sic) to act as a moral agent" (182). Put simply, moral character is the disposition to seek what is good and right in the world (7). In situations of choice and conflict, a person can be considered moral if they give priority to moral over nonmoral considerations. This can become complex when focussing on specific virtues and attributing them as 'good' as this deals with the interaction between the individual and the context. Shield's presents the example; honesty can be considered as good, but a moral person may act dishonestly in the form of a 'white lie' to protect others (7). Moral character virtues were shown to be highly valued by the participants with 34% of codes relating to the importance of moral character virtues. The study has identified three aspects of moral character which were deemed important to rugby union talent identification.

Self-regulation

This study will take the definition of self-regulation in sport as the self-initiated thoughts, feelings and actions used by athletes to attain a variety of goals (183,184). The importance of a player's ability to self-regulate was highly valued by participants. Seven participants highlighted self-regulatory behaviours they felt were necessary for players to demonstrate to increase the likelihood of being selected onto and navigating talent development pathways. The most common of these behaviours valued by participants was punctuality, but other recurring themes outlined included; organization of kit, managing one's sleep and nutrition and effective time management (particularly the balance between education and rugby). Participant 3 elaborated on the practical effects a player can have by being late;

"But it's all this behavioural stuff that adds to the character; timekeeping, punctuality, awareness, application. Knowing that my actions affect your actions. If I'm late for practice, well, it means that the session starts late and you don't get as much time"

It is clear from a practical standpoint the value of having players that are punctual and can self-organize .It has also been linked with athletes who can navigate the development pathway more successfully than others who cannot regulate their actions as effectively (34). Self-regulation links heavily with the virtues of curiosity and resilience as players must negate the potential negative effects of daily stressors (such as being on time, making healthy nutritional choices) and regulate their behaviour in such a way as to take responsibility for their own development. Research has shown a positive link between a mastery climate and self-regulation processes, which in turn, can facilitate increased levels of effort and feedback seeking behaviours (183)

Honesty

When discussing moral character it is almost certain that honesty will be presented as a virtue (185) and simply refers to the act of being truthful and free from deceit. Honesty was valued by three participants and was seen as an important aspect of character that they would consider before selecting an athlete onto the pathway. When asked to describe what they perceived as 'good character' Participant 6 said;

"I think yeah [. .] integrity and honesty, you want guys that when you're out on the field, and you're asking a lot of guys when they're on the playing field. They're gonna respond and they're gonna, you know…..if you can try and kid other people, then you will probably kid yourself as well. And you might come back to the effort you said that you put into certain areas and the training and all the preparation and recovery and so forth. So honesty and integrity are fairly significant"

This statement shows a similar thought pattern that underpinned the All Black's mantra "better people, make better players" as it was believed that players with poor character would wilt under the pressure when on the field (1). It is unclear of any direct mechanism in which honesty would facilitate better performance and it has been posited that

honesty is less emphasized in team sports as it less likely to lead to winning (119). However, participants highlighted the need for players to be honest about their own actions towards development which directly links it with self-regulation and curiosity. Participant 6 speaking on dishonesty they have observed in practice;

"They're not maliciously dishonest, you know, they're not a liar, thief, criminal or anything malicious like that. But, you know, the kid that doesn't do the work when there's no one hovering over them. But you know, they might say they have. It's dishonest and, you know, just those sorts of things. So that's, you're lacking in integrity. You haven't done what you said you're going to do. You've been a little bit dishonest about it"

There exists limited support for the importance of honesty with the rugby union talent identification, with key talent identification stakeholders listing honesty as an aspect of good character but failing to elaborate further on the reasons behind this (34,35,37). Dishonesty, such as that highlighted in the above statement was seen as a major 'red flag' which would cause serious doubt over a player's selection into the talent development pathway. When asked to give his thoughts on the now famed 'No dickheads' policy (1), Participant 1 began by saying; "*we tend to find the dickheads weed themselves out*" and then went on to give an example of when they had to remove a player from the pathways; "*You know we met this one kid he was telling us lies, so there is your honesty, [. . .] they put themselves first not the team, look i don't need to go into details but like bro..you're gone*". The character virtue of honesty was viewed as important by three of these studies participants. Where dishonesty was encountered, it would prompt the participant to either not select or remove a player from the pathway. Dishonesty was seen as a negative character trait, yet dishonesty can come in many forms such as; lying, cheating, stealing, promise-breaking, and misleading (186). Typically cheating behaviours in sport are the focus of researchers (187) yet from the above statements it is unclear whether this form of dishonesty would also be considered a red flag.

Self-awareness

Importance was also placed on potential players having good self-awareness; with seven participants directly highlighting its importance. Much like resilience and perseverance, self-regulation, self-reflection and self-awareness are closely linked but distinct from one another. The current study defines self-awareness as the process of an individual making themselves the object of their attention (188) and includes the mental processes of mindfulness and rumination to construct an understanding of one's self (189). It differs from self-reflection in that self-reflection refers to the action of reflecting internally, self-awareness is using this information in order to understand one's self. As such self-reflection is needed to develop self-awareness It has been considered a key component in managing psychological distress and facilitating personal development (190) with potentially theoretical backing for a positive link between self-awareness and task persistence (189,191). When asked to rate aspects of character they valued the most in a player, Participant 1 said;

> *"I think something around...how to just be the best version of you, regularly. So probably some stuff around confidence or self-belief or whatever that might be, whatever language people use around that. And I wouldn't understand that many fancy words. What I would definitely ask myself to be able to do is to interact with people (as a coach) and help them understand themselves better and can give them support in getting better at stuff"*

It was a player's ability to understand themselves, which was seen as critical by this participant in facilitating the development of the athlete. This is supported in the current rugby union talent identification literature. It has been identified as a key psychological characteristic of developing excellence (PCDE) in sports performers (24,25,192) and further a key characteristic of players who navigate rugby union talent development pathways more effectively than their less self-aware counterparts (34). Self-regulation and associated virtues, such as self-awareness and self-reflection have been discussed in relation to players who were more likely to become elite and potentially outperform other elite players who did not demonstrate these characteristics (131). Interestingly, self-awareness was identified as

an aspect of leadership within NZRU talent identification criteria. It was stated that self-awareness gave a player the ability to 'lead themselves first, then have the ability to lead others''. This classification of self-awareness as a virtue important to leaders has theoretical support within occupational research, with leaders that are aware of their actions being positively linked with greater leader effectiveness and greater follower satisfaction (193). The inclusion of self-awareness as important criteria for talent selection, combined with the findings of the current study show that self-awareness was highly valued by those responsible for talent identification in rugby union. Like other virtues highlighted in this study, stakeholders should look to develop self-awareness as it can facilitate the acquisition and growth of other virtues such as self-reflection and self-regulation, which have been shown to be important in successful progression of rugby union development pathways (34,189).

Civic character

Civic character is the passion and desire for public good (7). It is defined in the literature as "the set of dispositions and skills that motivate and enable an individual to effectively and responsibly participate in the public sphere in order to serve the common good" (194). It has been said sport offers the requisite conditions of emotionally and socially rich experiences to make it an ideal setting for nurturing and displaying civic character (6,195). Codes relating to the importance of civic character virtues represented 17.3% of total codes in this study. The following section will discuss aspects of the two civic character virtues identified as being valuable for rugby union talent identification.

Citizenship/civility

The virtues of citizenship and civility have been long debated within psychology and philosophy with classical thinkers such as Socrates and Plato associating the virtues with a transcendent desire for the common good (117). Whereas modernist thinkers such as Hulme and Hobbs argued from a position of self- preference and praise (196). By their very nature these virtues are difficult to define, as for one to be considered a good citizen they must

behave with civility. This means in accordance and respect with social norms such as politeness and mannerliness. As such, the context in which the individuals are being observed will directly impact whether their actions are perceived as civil. Therefore, in the context of rugby union talent identification, this study will view civility as behaviours which are consistent with cultural norms and values of the team and work to further the common good of the team in pursuit of a shared goal. However, the social norms which dictate whether a behaviour could be considered civil will ultimately differ depending on the unique culture of the team. Similarly, citizenship, in this context, can be seen as the embodiment of these behaviours. Findings from the current study show that when selecting potential players participants placed importance on a player's ability to be civil and work with their teammates toward a common goal and understanding that players actions should benefit the team first and then the individual. Seven of this study's participants highlighted a range of civil behaviours, which they believed to be beneficial to a player's ability to function in a team environment, when asked their thoughts on the statement 'better people make better players' Participant 9 stated;

"Well it's an opinion as opposed to something that is evidenced by a pile of academic research. It's just really well rounded humble young men, who are good role models, who are popular with their teammates. Team members that become popular off the field become popular on the field and generally, these are the ones that buy into the culture which is important for a successful side - and they're just good people."

The participants felt that it was vital for a player to be able to interact socially with others and implied a link between popularity within the team and playing ability. It is logical to assume that within a sports team, players who can interact more effectively and value the needs of the team above their own could be beneficial in fostering a more cohesive environment and perhaps improving performance (197). This assumption has theoretical support from occupational psychology which has shown a positive link between increased organizational citizenship behaviours (OCB) ;seen as seemingly insignificant voluntary actions directed towards the good of the organization, and overall organizational cohesion

and effectiveness (197) .While cohesion does not necessarily predict performance in team sports, it is a desirable trait most coaches to aim for (198). There exists limited research applying OCB to team sports, however, promising evidence has suggested a positive link between OCB particularly altruistic behaviours, to be a predictor of team cohesion and performance (199–201). This lends increasing support for the importance of the virtue of citizenship in rugby players, in particular the value of altruistic behaviours. This is reflected in the NZRU's definition of character, with altruism being one of the 'professional qualities' players should be assessed on, implying that acting in a 'team first' manner is seen as a prerequisite to being 'professional' (37). In a case study of a provincial rugby union in New Zealand, it was found that the 'selflessness' of the player was a major aspect of character that the coach considered when selecting players. The participant in this study suggested, much like 'good character', players who were selfless off the field, would translate into selflessness on the field and in turn improved performance (35). This shows that players would be considered good citizens of the team, if they acted altruistically and selflessly. This has been shown in the current study and wider research to be important to talent identification stakeholders when selecting potential players.

Participants of the current study also highlighted players who acted with incivility or were not seen as behaving altruistically for the good of the team would be less likely to be selected or ultimately removed from the development pathway. When asked to elaborate on the 'no dickheads' policy (1) and any other aspects of a players character that would put them off, Participant 1 highlighted the negatives of a player putting themselves before the team;

"We can detect character flaws within 4 weeks. So they come into a full time program to become a professional player and four weeks later they are not in it anymore [. . .] You know we met this one kid he was telling us lies, so there is your honesty, he had no courage, no fortitude, they put themselves first not the team, look i don't need to go into details but like bro..you're gone."

Support was found for incivility as being a red flag for rugby union talent identification stakeholder. Participants in Hill et al (34) outlined the importance of players having good communication skills on progressing through the talent development pathway and further poor communication skills were seen as a major reason why a player would not succeed in a talent development pathway setting (34). A point which was supported by Participant 8 who said;

"There have been players that I've seen who have the ability, that I was talking about before but haven't functioned well, because they don't get on with coaches or the players, and they are deselected because they don't fit into the jigsaw"

The virtue of citizenship and the importance of acting with civility is clearly important within team sports, especially when characterized by voluntary behaviours that are done from the good of the team. An increase in these may potentially lead to improved cohesion and possibly better performance for the team, although more needs to be done to assess this relationship in rugby union (202). The specific civil behaviours which would contribute to being a good citizen of the team are dependent on the social norms of the team, however altruistic behaviours appear to be considered important throughout rugby union talent identification and development pathways. Finally, participant 8 eluded to a more practical reason why the civility and citizenship of a player would be valued;

"They (senior players) need to be able to function together in a very short space of time because you only have a few days before you're playing internationals. And equally obviously, like the U20s go [. . .] to the Junior World Cup and things like that, and you're away for three weeks. So you could be with the same people for a long time. So that's one part of the character that people look for"

Cultural awareness

Team culture is a well discussed topic within organizational (203,204) and (205–207) sports psychology. A plethora of research has highlighted cultural awareness as one of the prominent factors in an organization's success. Team culture has been defined in the sports science literature as "A dynamic process characterised by the shared values, beliefs,

expectations and practices across the members and generations of a defined group" (208). Using this definition, cultural awareness in the present study will be seen as the degree to which an individual understands these values, beliefs, expectations, practices and social norms of the group. Therefore, it is heavily linked to the virtue of citizenship as for an individual to be a good citizen of the group they must first act with civility, meaning in accordance with the social norms of the group. Clearly to do this, an individual must have some awareness of the norms within the group to adjust their behaviour accordingly. Four of the current studies participants identified cultural awareness as an important aspect of a player character they would consider when selecting them into talent development pathways. Theoretical support for this has been shown in other domains with congruence between individual and group values seen as facilitator in creating a moral atmosphere (209). Research in occupational psychology has highlighted the importance of organization-person fit as a strong predictor of numerous performance and satisfaction based outcomes (210,211). When asked whether the team culture shaped the character of the players within it, or the character of individuals in the team shaped the culture, participant 4 said:

"A bit of both...Again, it's very hard to plan to develop a culture. There are so many variables within it. However, good management does accelerate good luck. So if you understand your own culture first and what you're trying to achieve, whether it might be something as simple as we want, you know, we want honesty, we want a work ethic. I don't know whatever your key areas are. You agree if you have buy into that, if you could articulate it well, and the players in particular understand it and can articulate it to fellow players, new ones coming in, then it's a lot easier"

Here the participant highlights the importance of the players being able to understand the team culture and articulate that to the rest of the group. This is supported directly by team culture research conducted in rugby union. A case study methodology was employed to track and identify factors which contributed to a league winning season of a professional rugby club in New Zealand. One of the key findings from this study was that, once a strong organizational culture had been developed, the key determinant in performance was the degree to which players could identify with and understand the team culture (207). The study

goes on to discuss the importance of 'synergy' which they define as a strong sense of shared purpose in the group and has been shown to be linked with increased productivity in occupational psychology, further supporting the importance of the ability of players to understand their team culture (212). Further research conducted in sport specific contexts, has shown team culture to be a key contributor to success and even the differentiating factor between successful and unsuccessful teams when controlling for talent of team members (206). Lending additional support for the importance of cultural awareness in potential players. It has been suggested however, that sports organizations are in danger of failing to embed their core values within their culture and instead transpose their values without considering the athlete's current internalised values (213). This was cited briefly by Participant 9; *"The people at the NGB have got their buzzwords about respect, teamwork, honesty [. . .] they are buzzwords and to a certain extent cosmetic. But actually, those values aren't just made up.If players stick to those values, you get good people."* In this case the participant acknowledges the potential the values meaning to become lost in the aesthetic value they may bring for the NGB. However, they quickly pivot back to the understanding that if players can accept and embody these values they will become good people, showing they value the ability of players to recognize and embrace the culture of the organization. Cultural awareness was not cited directly as important within the rugby union talent identification research. However, the study by Hill et al. where English premiership coaches/academy managers were interviewed did show that participants placed importance on a players cultural identity (34).

Discussion

This was the first study to attempt to understand the conceptualization and application of character in rugby union talent identification from a global perspective. The understanding of character among talent identification professionals in rugby union is highly variable. This is reflective of a wider confusion of the way the concept of character is understood in academia and society as a whole (58,121). Despite the most common

understanding of character being an umbrella term which encompasses all aspects of a player's psychology, there also exists an understanding that character traits underpin behaviour, and this reflects character, a view consistent with the literature (152). Amongst the variance in understanding of character, there was one theme which remained consistent across participants in this study (excluding Participant 5, who rooted their understanding in personality). No participants rooted their conception of character in a virtue ethical account of character but did highlight the importance such as honesty and perseverance. This illuminates the schism that exists in the conceptualization of character between sports philosophers and the applied understanding of character seen in practice (58,129). A consistent theme exhausted of the conceptions of character, eight of nine participants had their own implicit understanding of character, which made sense to them, allowing them to feel comfortable considering a player's character in an applied talent identification setting. The outlier to this (Participant 5) took a view of character that it didn't 'exist' in the sense that it could not be defined and therefore should not be used in practice. The reasoned perhaps as personality dictates preference for behaviour, this might aid in a player being perceived as a character and rooted their understanding in personality, viewing character almost akin to the Jungian 'persona'. This was an interesting perspective and it was unclear how this participant navigated the narrative of rugby 'build's character' put forth by world rugby (11).

By applying a multidimensional version of character to understand the virtues seen as important to rugby union talent identification, this study offered a unique insight into the conceptualization of character in rugby union. Virtues were identified across all four dimensions of character to be important to potential rugby players. Performance character was the most valued dimensional of character with the virtues of industriousness, resilience and perseverance being found to be of particular value by eight, five and seven of participants, respectively. These virtues all relate to the dispositions and qualities of an athlete to accomplish their goals and intentions (7). Valuing these virtues within an elite performance environment is logical, especially when considering the inherent challenges

posed by the talent development pathway (34,131). It is easy to conceptualize how an athlete in possession of high levels of these virtues would be well positioned to navigate the pathway. It is known that academy rugby union players in England can experience highly variable workloads, at the extreme end some players are made to play three games within seven days (214). This can lead to an increased chance of injury which can be a major setback for youth athletes occurring at a time when selection into academies or senior squads. It was in the context of these injury setbacks where the virtues of resilience and perseverance were discussed most by these studies participants. This was to say that participants valued the ability of a player to show resilience when faced with an injury and reframe the situation, and then show perseverance to work to overcome the injury and return as better players.

Resilience is clearly important therefore to navigate the development pathway, and preliminary research has shown support for the efficacy of resilience workshops in rugby union which may offer stakeholders a method to enhance resilience in their athletes (215). However, while enhancing resilience of athletes is a worthwhile pursuit, stakeholders should look to improve workload monitoring for athletes alongside this. Participants of this study almost seemed consigned to the fact that youth athletes were guaranteed to sustain some kind of meaningful injury during their time in the pathway. While it is clearly not possible to eliminate risk of injury, research has highlighted what it termed as 'organised chaos' in relation to player workloads which can lead to a risk of increased injury (214). The relationship resilience has to the virtue of perseverance and in turn is an important one. The virtue of perseverance is concerned with the effort applied in the face of negative stressors and therefore, displayed in reaction to events which likely required a level of resilience to protect the individual from the effect of the negative stressor (165).

Perseverance was seen by the participants as a key skill in overcoming challenges such as being dropped or told a particular skill was not at the required level. It was seen as an opportunity for a player to persevere to improve which in turn would grow and develop as

a player. This has theoretical support, in Collins and MacNamara's work on development pathways which suggested that for skills to be taught and developed they need to be exercised and supported against real-life challenges (131). They went further to suggest talent development stakeholders should introduce a form of 'structured trauma' which can help facilitate positive adaptation to future challenges. Building on this in the context of talent identification, it is clear why key stakeholders value athletes who are resilient and can persevere through challenges, however they should not underestimate their ability to develop these traits in athletes. It has been shown through carefully considering the individual differences bio-psychosocial situation they can develop the virtues needed to increase the likelihood of appraising a stressor as a challenge and overcoming it in the future (131,216,217).

Moral character virtues such as self-regulation and self-awareness were highlighted by the participants as being valuable in potential rugby union players. Interestingly, the second most mentioned theme by the participants was a player's ability to be punctual. The act of being on time has no clear impact on a player's competency as a rugby player yet it was consistently identified as being valuable. Self-regulation deals with a players ability to regulate their behaviour, emotions and direct them to achieve a goal (179,183,218). It appears that by emphasizing such behaviours they are using them as symbolic acts on which to assess a player's level of commitment/dedication to the ultimate goal of becoming a professional rugby player. That is, if players could not be punctual or adequately prepared upon arrival, this was taken as behaviour suggestive of deeper character flaws. However, seemingly tenuous this may have some theoretical support in the literature. Self-regulation has been identified to be facilitated by two other virtues identified in this study; self-awareness and self-reflection (189,219). Therefore, players who fail to effectively self-regulate may also possess deficiencies in self-awareness and reflection that allow an individual to pay attention and evaluate their internal states and behaviours (98). Building on this, stakeholders may be justified in de-selecting players who do not display effective self-regulation. However, like perseverance and resilience, bio-psychosocial and contextual

differences may influence an athlete's development of self-regulatory behaviours and evidence exists to suggest a bidirectional relationship between adolescent self-regulation and social relationships (220). By creating a team culture which fosters high caring positive social relationships between the players, it may be possible to enhance a players self-regulatory ability (221).

Civic character was outlined as an important character dimension by the participants. The virtues of citizenship/civility and cultural awareness were seen as vital character virtues potential players needed to possess. The importance of team culture and the ability of players to identify with that culture was seen by Participant 4 as the most important influence of team success. When relating this to the players, it was key that they could understand and identify with the culture of the team which in this study was seen as cultural awareness. It was highlighted by 5 of the studies participants as an important factor in determining a player's successful navigation of the development pathway. The importance of creating 'synergy' between the norms and values held by the players and the organizational culture have been highlighted in rugby union (207). However, while this may appear simple to create values and norms which players subscribe to, the individual needs to be considered first. The personal values of the individual drive behaviour and goals and are shaped both by preference and behaviour (222).Therefore, if organizations desire players to display specific norms and values they need to provide opportunities for these behaviours to be exhibited which in turn shape the personal values of the athletes (213,221). Regardless of the values, therefore, if stakeholders feel they are valuable and necessary for rugby players to possess then they must provide genuine opportunities to display them if they want players to embody these values and virtues.

The virtue of cultural awareness is directly linked with the virtue of citizenship and civility, as for a player to act with civility they must first understand the values and norms of the organization. A player's civility was seen as particularly important when selecting players into squads who only had a limited amount of time before matches were played such as

Junior world cups. Behaviours which were deemed to 'put the team first' were also highly valued, meaning players acted out of motivation to help the team before helping themselves. The idea of 'team first' was observed in other research in rugby union talent identification (34,35) and has theoretical support for its value in other sports contexts (199,201). These studies suggest that an increase in OCB within teams can lead to increased team cohesion, athlete satisfaction and perceived performance. These behaviours included altruistic and helping behaviours which is suggestive of the 'team first' sentiment presented in this study.

Other behaviours such as encouragement and praise towards teammates, called prosocial behaviours have been identified within the literature as being important to a number of variables (153). When compared to antisocial behaviour towards teammates (abuse, criticism, swearing etc.) and an absence of comments, prosocial behaviour has been shown to facilitate increased enjoyment, effort, task cohesion, performance and commitment (127,155,156). Antisocial behaviours in contrast, have been shown to lead to increased anger for the recipient, reduction in effort and commitment and has been linked with athlete burnout (153,154). The combination of this study's findings with the team culture research clearly shows an athlete's ability to understand the team culture is important in promoting cohesion and increased performance. This works by creating synergy within the organisation and allowing the athlete to function with civility by understanding the social norms of the team (207). Much like civil character virtues highlighted in this study, cultural awareness can facilitate the development of other virtues dependent on the values of the organization they are in. However, the author believes that stakeholders have a majority role by allowing athletes opportunities to display the values described by the organization.

Intellectual character was the least highlighted dimensional of character for potential rugby to possess. Self-reflection was seen by three participants as a valuable virtue when identifying players for entry into the pathway. Self-reflection in sport is the ability of players to critically evaluate their previous performance and learning process and use this information in future situations to improve (179). The process of self-reflection is directly linked with a player's ability to self-regulate their behaviour (189,219). If an individual can be self-aware of

their behaviour and emotions, they can use the virtue of self-reflection to critically evaluate and reflect on their actions. This in turn, allows for players to effectively self-regulate their behaviour, which was seen as very important for potential rugby players to be capable of. It is possible to consider that self-reflection will have an impact upon the perseverance process in athletes. Perseverance deals with an athlete's ability to apply effort in the face of negative stressors to overcome its effects (174). The athlete must first be able to evaluate and reflect upon their emotional and behavioural response to the negative stressors. It is only once a player has successfully reflected that they can begin to persevere and apply effort with the goal of improving. While intellectual character was the least valued dimension of character in rugby union talent identification setting, participants did place value in self-reflection. This was most likely to the importance of self-reflection in exercising other virtues such as self-regulation and perseverance, which were both valued highly by stakeholders in the rugby union talent identification process.

Study Limitations

As noted, the aim of case study methodology is not to directly extend theory but gain deep insight into a unique phenomena or sample. This means findings may lack transferability outside of professional rugby union. Further, there are inconsistencies between nations' talent identification structures. While consistencies can be seen across nations at U18 and U20 level, earlier structures differ greatly. Some nations use the school system as the primary development pathway, while others rely on professional clubs and some combine the two as a means to produce future athletes. This study focused on character in rugby union talent identification, however due to the different structures participants were not asked to specify the stage of talent identification they were discussing. Therefore, applying findings within a specific talent identification setting, may lack validity as the study considered rugby union talent identification from a global perspective.

When contacting potential participants to take part in the study, two nations were not represented which limited the global perspective of the research. Participants who matched

the eligibility criteria from France and Argentina could not be found either due to a combination of time constraints or language barriers. This meant participants from eight nations could be contacted, which motivated the decision to include two participants from England as to gather as much data as possible from two knowledge rich participants. Therefore, the ability to transfer findings to rugby union talent identification programmes from a global perspective may be limited as views of two tier one nations were not heard.

To protect the anonymity of the participants, they were not identified by their respective NBG. By not doing this, analysis was limited as national or hemispheric perspectives could not be assessed and compared. This is regrettable, as research has highlighted performance and organisational differences between the two hemispheres and this would be the first study to compare talent identification practices (237–239). Unfortunately, NGB's did not give permission for their talent identification practices being published meaning conceptualizations of character could not be compared across nations.

Future study

As discussed, personal values are formed as a result of preference and behaviour and while stakeholders should consider the psychosocial and cultural factors which may have influenced the development of these values. Research should seek to investigate personal values of stakeholders to create clearer pathways for alignment between stakeholder, organizational and athletes' values to create a synergistic environment. The development of a rugby specific measure of character would be an important step in allowing researchers and stakeholders to improve practice. By assessing a rugby-specific conceptualization of character, it would allow stakeholders to track changes in virtues over time and assess the effectiveness of cultural and training practices in developing desired character virtues in their athletes.

Another interesting avenue of study would be to investigate the perceived importance of creativity in rugby union players. Interestingly it was not mentioned by any of this study's participants yet, it has been shown in the literature to be valued by coaches and players in

team sports (223). Rugby union is a continuous contact sport with players quickly alternating between attack and defence and places large demands on a player's decision making capabilities (224). Creativity in team sports has been defined as varying, rare and flexible decision making in complex game situations (225) and has been discussed as a character virtue within the philosophy literature (226–228). It is of note it was not discussed in relation to talent identification in rugby union, yet its apparent importance to decision making in team sports makes the virtue of creativity an interesting avenue of research.

Conclusion

This study aimed to examine and understand the conceptualization of character and the virtues relevant to rugby union talent identification. The conceptualization of character was varied but the most participants used it as a board term to encompass a player's psychology and terms such as attitude, mindset and personality were all used interchangeably when discussing character. A consistent theme which ran throughout was, despite the variance in conceptualizations of character, eight participants had a unique internal understanding of character which they were comfortable assessing when selecting potential players. A multidimensional. To assess the virtues highlighted as valuable to rugby union a neo-Aristotelian virtue ethical account of character was adopted and underpinned by a multidimensional account of character proposed by Shields (7).

Performance and moral character were seen as the most valuable dimensions of character with the virtues of; industriousness, self-regulation, resilience, and perseverance being identified most frequently as important to rugby union talent identification. The importance of civic character was also outlined with players needing to be aware of the organisational culture and act with civility if they were to be considered for selection into development pathways. Additional virtues were identified as valuable and were discussed in relation to the literature and other virtues. It is of note that many of the variables were theoretically linked to the development of other virtues including; resilience and perseverance, and self-regulation with self-awareness and self-reflection. Therefore,

stakeholders should seek to assess players' characters holistically as deficiencies of specific virtues may be representative of deficiencies in other virtues. It is suggested therefore, that the reverse is true and that development of specific virtues could lead to development of other areas of a player's character. Calls for a rugby-specific measure of character were made to give stakeholders and researchers a tool to identify athletes and track character virtues. Stakeholders must also create opportunities for players to demonstrate the desired virtues as this facilitates the internalization of virtues and dictates the preference for behaviour in the future.

CHAPTER FOUR: GENERAL DISCUSSION

The aim of this thesis was twofold; primarily it aimed to understand the conceptualization of character within rugby union and how it was applied to the talent identification process. Further, a review of the literature was conducted to assess more broadly the role psychological components currently have in the rugby union talent identification literature. Focusing broadly on psychological components was a decision necessitated by a scarcity of character research and acted to further strengthen the rationale behind the qualitative study. . We were also interested in the specific aspects of character key stakeholders valued the most when selecting players for entry into development pathways. The rationale for the focus on character was driven by the sport of rugby union itself; World rugby proudly displays 'building character since 1883' on its website (11). Moreover, coaches and players in victory or defeat frequently cite the importance of individuals and teams showing good character (229,230), or describe it as something can be tested (231–234). Further, sports perceived character building qualities have been applied in political policy (235). Clearly, the importance of character is pervasive in all levels of the sport yet there remains a distinct lack of research on the concept itself. Specifically, what do stakeholders actually mean when they talk about character? Are there particular aspects of character that determine success? To this end, the importance of psycho-behavioural factors in the development of talent have been identified (20,24,25) and in the context of rugby union (34) From this, the ability to further understand the nuances of character is crucial to developing effective and robust talent identification and development pathways to nurture the next generation of players.

In Chapter 2, a review of the literature was undertaken to understand the role of psychological components within rugby union talent identification. Findings revealed a lack of diversity in the methodologies and samples used in of the studies reviewed. The majority of research explicitly examining character within rugby union utilised interviews with coaches

(35,37,113) which is considered to be an effective method to gather large amounts of data from knowledge rich participants.. As discussed throughout, character and rugby union are inextricably linked, yet relatively little is known about whether it is truly an important factor to success in the sport. The concept of character is a complex one and over years of academic and philosophical discourse there have been many interpretations of it. This has extended to the various stakeholders working with talent identification. The most common interpretation was of one that described a 'general positive psychology of the player'. While this is a rather crude definition of character from an academic standpoint it was how coaches and other applied practitioners understood the concept. When we look at the way character is talked about by coaches, players and the rugby media alike, this makes sense as it is typically something that is discussed in relation to a setback or a challenge, and players must therefore 'show' this character to be able to overcome said challenge. However, and as the review highlights, this understanding needs to be more clearly defined with greater clarity in the terminology used by all parties to improve our shared understanding of what behaviours are needed to truly demonstrate character.

A concerted effort needs to be made to understand the concept of character within rugby union and ensure it is similar to the notion of character seen within academia. If this is not reconciled, it is conceivable of the development of a rugby specific understanding of character which may differ from that which is concerned with developing players who value winning over moral considerations. It is not unthinkable that a rugby specific understanding of character may not emphasise classic moral values such as fairness or honesty if they help teams and players achieve success by getting away with illegal actions or 'buying penalties' through deceitful means. While limited evidence exists suggesting this was present in rugby union (113) future research should seek to create a unified understanding between 'character' discussed in professional rugby and that seen in academia. The review highlighted limited ecological and methodological variance in the rugby union literature. Supporting the need to create a unified understanding of character in rugby union which

could be applied across rugby union contexts. This would allow for a rugby specific tool to be created to assess character in players.

The second part of the thesis aimed to fill the gaps identified by the review of the literature ,namely, the lack of clarity surrounding character understanding in rugby union and its application to talent identification. The existing research was limited in two common ways, both were case studies of provincial unions within the NZ rugby macrosystem (35,37), reducing the generalisability of the findings. Therefore, in-depth interviews were conducted with nine experts (from eight separate nations) in rugby union talent identification. Participants were selected from Tier One rugby union nations to assess the prevalence and importance of character in the talent identification programmes of the top rugby union playing nations, thus building on the work conducted only in New Zealand. Semi-structured interviews were conducted, and participants discussed a wide range of topics relating to talent identification, character and rugby union. Focus was based around three main lines of questioning: (i) the importance of a player's character in the talent identification process, (ii) the participants' understanding of character, and (iii) aspects of character seen as most important in potential players.

The study provided further strong evidence of the importance of a player's character within talent identification across tier one rugby playing nations. To this end, it was often used as a deciding factor when selecting between two players of similar technical, tactical or physical ability. The mantra 'better people make better players' was a consistent theme within the interviews, stemming from Sir Graham Henry's all blacks team (1). Specifically, participants adopted this philosophy with the implicit understanding that they wanted to foster holistic development of the athlete. From a talent identification perspective, they sought individuals who either were, or could be developed in all aspects of their character and become well rounded players who would prescribe to the club's values and beliefs.

Although statements such as '*better people make better players*' are objectively difficult to assess from a scientific or philosophical standpoint, it does suggest a shift from more traditional ideas of talent identification where a snapshot assessment of a player's physical or technical attributes are used to determine selection. From this, a greater focus on the player as a whole and their potential to develop carries greater weight, with improvements in character supposedly leading to better performance. The character virtues that were identified by the participants support this and may lend some theoretical weight to the idea that 'better people make better players.

To analyse the data the study took a multidimensional understanding of character as detailed in Light Shields (7) which divided character into four dimensions; (i) performance, (ii) moral, (iii) intellectual, and (ix) civic character. The virtues identified by the participants as the most important in rugby players were; industriousness, self-regulation, self-awareness, resilience, and perseverance. The virtue of industriousness was valued most highly by participants with players having to work hard if they wanted to improve. As such, this virtue was seen as the largest discriminating factor for players who successfully navigated the talent pathway and those who do not. In addition, they desired players who had competent levels of self-awareness so that they could understand themselves and be able to effectively self-regulate their behaviour in relation to daily tasks such as punctuality and organization of kit, nutrition, and adequate sleep. Finally they wanted athletes who had the virtue of resilience, so that when inevitable challenges and setbacks occurred (131) they could overcome this by persevering to find ways and means to improve and learn from the challenge. which is why perseverance was also valued very highly by the participants of this study. Interestingly, and while all of these virtues were important in isolation, they were integral to the development of other virtues and thus key drivers behind a player's overall growth and the notion of 'better people make better players'.

The development pathway is an inherently challenging place for young athletes to be exposed to (131) but it is important for key stakeholders not to be overly supportive of athletes . Allowing athletes to navigate the pathway with support only where necessary it can

help facilitate the overall development of the athletes, which is why the author believes that resilience and perseverance were highlighted as such valuable virtues when selecting potential players for entry into the development pathway. Existing research in rugby union talent identification showed that often selectors based judgments of a players resilience on events that had occurred areas of a players life not related to rugby (35,37). Much like common issues with talent identification, selecting on a player's current perceived level of resilience using anecdotal evidence, such as reaction to challenging life events may be problematic. Rather stakeholders should, like talent, focus on a player's potential to develop resilience, which can be done by facilitating positive adaptation to the challenges of the pathway and allowing athletes who do not positively adapt , to in effect self-select out of the pathway (236).

An interesting area of future research stems from an anecdotal example given in one of the interviews, which described some personal research they had conducted. In summary, they called a range of elite rugby coaches (including World Cup winners and British and Irish Lions coaches) and asked them what their ideal rugby player would look like in terms of psychological characteristics. Interestingly, the hypothetical examples directly mirrored their psychological characteristics. Although this was all conjecture on the part of the participant, it does raise some valid questions about how key stakeholders assess the character of potential players. Specifically, there is a danger that players who present as more 'professional' at a young age will be favoured because they represent the character virtues more closely aligned with the people tasked with selecting them. Further research needs to be undertaken to ensure key stakeholders assess players on virtues associated with rugby performance rather than a player's ability to function as a professional.

REFERENCES

1. Kerr J. Legacy. Hachette UK; 2013. 167 p.
2. The All Blacks guide to being successful (off the field) [Internet]. The Telegraph. [cited 2020 Sep 18]. Available from: https://www.telegraph.co.uk/men/active/10427619/The-All-Blacks-guide-to-being-successful-off-the-field.html
3. character, n. In: OED Online [Internet]. Oxford University Press; [cited 2020 Sep 19]. Available from: https://www.oed.com/view/Entry/30639
4. Aristotle. Aristotle: Nicomachean Ethics. Cambridge University Press; 2000. 268 p.
5. Shields DLL, Bredemeier BJL. Character development and physical activity. Champaign, IL, England: Human Kinetics Publishers; 1995. xi, 269 p. (Character development and physical activity).
6. Bredemeier BL, Shields DL. Social Justice, Character Education, and Sport: A Position Statement. Quest. 2019 Apr 3;71(2):202–14.
7. Shields DL. Character as the Aim of Education. Phi Delta Kappan. 2011 May 1;92(8):48–53.
8. Richards H. A Game for Hooligans: The History of Rugby Union. Random House; 2011. 93 p.
9. Winn WE. Tom Brown's Schooldays and the Development of 'Muscular Christianity'. Church Hist. 1960;29(1):64–73.
10. Cordery G. 'Tom Brown's Schooldays' and Foreskin's Lament: The Alpha and Omega of Rugby Football. J Pop Cult Bowl Green Ohio. 1985 Fall;19(2):97–105.
11. world.rugby. Home | World Rugby [Internet]. [cited 2020 Aug 4]. Available from: https://www.world.rugby/
12. Ryan G. The Changing Face of Rugby: The Union Game and Professionalism since 1995. Cambridge Scholars Publishing; 2009. 241 p.
13. Duthie G, Pyne D, Hooper S. Applied Physiology and Game Analysis of Rugby Union. Sports Med. 2003 Nov 1;33(13):973–91.
14. Collins D, Bailey R. 'Scienciness' and the allure of second-hand strategy in talent identification and development. :11.
15. Gray HJ, Plucker JA. "She's a Natural": Identifying and Developing Athletic Talent. J Educ Gift. 2010 Jul 1;33(3):361–80.
16. Gulbin J, Weissensteiner J, Oldenziel K, Gagné F. Patterns of performance development in elite athletes. Eur J Sport Sci. 2013 Nov;13(6):605–14.
17. Henriksen K, Stambulova N, Roessler KK. Riding the Wave of an Expert: A Successful Talent Development Environment in Kayaking. Sport Psychol. 2011 Sep;25(3):341–62.
18. Larkin P, Reeves MJ. Junior-elite football: time to re-position talent identification? Soccer Soc. 2018 Jan 31;1–10.
19. Miller PK, Cronin C, Baker G. Nurture, nature and some very dubious social skills: an interpretative phenomenological analysis of talent identification practices in elite English youth soccer. Qual Res Sport Exerc Health. 2015 Oct 20;7(5):642–62.
20. Abbott A, Collins D. A Theoretical and Empirical Analysis of a 'State of the Art' Talent Identification Model. High Abil Stud. 2002 Dec;13(2):157–78.
21. Vaeyens R, Lenoir M, Williams AM, Philippaerts RM. Talent Identification and Development Programmes in Sport. Sports Med. 2008;14.
22. Orlick T, Partington J. Mental Links to Excellence. Sport Psychol. 1988 Jun 1;2(2):105–30.
23. Gould D, Dieffenbach K, Moffett A. Psychological Characteristics and Their Development in Olympic Champions. J Appl Sport Psychol. 2002 Jan 1;14(3):172–204.
24. MacNamara Á, Button A, Collins D. The Role of Psychological Characteristics in Facilitating the Pathway to Elite Performance Part 2: Examining Environmental and Stage-Related Differences in Skills and Behaviors. Sport Psychol. 2010 Mar;24(1):74–

96.

25. MacNamara Á, Button A, Collins D. The Role of Psychological Characteristics in Facilitating the Pathway to Elite Performance Part 1: Identifying Mental Skills and Behaviors. Sport Psychol. 2010 Mar 1;24(1):52–73.

26. Twist C, Worsfold P. The Science of Rugby. Routledge; 2014. 279 p.

27. Worsnop SA. Rugby Talent Development. Int Sport Coach J. 2016 Jan 1;3(1):75–82.

28. Green BS, Blake C, Caulfield BM. A Valid Field Test Protocol of Linear Speed and Agility in Rugby Union. J Strength Cond Res. 2011 May;25(5):1256–1262.

29. Pienaar AE, Spamer MJ, Steyn Jr HS. Identifying and developing rugby talent among 10-year-old boys: A practical model. J Sports Sci. 1998 Jan 1;16(8):691–9.

30. Durandt J, Toit S du, Borresen J, Hew-Butler T, Masimla H, Jokoet I, et al. Fitness and body composition profiling of elite junior South African rugby players. South Afr J Sports Med. 2006;18(2):38–45.

31. Agar-Newman DJ, Klimstra MD. Efficacy of Horizontal Jumping Tasks as a Method for Talent Identification of Female Rugby Players. J Strength Cond Res. 2015 Mar;29(3):737–743.

32. Spamer EJ, Plessis DJD, Kruger EH. Comparative characteristics of elite New Zealand and South African u/16 rugby players with reference to game-specific skills, physical abilities and anthropometric data. South Afr J Sports Med. 2009 Jan 1;21(2):53–7.

33. Hendricks S, Lambert M, Masimla H, Durandt J. Measuring Skill in Rugby Union and Rugby League as Part of the Standard Team Testing Battery. Int J Sports Sci Coach. 2015 Oct 1;10(5):949–65.

34. Hill A, MacNamara Á, Collins D. Psychobehaviorally Based Features of Effective Talent Development in Rugby Union: A Coach's Perspective. Sport Psychol. 2015 Sep 1;29(3):201–12.

35. Rosevear R, Cassidy T. Talent Identification and Development: An Investigation into the Policies and Practices of One New Zealand Rugby Provincial Union. Int J Sports Sci Coach. 2019 Jun;14(3):406–18.

36. Kruger A, Plooy KD, Kruger P. Personality profiling of South African rugby union players. J Psychol Afr. 2019 Jul 4;29(4):383–7.

37. Hewetson A. Talent Identification and Development: An Investigation into the Policies and Practices of One New Zealand Rugby Provincial Union [Internet] [Thesis]. University of Otago; 2016 [cited 2019 Oct 22]. Available from: https://ourarchive.otago.ac.nz/handle/10523/7014

38. World Rugby Year In Review 2019 [Internet]. [cited 2020 Oct 6]. Available from: http://publications.worldrugby.org/yearinreview2019/en/1-1

39. Lidor R, Côté J, Hackfort D. ISSP position stand: To test or not to test? The use of physical skill tests in talent detection and in early phases of sport development. Int J Sport Exerc Psychol. 2009 Jan 1;7(2):131–46.

40. Hogan K, Norton K. The 'Price' of olympic gold. J Sci Med Sport. 2000 Jun 1;3(2):203–18.

41. Mellalieu S, Hanton S. Advances in Applied Sport Psychology: A Review. Routledge; 2008. 365 p.

42. Wilding A. The diffusion and adoption of sport psychology by athletics coaches. [Internet] [phd]. Bournemouth University; 2017 [cited 2020 Oct 5]. p. ?-? (471). Available from: http://eprints.bournemouth.ac.uk/29881/

43. Allen MS, Greenlees I, Jones M. Personality in sport: a comprehensive review. Int Rev Sport Exerc Psychol. 2013 Sep 1;6(1):184–208.

44. Weissensteiner JR, Abernethy B, Farrow D, Gross J. Distinguishing psychological characteristics of expert cricket batsmen. J Sci Med Sport. 2012 Jan;15(1):74–9.

45. Bois JE, Sarrazin PG, Southon J, Boiché JCS. Psychological Characteristics and Their Relation to Performance in Professional Golfers. Sport Psychol. 2009 Jun 1;23(2):252–70.

46. Gould D, Weiss M, Weinberg R. Psychological Characteristics of Successful and

Nonsuccessful Big Ten Wrestlers. J Sport Exerc Psychol. 1981 Mar 1;3(1):69–81.

47. Highlen PS, Bennett BB. Psychological Characteristics of Successful and Nonsuccessful Elite Wrestlers: An Exploratory Study. J Sport Exerc Psychol. 1979 Jun 1;1(2):123–37.

48. Bányai F, Griffiths MD, Király O, Demetrovics Z. The Psychology of Esports: A Systematic Literature Review. J Gambl Stud. 2019 Jun 1;35(2):351–65.

49. Raglin JS. Psychological Factors in Sport Performance. Sports Med. 2001 Oct 1;31(12):875–90.

50. Weinberg RS, Gould D. Foundations of Sport and Exercise Psychology. Human Kinetics; 2014. 664 p.

51. Thelwell RC, Greenlees IA, Weston NJV. Using Psychological Skills Training to Develop Soccer Performance. J Appl Sport Psychol. 2006 Sep 1;18(3):254–70.

52. Sheard M, Golby J. Effect of a psychological skills training program on swimming performance and positive psychological development. Int J Sport Exerc Psychol. 2006 Jan 1;4(2):149–69.

53. Thomas PR, Fogarty GJ. Psychological Skills Training in Golf: The Role of Individual Differences in Cognitive Preferences. Sport Psychol. 1997 Mar 1;11(1):86–106.

54. Behncke L. Mental skills training for sports: A brief review. Athl Insight Online J Sport Psychol. 2004;6(1):No Pagination Specified-No Pagination Specified.

55. Dohme L-C, Piggott D, Backhouse S, Morgan G. Psychological Skills and Characteristics Facilitative of Youth Athletes' Development: A Systematic Review. Sport Psychol. 2019 Dec;33(4):261–75.

56. Dohme L-C, Backhouse S, Piggott D, Morgan G. Categorising and defining popular psychological terms used within the youth athlete talent development literature: a systematic review. Int Rev Sport Exerc Psychol. 2017 Jan;10(1):134–63.

57. Berkowitz MW, Bier MC. Research-Based Character Education. Ann Am Acad Pol Soc Sci. 2004 Jan;591(1):72–85.

58. Docheff D. Character in Sport and Physical Education. J Phys Educ Recreat Dance. 1997 Nov;68(9):34–34.

59. Banicki K. The character–personality distinction: An historical, conceptual, and functional investigation. Theory Psychol. 2017 Feb;27(1):50–68.

60. Gibson P, Okely AD, Webb P, Royall B. Talent identification in rugby union. ACHPER Healthy Lifestyles J. 1999;46(4):5–10.

61. Sarmento H, Anguera MT, Pereira A, Araújo D. Talent Identification and Development in Male Football: A Systematic Review. Sports Med. 2018 Apr 1;48(4):907–31.

62. Swann C, Moran A, Piggott D. Defining elite athletes: Issues in the study of expert performance in sport psychology. Psychol Sport Exerc. 2015;16(Part 1):3–14.

63. Johnston K, Wattie N, Schorer J, Baker J. Talent Identification in Sport: A Systematic Review. Sports Med Auckl NZ. 2018 Jan;48(1):97–109.

64. Baker J, Schorer J, Wattie N. Compromising Talent: Issues in Identifying and Selecting Talent in Sport. Quest. 2018 Jan 2;70(1):48–63.

65. Williams AM, Reilly T. Talent identification and development in soccer. J Sports Sci. 2000 Sep;18(9):657–67.

66. Handbook of Sport Psychology [Internet]. 1st ed. John Wiley & Sons, Ltd; [cited 2020 Oct 5]. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118270011#page=197

67. Anshel MH, Lidor R. Talent Detection Programs in Sport: The Questionable Use of Psychological Measures. J Sport Behav. 2012 Sep;35(3):239–66.

68. Piggott B, Müller S, Chivers P, Papaluca C, Hoyne G. Is sports science answering the call for interdisciplinary research? A systematic review. Eur J Sport Sci. 2019 Mar 16;19(3):267–86.

69. MacNamara Á, Button A, Collins D. The Role of Psychological Characteristics in Facilitating the Pathway to Elite Performance Part 1: Identifying Mental Skills and Behaviors. Sport Psychol. 2010 Mar 1;24(1):52–73.

70. Collins D, Bailey R. 'Scienciness' and the allure of second-hand strategy in talent

identification and development. :11.

71. Elferink-Gemser MT, Visscher C, Lemmink KAPM, Mulder T. Multidimensional performance characteristics and standard of performance in talented youth field hockey players: A longitudinal study. J Sports Sci. 2007 Feb 15;25(4):481–9.

72. Reilly T, Williams AM, Nevill A, Franks A. A multidisciplinary approach to talent identification in soccer. J Sports Sci. 2000 Sep;18(9):695–702.

73. Sieghartsleitner R, Zuber C, Zibung M, Conzelmann A. Science or Coaches' Eye? -- Both! Beneficial Collaboration of Multidimensional Measurements and Coach Assessments for Efficient Talent Selection in Elite Youth Football. J Sports Sci Med. 2019 Mar;18(1):32–43.

74. Pankhurst A, Collins D, Macnamara Á. Talent development: linking the stakeholders to the process. J Sports Sci. 2013 Feb 1;31(4):370–80.

75. Abbott A, Collins D. Eliminating the dichotomy between theory and practice in talent identification and development: considering the role of psychology. J Sports Sci. 2004 May;22(5):395–408.

76. Barreiros AN, Fonseca AM. A Retrospective Analysis of Portuguese Elite Athletes' Involvement in International Competitions. Int J Sports Sci Coach. 2012 Sep 1;7(3):593–600.

77. Barreiros A, Côté J, Fonseca AM. From early to adult sport success: analysing athletes' progression in national squads. Eur J Sport Sci. 2014;14 Suppl 1:S178-182.

78. Simonton DK. Talent and its development: An emergenic and epigenetic model. Psychol Rev. 1999;106(3):435–57.

79. Baker J, Schorer J, Wattie N. Compromising Talent: Issues in Identifying and Selecting Talent in Sport. Quest 00336297. 2018 Jan;70(1):48–63.

80. Johansson A, Fahlén J. Simply the best, better than all the rest? Validity issues in selections in elite sport. Int J Sports Sci Coach. 2017 Aug;12(4):470–80.

81. Musculus L, Lobinger BH. Psychological Characteristics in Talented Soccer Players – Recommendations on How to Improve Coaches' Assessment. Front Psychol [Internet]. 2018 [cited 2019 Oct 22];9. Available from: https://www.frontiersin.org/articles/10.3389/fpsyg.2018.00041/full

82. Christensen MK. 'An Eye for Talent': Talent Identification and the 'Practical Sense' of Top-Level Soccer Coaches. Sociol Sport J. 2009 Sep;26(3):365–82.

83. Côté J, Gilbert W. An Integrative Definition of Coaching Effectiveness and Expertise. Int J Sports Sci Coach. 2009 Sep 1;4(3):307–23.

84. Roberts AH, Greenwood DA, Stanley M, Humberstone C, Iredale F, Raynor A. Coach knowledge in talent identification: A systematic review and meta-synthesis. J Sci Med Sport. 2019 Oct 1;22(10):1163–72.

85. Reeves MJ, McRobert AP, Lewis CJ, Roberts SJ. A case study of the use of verbal reports for talent identification purposes in soccer: A Messi affair! PloS One. 2019;14(11):e0225033.

86. Bennett KJM, Vaeyens R, Fransen J. Creating a framework for talent identification and development in emerging football nations. Sci Med Footb. 2019 Jan 2;3(1):36–42.

87. Pyne DB, Gardner AS, Sheehan K, Hopkins WG. Fitness testing and career progression in AFL football. J Sci Med Sport. 2005 Sep;8(3):321–32.

88. Gil SM, Zabala-Lili J, Bidaurrazaga-Letona I, Aduna B, Lekue JA, Santos-Concejero J, et al. Talent identification and selection process of outfield players and goalkeepers in a professional soccer club. J Sports Sci. 2014 Dec;32(20):1931–9.

89. Johnston K, Wattie N, Schorer J, Baker J. Talent Identification in Sport: A Systematic Review. Sports Med Auckl NZ. 2018 Jan;48(1):97–109.

90. University of Edinburgh, Wolstencroft E. Talent identification and development an academic review: a report for sportscotland. Edinburgh: sportscotland; 2002.

91. Pearson DT, Naughton GA, Torode M. Predictability of physiological testing and the role of maturation in talent identification for adolescent team sports. J Sci Med Sport. 2006;4(9):277–87.

92. Darrall-Jones JD, Jones B, Till K. Anthropometric and Physical Profiles of English

Academy Rugby Union Players. J Strength Cond Res. 2015 Aug;29(8):2086–2096.

93. Smart DJ. Physical profiling of Rugby Union players: implications for talent development [Internet] [Thesis]. Auckland University of Technology; 2011 [cited 2020 Oct 5]. Available from: https://openrepository.aut.ac.nz/handle/10292/2218

94. Parsonage JR, Williams RS, Rainer P, McKeown I, Williams MD. Assessment of Conditioning-Specific Movement Tasks and Physical Fitness Measures in Talent Identified Under 16-Year-Old Rugby Union Players. J Strength Cond Res. 2014 Jun;28(6):1497–1506.

95. VAN DEN BERG L, PIENAAR AE, GROBBELAAR HW. The role of biological maturity in sport psychological skills of young rugby players: An explorative investigation. Afr J Phys Health Educ Recreat Dance. 2012 Dec 2;18(4.2):332–43.

96. Cooke A, Smith D, Booth A. Beyond PICO: The SPIDER Tool for Qualitative Evidence Synthesis. Qual Health Res. 2012 Oct 1;22(10):1435–43.

97. Moher D, Liberati A, Tetzlaff J, Altman DG, Group TP. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLOS Med. 2009 Jul 21;6(7):e1000097.

98. Unnithan V, White J, Georgiou A, Iga J, Drust B. Talent identification in youth soccer. J Sports Sci. 2012 Nov 1;30(15):1719–26.

99. Henriksen K, Stambulova N. Creating optimal environments for talent development : A holistic ecological approach. In Routledge; 2017 [cited 2020 Oct 6]. p. 271–84. Available from: http://urn.kb.se/resolve?urn=urn:nbn:se:hh:diva-32261

100. Hassanin R, Light RL, Macfarlane A. Developing 'good buggers': global implications of the influence of culture on New Zealand club rugby coaches' beliefs and practice. Sport Soc. 2018 Aug 3;21(8):1223–35.

101. Buekers M, Borry P, Rowe P. Talent in sports. Some reflections about the search for future champions. / Talent dans le sport. Quelques réflexions sur la recherche de futurs champions. Mov Sport Sci Sci Mot. 2015 Apr;(88):3–12.

102. Abraham A, Collins D. Examining and Extending Research in Coach Development. Quest. 1998 Feb 1;50(1):59–79.

103. Cripps AJ, Hopper LS, Joyce C. Coaches' perceptions of long-term potential are biased by maturational variation. Int J Sports Sci Coach. 2016 Aug 1;11(4):478–81.

104. Tromp EJY, Pepping G-J, Lyons J, Elferink-Gemser MT, Visscher C. "Let's Pick Him!": Ratings of Skill Level on the Basis of in-Game Playing Behaviour in Bantam League Junior ICE Hockey. Int J Sports Sci Coach. 2013 Dec 1;8(4):641–60.

105. Jokuschies N, Gut V, Conzelmann A. Systematizing coaches' 'eye for talent': Player assessments based on expert coaches' subjective talent criteria in top-level youth soccer. Int J Sports Sci Coach. 2017 Oct 1;12(5):565–76.

106. Vealey RS, Chase MA. Self-confidence in sport. In: Advances in sport psychology, 3rd ed. Champaign, IL, US: Human Kinetics; 2008. p. 68-97,430-435.

107. Harmison RJ. Peak performance in sport: Identifying ideal performance states and developing athletes' psychological skills. Prof Psychol Res Pract. 2006;37(3):233–43.

108. Holland MJG, Woodcock C, Cumming J, Duda JL. Mental Qualities and Employed Mental Techniques of Young Elite Team Sport Athletes. J Clin Sport Psychol. 2010 Mar 1;4(1):19–38.

109. Spamer EJ, Coetzee M. Variables which distinguish between talented and less talented participants in youth sport - a comparative study. / Die Talentierten von den weniger talentierten Teilnehmern im Jugendsport unterscheidende Variablen - eine vergleichende Studie. Kinesiology. 2002 Dec;34(2):141–52.

110. Andrew M, Grobbelaar HW, Potgieter JC. POSITIONAL DIFFERENCES IN SPORT PSYCHOLOGICAL SKILLS AND ATTRIBUTES OF RUGBY UNION PLAYERS. :15.

111. Cumming SP, Lloyd RS, Oliver JL, Eisenmann JC, Malina RM. Bio-banding in Sport: Applications to Competition, Talent Identification, and Strength and Conditioning of Youth Athletes. Strength Cond J Lippincott Williams Wilkins. 2017 Apr;39(2):34–47.

112. Hewetson A. Talent Identification and Development: An Investigation into the Policies and Practices of. :141.

113. Romand P, Pantaléon N. A Qualitative Study of Rugby Coaches' Opinions about the Display of Moral Character. Sport Psychol. 2007 Mar 1;21(1):58–77.

114. Kelly P, Hickey CJ. The life cycle of the AFL footballer: If you sell your body, mind and soul what is left when the cheering stops? [Internet]. undefined. 2006 [cited 2020 Oct 6]. Available from: /paper/The-life-cycle-of-the-AFL-footballer%3A-If-you-sell-Kelly-Hickey/6d975e2912cbb91328a3490201841b2b8c9a6f67

115. Irwin TH. VIRTUE, PRAISE AND SUCCESS: STOIC RESPONSES TO ARISTOTLE. The Monist. 1990;73(1):59–79.

116. Forbis E. Municipal Virtues in the Roman Empire: The Evidence of Italian Honorary Inscriptions. Walter de Gruyter; 2013. 308 p.

117. Lutz MJ. Civic Virtue and Socratic Virtue. Polity. 1997;29(4):565–92.

118. Sage G. Does Sport Affect Character Development in Athletes? J Phys Educ Recreat Dance. 1998 Jan;69(1):15–8.

119. Rudd A. Which 'Character' Should Sport Develop? Phys Educ. 2005 Winter;62(4):205–11.

120. Beller J. Positive Character Development in School Sport Programs. ERIC Digest. [Internet]. ERIC Clearinghouse on Teaching and Teacher Education Washington DC.; 2002 [cited 2020 Sep 15]. Available from: https://www.ericdigests.org/2004-1/sport.htm

121. Oddner F. The character of sport and the sport of character. Sport Soc. 2010 Mar 1;13(2):171–85.

122. Homiak M. Moral Character. In: Zalta EN, editor. The Stanford Encyclopedia of Philosophy [Internet]. Summer 2019. Metaphysics Research Lab, Stanford University; 2019 [cited 2020 Aug 4]. Available from: https://plato.stanford.edu/archives/sum2019/entries/moral-character/

123. Coakley J. The Good Father: Parental Expectations and Youth Sports. Leis Stud. 2006 Apr 1;25(2):153–63.

124. Gibbons SL, Ebbeck V, Weiss MR. Fair Play for Kids: Effects on the Moral Development of Children in Physical Education. Res Q Exerc Sport. 1995 Sep 1;66(3):247–55.

125. Kohlberg L. Moral Development: Kohlberg's original study of moral development. Taylor & Francis; 1994. 514 p.

126. Bredemeier BJ, Shields DL. Divergence in Moral Reasoning about Sport and Everyday Life. Sociol Sport J. 1984 Dec 1;1(4):348–57.

127. Kavussanu M, Seal AR, Phillips DR. Observed Prosocial and Antisocial Behaviors in Male Soccer Teams: Age Differences across Adolescence and the Role of Motivational Variables. J Appl Sport Psychol. 2006 Dec;18(4):326–44.

128. Priest RF, Krause JV, Beach J. Four-Year Changes in College Athletes' Ethical Value Choices in Sports Situations. Res Q Exerc Sport. 1999 Jun;70(2):170–8.

129. Bredemeier BL, Shields DL. Sports and Character Development. J Phys Act Health. 2006 Apr;3(2):255–6.

130. Rudd A, Stoll S. What type of character do athletes possess? An empirical examination of college athletes versus college non athletes with the RSBH value judgment inventory. Sport J [Internet]. 2004 [cited 2020 Sep 28];7(2). Available from: https://www.cabdirect.org/cabdirect/abstract/20053024043

131. Collins D, MacNamara Á. The Rocky Road to the Top. Sports Med. 2012 Nov 1;42(11):907–14.

132. World Rugby Laws - World Rugby's Law Education Web Site: Playing Charter [Internet]. [cited 2020 Aug 4]. Available from: https://laws.worldrugby.org/?charter=all

133. Our Values [Internet]. Scottish Rugby Union. [cited 2020 Aug 4]. Available from: http://www.scottishrugby.org/about/our-values

134. Core Values [Internet]. [cited 2020 Aug 4]. Available from: https://www.englandrugby.com/b60e6e31-e1cd-4d88-a268-4b6e76fb6593/dxsites/default/about-rfu/core-values

135. jtulloch. Working for the WRU [Internet]. Welsh Rugby Union | Club & Community.

[cited 2020 Aug 4]. Available from: https://community.wru.wales/the-wru/inside-the-wru/working-for-the-wru/

136. The Spirit Of Rugby [Internet]. Irish Rugby. [cited 2020 Aug 4]. Available from: https://www.irfu.ie/playing-the-game/spirit-of-rugby/what-is-spirit/

137. Rugbys Values [Internet]. [cited 2020 Aug 4]. Available from: https://sa.rugby/about/what is rugby/rugbys values

138. Mann DL, Dehghansai N, Baker J. Searching for the elusive gift: Advances in talent identification in sport. Curr Opin Psychol. 2017 Aug;16:128–33.

139. Abbott A, Button C, Pepping G-J, Collins D. Unnatural Selection: Talent Identification and Development in Sport. :28.

140. Boardley ID, Kavussanu M, Ring C. Athletes' Perceptions of Coaching Effectiveness and Athlete-Related Outcomes in Rugby Union: An Investigation Based on the Coaching Efficacy Model. Sport Psychol. 2008 Sep 1;22(3):269–87.

141. Tuck J. The Men in White: Reflections on Rugby Union, the Media and Englishness. Int Rev Sociol Sport. 2003 Jun 1;38(2):177–99.

142. Stake RE. Qualitative Case Studies. In: The Sage handbook of qualitative research, 3rd ed. Thousand Oaks, CA: Sage Publications Ltd; 2005. p. 443–66.

143. Miles MB, Huberman AM. Qualitative Data Analysis: An Expanded Sourcebook. SAGE; 1994. 358 p.

144. Bunge M. Realism and antirealism in social science. Theory Decis. 1993 Nov 1;35(3):207–35.

145. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006 Jan;3(2):77–101.

146. Braun V, Clarke V. Reflecting on reflexive thematic analysis. Qual Res Sport Exerc Health. 2019 Aug 8;11(4):589–97.

147. Baxter P, Jack S. Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. Qual Rep. 2008 Dec 1;13(4):544–59.

148. Abraham A, Collins D, Martindale R. The coaching schematic: Validation through expert coach consensus. J Sports Sci. 2006 Jun 1;24(6):549–64.

149. Smith B, Sparkes AC. Routledge Handbook of Qualitative Research in Sport and Exercise. Routledge; 2016. 1062 p.

150. Knox S, Burkard AW. Qualitative research interviews. Psychother Res. 2009 Jul 1;19(4–5):566–75.

151. Boyatzis RE. Transforming Qualitative Information: Thematic Analysis and Code Development. SAGE; 1998. 204 p.

152. Halstead M, Taylor MJ, National Foundation for Educational Research in England and Wales. The development of values, attitudes and personal qualities: a review of recent research. Slough, Berks.: National Foundation for Educational Research; 2000.

153. Kavussanu M, Boardley ID. The Prosocial and Antisocial Behavior in Sport Scale. J Sport Exerc Psychol. 2009 Feb;31(1):97–117.

154. Al-Yaaribi A, Kavussanu M. Teammate Prosocial and Antisocial Behaviors Predict Task Cohesion and Burnout: The Mediating Role of Affect. J Sport Exerc Psychol. 2017 Jun 1;39(3):199–208.

155. Al-Yaaribi A, Kavussanu M, Ring C. Consequences of prosocial and antisocial behavior for the recipient. Psychol Sport Exerc. 2016 Sep 1;26:102–12.

156. Kavussanu M, Al-Yaaribi A. Prosocial and antisocial behaviour in sport. Int J Sport Exerc Psychol. 2019 Oct 25;0(0):1–24.

157. Al-Yaaribi A, Kavussanu M. Consequences of prosocial and antisocial behaviors in adolescent male soccer players: The moderating role of motivational climate. Psychol Sport Exerc. 2018 Jul 1;37:91–9.

158. Al-Yaaribi A, Kavussanu M, Ring C. The Effects of Prosocial and Antisocial Behaviors on Emotion, Attention, and Performance During a Competitive Basketball Task. J Sport Exerc Psychol. 2018 Dec 1;40(6):303–11.

159. Jung CG. The basic writings of C. G. Jung. Oxford, England: Modern Library; 1959. xxiii, 552 p. (The basic writings of C. G. Jung).

160. St.Hilaire C. Jungian psychology in a demanding modern world. Environ Soc Psychol [Internet]. 2018 Aug 17 [cited 2020 Aug 20];3(2). Available from: http://ojs.whioce.com/index.php/esp/article/view/678

161. Berger R. An Ethic of Excellence: Building a Culture of Craftsmanship with Students. Heinemann, a division of Reed Elsevier Inc; 2003.

162. Eisenberger R. Learned Industriousness. Psychol Rev. 1992 Apr;99(2):248–67.

163. Hickman KL, Stromme C, Lippman LG. Learned Industriousness: Replication in Principle. J Gen Psychol. 1998 Jul;125(3):213–7.

164. Light RL, Evans JR. Dispositions of elite-level Australian rugby coaches towards game sense: characteristics of their coaching habitus. Sport Educ Soc. 2013 May;18(3):407–23.

165. Fletcher D, Sarkar M. Psychological Resilience: A Review and Critique of Definitions, Concepts, and Theory. Eur Psychol. 2013 Jan;18(1):12–23.

166. LUTHAR SS, CICCHETTI D. The construct of resilience: Implications for interventions and social policies. Dev Psychopathol. 2000;12(4):857–85.

167. Fletcher D, Sarkar M. A grounded theory of psychological resilience in Olympic champions. Psychol Sport Exerc. 2012 Sep;13(5):669–78.

168. Kelly PJ, Hickey CJ. The Struggle for the Body, Mind and Soul of AFL Footballers [Internet]. Australian Scholarly Publishing; 2008 [cited 2020 Sep 11]. Available from: https://research.monash.edu/en/publications/the-struggle-for-the-body-mind-and-soul-of-afl-footballers

169. Morgan PBC, Fletcher D, Sarkar M. Understanding team resilience in the world's best athletes: A case study of a rugby union World Cup winning team. Psychol Sport Exerc. 2015 Jan 1;16:91–100.

170. Kreiner-Phillips K, Orlick T. Winning after Winning: The Psychology of Ongoing Excellence. Sport Psychol. 1993 Mar;7(1):31–48.

171. Sarkar M, Fletcher D. Psychological resilience in sport performers: a review of stressors and protective factors. J Sports Sci. 2014 Apr 9;1–16.

172. Smith DJ. A Framework for Understanding the Training Process Leading to Elite Performance. Sports Med. 2003 Dec 1;33(15):1103–26.

173. Gucciardi DF, Lines RLJ, Ducker KJ, Peeling P, Chapman MT, Temby P. Mental toughness as a psychological determinant of behavioral perseverance in special forces selection. Sport Exerc Perform Psychol. 2020;No Pagination Specified-No Pagination Specified.

174. Duckworth AL, Peterson C, Matthews MD, Kelly DR. Grit: Perseverance and passion for long-term goals. J Pers Soc Psychol. 2007;92(6):1087–101.

175. Kaczmarek ŁD, Bączkowski B, Enko J, Baran B, Theuns P. Subjective well-being as a mediator for curiosity and depression. Pol Psychol Bull. 2014;45(2):200–4.

176. Baumgarten E. Curiosity as a Moral Virtue. Int J Appl Philos. 2001;15(2):169–184.

177. Reflection: A blind spot in psychology? [Internet]. [cited 2020 Oct 5]. Available from: https://www.psychminded.co.uk/wp-content/uploads/2014/04/clinicalpsychlogy.pdf#page=18

178. Zimmerman BJ. Chapter 2 - Attaining Self-Regulation: A Social Cognitive Perspective. In: Boekaerts M, Pintrich PR, Zeidner M, editors. Handbook of Self-Regulation [Internet]. San Diego: Academic Press; 2000 [cited 2020 Oct 1]. p. 13–39. Available from: http://www.sciencedirect.com/science/article/pii/B9780121098902500317

179. Jonker L, Elferink-Gemser MT, de Roos IM, Visscher C. The Role of Reflection in Sport Expertise. Sport Psychol. 2012 Jun;26(2):224–42.

180. Ellis S, Carette B, Anseel F, Lievens F. Systematic Reflection: Implications for Learning From Failures and Successes. Curr Dir Psychol Sci. 2014 Feb 1;23(1):67–72.

181. Chow GM, Luzzeri M. Post-Event Reflection: A Tool to Facilitate Self-Awareness, Self-Monitoring, and Self-Regulation in Athletes. J Sport Psychol Action. 2019 Apr 3;10(2):106–18.

182. Berkowitz MW, Puka B. Dissent and Character Education. Reclaiming Dissent. 2009

Jan 1;107–30.

183. Kitsantas A, Kavussanu M, Corbatto DB, van de Pol PKC. Self-regulation in athletes: A social cognitive perspective. In: Handbook of self-regulation of learning and performance, 2nd ed. New York, NY, US: Routledge/Taylor & Francis Group; 2018. p. 194–207. (Educational psychology handbook series).

184. Zimmerman BJ, Kitsantas A. The Hidden Dimension of Personal Competence: Self-Regulated Learning and Practice. In: Handbook of competence and motivation. New York, NY, US: Guilford Publications; 2005. p. 509–26.

185. Wilson AT. Honesty as a Virtue. Metaphilosophy. 2018;49(3):262–80.

186. MILLER CB. Honesty and Dishonesty: Unpacking Two Character Traits Neglected by Philosophers. Rev Port Filos. 2020;76(1):343–62.

187. Murphy S. The Oxford Handbook of Sport and Performance Psychology. Oxford University Press; 2012. 800 p.

188. Wicklund RA. Objective Self-Awareness. In: Berkowitz L, editor. Advances in Experimental Social Psychology [Internet]. Academic Press; 1975 [cited 2020 Oct 5]. p. 233–75. Available from: http://www.sciencedirect.com/science/article/pii/S006526010860252X

189. Sutton A. Measuring the Effects of Self-Awareness: Construction of the Self-Awareness Outcomes Questionnaire. Eur J Psychol. 2016;

190. Fenigstein A, Scheier MF, Buss AH. Public and private self-consciousness: Assessment and theory. J Consult Clin Psychol. 1975;43(4):522–7.

191. Feldman G, Dunn E, Stemke C, Bell K, Greeson J. Mindfulness and rumination as predictors of persistence with a distress tolerance task. Personal Individ Differ. 2014 Jan 1;56:154–8.

192. Bailey R. Participant Development in Sport: An Academic Review. :139.

193. Tekleab AG, Sims HP, Yun S, Tesluk PE, Cox J. Are We On the Same Page? Effects of Self-Awareness of Empowering and Transformational Leadership. J Leadersh Organ Stud. 2008 Feb 1;14(3):185–201.

194. Arthur J, Davies I, Hahn C. SAGE Handbook of Education for Citizenship and Democracy. SAGE; 2008. 594 p.

195. Denham BE. Youth Sports Participation and Attitudes Toward Societal Competition, Concern for Material Items, and the Consequences of Manipulative Advertising: Youth Soc [Internet]. 2008 Nov 25 [cited 2020 Oct 1]; Available from: https://journals.sagepub.com/doi/10.1177/0044118X08327517

196. Boyd R. 'The Value of Civility?' Urban Stud. 2006 May 1;43(5–6):863–78.

197. Nielsen TM, Bachrach DG, Sundstrom E, Halfhill TR. Utility of OCB: Organizational Citizenship Behavior and Group Performance in a Resource Allocation Framework. J Manag. 2012 Mar 1;38(2):668–94.

198. Carron AV, Brawley LR. Group dynamics in sport and physical activity. In: Advances in sport psychology, 3rd ed. Champaign, IL, US: Human Kinetics; 2008. p. 213-237,452-455.

199. Aoyagi MW, Cox RH, McGuire RT. Organizational Citizenship Behavior in Sport: Relationships with Leadership, Team Cohesion, and Athlete Satisfaction. J Appl Sport Psychol. 2008 Jan 29;20(1):25–41.

200. Collins D. Running the world-class programme in athletics. Psychologist. 2008;21(8):682–3.

201. Fletcher D, Wagstaff CRD. Organizational psychology in elite sport: Its emergence, application and future. Psychol Sport Exerc. 2009 Jul 1;10(4):427–34.

202. Martínez RN, Scott Tindale R. Impact of Organizational Citizenship Behavior on Performance in Women's Sport Teams. J Appl Sport Psychol. 2015 Apr 3;27(2):200–15.

203. Balthazard PA, Cooke RA, Potter RE. Dysfunctional culture, dysfunctional organization: Capturing the behavioral norms that form organizational culture and drive performance. Goldman A, editor. J Manag Psychol. 2006 Jan 1;21(8):709–32.

204. Schein EH. Organizational Culture and Leadership. John Wiley & Sons; 2010. 466 p.

205. Frontiera J. Leadership and Organizational Culture Transformation in Professional Sport. J Leadersh Organ Stud. 2010 Feb 1;17(1):71–86.

206. Schroeder PJ. Changing Team Culture: The Perspectives of Ten Successful Head Coaches. J Sport Behav. 2010 Mar;33(1):63–88.

207. Cole J, Martin AJ. Developing a winning sport team culture: organizational culture in theory and practice. Sport Soc. 2018 Aug 3;21(8):1204–22.

208. Cruickshank A, Collins D, Minten S. Culture Change in a Professional Sports Team: Shaping Environmental Contexts and Regulating Power. Int J Sports Sci Coach. 2013 Jun 1;8(2):271–90.

209. Motyl M, Iyer R, Oishi S, Trawalter S, Nosek BA. How ideological migration geographically segregates groups. J Exp Soc Psychol. 2014 Mar;51:1–14.

210. Bretz RD, Judge TA. The Role of Human Resource Systems in Job Applicant Decision Processes. J Manag. 1994 Jun 1;20(3):531–51.

211. Caldwell DF, O'Reilly III CA. Measuring person-job fit with a profile-comparison process. J Appl Psychol. 1990;75(6):648–57.

212. Franz TM. Group Dynamics and Team Interventions: Understanding and Improving Team Performance. John Wiley & Sons; 2012. 376 p.

213. Mills JP. Values Based Coaching and the Coaches Role in Moral Development [Internet]. SportRxiv; 2019 Oct [cited 2020 Oct 2]. Available from: https://osf.io/rbyqg

214. Phibbs PJ, Jones B, Roe G, Read D, Darrall-Jones J, Weakley J, et al. The organised chaos of English adolescent rugby union: Influence of weekly match frequency on the variability of match and training loads. Eur J Sport Sci. 2018 Mar 16;18(3):341–8.

215. Edwards DJ, Edwards SD, Hopley P, Kruger P, Goodwin H. Brief report on a resilience workshop for professional rugby players. J Hum Sport Exerc [Internet]. 2019 [cited 2020 Aug 11];14(3). Available from: http://hdl.handle.net/10045/85308

216. Elliot AJ. Handbook of Approach and Avoidance Motivation. Psychology Press; 2013. 683 p.

217. Ruiz MC, Robazza C. Feelings in Sport: Theory, Research, and Practical Implications for Performance and Well-being. Routledge; 2020. 392 p.

218. Kirschenbaum DS. Self-Regulation and Sport Psychology: Nurturing an Emerging Symbiosis. J Sport Psychol. 1984 Jun;6(2):159–83.

219. Grant AM, Franklin J, Langford P. THE SELF-REFLECTION AND INSIGHT SCALE: A NEW MEASURE OF PRIVATE SELF-CONSCIOUSNESS. Soc Behav Personal Int J. 2002 Jan 1;30(8):821–35.

220. Farley JP, Kim-Spoon J. The development of adolescent self-regulation: Reviewing the role of parent, peer, friend, and romantic relationships. J Adolesc. 2014 Jun;37(4):433–40.

221. Finkenauer C, Engels RCME, Baumeister RF. Parenting behaviour and adolescent behavioural and emotional problems: The role of self-control: Int J Behav Dev [Internet]. 2016 Jun 30 [cited 2020 Oct 3]; Available from: https://journals.sagepub.com/doi/10.1080/01650250444000333

222. Schwartz SH. An Overview of the Schwartz Theory of Basic Values. Online Read Psychol Cult [Internet]. 2012 Dec 1 [cited 2020 Oct 3];2(1). Available from: https://scholarworks.gvsu.edu/orpc/vol2/iss1/11

223. Memmert D, Baker J, Bertsch C. Play and practice in the development of sport-specific creativity in team ball sports. High Abil Stud. 2010 Jun 1;21(1):3–18.

224. Hodge K, Lonsdale C, McKenzie A. Thinking Rugby: Using Sport Psychology to Improve Rugby Performance. In: Dosil J, editor. The Sport Psychologist's Handbook [Internet]. Chichester, UK: John Wiley & Sons Ltd; 2005 [cited 2020 Sep 19]. p. 183–209. Available from: http://doi.wiley.com/10.1002/9780470713174.ch9

225. Memmert D, Roth K. The effects of non-specific and specific concepts on tactical creativity in team ball sports. J Sports Sci. 2007 Oct;25(12):1423–32.

226. Gaut B. Mixed Motivations: Creativity as a Virtue. R Inst Philos Suppl. 2014 Oct;75:183–202.

227. Paul ES, Kaufman SB. The Philosophy of Creativity: New Essays. OUP USA; 2014.

337 p.

228. Gaut B. The Philosophy of Creativity. Philos Compass. 2010;5(12):1034–46.

229. Bridge B. 'Character' - everything Wasps boss Blackett said after Saracens win [Internet]. CoventryLive. 2020 [cited 2020 Sep 23]. Available from: https://www.coventrytelegraph.net/sport/rugby/character-everything-wasps-boss-lee-18885930

230. rugbyworldcup.com. No-fuss Hansen departs as All Blacks' greatest coach - Rugby World Cup 2019 ⏐ rugbyworldcup.com [Internet]. [cited 2020 Aug 4]. Available from: https://www.rugbyworldcup.com/news/530426

231. Evely J. Back-to-back defeats a test of character for Bristol says Lam [Internet]. BristolLive. 2020 [cited 2020 Sep 23]. Available from: https://www.bristolpost.co.uk/sport/rugby/rugby-news/back-back-defeats-test-character-4475808

232. Opposition view: Saints clash was 'a real test of character' for Chiefs [Internet]. [cited 2020 Sep 23]. Available from: https://www.northamptonchron.co.uk/sport/rugby-union/opposition-view-saints-clash-was-real-test-character-chiefs-2978815

233. Evans N. England face biggest character test as losses raise eyebrows in New Zealand | Nick Evans. The Guardian [Internet]. 2018 Mar 15 [cited 2020 Sep 23]; Available from: https://www.theguardian.com/sport/blog/2018/mar/15/england-character-test-six-nations-new-zealand-nick-evans

234. Poirot forecasts "huge test" at Bristol [Internet]. European Professional Club Rugby. 2020 [cited 2020 Sep 23]. Available from: https://www.epcrugby.com/2020/09/22/poirot-forecasts-huge-test-at-bristol/

235. Scott R, Cadywould C. on the front foot independent evaluation report. :81.

236. Gonzalez SP, Detling N, Galli NA. Case studies of developing resilience in elite sport: Applying theory to guide interventions. J Sport Psychol Action. 2016 Sep 1;7(3):158–69.

237. Pulling C, Stenning M. Offloads in Rugby Union: Northern and Southern Hemisphere International Teams. Int J Perform Anal Sport. 2015 Mar 1;15(1):217–28.

238. Jones TW, Smith A, Macnaughton LS, French DN. Variances in Strength and Conditioning Practice in Elite Rugby Union Between the Northern and Southern Hemispheres. J Strength Cond Res. 2017 Dec;31(12):3358–3371.

239. Sasaki K, Furukawa T, Murakami J, Shimozono H, Nagamatsu M, Miyao M, et al. Scoring profiles and defense performance analysis in Rugby Union. Int J Perform Anal Sport. 2007 Oct 1;7(3):46–53.

APPENDICES

- Appendix A- Interview Guide
- Appendix B- SPIDER table
- Appendix C- Ethics Application

Appendix (A) - Interview Guide

Questions:

1. In the context of rugby, how would you personally define what character?

2. Do you place importance upon a player's character when selecting? - if so, what character traits are most important to you as a selector?

3. Have you explicitly been told by your NGB, what type of person you are looking to select/ any specific characteristics?

4. Are there aspects of a player's character which would make you less likely/put you off selecting a player?

5. Are there any consistent character traits which you see in successful players/ones that have gone on to senior or international rugby?

6. Are there any character traits you see in unsuccessful players/ones who didn't manage to progress to the next step?

7. How do you define (insert virtue or trait they highlight)- how does it look in practice? Why is this important?

8. How do you feel character is treated in rugby union talent identification? Prevalence, importance etc.

9. What do you feel are issues with rugby union talent identification?

10. What do you feel makes an effective Talent identification programme?

11. What does your ideal player look like in terms of character?

12. How do you feel about the notion of changing a player's character?

13. How do you begin to build a picture of a player's character?

14. Does your NGB dictate to you what type of character in a player they are looking for?

Appendix (B)- SPIDER Table

Search component	Description	Search terms
(S) Sample	Rugby union talent identification research	"Rugby" AND "Talent Identification" NOT "development"
(PI) Phenomenon of Interest	Psychological aspects /Character	"psychology" AND "sports"
(D) Design	-	-
(E) Evaluation	-	-
(R) Research type	Quantitative, Qualitive and mixed methods	-

Ethics ETH1920-0472: Mr Nicholas Foan

Date Created: 18 Nov 2019

Date Submitted: 27 Nov 2019

Date of last resubmission: 15 Dec 2019

Academic Staff: Mr Nicholas Foan

Category: Postgraduate Research Student

Supervisor: Dr John Mills

Project: "Better people make better players" The role of character in rugby union talent identification programmes

Faculty: Science and Health

Department: Sport, Rehabilitation, and Exercise Science

Current status: Signed off under Annex B

Ethics application

Project overview:

Title of project:

"Better people make better players" The role of character in rugby union talent identification programmes

Do you object to the title of your project being published?

No

Applicant(s)

Mr Nicholas Foan

Supervisor(s)

Dr John Mills

Dr Edward Hope

Proposed start date of research

13 Jan 2020

Expected end date

11 Oct 2021

Will this project be externally funded?

No

Will the research involve human participants?

Yes

Will the research use collected or generated personal data?

Yes

Will the research involve the use of animals?

No

Will any of the research take place outside the UK?

No

Project details

Brief outline of project:

The purpose of this research is to better understand the role an individual's character plays in the talent identification programmes of tier 1 rugby union nations. Based on the results of this study, we hope to create a clearer definition of character in sport and start the initial development a questionnaire, which aims to identify key characteristics coaches look for in players. Prior qualitative research from tier 1 rugby nations England and New Zealand has highlighted that coaches place emphasis upon a player's character when selecting individuals for entry into their long-term athlete development programmes. However, no consistency between the specific psychological characteristics nor the definitions of said characteristics exist. Aside from this, apart from the previously mentioned tier 1 rugby nations, little is known about the approach of tier 1 rugby nations in regards to character and talent identification. In study 1, qualitative interviews will be conducted with representatives of the ten tier 1 rugby union nations with a deep understanding of the talent identification programmes within their respective nation. Once the data is collected, thematic analysis will be employed to identify themes and salient character traits across Tier 1 nations, collectively. From there, Study 2 will build upon Aquino and Reed's work on assessing moral identity, by using the character traits identified in Study 1 to create a rugby specific measure

of character (please note that moral identity and character are often used as synonyms within the moral psychology literature). Once created, initial validation of the measure will commence. This will include assessing the face validity of the measure, test-retest, convergent and discriminant forms of validity, and predictive validity.

Research project proposal

Participant details

Who are the potential participants?
Study 1: 10 adults aged 18-65 who are professional members of Tier 1 Rugby Union NGB's who have knowledge of Talent Identification programs in rugby union.
Study 2: 200-300 UK-based rugby players aged between 16-65.

How will they be recruited?
Study 1: Participants will be recruited using an email outlining the scope and aims of the research. Snowball sampling will be employed to build upon the PI's contacts within professional rugby.
Study 2: For Study 2, we plan to use the contacts developed within Study 1 to distribute an online questionnaire to rugby players aged 16-65.

Recruiting materials
Will participants be paid or reimbursed?
No

If yes, how will they be paid?

How much will the participants be paid?

Could potential participants be considered to be vulnerable (e.g. children, mentally ill)?
No

If yes, please explain how the participants could be considered vulnerable and why vulnerable participants are necessary for the research.

Could potential participants be considered to feel obliged to take part in the research?
No

If yes, please explain how the participants could feel obliged and why they are still necessary for the research.

Will the research involve individuals below the age of 18 or individuals of 18 years and over with a limited capacity to give informed consent?
Yes

Is a DBS Check Required?
No

If yes, has the DBS check been completed?
No

If a DBS check is not required, please explain why.
UK data service recognises participants aged 16 and over as adults and requiring informed consent has been given, they are free to take part in research

Informed consent
How will consent be obtained?
Written

If consent will be obtained in writing, please attach an example of written consent for approval.

If consent will be obtained orally, please explain why.

Please upload a copy of the script that will be used to obtain oral consent.

If no script is available to upload please explain why.

Who will be obtaining and recording consent?
The named primary researcher- Nick Foan

Please indicate at what stage in the data collection process consent will be obtained.
Prior to data collection

If consent will not be obtained, explain why.

Please attach a participant information sheet.

Have you reviewed the information provided by the REO on participant information and consent?

Yes

Confidentiality and anonymity

Will you be maintaining the confidentiality and anonymity of participants whose personal data will be used in your research?

Yes

If yes, describe the arrangements for maintaining anonymity and confidentiality.

The primary researcher will collect data via interviews in person or via conference call and will, therefore, know the identity of the participant. Once data is collected it will be transcribed and anonymised at source by assigning participant numbers to protect the identities of the participants. During the transcription process, participant names will be pseudonymised and identifying information redacted for publication..

If you are not maintaining anonymity and confidentially, please explain your reasons for not doing so.

Data access, storage and security

Describe the arrangements for storing and maintaining the security of any personal data collected as part of the project.

The audio files generated from the research will be transcribed, aggregated and pseudonymized within one month of data collection. Consent forms will be given to participants as an online form. Data and completed informed consent forms will be stored on a password-protected laptop only accessible by the named Primary Researcher. A backup copy of the transcripts will be stored on the PI's University of Essex Box account. These files will only be available to the named research team on this application.

Please provide details of all those who will have access to the data.

It is expected that only the research team will have access to the raw audio files. However, depending on the length and number of interviews, a professional transcription service may be sought. If this is the case, we will only use a university approved service.

Risk and risk management

Are there any potential risks (e.g. physical, psychological, social, legal or economic) to participants or subjects associated with the proposed research?
No

If yes, please provide full details and explain what risk management procedures will be put in place to minimise the risks.

Are there any potential risks (e.g. physical, psychological, social, legal or economic) to the researchers working on the proposed research?
No

If yes, please provide full details and explain what risk management procedures will be put in place to minimise the risks.

Are there any potential reputational risks to the University as a consequence of undertaking this proposal?
No

If yes, please provide full details and explain what risk management procedures will be put in place to minimise the risks.

Risk Assessment documents

Are there any other ethical issues that have not been addressed which you would wish to bring to the attention of the reviewer(s) of your application?