FLOURISHING AFTER RETIREMENT:

UNDERSTANDING THE SPORT CAREER TRANSITION OF NEW ZEALAND'S ELITE ATHLETES

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ABSTRACT

Researchers have written extensively about the transitional experiences of former athletes and theorised about how to affect healthy and positive outcomes for athletes. While some studies have revealed significant psychological distress amongst retired athletes, others have found no indication of adjustment difficulty. Thus, the present study took a more specific approach, and aimed to identify the factors which either influenced post adjustment difficulty or led to flourishing in transitioned athletes. Data was collected from 81 former elite New Zealand athletes by means of a questionnaire, distributed amongst various sporting codes and organisations. The questionnaire included measures of athletic identity, flourishing and emotional responses. Results indicated that athletes who had stronger athletic identities also had higher levels of flourishing after retirement. Furthermore, those who retired voluntarily demonstrated high levels of flourishing and less post sport adjustment difficulty in comparison to those who retired involuntarily. Planning for retirement also resulted in significantly less post-retirement adjustment difficulty. Additionally, female athletes who displayed high levels of athletic identity also experienced more negative emotions when dealing with retirement. These findings demonstrate the importance of planning and preparing for retirement, as it has the potential to lead to more positive long terms outcomes for athletes. A better understanding of athletic identity and the experiences of athletes who retire involuntarily will allow governing sporting bodies and sport psychologists the opportunity to identify early the athletes who may be more prone to adjustment difficulties, and intervene appropriately. The development and implementation of a proper athlete transition programme or process within New Zealand would better support healthy and smooth transitions out of sport, and lead to more positive outcomes for athletes.

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CHAPTER ONE

Introduction

Countless athletes are faced with the difficult reality of choosing a new career after the termination of their sporting career. This is because the actuality of retirement is an inevitable part of an athlete's life. Whatever the reason, be it voluntary or involuntary, due to age, injury, deteriorating physical condition, or decreased motivation, research has shown that an athlete's decision to disengage from sport can be a challenging time (Webb, Nasco, Riley, & Headrick, 1998). Therefore, it is not uncommon for athletes to suffer considerable difficulties in their adjustment to retirement due to a perceived loss of identity, status, and self-confidence. Understanding the needs of athletes is crucial to ensuring they are equipped with the tools to flourish and not languish after the completion of their athletic career. Despite the increasing amount of literature focusing on the distress experienced by athletes during athlete-career transition, very few studies have analysed the positive outcomes and flourishing of individuals after the completion of their top-level sporting career. Research into factors that promote flourishing in life after sport will potentially enhance the health, wellbeing and quality of life for ex-elite athletes.

Sport retirement has been defined as "an occasion where an athlete is either compelled to give up sport through physical injury on a permanent or temporary basis, or chooses to disengage from sport through voluntary retirement."(Kremer, Moran, & Walker, 2011, p. 208). However, in many cases former athletes continue to engage in sport in some capacity following sport retirement. Coakley (1983) described sport retirement as "the process of transition from participation in competitive sport to another activity or set of activities" (p. 10). This considers the possibility of an athlete staying in touch with sport as opposed to becoming completely disengaged. Some former athletes may move into coaching, or management, although others may pursue opportunities in areas unrelated to sport.

A factor commonly associated with problematic athlete career transitions is the dominance of the athletic identity (Webb et al., 1998). Athletic talent is typically recognised early in life, forming strongly from a young age and

dominating an individual's self-concept. Consequently, individuals with stronger levels of athletic identity express more emotional distress about the future, and consider themselves less in control of their lives (Ballie & Danish, 1992; Brewer, Van Raatle, & Linder, 1993; Webb et al., 1998). Athletes who had less control over their retirement have been found to take more time to adjust emotionally (Gilmore, 2008).

Additionally, those athletes who have been forced into retirement due to injury or performance issues can be particularly vulnerable to adjustment difficulties (Webb et al., 1998). Younger retirees have also been shown to experience more problems with their retirement, emotionally and socially (Gilmore, 2008). It is thought that full-time athletes will have lower levels of career maturity outside of their sport due to the demands of their sporting involvement (C. Brown, Glastetter-Fender, & Shelton, 2000). Thus, formerly fulltime athletes require additional support to manage changes in financial status, loss of funding and sponsors, and learning to adjust to a new career.

Purpose of the Study

New Zealand culture is rich with sporting talent, with sports participation encouraged from a young age. Crawford (1983) observed that "for New Zealanders, the image of themselves as belonging to a country devoted to sport has been an important foundation for the development of national identity" (p. 56). This alludes to the issues that arise when an athlete is no longer capable of upholding their athletic self-image. Despite the prominence of sport as part of New Zealanders' national identity, the topic of sport retirement has been given to very little empirical consideration (Smith, 1999). Help for athletes in coping with sport retirement and career transitioning is not widely available in some sports, resulting in athletes experiencing considerable difficulties in their adjustment to retirement (Coakley, 1983).

Most research on sport retirement has predominantly focused on negative ramifications such as depression, anxiety, decline in motivation, mood changes and lack of control (Ballie, 1993; Grove, Lavallee, & Gordon, 1997; Schwenk, Gorenflo, Dopp, & Hipple, 2007). However, other studies have revealed that it is the minority of athletes who experience issues after retirement rather than the

majority (Marthinus, 2007; Sinclair & Orlick, 1993). In a study of former elite South African athletes, only 6% had very unsuccessful adjustments to retirement (Marthinus, 2007). Therefore, there is a gap in the literature with regard to positive outcomes and the ability of athletes to flourish after retirement from sport. Although some researchers have examined various constructs within the realm of flourishing, there appears to be no current literature examining the concept directly in elite athletes transitioning out of sport. Therefore, it is possible that more could be done for our potentially vulnerable elite athletes before, during and after retirement to support flourishing in their post-retirement lives.

Athlete Career Transition in New Zealand

The intent of this study was to analyse the experiences of elite New Zealand athletes who have come to the end of their sporting career and have had to explore new career options. The main objectives of this study were:

- To identify factors that have helped athletes to flourish after their athletic careers and possible interventions that can support post-retirement flourishing.
- To identify areas that cause difficulty for New Zealand athletes as they adjust to sport retirement
- To analyse athletic identity and how this interacts with adjustment to sport retirement

The next section reviews the psychological literature relating to flourishing and retirement. Various models and theories are evaluated, and several aspects that affect athletic retirement adjustment are examined. The hypotheses of this study are then presented.

Literature Review

The following section provides a comprehensive review of the literature relevant to the present study. It begins by discussing and defining the major topic of flourishing before analysing the theories of athlete and occupational retirement. Information on key variables known to influence athlete retirement such as athletic identity, cause of retirement, availability of resources and sporting

characteristics are also provided. The aim of this is to demonstrate how complex and multidimensional athlete retirement can be.

Flourishing

Early psychological literature was primarily focused on examining compromised psychological health and unhappiness. It was not until recently through the introduction of positive psychology that the benefits of measuring wellbeing became recognised as a valuable tool. Flourishing is a key concept within the field of positive psychology and has been shown to increase psychological and emotional resistance, improve physical health, and create sustainable happiness and wellbeing (Blissett, 2011). A study of US adults who had no mental disorders and were determined to be flourishing for the last 12 months revealed that those who are mentally healthy have less missed days of work, healthier psychosocial functioning, lower risk of cardiovascular disease, fewer health limitations of daily living and lower healthcare utilisation (Keyes, 2007). Other research has found that individuals who are flourishing learn more effectively, work productively, have better social relationships, and are more likely to contribute positively to their community (Diener, Helliwell, Lucas, & Schimmack, 2009; Huppert, 2009).

The term flourishing was first applied and defined by Keyes and Haidt (2003) as being a state where people experience positive emotions, positive psychological functioning and positive social functioning. To be classified as flourishing, an individual is required to demonstrate the combined presence of high levels of emotional, psychological and social wellbeing. The self-report method involved an assessment of personal functioning and societal functioning. Omitted from future flourishing definitions, Keyes and Haidt's (2003) integrated social wellbeing into their definition. This focused on aspects such as social contribution, social integration and social acceptance as an integral aspect of flourishing. Keyes and Haidt (2003) emphasised the importance of social wellbeing because it allows for an evaluation of an individual's public functioning, as opposed to purely focusing on personal feelings (Hone, Jarden, Schofield, & Duncan, 2014).

Flourishing has since been operationally defined in several different ways. Huppert and So (2013, p. 838) defined flourishing as the "combination of feeling good and functioning effectively." They developed a list of 10 positive features (competence, emotional stability, engagement, meaning, optimism, positive emotion, positive relationships, resilience, self-esteem and vitality) and grouped these into three factors; positive characteristics (comprising emotional stability, vitality, optimism, resilience and self-esteem), positive functioning (comprising engagement, competence, meaning and positive relationships) and positive appraisal (comprising life satisfaction and positive emotion). For flourishing, there needs to be a strong endorsement of positive emotion, four out of five positive characteristic features, and three out of four positive functioning features.

Similarly, Seligman (2011) defined flourishing in terms of five correlated constructs; positive emotions, engagement, relationships, meaning in life, and accomplishments (PERMA). Criteria for flourishing are those who rank in the upper range of each of these constructs. Unlike Huppert and So (2013), no threshold for flourishing is provided.

Although there are some subtle differences, flourishing is widely conceptualised as relating to optimal wellbeing and long-term happiness. Each theory agrees that flourishing is a multidimensional construct which requires high levels of subjective wellbeing. It goes beyond a simple measure of life satisfaction or positive thinking as it requires developing and sustaining positive attributes which lead to an engaged and meaningful life. The key elements that are each identified in each of these conceptualisations of flourishing are positive relationships, engagement, purpose and meaning, and positive emotions (Hone et al., 2014). Knights, Sherry, and Ruddock-Hudson (2016) agreed, describing that for an individual to be flourishing, they must embody three core features of (a) positive emotions, (b) engagement/interest and (c) meaning/purpose, plus at least three of six additional features. The additional features include self-esteem, optimism, resilience, vitality, self-determination and positive relationships. The core and additional features specifically utilise key concepts associated with hedonic and eudemonic aspects of holistic wellbeing. The definition provided by Knights et al. (2016) incorporates the majority of important concepts from previous research, and will be used as the basis of this study.

Flourishing in Athletes

The transition out of elite sport is complex. Where some former athletes may languish, others may flourish in their life after sport (Knights et al., 2016). There has been a growth in research focusing on the spectrum of athletes mental health and wellbeing (Uphill, Sly, & Swain, 2016). Sports psychology literature has emphasized the importance of athlete well-being during their sporting careers. It is well understood that participation in sport can promote positive wellbeing and health in children and adults (Lundqvist, 2011). However, the nature of a competitive athlete's lifestyle presents substantial physical and psychosocial pressures. Therefore, maximising athlete wellbeing is essential to optimal physical and mental performance (Uphill et al., 2016).

Athlete happiness is said to come from the maintenance of self-belief, lack of distress and mindfulness (Denny & Steiner, 2008). Gucciardi and Jones (2012) found that by further developing emotional intelligence, a desire to achieve and attentional control resulted in the flourishing of athletes. The rising number of specialist sports psychologists is evidence of an increased understanding of how enhancing the mechanisms essential to athlete psychological health can improve performance, promote wellbeing, protect athletes from burnout symptoms and increase flourishing (DeFreese & Barczak, 2017). However, despite this, research into understanding and examining flourishing within sporting literature post-athletic retirement is relatively slim. While some research has examined constructs considered closely related to flourishing, such as coping mechanisms, life satisfaction, positive emotions and optimism; flourishing has yet to be investigated in terms of athlete retirement. Therefore, it is the aim of this study to address this gap in the literature by investigating how athlete retirement influences flourishing.

Occupational Retirement

Retirement now no longer refers to the end of an individual's working career, but reflects a phase extending to various forms of full or part-time employment (Davis, 2003; Pettican & Prior, 2011). It is a long-term process involving a pre-retirement period, the act of retirement itself, and post-retirement adjustment. Theory and practice around workplace retirement also recognises a

transitional period, often involving delayed retirement, phased retirement, or bridge employment (Lytle, Foley, & Cotter, 2015). Some people may choose to work beyond the age of retirement, while others may prefer to gradually phase out of their current job.

Negative involuntary retirement and positive voluntary retirement are commonly distinguished through 'push' or 'pull' factors. Push factors tend to be involuntary and associated with lower levels of wellbeing, such as ill health or dislike of one's job. Pull factors tend to be voluntary reasons for retirement, such as becoming eligible for a pension or leisure interests (Nordenmark & Stattin, 2009). Push and pull factors operate interchangeably to influence satisfaction post-retirement. This can be complex because what may be determined a pull factor by some may be considered a push factor for others. For example, an attractive early exit scheme may be viewed as a pull factor for some who choose to overlook the institutional push occurring (Hanks, 1990). Once retirement occurs, the push and pull factors which led to retirement continue to influence an individual's life in various ways. One combination of pushes and pulls may lead the individual to believe they have been forced out of a satisfying career, while another combination may lead the individual to believe they had a great career and now it is time to move on (Hardy & Quadagno, 1995). Shultz, Morton, and Weckerle (1998) found that those who were forced to retire had lower self-ratings of physical and emotional health and lower life satisfaction.

A few vocational theories have been developed to help conceptualise the current concerns retirees face when preparing for retirement. Super's (1980) career development theory revolves around a Life-Career Rainbow model. Involving five major life stages, (Super, 1980) describes how each individual moves through the stages at various rates, and may take on multiple roles in each life space simultaneously (i.e., worker, parent). The final stage, 'decline,' is said to typically begin at the age of 65, incorporating two sub-stages, deceleration and retirement. Super (1980) explains how an older person may not be ready to retire from the workforce, but instead wants to focus more time and energy into other roles, such as being a grandparent. This theory directly refers to retirement as a stage of working life, and provides a framework for career counsellors to use to determine the factors that play critical roles in retirement decisions. A significant factor of Super's (1980) theory is its acknowledgement of the part culture, gender,

socioeconomic status and social structure play in work retirement decisions. Super's Life-Career Rainbow has been criticised however, for its narrow conceptualisation of the retirement process, and a sequential career path. Some individuals may be on a career path much less predictable than the model suggests, and decline may not begin until later than 65.

Aging theories tend to include the issues associated with retirement more so than vocational theories. One of the earliest models of aging focusing on older adults was Disengagement theory (Cummings, Dean, Newell, & McCaffrey, 1960). This theory suggests that older adults have reduced external social connections due to decreased involvement in formally central roles. Older adults become less focused on seeking approval from those outside the family, and more involved with family relationships. Similar to Super's (1980) theory, it explains how retirement has fewer life spaces (e.g. workplace, home) which retirees engage with. Despite some mention of gender, disengagement theory has little consideration of cultural variables, and more research needs to be done to determine its applicability to retirees from culturally diverse backgrounds. The disengagement theory has also been criticised for being a largely negative approach which minimises the value of retirees (Lytle et al., 2015). Career counsellors may still find use in disengagement theory by exploring with clients the importance of social connections and how retirement plans may affect the maintenance of these.

Another well-known aging theory is the Theory of Continuity (Atchley, 1989). This theory assumes that adults who preserve a lifestyle similar to that before retirement will have higher levels of psychological wellbeing. According to continuity theory, individuals occupy multiple roles, such as family and friend roles. For some, the work role may not necessarily be their central role. Unlike disengagement theory, continuity theory recognises retirement as a stage of life offering new opportunities rather than as an abrupt final transition. Research on bridge employment and other gradual transition frameworks support continuity theory, as it helps retirees maintain structure and self-identity through meaningful activities (Lytle et al., 2015). Evidence has been found to support continuity theory, stating that older adults who maintained a consistent level of participation in meaningful activities and limited their involvement in activities which were less important experienced greater psychological wellbeing (Pushkar et al., 2010).

Although this theory has been criticised for not accounting for minority issues and individuals from diverse backgrounds, some believe it does have the flexibility to do so, as meaningful activities are not limited to employment (Lytle et al., 2015).

It is evident from the literature that a significant factor in enhancing psychological wellbeing and flourishing post retirement is to ensure some form of continuity exists in retirement. The relief from job pressure and performance expectations may actually improve life satisfaction, as retirees have the opportunity to find enjoyment in other meaningful life spaces. Unlike disengagement theory, the Life-Career Rainbow and Continuity theory view retirement as another stage of working life, not necessarily one which will result in a loss of self-identity or psychological suffering.

Occupational vs. Athletic Retirement

For quite some time, retirement from work was considered to be equivalent to retirement from sport. Whilst they are not dissimilar in some aspects, a number of distinct differences exist between the two.

A major distinction is the age an athlete enters and exits sport. Athletes usually begin their athletic careers long before a traditional working career, and often retire at a much earlier age in comparison to those retiring from the workforce. While there is no mandatory age of retirement for athletes, skill and strength deteriorate to a point where the high physical demands of sport begin to take their toll, usually causing athletes to retire in their late twenties to early thirties. The effects of declining performance are somewhat hard to predict, and the likelihood of injuries further inhibits ease of anticipating sporting retirement.

Early retirement occurs in both sport and occupational retirement. Some athletes cease their sporting involvement well before any deterioration in physical ability, likely due to either injury or deselection from a sports team or programme. Similarly in occupational retirement, older adults can be forced into retirement by incentive programmes and strategies aimed at reducing the cost of labour (Robertson, 2000). Other older adults choose to retire before the age of 65 for health reasons. One way of looking at the determinants of retirement is by distinguishing the push and pull factors. Injury, deselection or bad health are common examples of involuntary push factors, often leading to a problematic

retirement (Hanks, 1990; Shultz et al., 1998). A study of aging in Sweden found that nearly 50% of pensioners cited health problems as a contributory reason for disengaging in work (Nordenmark & Stattin, 2009). Labourers and other physically intensive occupations may have to seek other work if they develop problems such as back or limb injuries which impede their ability to do certain jobs. Also, workers who have been made redundant or forced into retirement may experience financial difficulties subsequent to leaving the workforce, as do professional athletes who must find alternative income.

Another significant difference between athletic retirement and workforce retirement is the comparative environments of competitive sport and the workplace. From a young age, athletes are exposed to a highly competitive culture fixated on winning. The pressure exuded on athletes to exhibit physical and mental superiority in their roles may alter the way athletes understand themselves and how they are to behave in the workforce.

Contrarily, there are parallels observed in the experiences and emotional reactions to retirement in non-athletes and athletes. Both athletic and occupational retirees report identity loss, financial loss, loss of interest and a loss of meaning (Fortunato & Marchant, 1999; Lytle et al., 2015). Similarly, occupational retirement may also be involuntary, as many individuals have reported feeling forced into retirement when they feel they still have more to contribute (Lytle et al., 2015). When workplace retirement is involuntary, retirees experience adjustment difficulties and decreased levels of self-efficacy (Lytle et al., 2015; van Solinge & Henkens, 2007). Similar experiences have been reported by athletes who have been forced to retire involuntarily (Werthner & Orlick, 1986).

Unlike occupational retirement, an athlete retiring from sport in their thirties still has most of their working life ahead of them, signalling athlete retirement is not a conclusion, rather a transition in occupational status. Therefore, retirement theories which emphasise transition rather than cessation may be more appropriate than those which specify an end.

In general, while there are some similarities between workforce retirement and athletic retirement, there are some fundamental differences which will cause the majority of experiences between the two to be incomparable and ungeneralisable when investigating athlete retirement.

Theories of Athletic Retirement

The athletic transition has been conceptualised by a variety of theoretical perspectives since the importance of the subject was recognised. Initially, the transitional process was described through theoretical frameworks such as thanatology, Kubler-Ross Grief Response, and social gerontology.

The process of retiring from sport has been likened to the conceptual basis of thanatology, as a form of 'social death'. Individuals experiencing social death are biologically and legally alive, but describe feeling as if they were dead, suffering from feelings of social isolation, ostracism, and experiencing a loss in social functioning (Rosenberg, 1984). Athletes have reported feeling aspects of social death when their sporting contracts are terminated, when they are not re-selected, or when they pick up a career ending injury (Rosenberg, 1984).

Another thanatological perspective applied to athletic retirement was the Kubler-Ross Grief Response. This was used to explain the stages of adjustment athletes experience when having difficulty accepting their impending retirement. The grieving process involves five stages of grief; denial, anger, bargaining, depression and acceptance (Kubler-Ross, 1969). This theory however, has little empirical support from within the athletic retirement literature (Rosenberg, 1984). The above theories were also criticised for assuming athletic retirement is an abrupt, negative and traumatic life event, rather than as a part of a transitional process (Taylor & Ogilvie, 1998).

Expanding on the original model of human adaption to transition (Schlossberg, 1981), the revised 4S System has received considerable attention from researchers investigating the athletic career transition process (Schlossberg, Waters, & Goodman, 1995). The model examines the experience from a holistic lifespan perspective, rather than focusing solely on retirement. The transition can be either an event or non-event, which triggers a change in the athlete's environment. Schlossberg (1981) describes how the transition process involves three components, each having the potential to be an asset or a liability. The first component, "approaching transition" considers factors such as the type, impact, and impetus of the transition. The second component, "taking stock" incorporates the 4S factors, situation, support, self, and coping strategies. This examines the individual's previous experience, the triggers, their circle of support, personal characteristics and their coping responses. The final component, "taking charge"

involves the potential to strengthen resources, and try new strategies. This model and Schlossberg's original model especially, is commonly cited by sports theorists and has served as a basis for many athletic retirement research endeavours (Swain, 1991). However, it also received criticism for lacking operational detail and assessment (Taylor & Ogilvie, 1994).

Attention needs to be drawn to the fact that all the above theories were developed outside of the sporting context, signalling a need for the development of sport-specific athletic career retirement frameworks.

The first such model developed in the 1990's and widely referenced today was Taylor and Ogilvie's (1994) conceptual model of adaption to retirement for athletes. The model attempts to account for the entire course of the athletic career process. The proposed is a five-step model designed specifically for retiring athletes, attempting to characterise athlete experiences as a part of a life long journey, with positive and/or negative effects. These five steps are:

1) Causes of career termination. Taylor and Ogilvie (1994) suggested that the most common reasons for the termination of one's athletic career are age, deselection, injury and free choice. The latter produces the best outcomes for athletes when transitioning as they have increased control over their decision and are consequently more prepared for life after sport.
2) Factors related to retirement adaption. Taylor and Ogilvie (1994) described how a number of personal factors, such as self-identity, social identity, perceptions of control, previous developmental experiences and other tertiary contributors (e.g. financial independence, goal achievement and socio-economic status) also influenced the quality of adjustment. Those who neglected personal investment in other areas outside of sport at a young age develop strong and exclusive athletic identities and inhibited social roles, creating possible career barriers later in life.
3) Resources available for retirement adaption. Taylor and Ogilvie (1994) defined how a number of resources including coping strategies, social support and pre-retirement planning, are pertinent to assisting the athlete's adjustment to life after the termination of their athletic career. Athletes who engage in pre-retirement planning experience a more positive transition with less emotional disruption. However, athletes are known to

resist planning for retirement as it may be deemed a distraction to optimal performance.

4) The quality of the career transition. Here, Taylor and Ogilvie (1994) posited that the quality of the athlete's career transition depends on the presence or absence of the factors from the previous three stages. The researchers highlight the complexity of athlete retirement in that each individual will experience a multitude of interacting elements which can be somewhat unpredictable.
5) Intervention for career transition difficulties. Taylor and Ogilvie (1994) advocated the use of psychological interventions for those experiencing career transition distress. For some, the transition can be a vulnerable time requiring the need for professionals to intervene.

Although lacking the same degree of empirical support claimed by Schlossberg's models of transition, Taylor and Ogilvie (1994) conceptual model of adaption to career transition is considered to be sound in structure and is utilised as the underlying framework for the present research. It draws upon Schlossberg's (1981) model and directly deals with athlete retirement from elite sport, acknowledging the positive and negative experiences athletes may or may not face. Several studies have utilised this model to analyse athletic retirement and have found it to be a well-developed, all-encompassing model of adaption (Grove, Lavallee, Gordon, & Harvey, 1998; Moesch, Mayer, & Elbe, 2012; Smith, 1999).

Stage 1: Causes of Career Termination

Causes of athlete retirement can be classified as either involuntary or voluntary. The nature of the cause of athlete retirement has been shown to affect the ease of career transition. Voluntary retirement involves the athlete making the decision to disengage from sport, whereas involuntary retirement occurs when the athlete has little or no control over their disengagement from sport for a variety of reasons (Smith, 1999). The primary factors identified as instigating the career transition process are age, deselection, injury or free choice. Each of these factors may cause psychological, social and physical difficulties for athletes during retirement (Taylor & Ogilvie, 1994).

Other individual factors, such as athletic identity, education, and goal achievement have also been shown to influence adjustment difficulty of retiring athletes. Understanding how the combination of these factors interact with voluntary or involuntary retirement causes will impact how we learn to assist athletes in making a smooth and successful transition. This will be discussed in more depth throughout the following section.

Voluntary Retirement

Believed to the most advantageous form of retirement, having the freedom to choose when to retire influences an athlete's ability to transition smoothly away from sport. With the ability to choose, athletes can express more control over their lives and decide when the time is right for them. The perception of control is strongly related to increased self-efficacy and successful development, reducing the difficulties usually associated with retirement (Smith, 1999; Taylor & Ogilvie, 1994; Webb et al., 1998). Athletes retire voluntarily for a variety of personal and sporting reasons. Some athletes may be seeking new challenges, alternative sources of satisfaction, more time for family, or they find sport no longer rewarding (Werthner & Orlick, 1986).

Thus, it is predicted that there will be a positive relationship between athletes who retired voluntarily and flourishing.

Hypothesis 1: athletes who retired voluntarily will be positively correlated to flourishing.

Non-athletes also have the option of embarking on another career elsewhere for various reasons. Career change occurs relatively frequently, and is considered a normal part of career progress. A career change involves movement to a new occupation that is not typical of a career progression (Carless & Arnup, 2011). A similar change occurs when an athlete retires voluntarily to pursue a new career where their previous skills and responsibilities are largely irrelevant and new training is required. Commonly, athletes grow tired of the demands associated with the competitive lifestyle, or experience problems with the sporting federation and coaches (Sinclair & Orlick, 1993; Werthner & Orlick, 1986). Similarly, employees may choose to shift careers to earn a higher salary, increase job satisfaction and job security, or to obtain new knowledge and skills (Carless &

Arnup, 2011). For some athletes, financial insecurity is a significant reason for sport retirement, especially if athletes are working while competing. As seen in studies of non-athletes, as job security decreases, the probability of changing careers increases (Carless & Arnup, 2011). Sinclair and Orlick (1993) found that males tend to report financial and work-related reasons as contributing to their decision to retire. Others choose to retire once they have achieved their sport related goals, or when they believe there is nothing more to be gained by continuing to engage in sport. Either way, although voluntary retirement may seem more promising, it does not necessarily guarantee an athlete's transition will be overly positive.

Involuntary Retirement

Age

The decline in performance due to advancing age is considered to be a primary cause of retirement from sport. Whilst this can be the case in non-athletic careers, the major difference is sport retirement occurs comparatively earlier. As an athlete ages, they may experience the slow deterioration of physical abilities, a natural part of the maturation process. This includes declining agility, flexibility, coordination and muscle mass (Taylor & Ogilvie, 1994). Competing as an elite athlete requires the maintenance of such physical capabilities and is therefore jeopardised by the loss of strength and speed, especially in sports decidedly reliant on physical attributes for success (Lavallee & Robinson, 2007). Despite levels of experience or intensive physical conditioning compensating for certain aspects of aging, the physiological and psychological ramifications often lead athletes to discontinue their involvement (Taylor & Ogilvie, 1994).

Changes in motivation, personal values and priorities can be factors of psychological aging. As an athlete matures, they may become more focused on spending time with family, or starting a family, leaving less time to train and compete at elite level (Taylor & Ogilvie, 1998). Other athletes may become more heavily involved in business ventures, promotional work, public speaking or charity work as their central focus moves away from sport.

Social stigma also exists with athletes competing over a certain age. Age becomes a widely publicised characteristic of the athlete in the media, which may

influence an athlete to perceive themselves as too old if fans and media are labelling them as so, irrespective of performance. A study of Australian media releases revealed that there is a perception of a 'right time' to retire, and to continue to play beyond this point was considered undesirable (Cosh, Crabb, & LeCouteur, 2013). The 'right time' to retire was considered to be when the athlete is still at the pinnacle of sport ('going out on top'), and the athlete must demonstrate individual agency over the decision. Constructing an athlete's retirement at the right time and on their 'own terms' removes contestation around the retirement and also serves to praise the athlete (Cosh et al., 2013). Because of this, it is more commendable for an athlete to retire while they or the team are still at the pinnacle of their sport, rather than when performance is declining. Although it is not specified, there is a socially constructed point where athletes become positioned as needing to retire. Those who then continue on too long risk becoming portrayed as acting inappropriately and engaging in poor decision making (Cosh et al., 2013). One article analysed stated "it's best to get out a little early than a little late" (Cosh et al., 2013, p. 93). Additionally, those who begin to experience performance declines before retiring may be prone to adjustment difficulties due to lacking in self-confidence and loss of status (Sinclair & Orlick, 1993; Taylor & Ogilvie, 1994).

Deselection

Deselection is the elimination of an athlete from a competitive team based on the decision of the coach and selection panel (Taylor & Ogilvie, 1994). It occurs when the coach makes judgements and decisions about the performance of an athlete and their potential ability to enhance the team. If the athlete is judged to not be the best fit for the team due to lack of skill, physical prowess, or poor performance, the athlete will be deselected and replaced by an athlete who will give the team a greater chance of winning. Not surprisingly, deselected athletes have been reported to experience a loss in athletic identity and sense of self, along with feelings of anxiety, humiliation and anger (G. Brown & Potrac, 2009; Fortunato & Marchant, 1999).

The selection process in sport has been compared to Darwinian philosophy 'survival of the fittest,' and is considered a natural consequence of sporting reality (Taylor & Ogilvie, 1998). Those who do not survive in the sporting world and

retire as a result of deselection typically express bitterness and dissatisfaction towards their club, coach, and sport in general (Fortunato & Marchant, 1999). In a study of Australian Rules Football players, some retired athletes learned of their deselection through the media first, and expressed how they felt abandoned by their club and managers (Fortunato & Marchant, 1999). This shows that deselection is one of the harsh processes that occur through all levels of sport, considered by coaches as one of the most challenging parts of their job (Capstick & Trudel, 2010).

Parallels exist between literature examining redundancy and deselection. Similar to studies of deselection in sports, redundancy in organisations is frequently associated with decreased psychological wellbeing and increased adjustment difficulties (Leana & Ivancevich, 1987; Vickers & Parris, 2007; Waters, 2010). Individual employees who were satisfied, loyal and engaged workers may face the reality of redundancy through no fault of their own. Some employees may readily accept the organisational change and transition successfully, viewing redundancy as an opportunity to start a new career and a new life. However most often, employees will struggle with such a sudden change in circumstances.

Studies have indicated employees who have been made redundant experience significant fears of loss, particularly fear of losing friendships, finances and their identity (Davey, Fearon, & Mclaughlin, 2013). Some employees exhibit anger and frustration towards family, colleagues and to the organisation itself (Davey et al., 2013). Many may feel isolated and shamed for their failures, alienated by their organisation and experience feelings of shock, powerlessness and betrayal (Richardson & Temby, 2000; Vickers & Parris, 2007). An individual's experience of either redundancy or deselection affects their ability to transition into a new career, and can have lasting effects on how they perceive themselves and organisations.

Injury

Injuries are another inevitable reality of an athlete's life. However, any injury, minor or major has the potential to reduce physical capabilities leaving an athlete unable to compete at elite level for a significant amount of time. During rehabilitation, athletes also miss out on opportunities to improve, and may

experience poor performance on return to sport. Therefore, injuries do not necessarily need to be serious to result in retirement. Dissimilar to occupational retirement, minor injuries are unlikely to seriously impact an individual's career.

Many athletes who are forced to retire due to injury do not do so willingly. Among the players who do, many still fell that if they had the opportunity to play again, they would (Fortunato & Marchant, 1999). Most athletes believe they have the mental ability and motivation to continue playing, but are unable to due to their fallible physical condition. Research into different sports reveals varying levels of retirement due to injury, ranging between 5% up to 50% in sports such as ice hockey and football (Ristolainen, Kettunen, Kujala, & Heinonen, 2012; Soderman, Pietila, Alfredson, & Werner, 2002; Werthner & Orlick, 1986). Concerningly, a study of 27 retired Finnish athletes found that 70.4% reported that injury had caused mild or moderate permanent disability in performing daily life activities (Ristolainen et al., 2012). This may further limit an athlete's options when transitioning into a new career.

Similar to other involuntary means of retirement, studies have shown that athletes experience social withdrawal, fear, anxiety and loss of self-esteem as a result of injury forced retirement (Fortunato & Marchant, 1999; Werthner & Orlick, 1986). Additionally, if a career ending injury strikes, athletes may be left unprepared for retirement and uncertain about their future (Werthner & Orlick, 1986).

Due to the uncertainty following involuntary retirement, it is predicted that athletes who experience higher post retirement adjustment difficulty will score lower on a measure of flourishing than athletes who experience lower post retirement adjustment difficulty.

Hypothesis 2: there will be a negative relationship between post retirement adjustment difficulty and flourishing.

Another insightful reason for the resultant issues related to involuntary retirement incorporates Neugarten's (1977) concept of on-time and off-time events. On-time events are defined as an event which occurs at a developmentally typical point in life. They are occurrences which arise at a predictable or normalised time, such as the death of a parent in late adulthood. On the other hand, off-time events are atypical or unpredictable life events, such as the death of a parent in childhood. An individual's ability to anticipate a transition, such as

athletic retirement, plays an important role in diminishing transition related difficulties (Pearson & Petitpas, 1990). Therefore, events such as injury or deselection, induces off-time retirement, limiting an individual's ability to plan and prepare for a transition. Whereas on-time retirement caused by age or free choice allows an individual time to create and implement a plan for the future.

When applied to transitions into adulthood, on-time and off-time events have been found to play an important role in the formation of adult identity, and those who undergo certain life events off-time, such as early parenthood or late marriage are subjected to a variety of social sanctions and pressures (Eliason, Jeylan, & Vuolo, 2016).

Stage 2: Factors related to Retirement Adaption

Athletic Identity

Many of the issues associated with difficult retirement transitions have resulted from being unable to validate and satisfy a strong athletic identity which develops during an individual's sporting career (Lavallee & Robinson, 2007). Defined as "the degree to which an individual identifies with the athlete role" (Brewer et al., 1993, p. 240), athletic identity is formed due to the high demands of elite sport, resulting in individuals neglecting to experiment with different roles, interests and values. Adolescence is a crucial time for identity development. However, due to sport engagement commencing at a relatively young age, an individual's athletic identity has many years to cultivate intensely through continual participation in sport. Thus, an athletes sense of self, goals and decision making tend to revolve purely around sport (Lavallee & Robinson, 2007). A wide range of life skills may be neglected due to an athlete's narrow focus on having a successful sporting career. This is also known as identity foreclosure, where an individual commits to a role without further exploratory behaviour (Brewer et al., 1993). For athletes, time spent on other progressive endeavours are expendable in comparison to trainings and competitions (Brewer et al., 1993; Lavallee & Robinson, 2007; Smith, 1999). Later on, with little time left to engage in self-exploration, the development and reliance on a strong athletic identity and a foreclosed sense of self can have consequences for athletes. Studies have revealed those who find themselves fully immersed in the athletic role experience difficulty

with decision making, have low self-confidence, and increased anxiety (Brewer et al., 1993; Lavallee & Robinson, 2007).

The strength of an individual's athletic identity is thought to be relative to a person's experiences with failure and success in sport. Those who experience poor performance tend to show a decline in athletic identity when compared to athletes who experienced successful performance (Brewer et al., 1993).

Career termination distress is often linked to an over-emphasis on performance excellence, and a failure to develop an identity outside of sport. In a study of female gymnasts, athletes were found to experience an identity crisis during their retirement transition. This was intensified due to the nature of the sport, meaning many athletes retire during adolescence. Their single-minded dedication to achieving excellence during this crucial identity development phase hindered their own personal identity development (Lavallee & Robinson, 2007). The gymnasts all described how they were "living" for gymnastics, leading them to fear life after gymnastics and reluctant to retire (Lavallee & Robinson, 2007).

Some athletes struggle to detach from the restricted role of an athlete and find it difficult to function in other everyday roles. At the extreme end, the lack of self-exploration and early adoption of an athletic identity can make individuals highly susceptible to identity foreclosure, eating disorders, clinical depression and substance abuse (Brewer et al., 1993; Lavallee & Robinson, 2007; Ogilvie, 1987). Issues usually arise during the time of athlete retirement, during which a major part of their self-definition is removed, leading to a sense of loss and low self-esteem (Taylor & Ogilvie, 1994). Park, Lavallee, and Tod (2012) found a correlation between athletic identity and the quality of transition out of retirement in a review of 35 independent studies. Thirty-four of the studies indicated that a strong athletic identity and high tendency towards identity foreclosure was negatively associated with the quality of transition. Those with strong athletic identities also had longer adjustment periods to post-sport life than those with weaker athletic identities (Park et al., 2012).

Given this, it is predicted there will be a negative relationship between the strength of athletic identity and flourishing, and there will be a negative relationship between the strength of athletic identity and emotional reaction to retirement. It is also predicted that there will be a positive relationship between athletic identity and post retirement adjustment difficulty.

Hypothesis 3: there will be a negative relationship between the strength of athletic identity and flourishing

Hypothesis 4: there will be a negative relationship between the strength of athletic identity and emotional reaction to retirement

Hypothesis 5: there will be a positive relationship between the strength of athletic identity and post retirement adjustment difficulty.

Personal Variables

Higher education has the potential to influence the career transition experience of athletes. A study by Marthinus (2007) found that athletes who were better educated experience less occupation-related issues after sport. Retired athletes in Spain experienced fewer problems finding employment if they had obtained a higher education degree (Barriopedro et al., 2018). Other studies of collegiate athletes revealed that as athletes progress through their years at university, the role of education becomes more significant and sport becomes less so (Blann, 1985; Greendorfer & Blinde, 1985). This suggests that as an athlete becomes more engaged in their education, the strength of their athletic identity weakens. Developing educational or career focused goals outside of sport helps to alleviate potential adjustment problems. Despite this, the emphasis on sport usually comes at the expense of further education and career planning

The sense of accomplishment which comes with the achievement of sporting goals is related to a positive adjustment to retirement (Sinclair & Orlick, 1993). Athletes who have achieved their goals tend to be significantly more satisfied than those who had not achieved their goals prior to retirement. Athletes adjusted with ease when they had accomplished what they had desired, and were then able to retire when they wanted. This allows the athlete some closure on their sporting career, and renders them ready to begin a new challenge. Those who have not been able to achieve all their goals may feel resentful about leaving their sporting career unfinished, and be disappointed by their underachievement. Athletes who feel high levels of failure have been found to be more susceptible to transition related difficulties (Greendorfer & Blinde, 1985; Grove et al., 1997; Sinclair & Orlick, 1993). Whilst education and goal accomplishment have been

shown to be important in previous research, these factors are not directly investigated in this research, and were considered in an exploratory analysis.

Stage 3: Availability of Resources

The quality of adaption to athletic retirement may be influenced by the utilisation, or under-utilisation of key resources. These resources can be classified as being either personal, social, or institutional resources (Taylor & Ogilvie, 1994). Personal resources include pre-retirement planning and individual coping strategies useful for effective transition. Social resources include the athlete's surrounding support network who are invested in the athlete, such as family and friends. Finally, institutional resources are professional support systems such as psychologists and athlete life advisors who are employed to assist athletes.

Personal Resources

Terminating an athletic career can be a highly stressful period of an individual's life. Developing psychological skills and coping strategies are therefore important in helping an athlete deal with the stress. Some effective coping strategies include goal setting, searching for new careers, interests or challenges, and developing coping skills such as cognitive restructuring, anxiety reduction and relaxation training. Focusing on the implementation of coping mechanisms can limit the likelihood of adjustment difficulties (Taylor & Ogilvie, 1994). Maladaptive coping strategies which are avoidance orientated, such as denial, disengagement, alcohol dependence, substance abuse or increased smoking have also been reported by some athletes as methods of dealing with retirement (Park et al., 2012). Research has shown that those athletes with strong athletic identities are more likely to turn to maladaptive coping strategies (Grove et al., 1997).

Pre-retirement planning is also considered to be a significant influence on successful or unsuccessful transitions. Researchers have consistently found planning to positively affect the sport retirement process. Alfermann, Stambulova, and Zemaityte (2004) found that planned retirement correlated with higher satisfaction with one's career, more positive emotions after retirement, and a shorter duration of adaption to their new circumstances. Despite this, many

athletes and coaches avoid addressing the subject in order to not distract from the athlete's current performance.

A comprehensive pre-retirement plan incorporates activities such as psychological preparation, financial planning, educational advancement and vocational exploration before and after sport disengagement (Park et al., 2012). Structured pre-retirement planning has become an integral part of many high-performance sporting institutions, taking many different forms. Programmes involve mentoring systems, educational courses, cooking classes, workplace visits, or career counselling. However, opportunities for using pre-retirement planning services sometimes goes unused by athletes for various reasons. Some believe they are not useful, lack of knowledge of the service, or want to formulate their career plans independently (Sinclair & Orlick, 1993). For many, the range of services that exist now may not have been accessible during their retirement.

Therefore, as mentioned by previous research into planned and unplanned retirement, it is predicted that planned retirement will be negatively related to post retirement adjustment difficulty.

Hypothesis 6: there will be a negative relationship between planned retirement and post retirement adjustment difficulty.

Social Resources

When an individual is unable to cope with the transition on their own, the support from those outside of the sporting arena is crucial. Once an athlete ceases involvement in a particular sport or team, this may lead to feelings of loneliness and isolation if no other forms of social support exist outside of sport. A support system, commonly consisting of family and friends can supply the athlete with mental and emotional support required to minimise negative feelings resulting from anticipated or unanticipated retirement. Sinclair and Orlick (1993) reported that an athlete's partner, family and friends are the most important support group, and those who received their support experienced an easier transition into retirement than those who received less support.

Institutional Resources

With regards to institutional resources, possible interventions such as career programmes, sports psychologists and work-placements are considered most effective when they commence in the pre-retirement phase (Ballie & Danish,

1992). Ballie (1993) suggested that interventions should focus on "the development of new career options, of an attitude that promotes the opportunities of retirement rather than allowing for a purely loss orientated attitude to occur" (p. 407). Given the precarious situation athletes may be in, normalising and desensitising possible painful experiences before athletes begin transitioning may reduce feelings of isolation. Some athletes also feel neglected and forgotten by their sporting institutions and former coaches in retirement (Sinclair & Orlick, 1993). In certain cases, the lack of continued support or engagement with their former sporting bodies leaves athletes feeling used and unappreciated for their long-term commitment and contribution. Other forms of institutional support, such as psychologists, appear to be less utilised by retiring athletes. In one study, athletes indicated a reluctance in seeking professional assistance, with only 35% of athletes saying they would seek help from a sport psychologist (Sinclair & Orlick, 1993).

Stage 4: Quality of the Career Transition

The presence or absence of the aforementioned variables covered in the first three stages of Taylor and Ogilvie's (1994) model are said to directly affect the quality of the transition into retirement. Athletes must address significant life changes and challenges during this time, such as finding a new career, loss of identity, and financial constraints (Taylor & Ogilvie, 1998; Werthner & Orlick, 1986).

Conflicting research exists in both occupational retirement and athletic retirement when analysing the experiences of individuals who have retired. Some report high levels of psychological distress in occupational retirement (Lytle et al., 2015; van Solinge & Henkens, 2007) and athletic retirement (Alfermann et al., 2004; Taylor & Ogilvie, 1994; Werthner & Orlick, 1986). Other studies have reported more positive effects on health and wellbeing in occupational retirement (Atalay & Barrett, 2014; Oshio & Kan, 2017) and athletic retirement (Ballie, 1993; Marthinus, 2007; Park et al., 2012; Sinclair & Orlick, 1993). As is the case in occupational retirement, athletic retirement provides an opportunity for individuals to be relieved of prior pressures and training commitments so they can pursue other leisure activities or career pursuits. Retirement is quite often

associated with a positive lifestyle change (Atalay & Barrett, 2014; Marthinus, 2007; Park et al., 2012).

Stage 5: Post-retirement Interventions

Professional intervention may be required if an athlete is experiencing psychological stress, disorientation, or depression following retirement. Through the assistance of sport and counselling psychology professionals, athletes can learn how to establish a new self-identity and how to manage emotional distress. A concerted effort by sporting institutes in the past decade has led to the development of specialised career transition programmes to assist elite athletes. In New Zealand, High Performance Sport NZ is responsible for preparing athletes for transition out of sport. Other sporting codes have their own athlete management systems, and others receive very little support at all. The main goal of these programmes is to take a holistic view of an athlete's life and work to develop them as a person while still achieving their sporting goals (High Performance Sport New Zealand, 2018). A sport psychologist or counsellor can also teach athletes important coping techniques and mental skills to help the athlete manage grief associated with the challenges of a new lifestyle. For some, they may have experienced almost celebrity-like status, and must readjust back into societal norms where they are of less social significance. Retirement can also be perceived as a positive change, although some athletes still require assistance to successfully adapt to new challenges. Park et al. (2012) found that the quality of career transition was positively associated with the development of life skills. However, the athletes themselves can be an obstacle to a successful transition. Sinclair and Orlick (1993) indicated some athletes do not perceive counselling as an effective assisting method, partially due to preconceived notions of counsellors and psychologists, and their accessibility.

Summary

Much of the research into athlete retirement has been focused more specifically on the negative outcomes resulting from retirement. However, there are next to no studies which attempt to analyse if athletes are flourishing in their chosen careers after sport. There is evidence to support the idea that athlete

retirement is a traumatic life event, but there is also evidence which contradicts this. There is however, a consensus that athletic retirement is multi-dimensional and unique to an individual's context.

Taylor and Ogilvie's (1994) conceptual model of adaption to retirement has been used extensively in previous athletic retirement research and was chosen as the foundation for the present study. Utilising this framework, the main causes of athlete retirement were described, and other potential influences were outlined. Athletic identity and the voluntary nature of retirement were identified as significant influencers on retirement experiences. Several ways of reducing the effects of these factors are active in the New Zealand sporting scene. However, there are very few studies analysing their effectiveness and whether they are helping athletes transition smoothly and flourish later in life.

Summary of Hypotheses

- Hypothesis One: There will be a negative relationship between the strength of athletic identity and flourishing.
- Hypothesis Two: There will be a negative relationship between post retirement adjustment difficulty and flourishing.
- Hypothesis Three: There will be a positive relationship between athletes who retired voluntarily and flourishing.
- Hypothesis Four: There will be a negative relationship between the strength of athletic identity and emotional reaction to retirement.
- Hypothesis Five: There will be a positive relationship between the strength of athletic identity and post retirement adjustment difficulty.
- Hypothesis Six: There will be a negative relationship between planned retirement and post retirement adjustment difficulty.

CHAPTER TWO

Method

This chapter includes a detailed description and justification of the methodology adopted for the present study. A description of the participants and how they were recruited is illustrated, as well as the procedure used to collect and analyse the data. The measures used to obtain the information and their scales are defined. Ethical considerations and limitations relative to the method are also discussed.

Procedure

This study used a quantitative approach to investigate the career transition of elite athletes. An online questionnaire was developed using Qualtrics and focused on the causes of retirement, athletic identity, adaption to retirement, quality of adaption, and post-retirement flourishing. The questionnaire also requested basic demographic data including participants age, ethnicity, education, occupation and length of time since retirement. The online questionnaire was sent to a number of governing sports bodies for distribution throughout their athlete database. This email included a formal invitation for the organisation and the link to the questionnaire which contained the participant information sheet. The link was then distributed by the sporting organisation to participants who met the inclusion criteria. The advantages of using an online survey were increased accessibility to athletes who are widely geographically spread, and providing a sample more representative of the athlete population. Participants are also able to complete the survey at any time or place convenient to them. Participants responses remained anonymous, allowing them to be honest about their experiences with no risk of being identified.

Participation was voluntary, and participants received information disclosing the purpose of the study, risks, procedures, and the researcher's contact information (appendix C). The survey was active for 8 weeks to allow the sports organisations time to distribute at an appropriate time. Organisations were contacted again after 4 weeks for an update on distribution. After 8 weeks the questionnaire was closed for data analysis.

Participants

Purposive sampling was used to identify participants which would potentially meet the inclusion criteria. With the support of personnel who had access to potential participants, the researcher was able to contact them by email to encourage them to participate. A snowball sampling technique was then utilised to increase the number of participants. Current participants were encouraged to contact other retired athletes and encourage them to complete the survey.

Three National sporting organisations were contacted to assist with participant recruitment. These were High Performance Sport NZ, NZ Rugby Players Association, and the NZ Olympic Committee. Each of these organisations were asked to distribute the questionnaire and information sheet amongst their known retired athletes, either directly through email, or through newsletters.

The criteria to be eligible to participate in the research was to:

- have competed in sport at an elite level, (regional, national, or international representation).
- have since retired from competitive sport.

Retired elite athletes who had competed at regional level or above were eligible to participate in the study. A wide range of individual and team sports were represented, including football, rugby, netball, hockey and athletics. A total of 101 responses were received. Out of these 101 responses, 20 were omitted as they had not completed over 75% of the study. A total of 81 were included in the final analysis, 31% of them were female (n=25) and 69% were male (n=56). Seventy-eight percent of the participants identified as New Zealand European (n=64), 9.8% were Maori (n=8), 7% were Samoan (n=6) and 5% specified as English, American, or unspecified (n=4).

The average age of participants at the time of the study was 38 (SD=12.55). The age of retirement of athletes ranged between 16 to 51 years old, with the average age of retirement being 28.7 years (SD=6.61). The length of time athletes had been retired for prior to completing the study was an average of 9 years (SD=9.18).

Education and Employment

Table 1 shows the employment status and highest level of education obtained. Over 50% of the participants had achieved a Bachelor's degree. Whilst competing, 79% of participants engaged in some form of study, ranging from full time to part time university study, apprenticeships and coaching courses. Since retiring, 41% of males and 56% of females had gone on to gain a qualification since retiring. About 20% of the participants are currently studying, most of whom are completing post-graduate degrees.

Ninety-one percent of the participants are currently employed or self-employed, 35% of whom are currently employed in ventures related to sport. Those in the other category were either retired or students. Also, 60% of respondents were working part-time or full-time jobs while still competing at a high level.

Table 1. *Employment and education information*

	n	*%*
Employment status		
Employed	58	72%
Self-employed	17	21%
Unemployed	1	3%
Other	4	5%
TOTAL	81	
Highest education level		
Primary School	1	1%
High School	17	22%
Tertiary Diploma	10	13%
Bachelor's Degree	43	54%
Master's Degree	7	9%
Doctoral Degree	2	3%
TOTAL	80	

Ethical Considerations

The study received ethical approval from the Research and Ethics Committee of the School of Psychology at the University of Waikato. Contact number for the ethics board were provided to participants if they had any

questions regarding the study. Participation in this study was completely voluntary and required informed consent. All information sought from participants remained anonymous and confidential. Participants could request additional information at any time and reserved the right to refuse to take part in, or withdraw from the study at any time. Participants were also allowed to leave any questions they did not wish to answer blank.

Measures

The Athletic Identity Measurement Scale (AIMS)

The AIMS is a 10 item inventory developed to measure the strength and exclusivity of an individual's athletic identity (Brewer et al., 1993). It is a self-report measure Likert scale, in which participants respond between 1 (strongly agree) to 7 (strongly disagree). A high composite score gained by totalling the response for each item indicates a strong athletic identity. The AIMS is one of the most frequently used measures of athletic identity, incorporated into various studies with diverse athlete populations (Proios, 2012). Items include 'I consider myself an athlete', and 'I spend more time thinking about sport than anything else.' The AIMS is reported as having good face validity and good internal reliability with a Cronbach alpha coefficient of .80 (Brewer et al., 1993).

Flourishing Scale

The Flourishing Scale (Diener et al., 2009) consists of eight items describing important features of human functioning, such as purpose in life, positive relationships, and feelings of competence. It also assesses social relationships, and the development of meaningful life through engagement in activities. Although the Flourishing Scale has not been applied much in the sporting context, it has previously been used in a number of other studies, including research analysing optimism in young adults and well-being for public policy. It has been reported as having high validity and high internal reliability with similar scales, and is considered a reliable measure of positive functioning. Items include 'I lead a purposeful and meaningful life,' rated on a Likert scale from 1 to 7 (1= strongly disagree, 7= strongly agree). The Flourishing Scale has a Cronbach alpha coefficient of .80. (Diener et al., 2009).

Athlete Career Transition Inventory

Participants completed a modified version of the Athlete Career Transition Inventory (Smith, 1999). It has previously been used to explore the transitional experiences of elite athletes who have since retired from top-level sport in New Zealand. It seeks information on athlete's motivation for sport participation, achievement of sporting goals, personal and social growth and development. Response methods include Likert scales, ranking of alternatives, check boxes and open-ended questions. Items were questions such as 'I accomplished all my sporting goals during my competitive years in sport' and 'my overall adjustment to retirement from sports was easy.' Open ended questions regarding athletic identity included 'do you still consider yourself an athlete? Please explain why/why not.'

In consultation with retired athletes and the researcher's supervisor, some questions were removed for being irrelevant, and new questions added to offer new insight into the experiences of retired athletes. Some demographic questions were adapted to align with Statistics NZ. The questionnaire was then reviewed by peers and some minor adjustments to simplify the wording were made.

The final version of the Athlete Career Transition Inventory questionnaire contained 46 questions split into two sections. The first section contained questions related to participant demographics and details surrounding their retirement (age, sport, cause of retirement etc.). The second section made up of Likert scales and check boxes analysed current sport involvement, previous sport involvement, post sport adjustment, and career planning. The current and previous sport involvement sub-sections sought to understand athletes' motivations for sport participation. Athletes were asked about their activities after retirement and their experiences during the transition out of sport in the post-sport adjustment section. Information concerning the athlete's pre-retirement planning and support received was gathered as well.

The Likert scale questions were scored using six alternatives, as used in the original Athletic Career Transition Inventory to avoid a neutral category (Smith, 1999). The purpose of this was to force participants into a response and overcome the phenomenon of 'sitting on the fence.'

Emotional Response to Sport Retirement Scale

The Emotional Response to Sport Retirement Scale (Alfermann et al., 2004) consists of four typical negative emotions (anxiety, emptiness, sadness and uncertainty) and four typical positive emotions (freedom, happiness, joy and relief) which were rated by participants on a 5-point Likert scale (1=not at all, 5= very much). Participants were asked to respond to the emotional states retrospectively, as to how they felt about retiring from sport. Alpha values for positive emotions was 0.80 and negative emotions was 0.71 (Alfermann et al., 2004).

Data Analysis

The data was initially cleaned using Microsoft Excel and any recorded responses which did not exceed 75% of completion were removed from the final analysis. A total of 20 responses were removed. The data was then imported to SPSS Statistics which was used to analyse the data and to investigate the research questions. Any remaining missing values were treated using pairwise deletion.

CHAPTER THREE

Results

This chapter reports the descriptive statistics for the sample as well as testing the hypotheses that structured this research. This is followed by brief exploration of the data for further relationships.

Sports Demographics

The athletes competed in 18 different sports before retiring. Rugby had the highest level of representation with 44%. Other sports included were athletics (12%), football (10%) and rowing (11%). Table 2 shows that international competition was the most common level of representation achieved by athletes in their chosen disciplines (58%). 75% of respondents were competing at regional level or above for at least 10 years.

Table 2. *Sports demographics summary*

	n	*%*
Highest level of representation achieved		
Olympic	7	9%
International	48	58%
National	15	18%
Regional	12	15%
TOTAL	81	
Weekly hours spent participating in sport		
9 hrs or less	3	4%
10-14 hrs	14	17%
15-19 hrs	16	20%
20-24 hrs	15	19%
25-29 hrs	10	12%
30-34 hrs	9	11%
35-39 hrs	2	3%
40+ hrs	12	15%
TOTAL	81	

Current and Previous Sport Involvement

Table 3 shows what motivates participants to engage in physical activity currently on a 6-point Likert scale. To gain prestige and recognition was the least motivating factor (M = 2.23, SD = 1.32), with 80% of participants disagreeing in some way with the statement. Maintaining physical fitness for the health benefits was the most agreed with statement (M = 4.81, SD = 1.47), with 43% of participants agreeing strongly.

Competing in sport for the purpose of gaining recognition and awards was the least agreed with factor, with a mean of 2.63 (SD = 1.46). Over 50% agreed strongly that they originally participated in sport for the love and enjoyment of it (M = 5.28, SD = .97). Participation for the sake of competing with others was also agreed with by the majority (M = 4.21, SD = 1.38).

Table 3. *Current and previous sport involvement*

Q21. *I maintain my current level of physical activity for:*	*M*	*SD*
For health benefits of physical fitness.	4.81	1.47
To socialise with others interested in sport and have fun.	4.15	1.33
To remain fairly competitive.	3.36	1.46
To gain prestige and recognition.	2.23	1.32
Compared to my competitive sport experiences, I enjoy my current level of physical activity.	4.33	1.35
Q22.		
I originally participated in sports to be with people in a social situation.	3.78	1.59
I originally participated in sports for the love of the sport itself.	5.28	0.97
I originally participated in sports to compare skills or compete with others.	4.21	1.38
I originally competed in sports for reasons other than the sport itself (gaining recognition, awards, prizes, etc.). n = 80	2.63	1.46

Evaluation of Sport Achievement and Development

The degree to which sport enhanced personal development and the subjective evaluation of the achievement of sporting goals was analysed using a 6-point Likert. Just over 50% of participants agreed that to some extent, they had achieved all their sporting goals during their sports careers (M = 3.72, SD = 1.47). The majority agreed that sport enhanced their social development (M = 5.23, SD = 1.00) and their personal growth (M = 5.41, SD = 1.00). Additionally, 52% of participants retired when their performance was declining, 22% retired while their performance was improving, and 25% retired when they were at the peak of their performance.

Table 4 shows the reasons which led to the athlete's retirement. Athletes in the 'other' category acknowledged their reasons for retirement being more heavily related to financial situations, lack of enjoyment, career and study commitments, and negative sporting cultures.

aTable 4. *Reasons for retirement*

Retirement reason	*n*	*%*
Age	12	15%
Injury	25	31%
Free Choice	30	36%
Other	12	15%
Deselection	3	4%
TOTAL	81	

Adjustment Difficulty

A 6-point Likert scale was used to analyse the degree of difficulty participants experienced when withdrawing from competitive sport. The majority of participants believed their new career is not as emotionally rewarding as their sporting career (M = 3.21, SD = 1.36). Participants also deemed their retirement from sport was relatively easy (M = 3.96, SD = 1.55). Similarly, participants agreed they adjusted to their next venture quickly (M = 4.12, SD = 1.52). Roughly 60% of the participants adjusted in less than one year, although 26% took 3 or more years to feel fully adjusted to their new circumstances.

Pre-retirement Planning

Table 5 provides an overview of the preparation taken by athletes prior to retirement on a 6-point Likert scale. While most of the participants agreed in some way that they prepared for retirement beforehand (M = 3.85, SD = 1.72), the mean reported for having access to pre-retirement planning support was only 3.01 (SD = 1.63). That is, 53% of participants had received no support from outside sources to help them prepare for retirement. In comparison, 68% of females and 45% of males did not have access to pre-retirement planning resources.

Table 5. *Post-sport preparation*

Q33.	*M*	*SD*
I prepared for my retirement from sport whilst I was still competing. (*n* = 79)	3.85	1.72
During my sporting career I managed my finances to support myself and my family while I made the transition into a new career. (*n* = 79)	4.25	1.50
There were opportunities made available to help prepare me for the career transition out of sport whilst I was still competing. (*n* = 78)	3.01	1.63
My family were involved in helping me make the transition out of a sporting career into another career. (*n* = 78)	3.87	1.47

Athletic Identity

The combined average of athletic identity was 36.08 (SD = 7.98). Due to the variables not being normally distributed, a Mann-Whitney U test was used which showed that there were no significant differences between male (Mdn = 36) and female levels athletic identity (Mdn = 40), U = 486, z = -1.89, p = .058, r = .21.

Analysis of Hypotheses

Table 6 is a summary of correlations for hypothesis testing. Each of the scales were checked for reliability, and all Cronbach Alphas were above the Field (2013) minimum internal consistency threshold of .70, as shown below.

Table 6. *Summary of Spearman's correlations between all variables*

	Variables	*M*	*SD*	1	2	3	4	5
1	FS	49.17	5.25	(0.88)				
2	AIMS	36.1	7.98	0.30**	(0.80)			
3	Negative Emotions	10.12	4.00	-0.16	0.32**	(0.85)		
4	Positive Emotions	13.08	3.67	-0.02	-0.11	-0.08	(0.83)	
5	Post-sport adjustment difficulty	5.96	2.95	-0.23	0.31**	0.58**	-0.15	(0.91)

Note. FS = Flourishing Scale; AIMS = Athletic Identity Measurement Scale. **Correlation is significant at the 0.01 level (two tailed). Cronbach alpha given in brackets on the diagonal.

Hypothesis One: There will be a negative relationship between the strength of athletic identity and flourishing.

Contrary to the hypothesis, Spearman's rho Correlation indicated that there was a significant positive relationship between total athletic identity (M = 36.1 SD = 7.98) and flourishing (M = 49.17 SD = 5.25) r = .3, p = .01. Athletes who had high athletic identities also indicated high flourishing.

Hypothesis Two: There will be a negative relationship between post retirement adjustment difficulty and flourishing.

As predicted, Spearman's Correlation indicated there was a weak negative relationship which approached significance at the $p<0.05$ level between total post sport adjustment difficulty (M = 5.96 SD = 2.95) and total flourishing (M = 49.17 SD = 5.25) r = -.225, p = .054.

Hypothesis Three: There will be a positive relationship between athletes who retired voluntarily and flourishing.

Due to the variables not being normally distributed, a Mann-Whitney Test was used to determined that there is a significant difference between the total flourishing of athletes who retired voluntarily (Md = 51, n = 31) in comparison to athletes who retired involuntarily (Md = 49, n = 46), U = 508, z = -2.14, p = .03, r = .06. Athletes who retired voluntarily reported as having slightly higher levels of flourishing.

Hypothesis Four: There will be a positive relationship between the strength of athletic identity and emotional reaction to retirement.

This hypothesis was partially supported, as a Spearman's correlation analysis revealed a significant positive relationship between total athletic identity (M = 36.1 SD = 7.98) and negative emotional reaction to retirement (M = 10.12 SD = 4) r = .318, p = .005. However, no relationship was detected between total athletic identity and total positive emotional reaction to retirement (M = 13.08 SD = 3.67) r = -.109, p = .341.

Upon further investigation, gender differences were uncovered. A statistically significant relationship exists between female athletic identity (M = 37.96 SD = 9.20) and negative emotions (M = 11.80 SD = 3.73) r = .740, p < .001. Similarly, there was a significant negative relationship between female athletic identity and positive emotions (M = 14.2, SD = 2.94) r = -.426, p = .034. No statistically significant difference was found between male athletic identity (M = 35.19, SD = 7.25) and negative emotions (M = 9.32, SD = 3.91) r = -.056, p = .689. There was also no difference between male athletic identity and positive emotions (M = 12.54, SD = 3.88) r = 0, p = .998. Female athletes who had high athletic identity experienced more negative emotions when retiring, while those with low athletic identity experience more positive emotions. For male athletes, athletic identity was not significantly related to emotions.

Hypothesis Five: There will be a positive relationship between athletic identity and post retirement adjustment difficulty.

Post sport adjustment was calculated by combining the two scores for the items 'I adjusted to my new circumstances quickly and without difficulty' and

'my overall adjustment to retirement from sports was very easy' as recommend by the inventory creator (Smith, 1999). These questions correlated highly with each other ($r = .85$, $p < .001$). The items were then reverse scored so that higher scores indicated greater difficulty with adjustment.

Supporting predictions, a Spearman's correlation indicated a significant positive relationship between total athletic identity ($M = 36.08$ $SD = 7.98$) and post sport adjustment difficulty ($M = 5.96$ $SD = 2.96$) $r = .309$, $p = .007$. Athletes who had a stronger athletic identity experienced significantly more difficulty adjusting to retirement.

Hypothesis Six: There will be a negative relationship between planned retirement and post retirement adjustment difficulty.

Support for this hypothesis was achieved using Spearman's correlation which indicated a negative relationship between total post sport adjustment difficulty ($M = 5.96$ $SD = 2.96$) and planned retirement ($M = 3.85$ $SD = 1.72$) $r = -.454$, $p < .001$. Those who planned for their retirement beforehand experienced less adjustment difficulty. Those athletes who indicated high levels of control over their retirement decision ($M = 3.96$ $SD = 1.39$) also experienced less post sport adjustment difficulty ($M = 5.96$ $SD = 2.95$) $r = -.676$, $p < .001$.

Exploratory Data Analysis

In addition to testing the hypothesised relationships, the data was also explored for further relationships and differences within groups. Also included is a content analysis of open-ended questions about athletic identity.

Adjustment difficulty and cause of retirement

There is a significant positive relationship between the adjustment difficulty of athletes who retired by free choice and those who retired through injury. A one-way between-groups analysis of variance was conducted to explore the impact of causes of retirement on adjustment difficulty. There was a statistically significant difference at the $p < .05$ level for causes of retirement $F(4, 71) = 3.9$, $p = .006$. The effect size, calculated using eta squared, was .18, classified as a small effect (Cohen, 1988). To reduce the probability of making a Type 1 error, the Tukey Honesty Significant Difference (HSD) was used to determine if the relationship between the data was significant. The Tukey HSD

test indicated that the mean score for injury retirement (M = 7.33, SD = 2.79) was significantly different from free choice retirement (M = 4.38, SD = 2.28). Athletes who retired voluntarily experienced less post retirement adjustment difficulty in comparison to those who retired due to injury.

Goal achievement, adjustment and negative emotions

Spearman's correlation identified a significant negative relationship between the achievement of sporting goals (M = 3.72 SD = 1.47) and post sport adjustment difficulty (M = 5.96 SD = 2.96) r = -.247, p = .031. Athletes who reported achieving their sporting goals to a higher degree experienced less post sport adjustment difficulty. Similarly, a Spearman's correlation indicated a significant negative relationship between the achievement of sporting goals (M = 3.72 SD = 1.47) and total negative emotions (M = 10.12 SD = 4) r = -.247, p = .029. Those who achieved their sporting goals reported lower levels of negative emotions. No significant relationship exists between achievement of sporting goals and positive emotions.

Cause of retirement and negative emotions

A one way ANOVA was used to analyse the effect different reasons for retirement had on negative emotions. There was a statistically significant difference in negative emotions: F (4, 77) = 4.6, p = .002. Post-hoc comparisons with the Tukey HSD test indicated that the mean score for injury (M = 11.78 SD = 3.1) was significantly different from the free choice group (M = 8.09 SD = 3.6). The eta squared effect size was .20, a small effect size according to Cohen (1988). Athletes who retired due to free choice experienced fewer negative emotions than those who retired due to injury.

Content analysis: Do you still consider yourself an athlete?

Participants were asked if they still considered themselves an athlete, and state why or why not they felt that way. A third of participants (33%) still considered themselves an athlete while 66% believed they were not. For those who did not consider themselves still an athlete, the most common reasons, with illustrative quotes, were:

Nineteen respondents gave their reason for not viewing themselves as an athlete anymore as because they were no longer competitive or competing at an elite level.

I am still active with other sports like tennis or golf, but as I am not competing professionally I don't consider myself an 'athlete' as it isn't my focus anymore.

Eight respondents mentioned their reason being as they had since taken on new roles, such as parent, professional, supporter or coach.

I was an athlete when I was a competitive high jumper as I made two Olympic a Standards, but now I describe myself as a coach. I work at being fit and healthy.

Five respondents believed they were no longer athletes because they were training to keep fit and healthy rather than to be athletically advantaged.

I still train most days and I am still competitive however my athlete days are over. I exercise to mainly stay fit, healthy and in shape.

For those who did still consider themselves as an athlete, the most common reasons were:

Ten respondents believed they were athletes because they were still competitively involved, just not at an elite level.

I still compete at lower levels and coach a bit, so I am still very involved

Seven respondents mentioned their reason for still considering themselves as an athlete was because they have since found enjoyment in new, mostly socially focused sporting ventures.

I am still very active just in a different sport which isn't really about beating other people, more enjoying the movements and activity.

Four respondents gave their reason for still being an athlete was because it was an important part of their identity and lifestyle.

It is part of my identity and I still exercise a lot as it, it's what I did every day.

This chapter provided an analysis of the hypotheses, which revealed some contradictory findings. Three out of five of the hypotheses were supported, with

one approaching significance. However, the relationship analysed in hypothesis one was found to oppose predictions. The following chapter will discuss the implications of these results.

CHAPTER FOUR

Discussion

A growing interest in retirement experiences and the mental health of retired athletes has revealed mixed outcomes. It is widely assumed that athlete retirement is a difficult and distressing time for athletes. However, some studies have found minimal evidence to support this assumption. Furthermore, literature has predominately focused on identifying the cause of distress, rather than identify the factors which enable flourishing. The present study attempts to address this, and offers new evidence on the ability of athletes to flourish after retirement from sport. The purpose of this study was to investigate the experiences of elite New Zealand athletes who have come to the end of their sporting career and to identify the factors which aid flourishing and reduce adjustment difficulty after retirement. The study included 81 retired athletes varying in age, disciplines, identities and experiences.

The Influence of Athletic Identity

The relationship between athletic identity and adjustment difficulty is widely documented (Ballie & Danish, 1992; Brewer et al., 1993; Webb et al., 1998). The distress associated with career termination has more often than not been linked to a strong athletic identity developed through an overly intensive sporting fixation and lack of personal identity development. Thus, in the present study it was hypothesised that those with strong athletic identities would find it more difficult to flourish in their new ventures after forgoing competitive sporting participation. Results instead indicated that an elevated identification with the athlete role during sporting involvement led to enhanced levels of flourishing after the conclusion of their competitive sporting careers. This finding contradicts predictions, but it is supported by Lally (2007) who found that athletes flourished in sport retirement, as the transition allowed them to flourish due to the opportunity for self-exploration. Previous studies which utilised a measure of life satisfaction have also found mixed results. Some studies have reported declines in life satisfaction of athletes following retirement (Werthner & Orlick 1986). More recently however, a study done by Shachar, Brewer, Cornelious, and Petitpas (2004) found no differences in adjustment difficulties or life satisfaction of former

athletes, indicating athletic identity may not necessarily influence life satisfaction. A study of Australian athletes found that as athletes approach the end of their sporting career, the strength of their athletic identity decreases (Martin, Fogarty, & Albion, 2014). An explanation for these contradictory results could be found in the extent to which athletes prepare for retirement. In preparation for retirement, some athletes will engage in a variety of coping strategies, such as involving themselves in other physical, mental, or academic pursuits to develop their social identity. Thus, a retirement accompanied by a decrease in athletic identity leads to a better social adjustment (Lally, 2007). Additionally, higher levels of flourishing may also be associated with the benefits of retirement, such as increased free time, injury freedom, and less competition stressors. For example, Martin et al. (2014) found that the life satisfaction of athletes who planned for retirement actually increased post retirement. No athletes within their study experienced a decline in life satisfaction, even those who retired involuntarily. Therefore, a planned retirement combined with athletic identity decreasing strategies may more likely lead to flourishing.

Alongside this unpredicted link to flourishing, and in line with much of the previous research, athletic identity was also found to be significantly correlated to post sport adjustment difficulty. Partial support was gained for hypothesis four, which predicted that there would be a positive relationship between the strength of athletic identity and emotional reaction to retirement. It was identified that overall, athletic identity only had an effect on negative emotions. That is, athletes with higher athletic identity felt more negatively about their retirement from sport. This supports findings by Alfermann et al. (2004) who showed that high athletic identity corresponded to more negative emotions and less positive emotions after career termination. In the present study, this was mostly true for female athletes, who experienced more positive emotions when their athletic identity was lower, and more negative emotions when their athletic identity was higher.

Athletes who exhibited stronger athletic identities tend to experience greater post sport adjustment difficulty, take longer to adjust, and experience more negative emotions. These findings corroborate previous research in relation to occupational retirement and athletic retirement (Grove et al., 1997; Lytle et al., 2015; van Solinge & Henkens, 2007). As with any form of life transition, there will be a disruption to former behaviours and habits, requiring a period of

adjustment and adaption. Those who associate strongly with their sporting character are known to struggle more with the process of letting go. A study of female gymnasts showed how developing an intense athletic identity caused them to experience an identity crisis after retiring from sport (Lavallee & Robinson, 2007). Longer adjustment periods and difficulty transitioning is often a consequence of a strong athletic identity. While 40% of participants took less that 6 months to adjust, a further 22% of participants took over 3 years to feel fully adjusted to their new circumstances.

It is evident that athletic identity creates an interesting paradox. In the present study, while higher athletic identity is associated with greater flourishing, it is also correlated with negative emotions and greater adjustment difficulty. In recent flourishing literature, a study into the mental wellbeing of first year university studies observed that flourishing can be learned (Knoesen & Naudé, 2018). Initially, students feared facing the big unknown and were being confronted by practical difficulties. However, over time they experienced personal growth, independence, and skill mastery, allowing them to learn how to flourish. Similarly, athletes may be overwhelmed by the prospective transition, struggling with identity issues, and uncertain about the future. However, flourishing requires time and consistent, conscious investment (Fredrickson & Branigan, 2005). While athletes may initially experience emotional distress and psychosocial difficulties commonly reflected in languishing, research into flourishing has shown that through exploration, growth and resilience, athletes are able to become more comfortable in their new environment and begin to find a way to flourish (Grant & Cavanagh, 2007). Flourishing is not purely dependent on external circumstances, but rather the individual's ability to adapt and to learn the personal requirements necessary for them to flourish.

Adjustment Difficulty

The majority of athletes within this study adjusted to retirement relatively quickly and with ease. This supports previous research analysing sport retirement in New Zealand, which found most athletes had a reasonably smooth and problem free transition (Hodge, 1997; Smith, 1999). Previous research has also indicated that participating in activities which transcend sport enable athletes to broaden

their identity and prevent identity foreclosure. Athletes who are not engaging in exploratory behaviour and are concentrating on sport to the point of excluding all other activities have been shown to experience more adjustment difficulty. Allowing time for personal and professional development through employment or higher education exposes athletes to possible areas of interest to pursue once retired. Developing these interests is a highly recommended strategy for coping with sport career transition and preventing identity foreclosure (Sinclair & Orlick, 1993; Werthner & Orlick, 1986).

In the present study, 79% of participants were studying while competing, and a further 60% were working full time or part time. By doing so, athletes were not only gaining valuable knowledge and skills for after sport, but were developing a well-rounded self-identity. However, the advancement of New Zealand sport towards professionalism and full-time commitment may have had a negative influence on the athlete's ease of adjustment. A study done by Smith (1999) found that 93% of athletes surveyed maintained a job while competing at an elite level. This amount has dropped in the present study, and may continue to fall as more sports offer athletes full time professional contracts, which mean they no longer need to work to live. Athletes are now employees of sporting institutions, some from as early as high school age. Smith (1999) warned that the time and resource demands assigned to professional athletes will increase the likelihood they will experience identity foreclosure, and struggle when transitioning out of sport.

However, the majority of athletes recognised that sport participation enhanced their social development and personal growth significantly. Transferable skills such as teamwork, setting and achieving goals, personal drive and perspective taking are learned through sports participation and are valuable in the workplace. To capitalise on these, athletes need to be aware of the skills' existence, how they were learned and in what context. Successful skill transfer increases with an awareness of how transferable skills are developed in the sport context (Danish, Petitpas, & Hale, 1992). Hone et al. (2014) found that individuals who were aware of their strengths and were using them were more likely to be flourishing. Educating athletes on the possible applications of their strengths and skills they have gained through sport may facilitate a less daunting and more effortless sport career transition.

Furthermore, an exploratory analysis revealed that those athletes who believed they had achieved their sporting goals in sport experienced less difficulty adjusting to life after sport. They also experienced less anxiety, sadness, emptiness and uncertainty during retirement. Previous studies have found similar results, as the satisfaction with accomplishment allows the athlete some closure, leaving them fulfilled with their sporting career (Greendorfer & Blinde, 1985; Grove et al., 1997; Sinclair & Orlick, 1993). Athletes who have not achieved what they wanted in sport before retiring are more susceptible to adjustment difficulties. They may feel disappointed by their underachievement, and regretful about having to end their elite sporting career without meeting their high expectations. Underperforming and feelings of failure may reduce the willingness of an athlete to engage in retirement planning which can greatly affect the quality of transition (Greendorfer & Blinde, 1985).

Although previous studies have found links between education and transition quality (e.g. Barriopedro et al., 2018; Marthinus, 2007), the level of education obtained did not impact post sport adjustment difficulty in the present study.

Causes of Retirement

Support was gained for the third hypothesis which found that athletes who retired voluntarily had higher levels of flourishing later in life. Although, a third of participants still experienced difficulty during their sport career transition. Athletes who retired due to injury experienced significantly more adjustment difficulty than those who freely chose to retire, corroborating previous studies (Fortunato & Marchant, 1999; Greendorfer & Blinde, 1985; Werthner & Orlick, 1986). Retirement caused by injury induces early retirement, disallowing for proper retirement preparation. Also known as an off-time event, early retirement tends to result in transition difficulty due to its unpredictable nature. In comparison to on-time retirement, those who retire voluntarily can predict and plan for their life after sport more thoroughly. They are able to anticipate the right time to retire, and prepare accordingly. As Cosh et al. (2013) described, going out on your own terms, and while still at the pinnacle of sporting performance is considered more desirable and socially acceptable. These socially constructed

timetables for idealistic retirement may influence how each individual reacts to their new circumstances. Athletes who retire on-time feel accomplished and ready for life after sport, whether those who retire off-time may feel their sporting careers are unfinished (Sinclair & Orlick, 1993).

While forced injury retirement is unpredictable, for athletes to flourish after retirement more support needs to be provided to reduce initial adjustment difficulty. Furthermore, early preparation and identity development would give athletes the opportunity to form ideas around what they might be interested in focusing on after their sport career inevitably ends.

Planning for Retirement

Aligning with the findings of Taylor and Ogilvie (1998), pre-retirement planning and taking control contributed to a more positive adaption to retirement transition than unplanned retirement. The findings of this study showed that athletes who maintained control over their retirement and planned for life after sport experienced less adjustment difficulty, faster adjustment duration, and fewer negative emotional reactions. These findings are widely supported in the literature, as planning is considered to be one of the most important resources for a successful transition (Greendorfer & Blinde, 1985; Kuettel, Boyle, & Schmid, 2017; Taylor & Ogilvie, 1994). Alfermann et al., (2004) went on to emphasise that mobilising resources early and taking control of the situation increases an athlete's readiness for career transition, resulting in a more successful post-career adaption. What occurs before retirement is extremely important to what is likely to occur after. For flourishing to occur, athletes and sporting organisations must incorporate workshops that increase knowledge of financial planning, vocational searching, and psychological preparation. Providing opportunities for athletes to cultivate curiosity and practice mindfulness may enhance their ability to flourish (Malinowski, 2013). Planning programmes should also involve the athlete's immediate family in some capacity, as they are also likely to be affected by the sport career transition.

Socialisation

The process of retiring from sport and non-sports related occupations has previously been described as a form of 'social death' (Rosenberg, 1984). The process of maintaining or even rebuilding relationships is a concern for some retirees and athletes alike. However, the importance of social immersion in sport was evident in this study as it has been recognised in others (Taylor & Ogilvie, 1993). Athletes social activities and their sporting life are closely intertwined. Many of their friends and associates may still be engaged with the sporting environment, as well as still regularly engaging in sport and exercise themselves after transitioning. Thus, the majority of participants in the present study indicated the significance of social aspects before, during and after retirement with many of them strongly agreeing that they competed in sport largely for social aspects. Continuing to stay involved in sport after retirement also plays an important role in the adjustment process. According to occupational retirement's theory of continuity, it is important to maintain a lifestyle similar to that prior to retirement (Atchley, 1989). Maintaining structure and participation in meaningful activities after occupational retirement has shown to improve psychological wellbeing. The same could be said for athletes who continue involvement in social sport and maintain training regimes.

Similarly, in their post sporting careers, participants indicated that their continued participation was still heavily influenced by social aspects. Due to the strength of relationships developed in the sporting sphere, it is unsurprising that retired athletes continue to seek relationships in a familiar environment. Such as by maintaining physical activity in more social setting, by joining social sports clubs, hobby-sports, and other organised training groups (cross-fit, yoga etc.). Additionally, athletes may prefer to associate with those who have similar interests and lifestyles. Thus, socialisation plays an important role during the initiation of sport, throughout the continuation of sport and when dealing with termination. Encouraging continued involvement in the sporting sphere in some capacity may allow athletes to find other environments they can flourish within.

Implications and Recommendations

This study has important theoretical implications for our understanding of flourishing. It extends on previous sport career transition research in New Zealand by providing a new insight into the transition of New Zealand's elite athletes and their ability to flourish after sport. Staying consistent with previous research linking athletic identity with adjustment difficulty, this study has managed to analyse flourishing in a context which has not been done before. Most significantly, participants who scored high on athletic identity also scored high on a measure of flourishing. This is a major theoretical contribution, as although athletes with high levels of athletic identity may experience adjustment problems and negative emotions, they are also more capable of flourishing. Therefore, the link between athletic identity and flourishing requires further exploration to better understand the correlation between the two. Although adjustment difficulty may be initially affected, it is possible that eventually athletes are able to adapt and flourish later in life. Flourishing itself is not a static trait or characteristic, it is a process which can be learned and developed if cultivated conscientiously over time (Knoesen & Naudé, 2018). Therefore, it is expected that flourishing levels will vary during an individual's life time, depending on their circumstances and choices. This may be why some studies have demonstrated that athletic identity leads to increased depressive symptomology, while this study instead found they flourished.

Some studies have shown that revenue producing sports participants have higher identity foreclosure. In the present study, a strong and exclusive athletic identity is a risk factor for emotional difficulties during career transition. With the increasing number of sports within New Zealand offering paying professional contracts, this may become more of an issue in future. To address this, effective personal development programmes need to be available for professional athletes to prevent maladaptive identity development.

Athlete transition is no doubt a complex and contextually dependent experience. It was evident that athletes who planned for their retirement and demonstrated high levels of control over their retirement decision experienced a smoother and less difficult transition. These findings have significant practical implications in the way it can inform future research, athletes and sporting bodies about the importance of preparing for retirement. This improves their ability to

develop better interventions and assistance programmes through increased awareness of the barriers to a healthy transition. It is most important that our athletes are educated early about the importance of preparing for life after sport, as the unpredictable nature of involuntary retirement is one such barrier that needs to be addressed. If athletes and organisations have a proper appreciation for the factors which influence retirement adjustment difficulty, they may be able to better meet the individualistic needs of transitioning athletes. Their main goal should be to support flourishing by reducing adjustment difficulty, and the time taken for athletes to feel fully adjusted. It is recommended that sporting organisations consider assessing the strength of athletic identity in their athletes before retirement to identify potentially vulnerable individuals who are more likely to struggle with retirement, and put in place preventative measures and strategies to help with their personal development prior to retirement. More could also be done to support athletes who are forced to retire early due to injury. It is recommended that additional resources and professional support such as sports psychologists should be targeted towards this potentially vulnerable group in order to offset adverse outcomes.

Typically, elite athletes may put off gaining a qualification or working while they concentrate on their sporting career. This becomes an issue if their athletic career is ended prematurely. Many athletes avoid thinking about retirement before it is too late. Therefore, it is vital that coaches and sporting organisations encourage athletes to think proactively about their futures early on, and remain involved in other activities outside of sport, to prevent identity foreclosure. To facilitate this the development of a formalised transition programme, which includes learning opportunities, work experience, coping strategies, financial planning and identity development to assist the athlete in diversifying their skills, knowledge, and awareness, would be hugely beneficial. Whilst some sporting bodies have well established transition programmes for athletes, many sports within New Zealand do not.

Other studies (e.g., Alfermann et al., 2004) revealed that younger athletes are particularly vulnerable to experiencing difficulties if they drop out of sport without reaching their full potential. It would be beneficial if practitioners acknowledged their needs and employed special assistance as they withdraw from

their sport, such as helping them rebuild positive self-image and self-confidence to reduce feelings of failure and disappointment

Limitations and Future Directions

The nature of the study meant that retrospective recall data was collected, with some of the participants speaking from their retirement experiences which occurred over 20 years prior. Therefore, the data may be affected by recall bias, or inaccurate recall. The participants' perceptions of their sporting career and the transition process may have changed over time and the extent of which is difficult to report. To account for this future studies should include longitudinal research, with multimethod approaches inclusive of qualitative data. A longitudinal design would also work to reduce recall biases and allowing researchers the ability to capture more accurate perceptions of athletes before, during, and after their transition out of their sporting careers. It would be more beneficial to analyse flourishing levels during sport participation and after athlete transition. Researchers may also want to consider capping the data, and only recruiting participants who had retired in the last 5-10 years. Although a quantitative method was used to identify the issue, the use of qualitative data would allow us to fully understand the underlying elements contributing to the high levels of flourishing and adjustment ease evident in former elite athletes.

More also needs to be understood about how athletes utilise their support networks, notably family and friends, and why they choose not to seek professional support. It was raised within the study the importance of professional psychological support for those who experienced a traumatic retirement phase. Future studies which examine the use of different support systems before retirement would provide a more valuable and in-depth insight into how each assistance strategy influences the transition. Sports psychologists are becoming more accessible within the New Zealand sports scene during competition. However, there is still not a lot known with regards to the potential influence sport psychologists have on negating athlete transition for New Zealand's elite athletes. Future studies could examine the effectiveness of professional support for assisting the adaption of athletes, and its potential to ease distress and promote

flourishing. Nevertheless, the proper utilisation of sports psychologist's expertise needs to be encouraged.

Multiple sports with differing degrees of professional support available were also analysed. Some sports such as rugby are known to provide well designed athlete life programmes to assist athletes in preparing for life after sport. Other sports have little or no support for their athletes during their sporting careers. The use of a snowball sampling technique may potentially create a sampling bias, as individuals will likely refer the survey to those of whom they have similar traits to. An over representation of professional sports such as rugby may mean the effects experienced by athletes who have received less support may have not been identified in this sample. This could mean there may be difficulty in generalising the findings of this study to other sports and elite levels. Future studies may wish to focus more specifically on certain sports and analyse them individually to determine whether or not the type of sport influences athlete transition.

A larger sample size would also be beneficial to the ability to make generalisations. The statistical power is reduced due to the small sample size (n = 81). There is also the possibility important details of athlete career transition have not been uncovered in this study. Greater sophistication in statistical analyses provided by a larger sample size might lead to the detection of more significant differences.

Conclusion

There comes a point during the transitional experience when an athlete will begin to negotiate a new sense of self. For many though, this is not the end of sporting participation. It is just a part of the evolution of an athlete, a career progression into a new sphere, within which sport will still play an integral part, albeit a less competitive one. Therefore, athlete retirement may be better understood if it were permanently phrased as an athletic career 'transition' independent and unrelated to 'retirement' and its connotations. The age of athletes becoming professional is getting younger, so those supporting athletes must actively encourage them to develop a strong sense of self to prevent identity foreclosure. While more research is still needed, this study has provided a starting

point for understanding flourishing in former elite athletes. Ultimately, this will not only enhance the health and wellbeing of current and former athletes, but it will improve the knowledge available to athlete health and welfare programmes, sporting organisations, coaches and sport psychologists. It also strongly confirms the need for sport career transition programmes in order to facilitate flourishing.

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APPENDIX A

Section One

Demographic information

1. Sex
   - ☐ Male
   - ☐ Female
   - ☐ Other

2. Date of birth: _____

3. Which ethnic group do you belong to?

   - ☐ New Zealand European
   - ☐ Maori
   - ☐ Samoan
   - ☐ Cook Islands Maori
   - ☐ Tongan
   - ☐ Niuean
   - ☐ Chinese
   - ☐ Indian
   - ☐ Other Ethnicity, please specify:

_____

4. Employment Status
   - ☐ Employed
   - ☐ Unemployed
   - ☐ Self-employed
   - ☐ Other, please specify:

_____

Current job position title: -

_____

5. What is the highest level of education you completed?

   - ☐ Primary school
   - ☐ High school
   - ☐ Tertiary diploma
   - ☐ Bachelor's degree
   - ☐ Master's degree
   - ☐ Doctoral degree

6. Are you still studying?

   - ☐ Yes
   - ☐ No

If yes, please specify: -

_____

7. Highest level of sporting representation achieved
   - ☐ Regional
   - ☐ National
   - ☐ International
   - ☐ Olympic
   - ☐ Other, please specify: -

_____

8. What was the main sport you were a representative in?

   _____

9. When you were competing at the level you chose in question 6, what was the approximate amount of time you spent participating in your sport each week, on average? (Training and competitions included).

   - ☐ 9 hrs or less
   - ☐ 10-14 hrs
   - ☐ 15-19 hrs
   - ☐ 20-24hrs
   - ☐ 25-29 hrs
   - ☐ 30-34 hrs
   - ☐ 35-39 hrs
   - ☐ 40+ hrs

10. How long were you competitive at either a regional level or beyond during your competitive sporting career?

    - ☐ less than 1 year
    - ☐ 1-2 years
    - ☐ 2-4 years
    - ☐ 4-6 years
    - ☐ 6-10 years
    - ☐ 10-15 years
    - ☐ 15+ years

11. What year did you retire from top level competitive sport?

    _____

12. What was your age at the time of retirement from top level sport?

    _____

13. What was the main cause of your retirement from active sporting competition?

    - ☐ Age
    - ☐ Injury
    - ☐ De-selection

☐ Free choice
☐ Family related
☐ Other, please specify:

_____

14. What was your level of performance when you decided to end your competitive sporting career?

☐ My performance was improving
☐ My performance was declining
☐ I was at the peak of my sport career

15. Are you currently participating in any form of physical activity or sport participation?

☐ Yes
☐ No

16. Which of the following were available to you during your retirement from top level sports participation?

☐ Player development managers or life advisors
☐ Career counselling to help you identify and initiate further educational/training needed
☐ Training and advice in the preparation of a resume/CV and identifying and applying to prospective employers
☐ A mentoring system using already retired athletes
☐ None of the above
☐ Other, please specify: -

_____

17. Do you still consider yourself an athlete?

☐ Yes
☐ No

Please explain your answer:

_____

_____

_____

_____

Section Two

The following is a list of statements about thoughts, feelings and behaviours that may or may not apply to you
Please indicate how much you agree or disagree with each statement by circling the number that best corresponds with how you feel

Level of agreement	*Numerical response*	*Meaning*
Strongly disagree	1	Opposite to my views about me
Mostly disagree	2	Generally opposite to my views
Mildly disagree	3	Somewhat opposite to my views
Mildly agree	4	Somewhat like my views or me
Mostly agree	5	Generally like my views or me
Strongly agree	6	Like my views or me

Current Sport Involvement

18.	I maintain my current level of physical activity for the health benefits of physical fitness	1	2	3	4	5	6
19.	I maintain my current level of physical activity so I can socialize with others interested in sport and have fun.	1	2	3	4	5	6
20.	I maintain my current level of physical activity to remain fairly competitive.	1	2	3	4	5	6
21.	I maintain my current level of physical activity to gain prestige and recognition.	1	2	3	4	5	6

Previous Sport involvement

22.	Compared to my competitive sport experiences, I enjoy my current level of physical activity	1	2	3	4	5	6

23.	I originally participated in sports to be with people in a social situation	1	2	3	4	5	6
24.	I originally participated in sports for the love of the sport itself	1	2	3	4	5	6
25.	I originally participated in sports to compare skills or compete with others	1	2	3	4	5	6
26.	I originally competed in sports for reasons other than the sport itself (gaining recognition, awards, prizes, etc.)	1	2	3	4	5	6
27.	I accomplished all my sporting goals during my competitive years in sport.	1	2	3	4	5	6
28.	I feel sport participation enhanced my social development	1	2	3	4	5	6
29.	I feel sport participation enhanced my personal growth and development	1	2	3	4	5	6
30.	I mainly socialised with people I met through my sport participation	1	2	3	4	5	6

Post-Sport Adjustment

31. Did you gain any further educational qualifications following your retirement from competitive sports?

☐ Yes
☐ No

If yes, please list below

_____

_____

_____

_____

32. Did you work during your peak sporting career?

☐ Yes
☐ No

If yes, was your work:

☐ Part time
☐ Full time
☐ Self-managed

33. If you currently have paid work, is your occupation related to sport?

☐ Yes
☐ No
☐ No paid work

34. How long following your retirement did it take for you to feel fully adjusted to your new circumstances?

☐ Less than six months
☐ One year
☐ Two years
☐ Three or more years

Level of agreement	*Numerical response*	*Meaning*
Strongly disagree	1	Opposite to my views about me
Mostly disagree	2	Generally opposite to my views
Mildly disagree	3	Somewhat opposite to my views
Mildly agree	4	Somewhat like my views or me
Mostly agree	5	Generally like my views or me
Strongly agree	6	Like my views or me

35.	My second career was more emotionally rewarding than my sporting career	1	2	3	4	5	6
36.	The skills I acquired during my sporting career could be used in a variety of other careers	1	2	3	4	5	6

37.	I adjusted to my next career following my sporting career quickly and without difficulty	1	2	3	4	5	6
38.	My overall adjustment to retirement from sports was very easy	1	2	3	4	5	6
39.	Immediately following retirement from top level sport, my physical activity level reduced by at least half	1	2	3	4	5	6
40.	I had a strong sense of control over my life during my sporting years	1	2	3	4	5	6
41.	I had a strong sense of control over my life immediately following my retirement from sporting competition	1	2	3	4	5	6
42.	I had a high level of self-confidence immediately following my retirement	1	2	3	4	5	6

Career Planning and Support Available

43.	I prepared for my retirement from sport whilst I was still competing	1	2	3	4	5	6
44.	During my sporting career I managed my finances to support myself and my family while I made the transition into a new career	1	2	3	4	5	6
45.	There were opportunities made available to help prepare me for the career transition out of sport whilst I was still competing	1	2	3	4	5	6
46.	My family were involved in helping me make the transition out of a sporting career into another career	1	2	3	4	5	6

Section Three

Athletic Identity Scale (Brewer, Van Raalte, & Linder, 1993)

Level of agreement	*Numerical response*
Strongly disagree	1
Mostly disagree	2
Mildly disagree	3
Neither disagree or agree	4
Mildly agree	5
Mostly agree	6
Strongly agree	7

Please answer the questions below as if you were still the athlete you were before your retirement

47.	I consider myself an athlete	1	2	3	4	5	6	7
48.	I have many goals related to sport	1	2	3	4	5	6	7
49.	Most of my friends are athletes	1	2	3	4	5	6	7
50.	Sport is the most important part of my life	1	2	3	4	5	6	7
51.	I spend more time thinking about sport than anything else	1	2	3	4	5	6	7
52.	I feel bad about myself when I do poorly in sport	1	2	3	4	5	6	7
53.	I would be very depressed if I were injured and could not participate in sport	1	2	3	4	5	6	7

Flourishing Scale (Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi & Biswa-Diener, 2010)

Level of agreement	*Numerical response*
Strongly disagree	1
Mostly disagree	2
Mildly disagree	3
Neither disagree or agree	4
Mildly agree	5
Mostly agree	6
Strongly agree	7

Please answer the questions below reflecting on how you feel presently

54.	I lead a purposeful and meaningful life	1	2	3	4	5	6	7
55.	My relationships are supportive and rewarding	1	2	3	4	5	6	7
56.	I am engaged and interested in my daily activities	1	2	3	4	5	6	7
57.	I actively contribute to the happiness and well-being of others	1	2	3	4	5	6	7
58.	I am competent and capable in the activities that are important to me	1	2	3	4	5	6	7
59.	I am a good person and live a good life	1	2	3	4	5	6	7
60.	I am optimistic about my future	1	2	3	4	5	6	7
61.	People respect me	1	2	3	4	5	6	7

Emotional Response to Sport Retirement (Alfermann, Stambulova, Zemaityte, 2004)

Below is a list of emotional states that may have accompanied your retirement from sport. Using the 1-5 intensity scale, indicate which number best reflects the absence/presence of each of them.

Level of agreement	*Numerical Response*
Not at all	1
Very much	5

Please respond to the emotional states below as to how you felt about retiring from sport

62.	Anxiety	1	2	3	4	5
63.	Emptiness	1	2	3	4	5
64.	Sadness	1	2	3	4	5
65.	Uncertainty	1	2	3	4	5
66.	Freedom	1	2	3	4	5
67.	Happiness	1	2	3	4	5
68.	Joy	1	2	3	4	5
69.	Relief	1	2	3	4	5

APPENDIX B

Letter to Organisation

Dear Organisation

My name is Leanna Ryan, and I am a student at the University of Waikato, studying towards a Master of Organisational Psychology. I am conducting a study of retired athletes as part of the requirements for completing my degree, supervised by Dr. Anna Sutton.

The study I am undertaking is designed to explore how well New Zealand athletes make the transition from competitive sport into another career, and the factors which allow them to flourish after sporting retirement. The overall aim is to help determine what further assistance is required to help athletes flourish, to ensure a smooth transition into the workforce. This is an opportunity for your organisation to contribute to the growing body of research on athlete retirement.

Participating in this study is completely voluntary and participants can discontinue their involvement at any time without consequence. It consists of one anonymous online questionnaire anticipated to take approximately fifteen minutes to complete.

If your organisation is interested in supporting this research, please get in contact with me via email or phone to discuss your role in facilitating this study. Should you have any questions or concerns, please do not hesitate to ask. Your cooperation and participation would be extremely valuable to me and I thank you for considering my request.

Ethical approval for this project has been endorsed by the School of Psychology Research and Ethics Committee, and all data obtained will be kept confidential.

My contact:
leannaryan@hotmail.com
Ph: 0272398908

If you have any questions you do not wish to ask me, please contact the Psychology Research and Ethics Committee at
ethics@waikato.ac.nz

Sincerely,
Leanna Ryan

APPENDIX C

Information Sheet

Dear Participant

My name is Leanna Ryan, and I am a student at the University of Waikato, studying towards a Master of Organisational Psychology. This study is being conducted as part of the requirements for completing my degree, supervised by Dr. Anna Sutton.

The study I am undertaking is designed to explore how well New Zealand athletes make the transition from competitive sport into another career, and the factors which allow them to flourish after sporting retirement. The overall aim is to help determine what further assistance is required to help athletes flourish, to ensure a smooth transition into the workforce.

I would like to invite you to participate in this study, and I would be privileged if you were to consider to do so. Involvement is purely voluntary and participants can discontinue their involvement at any time without consequence. However, the anonymous nature of the research means it will not be possible to remove data once the questionnaire has been completed. Please answer the questions openly and honestly, as this is an opportunity for you to share your experiences and contribute to the growing body of research on athlete retirement.

The study consists of an online survey which is anticipated to take approximately 10-15 minutes to complete. The questionnaire will be available for completion for four weeks. The questions are a mix of multiple choice, rating scales, and open-ended questions. If you wish to discontinue your participation in the study, please close your browser before submitting the questionnaire. You do not have to complete a question if you do not feel comfortable with answering it. Once the questionnaire has been submitted, it will not be possible to remove data due to its anonymous nature. If you complete the study, it is assumed that consent for participation was provided. If you wish to receive a summary of the results of the research once it has been completed, please enter your email address when prompted.

Ethical approval for this project has been endorsed by the School of Psychology Research and Ethics Committee, and all data obtained will be kept confidential.

If you have any questions, please contact me at
leannaryan@hotmail.com
Ph: 0272398908

If you have any questions you do not wish to ask me, please contact the Psychology Research and Ethics Committee at
ethics@waikato.ac.nz

Thank you for your participation
Sincerely, Leanna Ryan

APPENDIX D

Ethics approval letter

Leanna Ryan
81a Fairfield Road
Fairfield
Hamilton 3214

Dear Leanna

Ethics Approval Application – # 18:27
Title: Flourishing after retirement: understanding the career transition of New Zealand's elite athletes

Thank you for your ethics application submitted for approval which has been fully considered and approved by the Psychology Research and Ethics Committee.

Please note that approval is for three years.

If any modifications are required to your application, e.g., nature, content, location, procedures or personnel these will need to be submitted to the Convenor of the Committee.

I wish you success with your research.

Yours sincerely

Dr Colin McLeay
Convenor
Psychology Research and Ethics Committee
School of Psychology
University of Waikato

APPENDIX E

Additional tables

Table 7. *Descriptive statistics for the Emotional reactions to retirements scale*

Q35. (*n* = 78)	*M*	*SD*
Anxiety	2.41	1.27
Emptiness	2.40	1.13
Sadness	2.56	1.19
Uncertainty	2.74	1.23
Freedom	3.55	1.25
Happiness	3.36	0.99
Joy	3.23	1.04
Relief	2.94	1.23

Table 8. *Descriptive statistics for the Athletic Identity scale*

Q34. (*n* = 78)	*M*	*SD*
I consider myself an athlete	6.05	1.56
I have many goals related to sport	5.86	1.37
Most of my friends are athletes	5.15	1.56
Sport is the most important part of my life	4.58	1.87
I spend more time thinking about sport than anything else	4.78	1.73
I feel bad about myself when I do poorly in sport	5.18	1.76
I would be very depressed if I were injured and could not participate in sport	4.47	1.97
TOTAL	36.08	7.98

Table 9. *Descriptive statistics for the Flourishing scale*

Q36. (*n* = 78)	*M*	*SD*
I lead a purposeful and meaningful life	6.05	1.07
My relationships are supportive and rewarding	6.22	0.88
I am engaged and interested in my daily activities	6.03	0.99
I actively contribute to the happiness and well-being of others	6.24	0.87
I am competent and capable in the activities that are important to me	6.27	0.68
I am a good person and live a good life	6.27	0.77
I am optimistic about my future	6.14	1.05
People respect me	6.01	0.66
TOTAL	49.17	5.25