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RETIRED ATHLETES:
WHEN THE SPOTLIGHT DIMS

A thesis presented in partial fulfilment of the requirements for the degree of
Master of Sport
and Exercise

Massey University, Albany,
New Zealand

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2016
ABSTRACT

The purpose of this study was to: (1) examine the experiences of elite New Zealand athletes during the retirement transition and, (2) determine whether current retirement-related assistance in New Zealand is perceived by elite athletes to enhance adjustment to retirement from elite-level sport. An extensive literature review underlies the study by introducing theories and models related to athletic retirement and examining what is currently known about the experiences of elite athletes during the transition. Semi-structured interviews were used to gather descriptive data from 16 former elite New Zealand athletes who retired within seven years of commencement of the study. Data was analysed using NVivo software and Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement was used in a thematic analysis of data. This study provided clearer understanding of the experiences of elite New Zealand athletes regarding the retirement transition, and helped to identify whether current athlete retirement-related interventions are sufficient. As well, participants made suggestions for future retirement interventions and/or changes to interventions currently offered. New findings revealed that career/education interventions were available to and highly used by 12 participants who were carded and had access to these interventions. Availability and usage of psychological/emotional interventions was found to be limited or non-existent. Findings that were aligned with or contested previous literature included multi-causal reasons led to all participants’ retirements. Participants experienced high athletic identity, high perceived control over their retirement, and retirements that, to varying degrees, were both voluntary and involuntary. Pre-planning was the most prominent resource used and enhanced participants’ career prospects. Furthermore, it was found that most participants had both positive and negative retirement experiences during the transition. Future research could include longitudinal designs, which might provide a more accurate account of athletes’ experiences and perceptions of the retirement transition as they occur, in particular the variables (e.g. athletic identity, social support) encountered.
DEFINITION OF TERMS

The retirement transition - in the sport context, the retirement transition is defined as the multi-dimensional process of transitioning from competitive sport to post-sport life and activities (Chow, 2001; Coakley, 1983; DiCamilli, 2000; Wheeler, Malone, Van Viack, Nelson, & Steadward, 1996).

Elite athletes - widely defined in sport-related literature as individuals who have participated at international and/or national competitive level and are either professional, semi-professional or amateur (Grana, 1988; Swann, Moran, & Piggott, 2015). Elite athletes who receive payment and generate their primary income from playing sport are considered professional or semi-professional athletes, while elite athletes who receive no money for playing sport are regarded as amateur.

Carded athletes - athletes selected from targeted sports (i.e. sports identified by High Performance Sport New Zealand (HPSNZ) as highly likely to win or podium at pinnacle events, such as Olympic and Commonwealth Games) and sports that received campaign investment from Sport and Recreation New Zealand (SPARC) prior to 2012 and from HPSNZ post-2012 (High Performance Sport New Zealand, n.d.a). Eligible athletes may receive a number of services, based on the needs of the individual and their sport, including strength and conditioning, sport psychology, and injury prevention and rehabilitation. This is based on the level of carding assigned by the National Sport Organisations (NSO), level one being for world class athletes, level two for national athletes and level three for emerging athletes. Carded athletes may also be entitled to funding via investments, such as Prime Minister’s Athlete Scholarships, Performance Enhancement Grants and Athlete Performance Support Services.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full name</th>
</tr>
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<tbody>
<tr>
<td>ACE</td>
<td>Athlete Career Education</td>
</tr>
<tr>
<td>ACP</td>
<td>Athlete Career Programme</td>
</tr>
<tr>
<td>ALA</td>
<td>Athlete Life Advisor</td>
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<tr>
<td>ALP</td>
<td>Athlete Life Programme</td>
</tr>
<tr>
<td>HPSNZ</td>
<td>High Performance Sport New Zealand</td>
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<tr>
<td>NSO</td>
<td>National Sport Organisation</td>
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<tr>
<td>NZAS</td>
<td>New Zealand Academy Of Sport</td>
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<tr>
<td>NZRPA</td>
<td>New Zealand Rugby Players Association</td>
</tr>
<tr>
<td>SPARC</td>
<td>Sport And Recreation New Zealand</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

Firstly, I would like to thank my supervisors, Dr Trish Bradbury and Dr Janet Sayers, for their expertise, hard work, guidance and commitment toward helping me complete this study. Thank you for taking my project on, guiding me through the greatest of challenges and helping to keep my dream alive!

To my boss and friend Rudi Huijsmans, I am so grateful for the hours of proof reading, flexibility with my work hours, and never ending support, encouragement and advice that you offered.

I would like to express a special thank you to both Ngaire Vakaruru and Ephra Pankhurst. Without your constant friendship, support, advice and belief in me, the completion of this project would not have been possible.

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CHAPTER ONE: INTRODUCTION

1.0 Background to athlete retirement

The retirement transition is an inevitable and significant transition in the sporting career of an elite athlete. It is defined as the multi-dimensional process of transitioning from competitive sport to post-sport life and activities (Chow, 2001; Coakley, 1983; DiCamilli, 2000; Wheeler, Malone, Van Viack, Nelson, & Steadward, 1996). The transition is dynamic due to the significant life changes and adjustment that occurs in the lives of elite athletes over an unspecified time period (Cecic-Erpic, Wylleman, & Zupancic, 2004; Lally, 2007; Stambulova, Stephan, & Jarphag, 2007; Stephan, Bilard, Ninot, & Delignieres, 2003). Typically, the transition lasts between six months to one year (Sinclair & Orlick, 1993; Stambulova, 1997), determined, largely, by how long individuals continue to identify as athletes after retiring (Cecic-Erpic et al., 2004). The transition process begins when it is first anticipated, through the duration, and concludes once its outcome has been accepted and assessed by the athlete (Danish, Owens, Green, & Brunelle, 1997; Kerr & Dacyshyn, 2000; Lally, 2007; Stephan et al., 2003). It is a significant period of adaptation for elite athletes, during which they may experience major transformations to their personal, occupational, and social lives, including pursuing new careers, building new social networks (Sinclair & Orlick, 1993), and changing physical appearances (Stephan et al., 2003; Taylor & Ogilvie, 1994). In addition, individuals are also likely to experience changes in their roles, personal and social relationships, and daily routines, such as increased parental/family roles (Sinclair & Orlick, 1993) and new time commitments from reduced training/playing volume (Kim & Moen, 2001). It is important to note that some studies (eg. Kubler-Ross, 1969; Park et al., 2013) have referred to the retirement transition as career termination; however, in this study the term retirement transition is used.

1.1 Rationale for the study

Compared to other vocations, the life-span of most elite athletes’ athletic careers is relatively short, lasting on average only six years (Orlick, 1990). Retirement from elite-level sport generally occurs at a much younger age, typically early-thirties, than other vocations (Baillie, 1993; Sinclair & Orlick, 1993). For many elite athletes, retirement forces them into a life of uncertainty that is vastly different to what they were accustomed to previously (Orlick, 1986).
A number of studies internationally (e.g. Alfermann & Gross, 1997; Crook & Robertson, 1991; Taylor & Ogilvie, 1994) reported psychological, emotional, social and physical distress related to retirement from elite-level sport for elite athletes. Some other studies (e.g. Allison & Meyer, 1988; Park, Lavallee, & Tod, 2013; Reints & Wylleman, 2013) described retirement from elite-level sport as an enjoyable, fulfilling experience for elite athletes (e.g. starting families, new business ventures). This indicates that the retirement transition, regardless of whether it is positive or negative, requires significant adaptation to a vastly different lifestyle (Coakley, 1983). Thus, it is of great importance that attention is paid to elite New Zealand athletes’ experiences of the retirement transition, the interventions in place to support their transition and how the experience might potentially be improved.

In New Zealand, few studies to date have examined retirement from elite-level sport. One such study by Denison (1997) found that retired elite New Zealand athletes from a range of sports including cycling, hockey and swimming were inclined to feel stranded, disillusioned and directionless when their elite athletic career ended. According to Denison, future generations of retired athletes would continue to struggle to make meaningful lives and find personal contentment following the end of their sporting career unless specific attention was given to the retirement process.

Another New Zealand specific study by Smith (1999) found conflicting results which suggested that elite New Zealand athletes made a relatively smooth and trouble-free transition out of high performance sport. Smith’s study examined the retirement experiences of elite New Zealand athletes in relation to Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement, highlighting the influence of retirement variables, such as voluntariness of retirement, on overall adaptation to retirement. In this study, on average, the participants retired 19 years prior to data collection, which meant that data was subject to memory and recall bias. Consequently, as noted by Smith (1999), it was difficult to determine the extent of which participants’ perceptions of their retirement experiences might have changed over time. Scant research has been conducted since.

In 2011, the New Zealand Rugby Players Association (NZRPA) surveyed 123 former professional male rugby players (retired since 1996) regarding their retirement experiences; the findings were alarming. Analysis revealed that 27% experienced negative effects (e.g. depression, feelings of despair, lack of self-esteem, anxiety) within three months of retiring, 40% experienced complications (e.g. work, study, financial, psychological distress, and
injuries and illnesses) during the transition and 60% took six months or longer to feel they had ‘gained control’ after retiring (New Zealand Rugby Players Association, 2011). This study provides compelling evidence of the struggle of elite rugby players, particularly in the early stages, during the retirement transition. Some variables, including high athletic identity, were linked with participants struggling to adapt to the transition. However, it is unclear whether/how other prominent variables such as perceived control over the decision to retire and coping skills, which according to Taylor and Ogilvie (1994) influence the adjustment of elite athletes to the retirement transition, affected the outcome of the study. In-depth exploration regarding the influence of such variables on the retirement transition for elite New Zealand athletes is required as this will potentially support the development of strategies to help athletes cope better.

In recent years, interventions such as Athlete Career Education (ACE), Athlete Career Programme (ACP) and Athlete Life Programme (ALP) were introduced by Sport and Recreation New Zealand (SPARC) and High Performance Sport New Zealand (HPSNZ), respectively, to prepare elite athletes for the retirement transition (see section 2.10 for further details regarding prominent retirement-related assistance in New Zealand). A study by Leberman (2007) found that 74% of elite New Zealand athletes were either satisfied or very satisfied with the services provided by the New Zealand Academy of Sport (NZAS), SPARC’s high performance network. These services included medical services, applied sport science and training facilities. ACE advice was also a service; however, there was no material related specifically to athletes’ perceptions of this intervention. As such, athletes’ perceptions regarding its influence on the retirement transition were unclear. Leberman declared that it is not possible to establish whether money invested into the services provided is making a difference unless it is proven that these services make an impact. Research seeking individual perceptions is an ideal way to assess the impact of current interventions. However, athletes’ perceptions of subsequent retirement interventions, such as ACP and ALP, in New Zealand do not appear to have been investigated.

Due to scant research conducted in New Zealand that has produced conflicting and/or inconclusive results, little is understood about elite New Zealand athletes’ experiences during the retirement transition and their perceptions of the current interventions available in New Zealand. This, in addition to the need for significant adjustment to the retirement transition (as noted above), has heightened the need for further exploratory research. It was determined that a qualitative exploratory study, using semi-structured interviews to collect data from elite
New Zealand athletes who retired within seven years of commencement of the study, was the best approach for the present study.

Kerr and Dacyshyn (2000) contend that through the use of qualitative research, the full experiences of athletes during retirement will be better understood. Utilising this approach enables rich descriptions, themes and patterns to emerge and develop. Taylor and Bogdan (1998) suggest conducting semi-structured interviews as this allows researchers to understand participants' experiences of a phenomenon and the meanings they attribute to it. Semi-structured interviews are particularly beneficial when investigating an underexplored topic such as this, as participants are afforded the flexibility to focus on aspects of their experience they feel is important (Rubin & Rubin, 2012). According to Rubin and Rubin, small scale research, such as this study, allows for more in-depth exploration with each individual.

By adopting this approach it was anticipated that the transition out of elite sport for New Zealand athletes and their perceptions of interventions would be better understood. Rich, in-depth information could potentially enable prominent sport organisations such as HPSNZ and various National Sport Organisations (NSOs) to:

1. Understand elite New Zealand athletes’ experiences during the transition and, thus, their needs.
2. Establish athletes’ perceptions and perspectives of the interventions they provide, specifically whether these interventions helped them adapt to the retirement transition or not.
3. Determine whether or not changes to any interventions currently offered are necessary.

1.2 Purpose of the study

The central intent for the present study was to (1) examine the experiences of elite New Zealand athletes, who retired within seven years prior to commencement of the study, regarding the retirement transition and, (2) determine whether current retirement-related interventions in New Zealand are believed to enhance adjustment to retirement from elite-level sport for elite New Zealand athletes. This will extend understanding of the impact that retiring from elite-level sport has on New Zealand athletes and whether current interventions help elite New Zealand athletes cope with the transition, or whether new strategies might be required.
The aim of the research is to answer the following two questions related to its objectives above:

- What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?
- What are the perceptions of elite New Zealand athletes regarding the interventions available to them in their retirement transition?

Research objectives:

- To review and critique existing elite athletic retirement-related literature.
- To explore and describe the experiences of elite New Zealand athletes during the retirement transition based on Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement.
- To gather and report on the opinions and/or perceptions of elite New Zealand athletes regarding future retirement-related interventions that would potentially improve the adjustment to the retirement transition for future retiring athletes.

It is hoped that the findings of this research and future research outcomes assist New Zealand athletes, and athletes worldwide, with the retirement transition in the future. Furthermore, it is hoped that information provided from the research assists major sport organisations within New Zealand, and potentially worldwide, to continue to develop interventions that help and support elite athletes with their adjustment to the retirement transition in the future.

1.3 Structure of the thesis

The thesis is presented in five chapters.

Chapter One provides a background to athlete retirement including a description of the retirement transition in the sporting context. A rationale for the study is offered and includes a discussion of previous retirement-related literature in New Zealand, highlighting the importance of the present study. Subsequently, the purpose of the study is presented, including the central research question and associated research objectives. The structure of the content of the thesis is outlined, followed by delimitations of the study.
Chapter Two presents a review of retirement-related literature to set the context for the thesis. In the initial sections, a review of athlete-retirement related theories and models is provided. Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement is described in detail and its use in the present study is justified. The remainder of the chapter is structured in accordance with Taylor and Ogilvie’s (1994) model and includes in-depth discussion on reasons for retirement, mediating factors, available resources, quality of the transition and interventions. The historical context of athlete transition programmes and services in New Zealand is included.

Chapter Three describes and justifies the methodology and methods used for the study. Included is information regarding participants (sport, year retired, highest representation) and how they were selected. A description of the instrument for data collection, semi-structured interviews, is provided as is a rationale for how/why each of the core interview questions was chosen. A step-by-step guide detailing the thematic analysis of the data is presented as well as a table identifying the key themes and sub-themes that emerged from data analysis.

Chapter Four contains a figure illustrating the link between the research questions and themes and sub-themes presented in the chapter. Pertinent themes and sub-themes that emerged from data analysis are presented and include results and discussion of them. Presentation of themes and sub-themes are aligned with Taylor and Ogilvie’s (1994) model.

Finally, Chapter Five draws conclusions from the study. Strengths and weaknesses of the study are provided and directions for future research are offered.

1.4 Delimitations

Literature related to retirement from the workforce and aspects of aging has been reviewed extensively in previous studies. Furthermore, several researchers have investigated the experiences of athletes retiring from lower levels of play, such as collegiate level in the United States. Findings and theories that emerged from such literature might be useful for examining aspects of retirement from elite-level sport. However, the scope of the present study was on the experiences of elite-level New Zealand athletes who had retired from elite-level sport and their perceptions of retirement interventions.
CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter lays the foundation for the importance of the study. Initially, an overview of its contents is provided. Elite athletes are defined and retirement from elite-level sport is discussed. A detailed description of Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement (the athletic retirement model chosen as the framework for the study) is provided to explain the likely transitions elite athletes typically progress through during their careers. This will also enable the process and structure of the interviews and subsequent results/discussion chapter to be clear and logical. Furthermore, there is an overview of various other prominent models used to study and explain the process of athletic retirement so that the progression and development of models used previously in athletic retirement-related literature to those used currently is understood. Then, key theoretical frameworks used to explain the process of athletic retirement research are described so that it is clear how this understanding has evolved over time and has led to what researchers currently use to conceptualise the transition.

Thereafter, key aspects related to the process of athletic retirement according to Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement are discussed in detail; namely (1) reasons for athletic retirement, so it is clear why elite athletes retire and the impact this has on their adjustment; (2) mediating factors, to determine elements which might influence the adjustment of elite athletes to retirement; (3) coping resources, to explain methods that may help to prevent adjustment distress; (4) the effects of retirement, so that positive and negative experiences elite athletes typically experience when they retire are understood; and (5) information regarding athlete retirement-related assistance available internationally is outlined. Their effectiveness is examined so that it is clear what type of assistance is available, and how it supports the adjustment to retirement for elite athletes abroad. Then, the importance of post-retirement assistance is highlighted. A historical context of New Zealand’s high performance sport environment is offered and current athlete retirement-related assistance in New Zealand is described. Finally, the chapter concludes with a summary of its contents.
2.1 Elite athletes

Elite athletes have been widely defined in sport-related literature as individuals who have participated at international and/or national competitive level and are either professional, semi-professional or amateur (Grana, 1988; Swann et al., 2015). Reaching an elite level is typically determined by a combination of inborn potential, motivation and sports/life circumstances (Stambulova, Alfermann, Statler, & Côté, 2009). Elite athletes who receive payment and generate their primary income from playing sport are considered professional or semi-professional athletes, while elite athletes who receive no money for playing sport are regarded as amateur. Some elite athletes earn six-figure salaries, and, moreover, various athletes who reach the top level of some extremely professionalised sports (such as basketball and soccer) have the potential to earn multi-million dollar salaries. However, this is rarely the case for most elite athletes.

Semi-professional and amateur elite athletes typically rely on sponsorship (Macintosh & Albinson, 1985), funding from sports institutions and government bodies, coinciding alternate careers (Alfermann, Stambulova, & Zemaityte, 2004; Stambulova et al., 2007) and assistance from family and spouses (Schmid & Seiler, 2003; Sinclair & Orlick, 1993) to support their lifestyle and enable them to dedicate time to training and competing. In several studies (e.g. May & Tsai, 2007; Moesch, Mayer, & Elbe, 2012) former elite semi-professional and amateur athletes cited financial pressures as a significant reason for ending their athletic careers prematurely. Torre (2009) found that due to the relatively short careers of elite athletes compared to other professions, 78% of professional athletes in the USA experience financial distress within a few years of retirement.

Elite athletes, typically, experience several transitions during their athletic careers, such as beginning of sports specialisation, transition to intensive training in specific sports and transition to high-achievement sports (Stambulova, 1994, 2000). Studies (e.g. Stambulova, 1998; Wylleman & De Knop, 1998) have suggested that on average elite athletes begin their careers between 8-12 years of age, start competing at club level one or two years later, reach national level between 17-19 years of age, make international selection in their early twenties and retire in their early thirties. This excludes such athletes as gymnasts and ice skaters for whom these stages typically begin earlier.
2.2 Retirement from elite-level sport

Approximately 5-7% of elite athletes retire annually at an average of 34 years of age (North & Lavallee, 2004). However, the age that athletes are likely to retire at varies relative to the physical demands of each sport (Cosh, Crabb, & LeCouteur, 2013; North & Lavallee, 2004; Wylleman, Alfermann, & Lavallee, 2004). Elite athletes from highly physically demanding sports (e.g. diving, judo, ice skating, gymnastics, swimming) typically retire between 24-30 years of age, whereas elite athletes from less physically demanding sports (e.g. equestrian, golf, shooting, sailing) typically retire after 40 years of age (North & Lavallee, 2004). Elite athletes generally retire much earlier than individuals from other vocations, many of whom begin their careers at a similar age to that of which elite athletes retire (Baillie, 1993; Blinde & Greendorfer, 1985; Sinclair & Orlick, 1993). Such a young average retirement age creates a need for retired athletes to pursue and establish new and meaningful direction. Consequently, many former elite athletes develop new skills and careers after retiring (Sinclair & Orlick, 1993).

Elite athletes are likely to experience significant life changes during retirement, such as new careers, identity issues and family challenges (Smith & McManus, 2008; Werthner & Orlick, 1986). Some early studies (e.g. McInnally, Cavin, & Knoth, 1992; Mihovilovic, 1968; Werthner & Orlick, 1986) suggested that retirement is a negative experience for many elite athletes, and is an event that may cause physical, psychological and psychosocial distress such as depression, anxiety, low self-esteem (Alfermann & Gross, 1997; Crook & Robertson, 1991; Taylor & Ogilvie, 1994), alcohol/substance abuse and eating disorders (Haerle, 1975; Werthner & Orlick, 1986). However, currently the consensus among researchers is that most elite athletes experience positive transitions to retirement (Alfermann et al., 2004; Moesch et al., 2012; Park et al., 2013; Sinclair & Orlick, 1993) that foster opportunities for desirable lifestyle and career changes (Allison & Meyer, 1988; Reints & Wylleman, 2013) and personal development and growth (Alfermann, 2000).
### Table 2.1 Summary of key studies investigating the retirement experiences of elite athletes.

<table>
<thead>
<tr>
<th>Study</th>
<th>Data collection</th>
<th>Sample characteristics</th>
<th>Mediating factors related to quality of adjustment</th>
<th>Coping resources used</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mihovilovic (1968)</td>
<td>Questionnaire</td>
<td>• 44 Yugoslavian males&lt;br&gt;• Former professional soccer players</td>
<td>n/a</td>
<td>n/a</td>
<td>Athletic retirement is a negative experience. Retired athletes were found to hide and escape from reality and abuse alcohol.</td>
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<td>Werthner &amp; Orlick (1986)</td>
<td>Semi-structured interviews</td>
<td>• 28 Canadian males/females&lt;br&gt;• Former amateur elite athletes&lt;br&gt;• Individual and team sports</td>
<td>Voluntariness of retirement</td>
<td>• Searching for new careers&lt;br&gt;• Emotional support</td>
<td>Majority of the participants faced some degree of difficulty in leaving their sport careers.</td>
</tr>
<tr>
<td>Allison &amp; Meyer (1988)</td>
<td>Questionnaire</td>
<td>• 20 North American females&lt;br&gt;• Former professional tennis players</td>
<td>n/a</td>
<td>n/a</td>
<td>Majority of the participants found that retirement was an opportunity to re-establish more traditional societal roles and lifestyles. Most did not find the experience traumatic. Athletic retirements were predominantly voluntary.</td>
</tr>
<tr>
<td>Sinclair &amp; Orlick (1993)</td>
<td>Questionnaire</td>
<td>• 199 Canadian males/females&lt;br&gt;• Former amateur elite athletes</td>
<td>n/a</td>
<td>• Searching for new career/interests&lt;br&gt;• Keeping busy</td>
<td>Athletic retirement was a positive experience for most of the participants. Athletes who adjusted smoothly tended to retire after they achieved their sport-related goals or because they had achieved their goals in sport. Athletic retirements were mostly voluntary.</td>
</tr>
<tr>
<td>Lavallee et al., (1997)</td>
<td>Questionnaire</td>
<td>• 60 Australian males/females&lt;br&gt;• Former amateur elite athletes</td>
<td>Athletic identity</td>
<td>• Emotional support</td>
<td>Athletes who retired involuntarily reported significantly greater emotional and social problems adjusting to retirement than did those who retired voluntarily.</td>
</tr>
<tr>
<td>Study</td>
<td>Data collection</td>
<td>Sample characteristics</td>
<td>Mediating factors related to quality of adjustment</td>
<td>Coping resources used</td>
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<tr>
<td>Kerr &amp; Dacyshyn (2000)</td>
<td>Semi-structured</td>
<td>Seven Canadian females&lt;br&gt;Former amateur elite gymnasts</td>
<td>Athletic identity</td>
<td>n/a</td>
<td>Most athletes have negative retirements. Furthermore, the distinction between voluntary and involuntary retirement was unclear and athletes who retire voluntarily were not necessarily exempt from adjustment difficulties.</td>
</tr>
<tr>
<td>Alfermann et al., (2004)</td>
<td>Questionnaire</td>
<td>256 Lithuanian, Russian and German males/females&lt;br&gt;Former amateur elite athletes</td>
<td>Athletic identity</td>
<td>Pre-retirement planning</td>
<td>Pre-planned retirement contributed to improved cognitive, emotional and behavioural adaptation. High athletic identity was linked to poor adjustment. German athletes experienced more positive than negative emotions after retirement compared to Lithuanian and Russian athletes.</td>
</tr>
<tr>
<td>Cecic-Erpic et al., (2004)</td>
<td>Questionnaire</td>
<td>85 Slovene males/females&lt;br&gt;Former elite amateur athletes</td>
<td>Athletic identity, Voluntariness of decision</td>
<td>Pre-retirement planning</td>
<td>The quality of the sport career termination process depends on the voluntariness of career termination and athletic identity. Consideration of athletic and non-athletic factors was crucial for understanding adjustment to retirement.</td>
</tr>
<tr>
<td>Stambulova et al., (2007)</td>
<td>Questionnaire</td>
<td>157 French and Swedish males/females&lt;br&gt;Former elite amateur athletes</td>
<td>n/a</td>
<td>Pre-retirement planning</td>
<td>The transition out of elite-level sport is a dynamic, multidimensional, multilevel and multifactor process in which nationality/culture plays an important role. Pre-planned retirement contributed to better adjustment.</td>
</tr>
<tr>
<td>Kadlcik &amp; Flemr (2008)</td>
<td>Semi-structured</td>
<td>11 Czech males/females&lt;br&gt;Former elite amateur athletes</td>
<td>n/a</td>
<td>Keeping busy&lt;br&gt;Social support</td>
<td>Significant others and coping strategies played important roles in helping athletes cope during the transition process.</td>
</tr>
<tr>
<td>Park et al., (2013)</td>
<td>Systemic review</td>
<td>126 studies including males and females from a number of countries&lt;br&gt;Wide range of competitive levels&lt;br&gt;Various sports</td>
<td>Athletic identity, Voluntariness of decision</td>
<td>Coping strategies&lt;br&gt;Pre-retirement planning&lt;br&gt;Psychosocial support</td>
<td>Athletic retirement is a positive experience for most athletes. High athletic identity is correlated with poor adjustment and voluntariness of retirement is correlated with positive adjustment. Coping resources support positive adjustment.</td>
</tr>
</tbody>
</table>
2.3 Athletic retirement: Theories and models

Prominent early studies by Mihovilovic (1968) and Haerle (1975) provided accounts of the retirement experiences of elite athletes. These studies were conducted without theories or models, due to the lack of available theoretical frameworks that conceptualised athletic retirement at that time. Therefore, researchers attempted to understand and explain athletic retirement by using a range of retirement theories and models developed outside of sport (Taylor & Ogilvie, 1998). This included attempts to compare athletic retirement to the processes of aging, retirement from the workforce, dying and human life transitions (e.g. Kubler-Ross, 1969; Taylor & Ogilvie, 1994). Several of the pertinent theories and models that have been used to conceptualise athletic retirement are introduced below.

2.3.1 Athletic retirement as a singular event

Initially, when theories were first used to conceptualise athletic retirement, many researchers (e.g. Blinde & Stratta, 1992; Lerch, 1982; Rosenberg, 1982) described athletic retirement as a singular, abrupt event predicated on two theoretical frameworks: thanatology, the study of the process of dying and death (Lerch, 1982; Rosenberg, 1982) and social gerontology, the study of the aging process in relation to individuals’ lives and activities (Blinde & Greendorfer, 1985; Cumming, Dean, Neweel, & McCaffrey, 1960).

2.3.1.1 Thanatological frameworks

From a thanatological perspective, Lerch (1982) and Rosenberg (1982) compared the psychological and social changes experienced by retired athletes (e.g. loss of social functioning, isolation and ostracism) to social death, which is characterised as isolation and rejection of individuals from former social groups. On the other hand, Kubler-Ross (1969) implied that athletic retirement is similar to the series of stages humans experience when coping with death (shock, denial, anger, depression and understanding/acceptance). These characteristics are typical of elite athletes who retire involuntarily and have high athletic identities (Grove, Lavallee, & Gordon, 1997; Taylor & Ogilvie, 1994). Therefore, some psychologists utilised these frameworks to help athletes cope with diminishing athletic identity by teaching them that retirement and death experiences are similar (Lavallee & Wylleman, 2000).

However, the thanatological approach was criticised because it lacks an analogy between terminal illness and career termination (Gordon, 1995), insinuates that retirement is an
inherently negative experience (Greendorfer & Blinde, 1985), overlooks factors that influence adaptation to retirement and disregards post-retirement life (Sinclair & Orlick, 1993; Taylor & Ogilvie, 1998). Consequently, the fact that many athletes experience positive retirements (such as increased family time and fewer training commitments) and have new social and vocational post-retirement experiences is overlooked (Park et al., 2013; Sinclair & Orlick, 1993; Young, Pearce, Kane, & Pain, 2006).

2.3.1.2 Social gerontological frameworks

Derived from social gerontological frameworks, six main theories were developed: disengagement theory (Cummings et al., 1960), activity theory (Havighurst & Albrecht, 1953), continuity theory (Atchley, 1976), social exchange theory (Homans, 1961) and social breakdown theory (Kuypers & Bengtson, 1973). These theories were endorsed by several researchers (e.g. Lavallee, 2000; Lerch, 1981; McPherson, 1980; Rosenberg, 1981) as appropriate for describing athletic retirement. For instance, exchange theory illustrates the exchange of athletes’ physical talent, knowledge and experiences for meaningful rewards from the sports system, such as coaching/media careers (Lavallee, 2000; Rosenberg, 1981). Furthermore, social breakdown theory reflects what happens to athletes when their skills decline and their performance deteriorates (Edwards & Meier, 1984; Rosenberg, 1981). Subsequently, psychologists used these theories to predict the quality of athletes’ adjustments to retirement by paralleling retirement from sport to the labour force (Phillips, Ajrouch, & Hillcoat-Nalletamby, 2010; Wylleman et al., 2004).

However, social gerontological approaches compare athletic retirement to retirement from other careers, focus narrowly on social issues of the aging population (e.g. health care, institutionalisation; Lerch, 1980) and were not developed within sports populations (Curtis & Ennis, 1988; Murphy, 1995; Werthner & Orlick, 1986). Consequently, they neglect that athletes typically retire for multi-factorial reasons (Sinclair & Orlick, 1993), progress into new careers after retiring (Coakley, 1983; Greendorfer & Blinde, 1985) and that retirement from sport typically occurs much earlier (Sinclair & Orlick, 1993), often unexpectedly and for different reasons than other careers (Baillie, 1993; Baillie & Danish, 1992; Sinclair & Orlick, 1993).
2.4 Athletic retirement as a transition

During the early 1990s, researchers shifted to examining athletic retirement as a transitional process (Taylor, & Ogilvie, 1998; Wylleman et al., 2004; Wylleman & Lavallee, 2004). This was because numerous studies linked athletic retirement with predominantly positive experiences which include social re-birth (Allison & Meyer, 1988; Coakley, 1983; Greendorfer & Blinde, 1985), gradual disengagement from sport and realignment of life goals (Coakley, 2009).

2.4.1 Human transition models

Some of the earliest studies that examined athletic retirement as a transitional process (e.g. Baillie & Danish, 1992; Parker, 1994; Swain, 1991) were based on human transition models, such as the analytical model (Sussman, 1972) and the model of human adaptation to transition (Schlossberg, 1981). This enabled examination of individual characteristics (including gender and age), athletes’ perceptions of the transition (such as stress occurrence and role change) and pre-and post-transition environments (including evaluation of internal and institutional support). Therefore, these frameworks were more suitable for conceptualising elite athletes’ career transition processes. Human transition models were criticised for not being sport-specific and, therefore, lacking operational detail of specific components related to athletic retirement (Wylleman et al., 2004).

2.4.2 Athlete-specific career transition models

As a result of early model limitations and criticisms, several athlete-specific career transition models were developed to describe and predict the existence and order of athletes’ normative career transitions. Prominent models include: the four-stage sports career model (Salmela, 1994); the analytical career model (Stambulova, 1994); and the developmental model of transition faced by athletes (Wylleman & Lavallee, 2004). The models are effective because they describe and predict the existence and order of the athletes’ normative career transitions. They describe a succession of stages (such as initiation/sampling stage, development/specialisation stage, perfection/mastery/investment stage, final/maintenance stage and discontinuation stage) that athletes from all countries, sports and genders typically progress through during their careers. Furthermore, they describe changes within athletes and their social environment throughout each stage (Alfermann & Stambulova, 2007). Therefore, the
models support greater examination of the events that alter athletes’ routines, roles and relationships (Schlossberg, 1981).

The developmental model of transition faced by athletes has been the most frequently used athlete-specific career transition model for athletic retirement research. This model illustrates the link between the transitions in an athletic career and the transitions within other aspects of athletes’ lives, including individual, psychosocial and academic/vocational (Wylleman & Lavallee, 2004), and shows that these transitions typically occur simultaneously and are interactive. For instance, transitioning from primary to secondary education typically occurs at the same time that most young athletes transition from the initiation to development stage. This is a prominent feature of the model because adjusting to athletic transitions can be difficult when they occur simultaneously with other life transitions, thus, being able to predict such overlaps is critical (Wylleman & Lavallee, 2004). However, the model was criticised for not including non-normative transitions, such as injury and de-selection, which are likely to influence how long and to what level elite athletes participate in sport and are also linked with problematic adaptation to retirement, such as anxiety and depression (Alfermann & Gross, 1997; Wylleman et al., 2004).

2.4.3 Career explanatory transition models

Career explanatory transition models are based on reasons, demands, coping, outcomes and consequences related to a transition during an athlete’s career. Two athlete career explanatory transition models (conceptual model of adaptation to retirement, Taylor & Ogilvie, 1994; sport career transition model, Stambulova, 1997, 2003) have featured prominently throughout the retirement literature. The models were developed from early theoretical frameworks (e.g. Schlossberg, 1981; Sussman, 1972) and empirical research (e.g. Baillie, 1993; Lavallee, 2000; Parker, 1994; Sinclair & Orlick, 1994). Central to both models is the importance of coping processes and strategies used by athletes to adjust to transition challenges (Alfermann & Stambulova, 2007; Lavallee, 2000; Schlossberg, 1981; Sinclair & Orlick, 1994). For instance, when there is an appropriate level of congruence between the demands of the transition and available resources the athlete typically copes successfully (Stambulova, Alfermann, Statler, & Côté 2009). Furthermore, both models provide multidimensional views of athletic retirement, highlight the importance of individuality and emphasise challenges of the transition. The present study is based on Taylor and Ogilvie’s (1994) model which is described in depth in the following section.
2.5 Framework for the present study

Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement (Figure 2.1) is the framework used for the present study. Based on Schlossberg’s (1981) model, it is a thorough framework for athletic retirement-related research and includes personal and situational factors that affect athletic retirement and the ability of athletes to adapt. It deals specifically with retirement from elite-level sport and includes negative and positive adjustments so that the full retirement experiences of athletes are acknowledged. The model has been used in several studies (e.g. Grove, Lavallee, Gordon, & Harvey, 1998; Kadlcik & Flemr, 2008; Moesch et al., 2012) to examine aspects of the athletic retirement process and is based on five key stages.

Figure 2.1 The conceptual model of adaptation to retirement (Taylor & Ogilvie, 1994)
Stage one identifies the cause of retirement, with the four main reasons listed as age, de-selection, injury and free choice. Stage two considers intrapersonal factors that relate to adaptation to retirement, including self-concept and self-identity, perception of control over the decision to retire and various other personal, social and environmental variables. In stage three available resources (coping skills, pre-retirement planning, social support) that influence how athletes respond to retirement are examined. The first three stages combine to influence stage four, in which the quality or success of an athlete’s transition to retirement is determined. Finally, stage five describes cognitive, emotional, behavioural and social intervention strategies that can be used to support athletes who experience difficulty adjusting to retirement. Within each stage factors and experiences that influence the success of athletes’ transitions are described. One criticism is that, although several researchers (Alferman et al., 2004; Stephan et al., 2003) have examined various aspects of the model, there is a lack of research examining the effectiveness of the model in its entirety for athlete retirement-related research. Despite this, it was determined that the model encapsulates the dynamic nature of retirement from elite-level sport and, thus, appears most suitable for guiding athletic retirement-related research. Each stage of the model is expanded on in the following sections.

2.5.1 Stage one- Reasons for athletic retirement

Reasons for athletic retirement directly influence whether the retirement process is positive or negative for elite athletes (Alfermann et al., 2004; Blaesild & Stelter, 2003; Cecic-Erpic et al., 2004; Schlossberg, 1984; Taylor & Ogilvie, 1994). Age, de-selection, injury and free choice are acknowledged as the primary reasons for athletic retirement by Taylor & Ogilvie, (1994) and have been examined extensively in athletic retirement-related literature (e.g. May & Tsai, 2007; Moesch et al., 2012; Ristolainen, Kettunen, Kujala, & Heinonen, 2012).

2.5.1.1 Age

Retirement from elite-level sport generally occurs at a much younger age than other vocations (Orlick, 1990; Baillie, 1993; Sinclair & Orlick, 1993). As athletes age they begin to experience deterioration of their physical skills, such as agility, speed and flexibility, which makes it increasingly challenging for them to remain competitive at an elite level (Taylor & Ogilvie, 2001). This significantly impacts the decision of elite athletes to retire. For instance, Mihovilovic (1968) found that 27% of former Yugoslavian soccer players retired for age-related reasons; however, other studies examining various individual and team sports indicate that age is not a main cause for retirement (e.g. 4.4%; Moesch et al., 2012).
2.5.1.2 Deselection

Deselection occurs when coaching staff replace existing players with new players who they consider to be performing better. Some athletes aim to improve their performance level in an attempt to be re-selected in the future. For some athletes being deselected is the catalyst for retiring (Taylor & Ogilvie, 1994). Despite deselection being acknowledged as a main reason for retiring (Taylor & Ogilvie, 1994, 1998), in several studies only a small number of athletes identified this as the cause of their retirement (e.g. 7%, Lavallee, Grove, & Gordon, 1997; 2.9%, Moesch et al., 2012).

2.5.1.3 Injury

Injuries, particularly serious ones, can lead to elite-level athletes terminating their athletic career. Injuries can lead to a reduction in the physical capability of some athletes, resulting in a decline in their ability to perform at the same level that they could prior to being injured (Ogilvie & Taylor, 1993). Furthermore, some athletes do not want to pursue the hours of rehabilitation required to return from a serious injury to elite-level sport. Injury features prominently in the literature as a primary reason for athletic retirement (e.g. 15%; Allison & Meyer, 1988, 26.5%; Moesch et al., 2012, 52%; Ristolainen et al., 2012).

2.5.1.4 Free choice

Free choice is a desirable and popular reason for athletic retirement because elite athletes usually feel better about their decision to retire when it is of their own accord (Moesch et al., 2012; Ogilvie & Taylor, 1993). For instance, some elite athletes cite reasons such as reduced motivation and desire to pursue other interests as cause to freely choose to retire from elite-level play (May & Tsai, 2007; Moesch et al., 2012). Many studies indicate that free choice is the most common reason for termination of an athlete’s career (e.g. 69%; Lavallee et al., 1997, 69.5%; Moesch et al., 2012, 42%; Werthner & Orlick, 1986).

The growing consensus is that athletic retirements are multi-causal and unique (Alfermann & Stambulova, 2007; Stambulova et al., 2009). Numerous other reasons that contribute to athletic retirement have been identified in multiple studies (e.g. Koukouris, 1991; Lavallee et al., 1997; May & Tsai, 2007; Moesch et al., 2012; Ogilvie & Taylor, 1993; Ristolainen et al., 2012; Stambulova et al., 2009). These include finances, politics of sport, burnout, work/study demands and financial reasons. Due to the high number of retirement antecedents, and for easier comprehension (Moesch et al., 2012), researchers classified these as voluntary or
involuntary (Webb, Nasaco, Riley, & Headrick, 1998), planned or unplanned (Alfermann et al., 2004) and athletic or non-athletic (Kadlcik & Flemr, 2008). Some researchers have used themes to categorise retirement reasons such as psychosocial, psychological, academic, athletic, physical and financial (Reints, 2011b). However, studies indicate that most athletic retirements are uniquely influenced by several reasons from multiple categories (Alfermann & Stambulova, 2007; Moesch et al., 2012; Stambulova, 1994; Stambulova et al., 2009; Swain, 1991). For instance, voluntary retirements (e.g. due to loss of enjoyment) might be influenced by non-athletic reasons, such as financial or family issues. Therefore, grouping single reasons for athletic retirement into specific categories fails to acknowledge all contributing factors (Fernandez, Stephan, & Fouquereau, 2006; Kerr & Dacyshyn, 2000; Moesch et al., 2012; Stambulova et al., 2009).

2.5.2 Stage two- Mediating factors influencing athletes’ adjustments to retirement

Taylor and Ogilvie (1994) identified developmental experiences, athletic identity, perceptions of control, social identity and tertiary contributors as mediating factors that influence the physical, psychological and social adjustment of elite athletes to retirement. Researchers have identified numerous other mediating factors that also influence whether the retirement process is a positive or negative experience for elite athletes, such as educational status and player-coach relationship (Fortunato & Marchant, 1999; Leung, Carre, & Fu, 2005). Social identity, athletic identity and voluntariness of retirement are acknowledged as the primary influences (Cecic-Erpic et al., 2004; Cosh et al., 2013; Lally, 2007; Lavallee et al., 1997; Lavallee & Robinson, 2007; Wylleman et al., 2004) that would be involved in determining the nature of an athlete’s adjustment to the retirement process and are expanded on in the following sub-sections.

2.5.2.1 Social identity

Elite athletes often internalise athletic identity at the expense of other social roles (Blinde & Greendorfer, 1985), consequently, athletic identity typically dominates their overall self-concept (Webb, Nasaco, Riley, & Headrick, 1998). According to Bee (1992), self-concept is the sense of being separate and distinct from others and the awareness of the constancy of the self. An important aspect of an elite athlete’s self-concept is their social identity, which is related to their sense of who they are based on membership of other groups (Vaughan & Hogg, 1995). For many elite athletes their social identity is defined in terms of their public profile, which is often reinforced by media coverage (McPherson, 1980). Following
retirement, publicity and media coverage typically declines quickly (Taylor & Ogilvie, 1998). Therefore, many elite athletes experience loss of status and public-esteem and, consequently, struggle to maintain their social identity (Daniels, Sincharoean, & Leaper, 2005; Taylor & Ogilvie, 1998). Having a diverse social identity (e.g. friends, family and education) has been associated with a more positive adjustment to retirement for elite athletes (Sinclair & Orlick, 1993).

2.5.2.2 Athletic identity

How individuals perceive themselves is comprised of many identities which define who they are (Marsh, 1990). Athletic identity is the extent to which athletes identify with the athletic role (Brewer, Van Raalte, & Linder, 1993). Many elite athletes dedicate themselves physically and emotionally to training and competing and some also have high profile lives in the public spotlight (Albion & Fogarty, 2005; Alfermann et al., 2004). Such commitment and lifestyle has the potential to promote positive experiences such as euphoria (McAllister, Motamedi, Hame, Shapiro, & Dorey, 2001), adrenaline rush (Drahota & Eitzen, 1998) and increased social recognition and psychological well-being (Adler & Adler, 1989; Loland, 1999). These factors would be expected to be supportive of improved athletic performance (Werthner & Orlick, 1986), exercise adherence (Brewer et al., 1993) and subjective well-being and life satisfaction (Martin, Fogarty, & Albion, 2014; McAllister et al., 2001; Stephan et al., 2003). Therefore, the likelihood of elite athletes developing high athletic identity is enhanced (Cosh et al., 2013; Martin et al., 2014; Stambulova, 1994; Ungerleider, 1997; Webb et al., 1998; Wylleman, De Knop, Menkehorst, Theeboom, & Annerel, 1993).

High athletic identity has been linked with issues related to self-worth. Hewitt (2009) defined self-worth as the sense of one’s evaluation of their value as a person. Athletes with high athletic identity typically characterise their self-worth based on their perceived physical ability, associated with their physical skills and the quality of their physical performance (Blinde & Greendorfer, 1985; Svoboda & Vanek, 1982). Being recognised for athletic achievement heightens elite athletes’ dependence on self-worth from sport, often at the expense of other facets of their personalities (Botterill, 1982). Without success in sport, elite athletes often struggle to reinforce their sense of self-worth (Pearson & Petitpas, 1990). Furthermore, athletes typically reduce their training load and change their eating habits when they retire, which often leads to weight gain, degradation of physical competencies, pain and
tiredness (Asci, 2003; Fox, 2000). As a result, they might develop negative perceptions of their body, which has been linked with low self-worth (Stephan et al., 2003).

Loss of a preferred or dominant role, such as being an elite athlete, may affect a person’s ability to redefine their overall self-concept (Markus, 1977; Stryker, 1978; Stryker & Serpe, 1994). Coupled with sudden changes to their lifestyle following retirement, elite athletes with high athletic identity often struggle to assume new identities and this has the potential to cause shock and possibly identity crisis (Grove et al., 1997; Hill & Lowe, 1974; Kerr & Dacyshyn, 2000). As such, elite athletes can be vulnerable to poor emotional and social adjustment (Grove et al., 1997; Hill & Lowe, 1974; Tasiemski, Kennedy, Gardner, & Blaikley, 2004), confusion and disorientation (Kerr & Dacyshyn, 2000), dependence (Pearson & Petitpas, 1990) and lack of alternate career preparation (Albion & Fogarty, 2005; Murphy, Petitpas, & Brewer, 1996). The above findings suggest that high athletic identity is linked with difficulties adjusting to retirement for elite athletes.

Some researchers (e.g. Lally, 2007; Lally & Kerr, 2005; Lavallee et al., 1997) suggest complete abandonment of athletic identity during the retirement process. At present, however, there are no known approaches that will guarantee full reduction of athletic identity. Instruments have been developed that measure athletic identity (e.g. athletic identity measurement scale; Brewer et al., 1993, athletic identity questionnaire; Anderson, 2004) and may help to identify athletes at risk of maladjustment. Despite this, Lally (2007) found that it is not possible to predict or prevent identity issues by assessing athletic identity prior to retirement.

It has been suggested that gradual reduction of athletic identity prior to retirement (e.g. committing to alternate careers and education development; Baillie & Danish, 1992; Sinclair & Orlick, 1993; Werthner & Orlick, 1986) is linked with improved adjustment (Ogilvie & Taylor, 1993). The best approach for elite athletes may be to participate in programmes and services that will enhance their preparation for retirement and, thus, reduce their athletic identity.

2.5.2.3 Voluntary/involuntary retirement

Athletic retirements that are due to involuntary reasons, such as injury (Kadlcik & Flemr, 2008) and deselection (Moesch et al., 2012), are linked with reduced perceived control (Lavallee et al., 1997; Stambulova, 2012; Taylor & Ogilvie, 1994). Such reasons for
retirement can make elite athletes vulnerable to feelings of loss and failure (Alfermann & Gross, 1997; Werthner & Orlick, 1986). These athletes are more susceptible to adjustment distress such as lower self-control (Werthner & Orlick, 1986), lower self-respect (Crook & Robertson, 1991), anxiety and depression (Alfermann & Gross, 1997) and poor social adjustment (Lavallee et al., 1997). Additionally, in rare cases, some may experience psychopathological symptom distress (Walker, Thatcher, & Lavallee, 2007; Wippert & Wippert, 2010), such as hostility, addictive behaviour, psychoticism and obsessive-compulsive symptoms (Wippert & Wippert, 2010).

Studies (e.g. Alison & Meyer, 1988; Park et al., 2013; Sinclair & Orlick, 1993) indicate that most athletic retirements are voluntary (e.g. due to goal satisfaction, loss of motivation; Taylor & Ogilvie, 1994; Stambulova, 2000). These athletes typically develop feelings of higher perceived control over their decision (Alfermann et al., 2004; Rintaugu & Mwisukha, 2011; Taylor & Ogilvie, 2001). This often leads to an improved sense of autonomy that enables them to prepare psychologically and practically for retirement (Alfermann et al., 2004; Cecic-Erpic et al., 2004; Webb et al., 1998). The outcome of this is increased life satisfaction (Martin et al., 2014) and heightened self-efficacy (Meeker, Stankovich, & Kays, 2000; Reints & Wylleman, 2013). Therefore, it appears that voluntary retirements enhance elite athletes’ ease of adjustment.

Kerr and Dacyshyn (2000) found that both voluntary and involuntary reasons influence individual decisions to retire and that most participants had difficulty adjusting to retirement. Furthermore, as noted previously, research indicates that most athletic retirements are due to multi-causal reasons. This suggests that elite athletes will potentially experience a mix of positive and negative adjustment experiences (Stambulova et al., 2009). Therefore, it is important that assistance to cope with the retirement transition is available. Utilising pre-retirement (e.g. career planning, coping skills) and post-retirement (e.g. individual counselling) interventions might enhance elite athletes’ preparation and ability to cope with retirement distress.

2.5.3 Stage three- Available resources for adaptation to retirement

Elite athletes adapt to retirement according to the availability of resources and their ability to utilise them (Alfermann et al., 2004; Sinclair & Orlick, 1993; Stambulova et al., 2007). Resources include the internal and external factors that enhance the adjustment of athletes during retirement (e.g. self-knowledge skills, motivation, social support; Harrison &
Lawrence, 2004; Werthner & Orlick, 1986). Taylor and Ogilvie (1994) identified coping skills, pre-retirement planning and social skills as being integral resources for athletes to utilise to support their adjustment to retirement. Studies indicate that recruitment and use of such resources is associated with positive adaptations to retirement (Alfermann, 2000; Stambulova et al., 2007).

2.5.3.1 Coping skills

Coping skills are an integral resource for retired elite athletes (Alfermann et al., 2004; Stambulova et al., 2007). The coping skills that elite athletes possess and implement help determine the level of distress they are likely to experience during the retirement process (Brammer, 1991). Most elite athletes utilise active coping skills, including seeking psychosocial support or external support (Lotysz & Short, 2004), keeping busy (Sinclair & Orlick, 1993; Kadlčík & Flemr, 2008), seeking new careers (Butt & Molnar, 2009; Shachar, Brewer, Cornelius, & Petitpas, 2004) and acceptance (Alfermann et al., 2004). Development and use of these skills is associated with positive adjustment to retirement for elite athletes (Kadlčík & Flemr, 2008; Sinclair & Orlick, 1994). Conversely, fewer athletes use passive coping skills, such as avoidance/denial (Lally, 2007; Stambulova et al., 2007) and alcohol dependence (Wippert & Wippert, 2008), which are associated with psychological, physical and social problems during retirement (Alfermann et al., 2004; Cecic-Erpic et al., 2004; Stephan et al., 2003; Webb et al., 1998). Therefore, it appears that athletes who employ active coping skills are less likely to experience distress than those who predominantly utilise passive coping skills. The type of coping skills generally used by elite athletes is usually influenced by their athletic identity and reason for retirement (Alfermann et al., 2004). High athletic identity and involuntary retirement is linked with using passive coping skills, whereas low athletic identity and voluntary retirement is associated with using active coping skills (Alfermann et al., 2004; Cecic-Erpic et al., 2004; Stephan et al., 2003; Webb et al., 1998).

2.5.3.2 Pre-retirement planning

Pre-retirement planning appears to foster positive adjustment to retirement for elite athletes (Alfermann et al., 2004; Cecic-Erpic et al., 2004; Stambulova et al., 2007). Pre-retirement planning includes psychological (e.g. social networking; Taylor & Ogilvie, 1994), financial (e.g. investment endeavours; Taylor & Ogilvie, 1994) and vocational (e.g. career planning; Cecic-Erpic et al., 2004) planning for post-sport life. Pre-planning for retirement helps elite athletes to reduce their athletic identity prior to retiring (Cecic-Erpic et al., 2004; Harrison &
Lawrence, 2004; Lally, 2007; Stambulova, 1994), experience higher perceived control over their decision to retire (Alfermann, 2000) and enhances their self-efficacy regarding their ability to adjust (Alfermann et al., 2004; Taylor & Ogilvie, 1994; Webb et al., 1998). This improves their cognitive, behavioural and emotional readiness for post-retirement life (Alfermann et al., 2004; Fortunato & Marchant, 1999; Park et al., 2013; Taylor & Ogilvie, 1994). Consequently, psychologists recommend pre-retirement planning (e.g. life skills programmes) during elite athletes’ sport careers (Carr & Bauman, 1996; Miller & Kerr, 2002).

Approximately 50% of elite athletes do not contemplate post-sport life while competing (North & Lavallee, 2004; Wylleman et al., 1993). This is due to high athletic identity (Gorely, Lavallee, Bruce, Teale, & Lavallee, 2001; North & Lavallee 2004) or anticipation of a long athletic career (Gorely et al., 2001; McPherson, 1980; North & Lavallee 2004). Studies indicate that low numbers of elite athletes (e.g. 40%, Alfermann et al., 2004; 29%, New Zealand Rugby Players Association, 2011; 29%, Svoboda & Vanek, 1982) pre-plan for retirement.

Stambulova et al. (2007) reported that higher numbers of French (55%) and Swedish (67%) elite athletes pre-plan their retirement. A possible explanation for this is that most Western Europeans are from individualist cultures that tend to prioritise planning and are thus more likely to pre-plan for retirement (Stambulova et al., 2009; Triandis, 2004). Cross-cultural differences can potentially influence whether elite athletes pre-plan for retirement; however, further research is needed to clarify this. Also, only amateur athletes, who are more likely to pre-plan for retirement than professional athletes due to their need, generally, to earn an income outside of sport (Gorely et al., 2001; McPherson, 1980), were examined in the study, which potentially influenced the outcome. Creating awareness that athletic retirement is an inevitable transition and promoting pre-retirement planning would be expected to encourage improved pre-planning.

The role of an athlete’s entourage has been identified as a key determinant of effective pre-retirement planning. The entourage includes all the people associated with an athlete and typically consists of, and is not limited to, coaches, managers, sponsors, friends, family and spouses (International Olympic Committee, 2011). Tshube (2014) found that balancing sport with pre-retirement planning, such as university education, was a difficult challenge for athletes and their entourage. However, it was acknowledged that coaches and parents played
a key role in encouraging elite athletes to balance pursuing an academic career alongside their athletic careers in preparation for retirement. Many athletes completed academic studies, which enabled them to find employment or pursue further academic study after retiring. Some athletes’ sponsors facilitated pre-retirement planning through part-time employment, which enabled the athletes to develop new skills and networks that enhanced their post-retirement career prospects. This highlights the importance of an athlete’s entourage in creating awareness of the importance of pre-retirement planning and providing them with opportunities to do it.

2.5.3.3 Social support

Adequate social support has been linked with successful adjustment to retirement (Lavallee et al., 1997; Lotysz & Short, 2004; Pearson & Petitpas, 1990; Wang, 2008). Social support is the provision of resources from one individual to another to enhance well-being and is considered a major influence on elite athletes’ retirement adjustments (Alfermann et al., 2004; Sinclair & Orlick, 1993; Stambulova et al., 2007; Werthner & Orlick, 1986). Social support provides elite athletes with new skills, advice, assistance and information, and is believed to reduce retirement transition distress (Lavallee et al., 1997; Sinclair & Orlick, 1993; Taylor & Ogilvie, 1994). Conversely, in the absence of social support it is possible that elite athletes may experience feelings of isolation, loneliness or distress (Greendorfer & Blinde, 1985; Werthner & Orlick, 1986).

Social support comes from sporting (e.g. sport organisations and administrators) and non-sporting (e.g. government agencies) sources and members of an athlete’s entourage, including friends, family and spouses. Support can be classified as emotional (e.g. counselling), network (e.g. developing social relationships), material (e.g. financial support), and informational (e.g. education and career planning) support (Alfermann et al., 2004; Levy & Gordon, 2001; Pearson & Petitpas, 1990; Stambulova et al., 2007). Sporting sources account for the majority of the support elite athletes receive during their athletic careers (Alfermann & Stambulova, 2007; Bubmann & Alfermann, 1994; Sinclair & Orlick, 1993; Svoboda & Vanek, 1982). However, this support usually diminishes during the retirement transition (Blaesild & Stelter, 2003; Crook & Robertson, 1991; Werthner & Orlick, 1986). It appears that non-sporting sources and an athlete’s entourage, particularly friends, family and spouses, provide the most post-retirement social support (Botterill, 1990; Schmid & Seiler, 2003; Sinclair & Orlick, 1993). Tshube (2014) found that family entourage members, such as
parents and spouses, had an integral role in supporting the transition of elite athletes from competing to retiring by keeping them engaged in meaningful activities, such as focusing on relationships with their spouses and keeping active.

2.5.4 Stage four- Quality of the career transition for elite athletes

According to Taylor and Ogilvie’s (1994) model, the influence of the variables in the first three stages directly affects the quality of the transition to retirement for elite athletes. Elite athletes are likely to experience significant life changes during retirement, such as new careers, identity issues and family challenges (Smith & McManus, 2008; Werthner & Orlick, 1986). Such challenges influence how they perceive themselves, their abilities, the quality of their lives and whether or not retirement is a positive or negative experience (Kim & Moen, 2001; Smith & McManus, 2008; Stephan et al., 2003). Nevertheless, athletic retirement requires athletes to adjust appropriately to these changes, regardless of whether it is a positive or negative experience (Coakley, 1983; Schlossberg, 1984).

 Some early studies (e.g. McInnally et al., 1992; Mihovilovic, 1968; Werthner & Orlick, 1986) suggest that retirement is a negative experience for many elite athletes. Several participants reported physical, psychological and psychosocial distress such as depression, anxiety, low self-esteem (Alfermann & Gross, 1997; Crook & Robertson, 1991; Taylor & Ogilvie, 1994), alcohol/substance abuse and eating disorders (Haerle, 1975; Werthner & Orlick, 1986). It is important to note that these studies typically examined highly ranked elite athletes, who tend to have high athletic identity and thus are more likely to describe retirement negatively (Grove et al., 1997; Stambulova, 1994; Webb et al., 1998; Wylleman et al., 1993).

 Elite athletes in most studies have, however, described their retirement as positive and healthy (e.g. Allison & Meyer, 1988; Park et al., 2013; Sinclair & Orlick, 1993). Research suggests that athletic retirement fosters opportunities for desirable lifestyle and career changes (Allison & Meyer, 1988; Reints & Wylleman, 2013), increased self-efficacy (Alfermann et al., 2004; Cecic-Erpic et al., 2004) and personal development and growth (Alfermann, 2000). Park et al’s. (2013) review of retirement literature, which included 44 studies involving amateur and professional athletes from various levels of competition, revealed that only 16% of elite athletes identified athletic retirement as negative. The review included studies regardless of whether they suggested athletic retirement was negative or positive. Therefore, the current consensus among researchers is that most elite athletes
experience positive transitions to retirement (Alfermann et al., 2004; Moesch et al., 2012; Park et al., 2013; Sinclair & Orlick, 1993).

2.5.5 Stage five- Interventions

Athlete retirement interventions were highlighted by Taylor and Ogilvie (1994) as essential for helping elite athletes to cope with the transition to retirement, in particular athletes who experience difficulty adjusting. Various life skills, counselling, career and education interventions (e.g. Athlete Career and Education Programme, Making the Jump Programme) have been developed in numerous countries including Australia, USA, United Kingdom, Canada and New Zealand. Wylleman et al. (2004) outlined that such interventions are typically managed by government agencies (e.g. Sport New Zealand via HPSNZ), NSOs (e.g. Netball New Zealand) and National Olympic Committees (e.g. New Zealand Olympic Committee). Most interventions seek to help elite athletes develop career/vocational, social and educational skills to support their adjustment (Anderson & Morris, 2000; Gordon, 1995; Taylor & Ogilvie, 1994) and quality of life (Stronach & Adair, 2010) throughout the retirement transition. Consequently, many of the individuals acquire valuable life skills (e.g. time management, goal setting) and become efficient at lifestyle management which prepares them for potential post-sport careers (Anderson & Morris, 2000; Lavallee, Gorely, Lavallee, & Wylleman, 2001). Some interventions directly support athletes seeking employment (e.g. Olympic and Paralympic Employment Network) by connecting them with companies that offer suitable employment opportunities while others provide workshops to enhance the ability of athletes to choose their own career path (e.g. Scottish Performance Lifestyle programme). However, barriers exist, including financial constraints and the sporadic nature of many interventions, which lead to wider retirement issues (e.g. social integration, emotional support) often being neglected (Gorely, Bruce, & Teale, 1998; Lavallee et al., 1997). Table 2.2 below identifies some current prominent international athlete retirement interventions.
Table 2.2 Overview of selected athlete career interventions currently available

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Institution/Organisation</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete Career and Education (ACE) Programme</td>
<td>Australian Institute of Sport</td>
<td>Australia</td>
</tr>
<tr>
<td>Athlete Career Program</td>
<td>US Olympic Committee</td>
<td>USA</td>
</tr>
<tr>
<td>Athlete Life Programme</td>
<td>High Performance Sport New Zealand (HPSNZ)</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Career Development Program</td>
<td>National Basketball Association</td>
<td>USA</td>
</tr>
<tr>
<td>Elite Athlete Work Experience Program</td>
<td>Canadian Sport Institute</td>
<td>Canada</td>
</tr>
<tr>
<td>Game Plan</td>
<td>Canadian Olympic Committee</td>
<td>Canada</td>
</tr>
<tr>
<td>Hong Kong Athletes Career and Education Programme</td>
<td>Sports Federation and Olympic Committee of Hong Kong, China</td>
<td>Hong Kong, China</td>
</tr>
<tr>
<td>Performance Lifestyle</td>
<td>Sports Institute Northern Ireland</td>
<td>Northern Ireland</td>
</tr>
<tr>
<td>Professional Development Programme</td>
<td>New Zealand Rugby Players Association</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Scottish Performance Lifestyle Programme</td>
<td>Scottish Institute of Sport</td>
<td>Scotland</td>
</tr>
<tr>
<td>Tutorsport (TS)</td>
<td>Autonomous University of Barcelona</td>
<td>Spain</td>
</tr>
<tr>
<td>Wales Lifestyle Management Programme</td>
<td>Sports Council for Wales</td>
<td>Wales</td>
</tr>
<tr>
<td>Young Player Education Programme</td>
<td>New Zealand Rugby Players Association</td>
<td>New Zealand</td>
</tr>
</tbody>
</table>

At present there is limited research regarding the effectiveness of such athlete transition interventions. Gorely et al. (1998) identified that the ACE programme (Australia) lacked
accessibility and availability to elite athletes. Albion (2007) later found that the ACE programme helped athletes become less inclined towards identity foreclosure and increased their motivation to make career decisions. Another study by Mateos, Torregrosa, & Cruz (2010) reported that the Tutorsport Career Assistance Programme was deemed successful by retired elite Spanish athletes.

2.5.5.1 The importance of life skills interventions for athletic retirement

Life skills (also referred to as transferable skills) are general skills that enhance individuals’ adaptive and positive behaviour and include problem solving, organising and motivating (Anderson & Morris, 2000; Lavallee, 2005; Lavallee et al., 2001). Some of these skills are developed through training and competing (e.g. tenacity and mental toughness) and are transferable to post-sport life (Mayocchi & Hanrahan, 2000). However, transferability is not always guaranteed (Danish, Petitpas, & Hale, 1992) because athletes may be unaware that they possess such skills, or lack the confidence to successfully utilise them in a non-athletic setting. Both cultivation and awareness of life skills are necessary so that they are transferable (Danish, Nellen, & Owens, 1996; Danish, Fazio, Nellen, & Owens, 2002; Petitpas, Danish, McKelvain, & Murphy, 1992) to areas of life outside of the sporting context.

The development of life skills has become central to preparing elite athletes for retirement (Anderson & Morris, 2000; Hesketh, 1997; Lavallee et al., 2001). This has led to a significant increase in athlete life skills interventions (e.g. ACE, Wales Lifestyle Management Programme; Miller & Kerr, 2002). These interventions develop elite athletes’ life skills and teach them how to use them (Danish et al., 1993; Lavallee, 2005). This increases their confidence (Lavallee, 2005) and helps them to feel more positive about their post-sport lives and careers (Petitpas et al., 1992). For example, Reints (2011a) noted a high volume of life skills-related content in career development programmes, such as goal-setting and relationship training. Consequently, athletes are better equipped to deal with various opportunities and challenges throughout their retirement; including starting new careers (Danish et al., 1993; World Health Organization, 1996), developing relationships (Danish et al., 1993; Mayocchi & Hanrahan, 2000) and changing social settings (Danish et al., 1993; Wiant, 1977).

Limited research has been conducted on life skills interventions (Wylleman et al., 2004). Gorely et al. (2001) studied elite Australian athletes and found that less than 1% utilise the
career transition services in the ACE programme. This potentially hinders their development and transferability of life skills. Miller and Kerr (2002) believe there is a lack of validated measures that assess elite athletes’ life skills. Consequently, the effectiveness of life skills interventions is unknown.

2.5.5.2 Historical context of athlete retirement transition interventions in New Zealand from 2000 to 2012

New Zealand governmental reviews of sport and recreation in New Zealand in 1985, 1995 and 2001 identified that previous New Zealand governments had failed to allocate sufficient funding into the development of elite New Zealand athletes to promote their success on the world stage (High Performance Sport Review Committee, 1995; Sports Development Inquiry Committee, 1985; Sport, Fitness & Leisure Ministerial Taskforce, 2001). Poor performances by New Zealand athletes at the 2000 Sydney Olympic Games and heightened public scrutiny regarding funding of elite sport in New Zealand led to a taskforce commissioned by the New Zealand government in late 2000 to examine the current state of sport in New Zealand and offer suggestions for future initiatives to enhance the performance of New Zealand’s elite athletes (Sport, Fitness & Leisure Ministerial Taskforce, 2001). The subsequent report, the Getting Set for an Active Nation Report (widely known as ‘The Graham Report’), was released and has since paved the way for major funding into New Zealand’s high performance sport structure. The report also initiated the restructuring and centralisation of New Zealand’s sport and recreation environment after identifying that New Zealand’s sport and recreation set up was fragmented. This culminated in the Hillary Commission, the Sports Foundation and the policy arm of the Office of Tourism and Sport merging to form one entity named SPARC, in 2002 (SPARC, 2002). The primary objective of SPARC was to direct future sport and recreation policy and strategic development in New Zealand, including high performance sport.

The NZAS was then established as the high performance arm of SPARC to provide leadership and accountability for elite sport policy across New Zealand (SPARC, 2002). The NZAS subsequently launched high performance sport centres in both the North and South Island and introduced the Carded Athlete Programme that included coaching, training and support services for carded athletes (Sam, 2012; SPARC, 2006). The Carded Athlete Programme also provided direct financial assistance to some carded athletes. Carded athletes were athletes selected from targeted sports and sports that received campaign investment
from SPARC (High Performance Sport New Zealand, n.d.a) that enabled them to access a combination of services, including strength and conditioning, injury prevention and rehabilitation and career/education development and support. This is based on the level of carding assigned by NSOs, level one being for world class athletes, level two being for national athletes and level three being for emerging athletes. Due to a smaller talent pool and less funding for elite-level sport than many of New Zealand’s international competitors, SPARC approached its funding allocation by targeting seven ‘priority’ and ten ‘performance’ sports (SPARC, 2004). The sports were selected on the basis that they were considered to have the best chance of achieving international success at major events (e.g. World Cups and/or Olympic and Commonwealth Games). Athletes or teams that were perceived as having the greatest chance of success received the highest levels of support. Improved success increased the likelihood of higher levels of support and carding for athletes and teams in the future. Conversely, athletes and teams that failed to achieve pre-determined standards set by SPARC were at risk of receiving less support or losing support altogether.

Two prominent programmes, Avenues and the ACP, were introduced in 2006 to help athletes prepare for life outside of elite-level sport (Adecco, 2006; Mallard, 2006; SPARC, 2006). The Avenues programme, a SPARC initiative, functioned to match elite athletes with prospective employees willing to accommodate athletes’ various training and competition demands (Adecco, 2006). Running alongside the Avenues programme, the ACP supported elite athletes to effectively manage their lives throughout their sport careers and facilitated their career development (Mallard, 2006). This included the Milestones Programme, which helped athletes determine their ideal career path. ACE advisors were on hand to provide regular information, advice and support to carded athletes, relative to all programmes, and also offered budgeting, life/work balance, sponsorship advice and education guidance.

In 2012, SPARC became known as Sport New Zealand (Sport New Zealand, 2012). SPARC’s high performance division amalgamated with the North and South Island branches of the NZAS to form HPSNZ. The purpose was to simplify and streamline New Zealand's High Performance system with an increased focus on excellence. HPSNZ is responsible for leading the high performance system in New Zealand and working with NSOs to allocate funds to sport organisations and athletes (High Performance Sport New Zealand, n.d.c).
2.5.5.3 Current athlete retirement transition interventions in New Zealand (as of June 2016)

As part of the restructure, HPSNZ pioneered the ALP for carded elite New Zealand athletes. The ALP includes individualised support (e.g. skill development, sport lifestyle management, finance and budgeting skills, and career and education skills), via Athlete Life Advisors (ALA), for carded athletes up to six months following their retirement or de-carding (High Performance Sport New Zealand, n.d.a). Carded athletes are also connected with the Athlete Friendly Network which provides career opportunities and learning expertise through associated businesses. HPSNZ also manages the Prime Minister's Athlete Scholarships which includes career advice and financial support regarding academic fees and living costs for athletes who meet the following criteria: (1) capable of being successful on the world stage at Olympic/Paralympic Games and world championships, and (2) endorsed by their NSO (High Performance Sport New Zealand, n.d.b). Additionally, elite athletes who perform well at pinnacle events (e.g. Commonwealth Games) are eligible to receive the Prime Minister’s Athlete Gold Level Scholarship (High Performance Sport New Zealand, n.d.b). Athletes who are eligible for this level of scholarship must commence study within 18 months following their retirement or de-carding and complete their study within three years of commencement. Furthermore, HPSNZ works in conjunction with Adecco to connect carded New Zealand athletes and Paralympians to the Athlete Career Programme (High Performance Sport New Zealand, n.d.a). This provides employment and career opportunities via high performing organisations.

Some NSOs (e.g. New Zealand Cricket, New Zealand Rugby) provide career and development interventions via their respective player associations. For instance, the NZRPA provides the Professional Development Programme, with assistance from Personal Development Managers, to current professional players to develop aspects of their careers (e.g. career, education and work experience, finance and asset protection, and character development). Additionally, they offer the Young Player Education Programme to support and educate potential future professional rugby players. The NZRPA believes that these programmes will foster increased self-management of players’ development off the field, enhanced self-awareness, ability to evaluate capabilities, and development of a plan for successful post-sport life (New Zealand Rugby Players Association, n.d.).
2.5.5.4 The importance of post-career interventions

Many elite athletes require post-career interventions to deal with negative psychological and emotional outcomes, such as loneliness and depression (Baillie & Danish, 1992; Danish et al., 1992; Smith & McManus, 2008), associated with changing identities (Stephan et al., 2003) and reduced social support (Murphy, 1995; Werthner & Orlick, 1986). Therefore, having adequate social skills and maintaining a sufficient level of self-esteem and resilience are crucial for successful adjustment (Smith & McManus, 2008; Taylor & Ogilvie, 2001). As a result of the need for post-retirement interventions, several researchers (e.g. Lavallee & Andersen, 2000; Murphy, 1995; Stephan et al., 2003) highlight the importance of post-retirement counselling to address the challenges retired athletes may experience associated with voluntariness of retirement, athletic identity, career planning and life skills. Some countries provide interventions that include post-career assistance for retired athletes, such as the ALP in New Zealand. However, the effectiveness of these interventions is largely unknown because of the shortage of research in this area, especially in New Zealand.

Lavallee (2005) found that post-career interventions for retired elite athletes is effective for reducing adjustment distress. Recently retired elite English and Scottish soccer players were tested using an intervention programme that featured supportive and counselling strategies (e.g. teaching life and coping skills). The participants displayed enhanced ability to use social resources and coping skills suggesting that post-retirement interventions may enable elite athletes to identify and apply available coping resources.

2.6 Summary

Several theories and models have been utilised to examine athlete retirement-related literature. Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement was identified as a thorough framework for athletic retirement-related research that has been used regularly to examine athlete retirement-related literature. Thus, it is the framework chosen for the present study. The main reasons for athletic retirement were described. The current consensus is that most athletic-retirements are multi-causal in nature. Many elite athletes experience loss of status and public-esteem and, consequently, struggle to maintain their social identity. Elite athletes who have high athletic identity and retired involuntarily are more likely to experience retirement distress than those with low athletic identity and who retired voluntarily. It appears that coping resources (coping skills, pre-retirement planning and social support) and lower athletic identity foster positive retirement experiences. Both
positive and negative responses to retirement that elite athletes potentially experience during their transition period were discussed in this review. Athlete retirement interventions provide career planning and vocational support to elite athletes in many countries. In New Zealand there are several interventions available to support the retirement of elite New Zealand athletes. However, there is scant New Zealand-based evidence regarding retirement of elite New Zealand athletes and the effectiveness of the available interventions. Therefore, exploration of the experiences of elite New Zealand athletes during the retirement transition and their perceptions of the effectiveness of the offered interventions remain largely unclear and justify the rationale for the present study.
CHAPTER THREE: METHODOLOGY

3.0 Introduction

This chapter defines, describes and justifies the methodology and methods used in the study. The protocol and process used for participant selection is described and participant information is provided. The procedure for data collection is outlined and a step by step process of the thematic analysis that was utilised to analyse the data is included. Trustworthiness of the methodology used and how this was attained is explained. To conclude the chapter, ethical considerations relative to the methods used in this study are discussed and a summary of the chapter is provided.

The methodology was used to answer the following research questions and to achieve the research objectives:

Research questions:

- What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?
- What are the perceptions of elite New Zealand athletes regarding the interventions available to them in their retirement transition?

Research objectives:

- To review and critique existing elite athletic retirement-related literature.
- To explore and describe the experiences of elite New Zealand athletes during the retirement transition based on Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement.
- To gather and report on the opinions and/or perceptions of elite New Zealand athletes regarding future retirement-related interventions that would potentially improve the adjustment to the retirement transition for future retiring athletes.

3.1 Research method

The research questions and the researcher’s personal worldview forged the ontological and epistemological direction for the framework of the methodology. That is, the epistemological rationale was guided by the characteristics of the research questions, and the ontological
assumptions were guided by the experiences of the researcher in relation to the investigation. The exploratory nature of the research questions that the study is centred on, and the researcher’s assumptions that individuals are integral in the construction of knowledge, resulted in the researcher adopting an approach predicated on a constructivism framework. Constructivism is grounded in the view that truth or meaning cannot be discovered, but is constructed via the interaction between human beings and the world they are interpreting (Crotty, 1998; Curtis & Curtis, 2011). According to Denzin and Lincoln (2011), a constructivist framework assumes a subjectivist epistemology from which meaning and understandings are constructed via interaction between the researcher and subject. The epistemological assumption in this study was centred on the reasoning that the participants could express their perceptions, descriptions and opinions of their experiences of their retirement transition via their interactions with the researcher during interviews. A constructivist framework also has a relativist ontology based on the understanding that there are multiple realities. For this study, the realities were based on the perceptions and interpretations of the participants, and meaning was interpreted by the participants from their experiences.

Placing the study within a constructivist framework commanded an exploratory qualitative research approach for this study. Creswell (1994) suggests that qualitative research is the best option for exploratory studies that are focused on topics where little information exists. Scant research has been conducted regarding the retirement experiences of elite New Zealand athletes and their perspectives of retirement interventions with conflicting and/or inconclusive results. As such, for the present study the researcher sought to explore the unique experiences and perspectives of elite New Zealand athletes to uncover rich and in-depth information to answer the research questions. This method enabled the researcher to gather data directly from the athletes’ responses. Accordingly, as suggested by Taylor and Bogdan (1998), this allowed the researcher to access and explore individuals’ perceptions, understandings and experiences, and provided flexibility to interpret underlying meanings, language and themes from a contextual base, which may not have occurred under a quantitative approach (Denzin & Lincoln, 2005). In addition, the researcher found that several other studies (e.g. Kadlcik & Flemr, 2008; Kerr & Dacyshyn, 2000) aiming to answer similar research questions were based on similar qualitative frameworks, which were also exploratory in nature.
In qualitative studies, researchers have an important role in the collection and analysis of data. According to Denzin and Lincoln (1994), qualitative research takes an interpretive, naturalistic approach to its subject matter to explore a human or social problem. Qualitative researchers typically attempt to develop a complex holistic picture, analyse words and report detailed views of informants. The objective is to attain contextual understanding of various phenomena by interpretation through meanings people bring to them. According to Denzin and Lincoln (2003), the researcher is considered an instrument of data collection, meaning that data is obtained through the researcher. A key role for the researcher during the present study was to ask participants probing questions, contemplate the answers and then ask more probing questions. This process enabled the researcher to obtain deeper, meaningful information during interviews, which Crotty (1998) suggests helps to enrich the data collected. The researcher then developed a clearer picture of the data set and interpreted it by relating it to findings, theories and ideas from a wide array of sources, including journal articles, doctoral dissertations and studies by experts in the field of athletic retirement (e.g. Lavallee, 2005; Stambulova et al., 2009). As such, the researcher was involved in the construction of knowledge relative to their own stance in relation to what was observed and how this was translated in the research findings (Bryman & Bell, 2011; Crotty, 1998). Mauthner and Doucet (2003) propose that qualitative researchers will, inevitably, interpret data from their own viewpoint.

A primary criticism of qualitative research is that the role of the researcher may be too influential on the interpretation of the research findings, as suggested by Patton (2002). According to Finlay (2002), within qualitative frameworks there is considerable risk of the researcher producing results that are overly influenced by their own personal behaviour, bias and prejudice. It is important that data is interpreted from the perspective of the researcher while attempting to minimise researcher bias. The researcher in this study consulted the research supervisors frequently regarding data analysis and interpretation, and whether this was influenced by researcher bias. Most of the time it was agreed that no researcher bias was involved. However, in some situations the research supervisors made suggestions (e.g. looking at various studies) to ensure that multiple perspectives were considered.
3.2 Participants

3.2.1 Criteria used for selection of the participants

Criteria for participant recruitment were developed to identify potential research participants. In order to be selected for this study, participants were required to:

- have represented their sport at an elite level (international competitive level) for New Zealand;
- had retired within seven years prior to commencement of the study; and
- had retired in New Zealand.

The criteria ensured that information was specific to the athletes, programmes and support offered in New Zealand. This was based on similar criteria that enabled researchers to elicit recent and relevant data in other studies that focussed on the retirement of elite athletes (e.g. May & Tsai, 2007; Moesch et al., 2012; Warriner & Lavallee, 2008).

3.2.2 Sampling process and assessing participants

Purposive sampling is considered a valuable non-probability sampling technique which enables researchers to sample potential participants with specific characteristics and experiences considered relevant to a particular study (Schwandt, 1997). This technique was successfully used in other studies (e.g. Tshube, 2014) to identify participants and was used initially in this study. Participants with relevant characteristics and/or experiences who met participant criteria were identified by the researcher, research supervisors and with the assistance of colleagues of the researcher and research supervisors. The researcher contacted potential participants via email to gauge their interest in participating. Further information was provided to interested participants.

However, more suitable participants were required so snowball sampling was employed to enable development of a more extensive list of potential participants. Snowball sampling is defined as approaching a small group of people who are relevant to the research and then using these people to establish contact with others (Bryman & Bell, 2011). This technique has been utilised to increase participant numbers in other studies (e.g. Allison & Meyer, 1988; Rintaugu & Mwisukha, 2011). Some participants suggested other retired athletes who met selection criteria. They were contacted first by the participants to confirm their interest, and those who were willing to participate were referred to the researcher. The researcher
continued to use this technique until it was agreed, after consulting with the research supervisors, and being guided by similar participant numbers used for semi-structured interviews in other studies (e.g. Camiré, Trudel, & Forneris, 2014; Stirling & Kerr, 2014), that a suitable number of participants were recruited to attain data saturation.

### 3.2.3 Description of the participants

Sixteen retired elite athletes participated in this study of whom eight were male and eight female. Four participants were professional athletes who generated their primary income from their sport, four were semi-professional and received some payment from playing and also worked part time or full time in other occupations while eight participants were amateur and received no money from playing sport. Participants ranged in age from 23 to 41 at the time of the interviews and represented a range of team (e.g. basketball, hockey) and individual (e.g. cycling, swimming) sports. The highest representation included athletes who participated in the Olympic Games (9), Commonwealth Games (3), World Cups (3) and World Championships (1). The length of time from the participants’ retirement to commencement of the study ranged from two months to seven years (median = 2 years). Further details, including the sport played by each participant and their highest level of achievement, are outlined in Table 3.1.

### Table 3.1 Participant information

<table>
<thead>
<tr>
<th>Gender</th>
<th>Sport</th>
<th>Highest representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Swimming</td>
<td>Olympic Games</td>
</tr>
<tr>
<td>Male</td>
<td>Basketball</td>
<td>Olympic Games</td>
</tr>
<tr>
<td>Female</td>
<td>Heptathlon, high jump</td>
<td>Olympic Games</td>
</tr>
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<td>Female</td>
<td>Netball</td>
<td>Commonwealth Games</td>
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<td>Female</td>
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<tr>
<td>Female</td>
<td>Indoor cricket</td>
<td>World Cup</td>
</tr>
<tr>
<td>Male</td>
<td>Trampoline</td>
<td>World Championship</td>
</tr>
<tr>
<td>Male</td>
<td>Hockey</td>
<td>Olympic Games</td>
</tr>
</tbody>
</table>
3.3 Data collection

Semi-structured interviews were conducted to collect rich, in-depth data related to participants’ experiences during the retirement transition and their perceptions of current interventions. Semi-structured interviews are a well-established qualitative method regularly used in athletic retirement-related research (e.g. Kadlcik & Flemr, 2008; Ristolainen et al., 2012; Warriner & Lavallee, 2008), which involves the researcher asking open-ended questions to gather the thoughts and perceptions of the interviewees.

The researcher constructed the interviews around a core guide of predetermined themes and questions based on Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement, which were presented to the participants during the interviews to help guide the discussion, and, therefore, collection of data. The interviews were loosely structured and flexible to allow the participants the freedom to divulge as much information as possible. This flexibility also enabled the researcher to alter the arrangement of questions, add questions and expand on questions during some interviews in order to investigate interesting responses from interviewees further. As such, the researcher was able to elicit comprehensive, rich and at times unexpected data. As suggested by Patton (2002), this allowed for in-depth exploration of the unique experiences and perceptions of the participants, which was identified in chapter one as key to answering the research questions and objectives.
An interview schedule consisting of nine core questions with relevant follow-up questions was used by the researcher to conduct the interviews (Appendix A). Several steps were taken to decide which questions were included in the interview schedule:

- Questions were linked to Taylor and Ogilvie’s (1994) conceptual model of adaptation to career transition among athletes, which was the framework for the present study. By carefully examining the respective stages of the model and putting this into context with the research questions and objectives, the researcher developed questions that were likely to elicit rich and relevant data.
- A meeting was conducted with the researcher, research supervisors and ALAs from HPSNZ. Current interventions offered by HPSNZ were discussed and key questions that would, potentially, determine their effectiveness, and identify ideas and areas for future development were ascertained.
- Interview questions utilised in previous athletic retirement-related studies, such as Pummel, Harwood and Lavallee (2008) and Warriner and Lavallee (2008), were reviewed and those deemed relevant were included.
- Lastly, the final interview questions were decided upon with guidance from the research supervisors and an expert in qualitative research. Questions that would potentially elicit key data from the participants within the suggested time frame for the interviews, as outlined in the information sheet (Appendix B), were selected.

The following table justifies why the interview questions were included in the study.
### Table 3.2 Justification for interview questions included

<table>
<thead>
<tr>
<th>Questions</th>
<th>Justification</th>
</tr>
</thead>
</table>
| 1. Tell me about your career | • Allowing the participant to ease into the role of interviewee and become comfortable with a question they can easily respond to.  
• To gain familiarity with the participant and learn more about their background as an athlete. |
| 2. What was your reason(s) for retiring from elite-level sport? | • Linked to stage one of the retirement transition in Taylor and Ogilvie’s (1994) model.  
• Several researchers (e.g. Alfermann et al., 2004; Blaesild & Stelter, 2003; Cecic-Erpic et al., 2004; Schlossberg, 1984; Taylor & Ogilvie, 1994) found that reasons for retirement directly influence the adjustment experiences of elite athletes to the retirement transition. Therefore, answers to this question will potentially justify participants’ various retirement experiences.  
• To provide information related to answering the following research question:  
1. What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand? |
| 3. What, if any, mediating factors were linked with your adaptation to retirement? | • Linked to stage two of the retirement transition in Taylor and Ogilvie’s (1994) model.  
• Mediating factors have also been identified as influencing the outcome of elite athletes’ adjustment to retirement (Grove et al., 1997; Loland, 1999; McAllister et al., 2001; Stambulova, 2012).  
• Will potentially enable clearer understanding of the influence of mediating factors on the experiences of elite New Zealand athletes during the retirement transition.  
• To provide information related to answering the following research question:  
1. What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand? |
<table>
<thead>
<tr>
<th>Question</th>
<th>Relevant to Taylor and Ogilvie’s (1994) Model</th>
<th>Research Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. What, if any, resources did you use to help you prepare for life after sport?</td>
<td>Linked to stage three of the retirement transition in Taylor and Ogilvie’s (1994) model.</td>
<td>1. What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?</td>
</tr>
<tr>
<td></td>
<td>Use of available resources is acknowledged as having a major effect on the experiences of elite athletes and their ability to adapt to the retirement transition (Alfermann et al., 2004; Cecic-Erpic et al., 2004; Lavallee et al., 1997; Wertner &amp; Orlick, 1986).</td>
<td></td>
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<tr>
<td></td>
<td>Understanding what, if any, resources were utilised during the retirement transition might help to justify the potential effect using these had on the adaptation of elite New Zealand athletes to the retirement transition.</td>
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<td></td>
<td>To provide information related to answering the following research question:</td>
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<tr>
<td></td>
<td>1. What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?</td>
<td></td>
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<tr>
<td>5. Can you describe the actual process you went through in regards to retiring?</td>
<td>To enable clearer understanding of the unique process that each participant might have experienced during the retirement transition.</td>
<td>1. What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?</td>
</tr>
<tr>
<td></td>
<td>To provide information related to answering the following research question:</td>
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<tr>
<td></td>
<td>1. What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?</td>
<td></td>
</tr>
<tr>
<td>6. What emotions did you experience as you made the decision to retire, and went through during the retirement transition?</td>
<td>Linked to stage four of the retirement transition in Taylor and Ogilvie’s (1994) model.</td>
<td>1. What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?</td>
</tr>
<tr>
<td></td>
<td>To further explore the participants’ experiences during the retirement transition.</td>
<td></td>
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<td></td>
<td>To identify whether the retirement transition for each participant was positive or negative (Taylor &amp; Ogilvie, 1994).</td>
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</tr>
<tr>
<td></td>
<td>Provides a link between the participants’ retirement transition outcomes and the first three stages of Taylor and Ogilvie’s (1994) model in regards to making the decision to retire and mediating factors that influenced adaptation to the transition and resources utilised to cope with the transition (Alfermann et al., 2004; Grove et al., 1997; Taylor &amp; Ogilvie, 1994).</td>
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<tr>
<td></td>
<td>To provide information related to answering the following research question:</td>
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<tr>
<td></td>
<td>1. What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?</td>
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<tr>
<td>Question</td>
<td>Response</td>
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</tbody>
</table>
| 7. What, if any, assistance was available to support your transition from competing to retirement? | - Linked to stage four of the retirement transition in Taylor and Ogilvie’s (1994) model.  
- Due to lack of research regarding retirement interventions in New Zealand, it was determined during consultation with ALAs from HPSNZ that it would be valuable to ask this question in order to provide information related to the following research question:  
  1. What are the perceptions of elite New Zealand athletes regarding the interventions available to them in their retirement transition? |
| 8. What, if any, suggestions do you have regarding assistance offered for future retiring athletes? | - During consultation with HPSNZ this question was identified as important for potential development of existing retirement interventions and possible additional retirement-related interventions in the future to enhance the adaptation of retiring athletes to the transition. Therefore, it will provide information in relation to the following research objective:  
  1. To gather and report on the opinions and/or perceptions of elite New Zealand athletes regarding future retirement-related interventions that would potentially improve the adjustment to the retirement transition for future retiring athletes. |
| 9. Is there anything else you would like to add that we may have missed regarding your retirement? | - To allow participants the opportunity to add further comments and/or make suggestions, if any, that they were not able to while answering the previous questions. |
Pilot interviews were conducted with an elite junior tennis player and the two research supervisors. Pilot interviews are considered a useful strategy for setting the foundation of semi-structured interviews (Miles & Huberman, 1994). The researcher, as suggested by Galletta (2013), employed pilot interviews to verify that the phrasing of questions, their order and usefulness, and structure and duration of the interview was suitable to fulfil the purpose of the research. Some adjustments to the interview schedule were made, including a change in order of the core questions and addition of four follow-up questions.

As suggested by Patton (2002), interviews were arranged at mutually convenient dates, times and locations with confirmed participants. The researcher confirmed with the participants that they felt comfortable with the location prior to conducting the interviews, and gave them the option to change venues or postpone the interview if felt necessary. The participants were provided information sheets prior to the interview so that they were fully aware of what was involved with the interview process. They were informed of their right to withdraw from the study, without reason, at any time. Two of the originally selected participants dropped out prior to the study commencing due to work and travel commitments, respectively. To replace these participants, snowball sampling was utilised to recruit two new participants who met selection criteria.

All participants signed consent forms (Appendix C) prior to the interviews commencing and the researcher reiterated key points from the information sheet to ensure that the participants clearly understood the process. The anonymous nature of the interviews, confidentiality surrounding the storage of data and reporting of results, and the importance of audio-recording the interviews for data collection accuracy were highlighted. The researcher reiterated to the participants that they would not be identified by name in the thesis and that measures would be taken to protect their anonymity, including not disclosing personal information (such as age) and referring to them as ‘Participant one’ for example. The participants were encouraged to ask questions and seek clarification if they experienced any confusion regarding the nature of the study or details in the information sheet.

A total of 16 interviews were conducted over a four month period from December 2014 to March 2015. All participants were interviewed one time only. Eight interviews were conducted face-to-face at mutually agreed upon, predetermined, neutral locations; five interviews were conducted via Skype; and three interviews were conducted via telephone, due to participants being located outside of the Auckland region. The interviews ranged in
length from 34 to 81 minutes and were digitally recorded. The researcher used a journal during the interviews to make note of important information and also participants’ tone of voice and body language. The audio quality of one of the Skype interviews was compromised at times due to internet connection issues. This was overcome by explaining the issue to the participant and then asking them to repeat their answer.

As suggested by Curtis and Curtis (2011), all of the interview questions were open-ended to encourage full answers, as opposed to simple categorical answers such as ‘no’ or ‘yes’. Flexibility in the interview guide allowed incorporation of impromptu questions to support the natural flow of the interview (Patton, 2002). The researcher encouraged the participants to do most of the talking and used probes when necessary so that full clarity and meaning of their responses was obtained (Patton, 2002). The interviews were concluded when the researcher had finished asking questions.

3.3.1 Data transcription

Each interview was transcribed verbatim by the researcher, which supported full immersion and familiarisation with the data (Riessman, 1993), and occurred immediately following completion of each interview. This was because, as suggested by Curtis and Curtis (2011), the interview was still fresh in the researcher’s mind enabling the researcher to recall and add further notes that were not initially included, such as descriptions of body language and tone of voice. Once transcribed, participants were sent a copy of the interview notes and transcription and encouraged to offer feedback or suggest amendments. All of the participants responded that they were satisfied with the interview transcriptions and confirmed their approval for any information that they provided to be quoted word for word in the thesis. A passage from a transcribed interview is demonstrated below.

Interviewer - How did it feel watching the sport just after you had retired?

Participant – “It’s mixed emotions ‘cause every time you win a championship you feel like you can go again...but even though we won and I felt like I could’ve kept going, I always wanted to end my career on a high and I always wanted to finish where I was happy retiring and that’s how I felt afterwards.”
3.4 Data analysis

Thematic analysis is a widely used qualitative data analysis method that was employed to analyse the interview transcripts. This method involves identifying, analysing and reporting identified themes (Braun & Clarke, 2006). Thematic analysis enables researchers to organise and describe a data set in richer detail (Charmaz, 2002) and is an extremely flexible method of data collection that is suitable to be used alongside a wide array of analytic options (Braun & Clarke, 2006).

The researcher analysed the transcripts with the assistance of NVivo software (QSR International Inc: Victoria, Australia). Initially, all of the interview transcripts were imported into NVivo as documents and saved in the external folder under the heading ‘Interviews’. Data analysis was then guided by six key stages that Braun and Clarke (2006) suggest are fundamental to thematic analysis in order to identify the key themes, which are presented below.

1. The interview transcripts were read and re-read by the researcher until thorough familiarity with the data was obtained. During this process, notes and ideas for coding were made.

2. Initial codes were created and numbered for as many potential themes as possible. This was done by highlighting and saving related excerpts from each open-ended question in the interview transcripts.

3. Codes were then sorted into broader potential themes and related sub-themes. For each theme a node was created and named in NVivo. Sub-themes were created and located under relevant themes. Coded material from the interviews was allocated to relevant themes and sub-themes. A coding tree which included themes and sub-themes was developed to ensure that key information prevalent in the interviews was grouped together. Table 3.2 provides some examples of themes and sub-themes with data extracts that were developed during analysis.
Table 3.3 Themes and example extracts

<table>
<thead>
<tr>
<th>Theme: Mediating factors that contributed to the participants’ adaptation to the retirement transition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-theme</td>
</tr>
<tr>
<td>Participants’ athletic identity</td>
</tr>
<tr>
<td>All retirements were voluntary and involuntary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme: Positive and negative retirement experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-theme</td>
</tr>
<tr>
<td>Positive experiences</td>
</tr>
<tr>
<td>Negative experiences</td>
</tr>
</tbody>
</table>

4. Themes and sub-themes were reviewed and refined. All of the collated extracts for each theme and sub-theme were re-read to ascertain whether they matched the data set and to see if any further themes emerged. Following this, the main themes and associated sub-themes were clear.

5. The main themes and sub-themes were further reviewed and refined. This involved broader analysis of the main themes and sub-themes so that they were put into context and understood in relation to the overall research question and objectives. Theme and sub-theme names were also refined to be used for final analysis.
6. The final stage involved producing, describing and analysing the main themes and sub-themes to be presented in the thesis (see Chapter Four for detailed analysis of the results). A description of each of the main themes and sub-themes was provided and the most vivid extracts from the data were presented. Following this they were discussed and analysed in relation to the research questions and linked to previous related literature.

**Table 3.4 Overarching themes that emerged from the data analysis**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Participants’ retirements were multi-causal</td>
<td></td>
</tr>
<tr>
<td>2. Mediating factors that contributed to the participants’ adaptation</td>
<td>2.1 Participants’ perceived control over their decision to retire</td>
</tr>
<tr>
<td>2. to the retirement transition</td>
<td>2.2 Participants’ athletic identity</td>
</tr>
<tr>
<td></td>
<td>2.3 Each retirement was to very degrees both voluntary and involuntary</td>
</tr>
<tr>
<td>3. Participants used resources to prepare for life after sport</td>
<td>3.1 Pre-planning for retirement</td>
</tr>
<tr>
<td>4. Positive and negative retirement experiences</td>
<td></td>
</tr>
<tr>
<td>5. Retirement interventions available to participants</td>
<td>5.1 Career/education interventions</td>
</tr>
<tr>
<td></td>
<td>5.2 Psychological/emotional interventions</td>
</tr>
<tr>
<td>6. Participants’ suggestions for retirement interventions for future</td>
<td></td>
</tr>
<tr>
<td>retiring athletes</td>
<td></td>
</tr>
</tbody>
</table>

Thematic analysis of data has disadvantages. The flexibility of thematic research, mentioned earlier as an advantage, can make it difficult to establish guidelines for higher-phrase analysis and can be problematic for researchers trying to decide which aspects of the data to focus on (Braun & Clarke, 2006). In contrast to other qualitative analytic methods, such as narrative and other biographical approaches, the highly flexible nature of thematic analysis can make it difficult for researchers to attain continuity within one data set. However, the researcher
found that flexibility was an advantage throughout the data analysis process as it supported
discovery and analysis of a variety of themes and sub-themes.

3.5 Research quality

According to Fade (2003), the quality of the methods used by researchers is integral to
judging the overall quality of the research. It has been suggested that qualitative research
should be evaluated according to different criteria than what is used for quantitative research
(Lincoln & Guba, 1985). Trustworthiness is a key criterion endorsed by researchers (e.g.
Lincoln & Guba, 1985) to assess the quality of qualitative research. Trustworthiness is
composed of four key criteria, namely: (1) credibility, (2) transferability, (3) dependability,
and (4) confirmability.

3.5.1 Credibility

Bryman and Bell (2011) described credibility as a criterion for assessing integrity and quality
in qualitative studies, referring to confidence in the truth of data. Credibility is attained when
research findings accurately reflect the experiences of the participants or the context studied
(Bryman & Bell, 2011). Credibility of the study was enhanced through respondent validation.

Respondent validation is a technique that involves providing research participants with an
account of the research findings in order to seek their verification of the narrative provided by
the researcher (Bryman & Bell, 2011; Lincoln & Guba, 1985). Each of the participants
received a copy of their interview transcript and verified that the data accurately represented
their experiences.

3.5.2 Transferability

Transferability is the degree to which the findings of a study can be generalised or transferred
to other contexts or settings (Leininger, 1994). According to Seale (1999) transferability is
enhanced by thick description of the research methods, contexts and assumptions underlying
the study that is sufficient enough to be able to judge the applicability of the findings to other
contexts. To enhance transferability, the researcher provided a rich and thick description of
the study. This included an in-depth description and justification of the research methods
used, the participants, data analysis, the setting and context of the research.
3.5.3 Dependability

According to Lincoln and Guba (1985), dependability refers to being able to show that research findings are consistent and can be repeated. They suggest that to enhance dependability an auditing approach should be utilised by researchers. This involves keeping records of all stages of the research process, including participant selection, interview transcripts, data analysis products and descriptions of how data was obtained and analysed. The researcher compiled rich and elaborate documentation of all stages of the research process. This included written notes from meetings with the research team; secure storage of important documents such as the interview schedule, interview transcripts, information sheets and consent forms; detailed step by step descriptions of participant selection, data collection and analysis methodologies used; and records of results and research findings.

3.5.4 Confirmability

Confirmability relates to the need to show that data, interpretations and outcomes of inquiry are the results of the experiences and ideas of research informants and are not unduly influenced by the researcher (Bryman & Bell, 2011). Confirmability increases when two or more researchers agree on decisions made during the study in relation to what data to collect, how to interpret it and the outcome of the study findings. Guba and Lincoln (1989) suggest using auditing as a tool to check for confirmability. Confirmability was enhanced after the two research supervisors examined the research process and outcomes in its entirety which, as mentioned previously, was fully documented and detailed by the researcher.

3.6 Ethical considerations

Ethical approval was sought by sending a full ethics application to the Massey University Human Ethics Committee Northern (MUHEC: Northern). Approval was required before potential participants could be contacted for involvement in the study. Ethical approval, Number 14/043, was granted for this study on 14th November 2014 (see Appendix D). Major ethical considerations applied in this study are outlined in this section.

3.6.1 Respect for persons

Respect for persons includes acknowledgement for individual dignity, beliefs, privacy and autonomy of individuals. The participants had the right to withdraw from participation in the study at any time, including during the interview, up until approval of the transcript by the
participant, without offering a reason. All participants were given the right to review the interview transcript before the results were analysed and presented.

### 3.6.2 Minimisation of risk of harm

The participants were not exposed to any risk of harm or discomfort during the research. To reduce the possibility of harm or discomfort, the participants were not asked to provide any personal information on the consent form other than their name. The participants were not obliged to answer any questions which made them feel uncomfortable. None of the participants refused to answer any of the interview questions.

### 3.6.3 Informed and voluntary consent

Participation in the study was completely voluntary. No undue pressure was put on potential participants to be involved in the study. An information sheet was provided to participants prior to the interviews. This included information about the research questions and objectives, a brief introduction and contact details for the researcher and research supervisors, expectations of the participants and their rights. Information and participant rights were also repeated verbally by the researcher. Participants were asked to complete a participant consent form (see Appendix C) prior to their participation in the study to confirm that they understood their rights and what was expected of their involvement.

### 3.6.4 Respect for privacy and confidentiality

The participants were referred to by a number in the results/discussion chapter (e.g. ‘Participant 4’) to help protect their anonymity. The names of the research participants were known only to the researcher and research supervisors. Participant privacy was enhanced by conducting the interviews at locations that they felt comfortable with.

### 3.6.5 Storage of data

All of the data obtained was kept in strict confidence. Data and results from the interview were stored electronically within a protected file that was accessible only by the researcher and research supervisors. All data/information has been stored in a secure location on the Massey University Albany Campus and will be disposed of five years following data collection.
3.6.6 Avoidance of conflict of interest

Neither the researcher nor the research supervisors had any private or professional conflict of interest with the research study.

3.7 Summary

This chapter started with an overview of its contents. Qualitative research methods were used as it was deemed suitable to answer the research questions and objectives. Purposive sampling was used to identify the initial participants and snowball sampling identified further required participants. Sixteen male/female amateur/professional retired athletes from a range of sports who met the selection criteria participated in the study. An interview guide designed to elicit rich and relevant data was created consisting of nine core questions with relevant follow-up questions. Semi-structured interviews gathered the data and were transcribed verbatim by the researcher immediately following each interview. Interview transcripts were then sent to the participants to confirm that the transcribed information was correct and to offer the opportunity to add further information if they felt necessary. Analysis of the interview transcripts was completed through thematic analysis, and the main themes and sub-themes were identified and supported with quotes from the data. Research quality was enhanced by taking measures to improve the credibility, transferability, dependability and confirmability of the study. Key ethical considerations were considered and addressed prior to and throughout the study. The next chapter will present and discuss the findings from the data collection process.
CHAPTER FOUR: RESULTS/DISCUSSION

4.0 Introduction

This chapter explains the link between interview questions and the main themes and sub-themes in Figure 4.1. Results for each of the main themes and sub-themes are presented and in-depth discussion follows and concludes with a summary of contents.

The experiences and perspectives of 16 retired elite New Zealand athletes are described and discussed in this chapter. Currently, the experiences of elite New Zealand athletes during the retirement transition and the athletes’ perceptions of the effectiveness of the available interventions are largely unclear.

The present study answers the following research questions and objectives:

Research questions:

- What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?
- What are the perceptions of elite New Zealand athletes regarding the interventions available to them in their retirement transition?

Research objectives:

- To review and critique existing elite athletic retirement-related literature.
- To explore and describe the experiences of elite New Zealand athletes during the retirement transition based on Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement.
- To gather and report on the opinions and/or perceptions of elite New Zealand athletes regarding future retirement-related interventions that would potentially improve the adjustment to the retirement transition for future retiring athletes.

The themes and sub-themes included in this chapter are presented as answers that are linked to questions from the interview schedule (not all interview questions were linked to themes/sub-themes). They were deemed to contain the most relevant and important data to answer the research question and objectives. The link between interview questions and themes and sub-themes that emerged is presented in Figure 4.1.
Figure 4.1 Link between interview questions and key themes and sub-themes that emerged

**Interview Questions**

- **Q.2** What was your reason(s) for retiring from elite-level sport?
- **Q.3** What, if any, mediating factors were linked with your adaptation to retirement?
- **Q.4** What, if any, resources did you use to help you prepare for life after sport?
- **Q.6** What emotions did you experience as you made the decision to retire, and went through during the retirement transition?
- **Q.7** What, if any, assistance was available to support your transition from competing to retirement?
- **Q.8** What, if any, suggestions do you have regarding assistance offered for future retiring athletes?

**Themes**

1. **Theme 1.** Participants’ retirements were multi-causal
   - **Sub-theme 2.1** Participants’ perceived control over their decision to retire
   - **Sub-theme 2.2** Participants’ athletic identity
   - **Sub-theme 2.3** Each retirement was to varying degrees both voluntary and involuntary

2. **Theme 2.** Mediating factors that contributed to the participants’ adaptation to the retirement transition
   - **Sub-theme 2.2** Participants’ athletic identity

3. **Theme 3.** Participants used resources to prepare for life after sport
   - **Sub-theme 3.1** Pre-planning for retirement

4. **Theme 4.** Positive and negative retirement experiences

5. **Theme 5.** Retirement interventions available to participants
   - **Sub-theme 5.1** Career/education interventions
   - **Sub-theme 5.2** Psychological/emotional interventions

6. **Theme 6.** Participants’ suggestions for retirement interventions for future retiring athletes
4.1 Participants’ retirements were multi-causal

Injury was the most common reason given for retiring, identified by 12 participants as a contributing factor to their decision. One participant reported that they retired because injury impaired their ability to perform at a high-level and also because they lost motivation after achieving their predetermined goals. Others frequently identified causes including age and free choice, mentioned by seven and nine of the participants, respectively. The cost of competing at an elite-level (six), desire to spend more time with spouses and family (five), time spent away from other jobs (five) and starting a family (four) were also mentioned as influencing participants’ decisions to retire. All of the participants claimed that a combination of several factors, in addition to injury, such as training and travel commitments contributed to their decision to retire, as noted below.

“I think it was a combination of things...it wasn’t just one thing...it wasn’t just family...it wasn’t just my career...it was all those little things... like the time needed for trainings and all the travel...and those little things added up to make the bigger decision” (Participant 10).

“I kept getting injured and I also wanted to concentrate more on my family and career after sport...so lots of things went into it [decision to retire] ” (Participant 4).

Injury has also been reported as the primary cause for athletic retirement in several previous studies (e.g. Drawer & Fuller, 2001; Kettunen, Kujala, Kaprio, Koskenvuo, & Sarna, 2001; Ristolainen et al., 2012). Furthermore, age and free choice have consistently been identified as main causes of athletic retirement in athlete retirement-related research (e.g. Lavallee et al., 1997; Ogilvie & Taylor, 1993; Taylor & Ogilvie, 1994). This suggests that the most common causes of retirement for elite New Zealand athletes are similar to those internationally.

The multi-causal nature of retirements in this study is in-line with the emerging consensus that athletic retirements are multi-causal and unique (Alfermann & Stambulova, 2007; Stambulova et al., 2009). One possible reason for this is that most (12) of the participants were either amateur or semi-professional, and there were multiple associated reasons that led to their retirements which are not usually relevant to fully-professional athletes (e.g. cost of competing, time spent away from other jobs, need to earn money). For instance, two amateur athletes, whom identified cost of competing as a reason for retiring, felt that when combined with other reasons (e.g. injury) it strengthened their desire to retire, and ultimately led to their
retirement. However, consistent with other studies (e.g. Park et al., 2013; Roberts, Mullen, Evans, & Hall, 2015), professional athletes in this study also reported multi-causal retirements, and although it appears that a broader range of reasons for leaving elite-level sport influences amateur and semi-professional athletes, it would also appear that being amateur, semi-professional or professional does not determine whether retirements are multi-causal or not.

4.2 Mediating factors that contributed to the participants’ adaptation to the retirement transition

Participants were asked to discuss various factors that typically contribute to elite athletes adapting to the retirement transition. Specifically, they were asked to describe the level of control they felt that they had over their decision to retire and how highly they identified as an athlete during their career. Three pertinent sub-themes (described below) emerged: 1) participants’ perceived control over their decision to retire was high, 2) participants identified highly as athletes, and 3) each retirement was to varying degrees both voluntary and involuntary.

4.2.1 Participants’ perceived control over their decision to retire

Each participant, including those who claimed that their retirements were completely involuntary, believed that they had a high level of control over their decision to retire. Six participants noted that their decision to retire might have appeared to be out of their control (e.g. due to deselection). However, they still emphasised that they maintained full control over their decision, as noted by three participants.

“It was certainly my decision” (Participant 12).

“I’d say it was completely my choice...it was my decision to say ‘I’m retiring’...” (Participant 13).

“Well I would argue that all ownership is on you...all decisions you make in life...I mean that’s a personal philosophy so I would have to say 100% [my decision]...but for me 50% of it was the political side of things so someone else might say that 50% was not my decision” (Participant 1).

Five participants, all of whom reported high levels of perceived control, described retirement as being a completely positive experience and appeared to have high life satisfaction.
However, although the remaining participants had high levels of perceived control and positive retirement experiences, they also had negative experiences such as depression (three) and anxiety (six).

According to McPherson (1980), the level of perceived control athletes have over their decision to retire is closely linked with how well they adapt to retirement. High perceptions of control have been associated with positive retirement experiences, such as improved self-efficacy and autonomy (Alfermann et al., 2004; Cecic-Erpic et al., 2004; Webb et al., 1998), which typically leads to greater life satisfaction (Martin et al., 2014). The present study revealed similar findings to these studies, also suggesting that high perceived control is linked with positive retirement experiences.

Previous studies linked a lack of perceived control over the decision to retire with adjustment distress, such as lower self-control (Werthner & Orlick, 1986), lower self-respect (Crook & Robertson, 1991), anxiety and depression (Alfermann & Gross, 1997) and poor social adjustment (Lavallee et al., 1997). Some studies indicate that in rare cases lack of perceived control leads to psychopathological symptom distress (Walker et al., 2007; Wippert & Wippert, 2010), such as hostility, addictive behaviour, psychoticism and obsessive-compulsive symptoms. Authors from these studies suggested that athletes with high levels of perceived control were less likely to experience this type of distress during the retirement transition. However, participants in this study with high levels of perceived control also described experiencing varying levels of distress during the retirement transition. This suggests that a high level of perceived control was not an antecedent for completely positive adjustment to retirement for all participants.

It is unclear why all participants who reported high levels of perceived control also reported having positive experiences whereas others reported having both positive and negative experiences. This is potentially related to the causal attribution theory which, in the sport context, stipulates that athletes attribute success or failure outcomes to ability, effort, task difficulty or luck (Weiner, 1972). As mentioned in section 4.1.1, external influences that were out of the participants’ control, such as injury and non-selection, contributed to all retirements in varying degrees. Consequently, the gap between level of perceived control and actual control over retirement was, potentially, greater for some participants than others, which may have contributed to difficulty adjusting to retirement for some participants. This finding suggests that having high levels of perceived control over retirement is only effective
if levels of actual control are also high. The participants who reported negative retirement experiences may have had lower levels of actual control over their decision. It is important to note that the multi-causal nature of retirements in this study make it difficult to accurately gauge the level of actual control compared to perceived control that the participants had over their retirements.

4.2.2 Participants’ athletic identity

All of the participants were asked to discuss their identity as an athlete during their career. Fifteen participants identified highly as athletes and one did not, and all participants reported that they were completely immersed in their athletic lifestyle. Four participants noted that they maintained identities related to other facets of their lives (e.g. other careers). However, 12 participants felt that they identified solely as an athlete during their career, as noted below.

“I lived and breathed it…dreamed about it…it came first and everything else came around that…and I guess my profile was one of the highest for Olympic sports…” (Participant 1).

“Oh for sure, I can’t ever remember thinking about what I was going to do when I stopped playing” (Participant 2).

“Yeah, oh huge, and because people would identify and relate that to me so that would reinforce that idea within my mind…and because I wasn’t working, I was a full time athlete, it’s like what do you do? Ok I’m an athlete…I really treated my lifestyle as an athlete and so that just embodied it and my life embodied it, and people in my life embodied that with me” (Participant 3).

“When I was at the peak of my game earlier on I was far from even thinking about retirement…I was enjoying it and all I wanted to do was play” (Participant 4).

One participant did not identify highly as an athlete, and they attributed this to the fact that the sport in which they participated had a low public profile. In addition, the participant also reported spending a lot of time focused on their family and career. They had the following to say.

“I was full-time working for the last four years of my career…I tried to keep it pretty balanced and we weren’t in the public eye that often or in terms of TV coverage or media coverage…so I don’t think that my identity as an athlete was that strong that my world revolved around just being an athlete” (Participant 13).
Five of the 11 participants who studied and gained academic qualifications during their athletic career mentioned that this was to reduce their athletic identity prior to retirement so that they were prepared for a different lifestyle after retiring. For one participant this was because they became aware of potential financial difficulties if their career ended suddenly. All five participants felt that this strategy enabled them to successfully reduce their athletic identity before they retired and that this was linked with positive adjustment to retirement, as Participant 12 notes below.

“I had a big mortgage on the house and kids to feed...so that’s when I started understanding what my identity was as a person more than what it was as an athlete...and for me that was the turning point where I realised how important the rest of life was and [sport] was just a tiny portion of what I did...so I started to develop other interests away from [sport]...this definitely helped me ease into retirement and feel more positive about the experience” (Participant 12).

Several factors were linked to why the participants experienced high athletic identity. An important factor was that twelve participants competed at Olympic Games and/or Commonwealth Games during their career and as such had high profile lives. As Stambulova (1994) noted, athletes who reach Olympic level must remain focused on this goal and typically become completely immersed in sport, which takes precedence over other aspects of their lives. Therefore, it is highly likely that their identity is mostly tied to sport. Furthermore, elite athletes who have high profile lives in the public spotlight are also likely to experience strengthened athletic identity due to being recognised as, and celebrated for, being an elite athlete (Albion & Fogarty, 2005; Alfermann et al., 2004). As such, competing at major events and having a high level of public recognition appears to have contributed to the participants’ high athletic identity.

Lally (2007) proposed that having academic interests during their athletic careers helps athletes to establish other identities and, consequently, experience a reduction in athletic identity. It is likely therefore that the participants who utilised career/education interventions to gain academic qualifications experienced a reduction in athletic identity. Furthermore, some researchers suggest that reduced athletic identity helps athletes to adjust and cope well during the retirement transition (Lally, 2007; Lally & Kerr, 2005; Ogilvie & Taylor, 1993). The participants’ reduced athletic identity might have contributed to the positive experiences that they noted having after retiring.
Being a carded athlete, as was the case for 12 participants, may have had a role in reducing their athletic identity. As noted in Chapter Two, carded athletes are athletes selected from targeted sports (i.e. sports identified by HSPNZ as highly likely to win or podium at pinnacle events, such as Olympic and Commonwealth Games) and sports that received campaign investment from SPARC prior to 2012 and from HPSNZ post-2012 (High Performance Sport New Zealand, n.d.a). Eligible athletes may receive a number of services, based on the needs of the individual and their sport, including strength and conditioning, nutrition, sport psychology, and injury prevention and rehabilitation. This is based on the level of carding assigned by the NSO, level one being for world class athletes, level two for national athletes and level three for emerging athletes. The availability of career/education interventions, including the ACE programme and/or ALP, to carded participants may have encouraged their use of such services and, thus, assisted in reducing their athletic identity and promoting positive retirement experiences. Having access to career/education interventions in the future would appear to be useful for helping elite athletes to cope with the retirement transition by helping to reduce their athletic identity prior to retiring.

4.2.3 Each retirement was to varying degrees both voluntary and involuntary

Participants were asked how voluntary they felt that their retirements were. Three participants described their retirements as completely voluntary (e.g. due to loss of motivation) and two described theirs as completely involuntary (e.g. due to deselection). Eleven participants reported that both voluntary reasons, such as new career (six) and starting a family (four), and involuntary reasons, including deselection (four) and conflict with the coach and/or manager (four), contributed to their decision to retire. In relation to this Participant 8, Participant 13 and Participant 12 stated, respectively,

“I can guarantee that I would have been selected in the squad if I hadn’t retired...so from that perspective it was voluntary...I guess I’d gone through the process of not being selected previously and I wasn’t keen to go through it again [in the future]...so in that sense it perhaps was a little bit involuntary” (Participant 8).

“Non-selection...and having other factors come into it like my job, young family and training and pressure from the coach” (Participant 13).
"The body was breaking down...I was struggling to get through the pre-season and while the mind was still willing, the body wasn't...plus I had a young family and job opportunities" (Participant 12).

Following closer examination it was apparent that none of the participants’ retirements were exclusively voluntary or involuntary. The participants who reported that their retirements were completely involuntary had the option to continue competing and attempt to play elite-level sport again. According to Koukouris (1994), disengagement from an activity may be considered voluntary when an alternate course of action is available. Of the participants who described their decision to retire as completely voluntary, all of them were also influenced by involuntary reasons, such as age and organisational politics. This has been revealed previously by Cecic-Erpic et al. (2004) and Kerr and Dacyshyn (2000) who found that the diversity and nature of potential factors that contribute to retirement make it difficult to differentiate between voluntary and involuntary retirements. Similarly, in this study the diverse range of voluntary and involuntary factors influencing each retirement meant that it was not possible to determine whether any of the participants’ retirements were exclusively voluntary or involuntary.

Some participants’ retirements appeared to be more voluntary than others. This is important because the degree of voluntariness of an athlete’s retirement influences whether their adjustment is likely to be positive or negative (Alfermann, 2000; Cecic-Erpic et al., 2004; Taylor & Ogilvie, 1994). Voluntary causes are associated with an improved sense of autonomy which enables athletes to prepare psychologically and practically for retirement (Alfermann et al., 2004; Cecic-Erpic et al., 2004; Webb et al., 1998). Involuntary causes including injury (e.g. Kadlcik & Flemr, 2008) and de-selection (e.g. Moesch et al., 2012) are linked with difficult adjustment to retirement, such as feelings of loss and failure (Alfermann & Gross, 1997; Werthner & Orlick, 1986), anxiety and depression (Alfermann & Gross, 1997) and poor social adjustment (Lavallee et al., 1997). Participants who reported negative retirement experiences might have experienced a higher degree of involuntariness affecting their retirement than those who described only having positive experiences. It is important that all of the contributing factors to athletic retirements are acknowledged so that the full complexities of an athlete’s decision to retire are understood. If this is achieved, it could be easier to determine what adjustment issues the athletes could potentially experience and the type of assistance they may require to cope with such challenges.
4.3 Participants used resources to prepare for life after sport

Participants were asked if resources were available to them to support their transition to retirement and whether they utilised these. Resources were available to and used by all of the participants, including education, career counselling, coping skills and social support. Pre-retirement planning was the most prevalent resource used by the participants.

4.3.1 Pre-planning for retirement

All of the participants reported that in some way they pre-planned for retirement (e.g. career planning). All participants mentioned that they developed new interests prior to retiring (e.g. investment, corporate networking) to help them adjust to the transition by having various challenges to focus on. Eleven participants studied and gained academic qualifications during their athletic career. These participants mentioned that this presented them with alternate career options for their post-retirement lives, as noted below.

“I think doing the degree was going to give me something to fall back on [after retiring]...it opened the door for me to a new career” (Participant 10).

“I always looked to the future a little bit...I knew it was important to have an education...I think that without qualifications my opportunities would’ve been limited” (Participant 1).

Five participants also believed that the qualifications they earned while competing helped them to develop identities separate to their athletic identity. To varying degrees, all of the participants linked their preparation for retirement, such as development of alternate interests, to positive experiences they had during the retirement transition, as described by the following participants.

“Being ready to start a new job pretty much straight after I retired kind of like made me feel good about no longer playing sport because I was focused on a new challenge and, yeah, feeling good about that” (Participant 4).

“The job I’d prepared for and spent time in [part-time] towards the end of my career, I moved into that full-time after retiring...I really loved it and it meant I didn’t have time to feel sad about retiring” (Participant 3).

Thirteen participants planned and prepared for transitioning into other vocations and reported that since retiring they had developed and thrived in new careers. Ten participants’ new
careers are unrelated to sport. Six participants’ current occupations are related to their sport which, according to the participants, helped them ease into retirement. They include coaching, broadcasting, corporate sales and working for sponsors, as reflected below.

“I went to tell my sponsors I had retired and they said ‘do you want to come and work here?’...” (Participant 3).

“I was offered a coaching role for the following season” (Participant 2).

The percentage of participants who pre-planned for retirement (100%) is significantly higher than in overseas studies (e.g. 40%, Alfermann et al., 2004; 29%, Sloboda & Vanek, 1982), suggesting that elite New Zealand athletes might be more aware of the need to pre-plan for retirement. This has been referred to as anticipatory socialisation whereby the athletes proactively prepare for retirement before it happens (Crook & Robertson, 1991), enabling them to discover and pursue new challenges that they can focus on when they do retire (Werthner & Orlick, 1986). This might be due in part to career/education interventions that were available to 12 participants via the ACE programme and/or ALP (as reported in section 4.5). Super (1990) suggests that career/education interventions help athletes to establish other vocational identities by fostering psychological readiness to focus on other dimensions of life. Therefore, career/education interventions may have contributed to heightened awareness of the participants regarding the need for future career planning and, consequently, resulted in more participants pre-planning for retirement, enabling them to develop new vocational identities. It is important to note that the participants who did not have access to career/education interventions also pre-planned for retirement.

The high volume of participant preparation for retirement in this study might be linked to their positive retirement experiences. According to Sinclair and Orlick (1993), proactively preparing for retirement supports positive adjustment to retirement by helping athletes identify additional interests in their lives. This enables athletes to develop a multi-faceted self-identity which is associated with successful adjustment to athletic retirement (Mihovilovic, 1968; Sinclair & Orlick, 1993; Werthner & Orlick, 1986). Furthermore, studies suggest that when athletes gain qualifications prior to athletic retirement it increases their life satisfaction and self-esteem when they retire (Kleiber & Malik, 1989). Pre-retirement planning appears to have helped the participants cope and adjust with the transition because they had new challenges and responsibilities to concentrate on and were able to develop identities separate to their athletic identity (e.g. by studying). Consequently, they may have
been better equipped to adjust positively to retirement than athletes who do not pre-plan for retirement and who lack new career options when they retire. This finding supports suggestions from previous literature (e.g. Cecic-Erpic et al., 2004; Stambulova, 1994) that encouraging elite athletes to pre-plan (i.e. study and gain qualifications) prior to retiring from elite-level sport is an effective strategy to increase their career prospects when they retire and help them to adjust well to retirement.

4.4 Positive and negative retirement experiences

Participants were asked whether they felt that their retirement was a positive or negative experience. They were encouraged to discuss their experiences in detail where appropriate. Five participants described retirement as completely positive and 11 participants described having at least some positive experiences (in addition to some negative experiences), as mentioned below.

“When I made the announcement I felt like a huge weight had been lifted off my shoulders…it was upwards and onwards” (Participant 9).

“I was at home with the family and enjoying that and the body was feeling good” (Participant 2).

Nine participants reported feeling excited about their personal development after retiring, as the following responses reveal.

“You move on and there are lots of other things going on in your life and you’re ready to make another chapter” (Participant 4).

“I was really keen to get on with the next thing really and figure out what I was going to do next” (Participant 15).

Nine participants viewed their athletic retirement as an opportunity to start a family (four) or to concentrate more on their roles as a parent or spouse (five). They mentioned that this helped them to feel more positive about their retirement because it gave them something else to focus on, as noted by one participant.

“I also want to have children as well and that’s probably a really big factor...it was something that wasn’t possible for me during my career and was for sure an exciting part about retiring from sport” (Participant 3).
Although all participants reported some positive aspects to retirement, 11 participants reported that they also had negative experiences. Participants had this to say.

“There’s always that dream of going to the Olympics and World Champs…then all of a sudden that’s all gone so I think that was the biggest thing just thinking that, gosh, that will never happen now” (Participant 14).

“It was like a foggy cloud for me…I felt sad that it was over…I guess I felt like a period of grief…it almost feels like…you don’t have anything anymore…you’ve lost what you had and you feel really unconfident about things and quite uncertain…just kind of really unsure and I guess a little bit unstable as well” (Participant 3).

“I would say that I was quite depressed and had some really down and really dark days…points where I didn’t speak about it so I was in a really bad space in my life” (Participant 1).

“It was so, so hard…It meant everything to me and I felt kind of empty” (Participant 7).

Eleven participants noted that they struggled to replicate the thrill of competing and the adrenaline rush that they experienced at various stages throughout their careers (e.g. Olympic Games, test matches) following their retirement from sport, as the following participant noted.

“Something I found tough for a few years afterwards…playing a test match it just refines all of that intensity and passion and you just don’t get that outside elite sport…that’s where you get that concentrated piece of emotion and you just can’t achieve that anywhere else…it’s completely opposite to the way you approach your work” (Participant 8).

For seven participants this was a source of loss, and three participants also noted that this contributed to feelings of depression. Six participants reported that they continued to compete at lower levels of play in an attempt to replicate their experiences from elite-level competition. All of them found that their experiences competing at lower levels were incomparable to elite-level sport. Four participants felt that it helped them to ease into retirement and avoid potential feelings of loss.

All of the participants mentioned that after retiring they missed the social relationships they developed with other athletes during their career more than any other aspect of their career, as was evident in the following comments.
“I think that’s a big adjustment and probably if I miss anything at all, it’s that, the camaraderie” (Participant 15).

“They [other athletes] really become your family...it’s really close knit and I saw my coach and my fellow [teammates] more than I did my family, even when I was living at home” (Participant 1).

“The social aspect was really important and that was something I really struggled with post-retirement” (Participant 5).

All participants mentioned having alternate sources of social support outside of the sporting environment before and after retiring, such as family (16), spouses (14) and friends (16).

Nevertheless, none of the participants described retirement as an entirely negative experience. In fact, when asked whether they felt their retirement was positive or negative, 11 participants were ambiguous with their responses and used neutral phrases such as “a bit of both”, “negative and positive”, and “a mixture” to answer the question, as seen in this response.

“A bit of both really...can’t really say either way...yeah, it was both [positive and negative]” (Participant 6).

Nine participants reported that their negative feelings about retirement were strongest within six months of retiring, and then eased considerably after this time, as reflected in the following comments.

“It’s definitely eased off...it took a while” (Participant 1).

“It was really tough at first but over time it was easier” (Participant 6).

“Yeah I mean it definitely got easier and easier to accept but there were definitely times when it was tough...but yeah over time you just accept it” (Participant 14).

Most studies (e.g. Alfermann et al., 2004; Moesch et al., 2012; Park et al., 2013; Sinclair & Orlick, 1993) suggest that elite athletes usually experience positive transitions to retirement. For many elite athletes retiring from sport is a pleasantly anticipated event because it allows opportunities for personal growth and development (Blinde & Greendorfer, 1985; Coakley, 1983). Allison and Meyer (1988) reported that some retired elite tennis players considered retirement as an opportunity to assume more traditional societal roles and lifestyles. Similar opportunities for personal growth and development were experienced by the participants,
providing them with different aspects of life to focus on. This was also linked with positive adaptation.

The percentage of participants who reported having at least some positive retirement experiences in this study (100%) is considerably higher than in other studies (e.g. 80%, Lavallee, Nesti, Borkoles, Cockerill, & Edge, 2000; 64%, Sinclair & Orlick, 1993; 80%, Wippert & Wippert, 2008). This is possibly due to the fact that, as noted in section 4.3.1, most of the participants had prepared in advance for their athletic retirement (e.g. alternate employment, education) which has been linked to positive adaptation to retirement (e.g. Alfermann et al., 2004; Cecic-Erpic et al., 2004; Stambulova et al., 2007). This also may be due to the nature of the semi-structured interviews utilised in this study, which enabled participants to discuss all of their experiences in-depth. Some other studies (e.g. Sinclair & Orlick, 1993; Wippert & Wippert, 2008) used methods such as questionnaires, which sometimes restrict participants to giving short answers or choosing from predetermined options provided by the researchers.

Interestingly, the number of participants who reported negative experiences in this study (69%) conflicts with the consensus that athletic retirements are typically positive, and is actually consistent with early retirement studies that suggest most elite athletes have negative retirement experiences (e.g. 63%, Curtis & Ennis, 1988; 66%, Werthner & Orlick, 1986). Being unable to replicate the thrill of competing at an elite level has been identified previously (Bean, 2003) as a challenge that athletes struggle to come to terms with after retiring from elite-level sport. Playing at a lower-level of play was an unsuccessful strategy for the participants in relation to replicating the thrill of competing that they experienced while playing elite-level sport. However, because it was associated with positive adjustment to retirement, it may still be an effective approach for athletes to use in the future to help them cope with retiring. Further research that measures the effect that playing sport at lower levels, after retiring from elite-level competition, has on the adjustment of elite athletes might offer further insight regarding its effectiveness as a measure for preventing adjustment distress.

Retired athletes have frequently reported in other studies (e.g. Roberts et al., 2015; Sinclair & Orlick, 1993) missing the social relationships that they developed with other athletes while playing elite-level sport. When there is a lack of alternate social support, this is linked with negative experiences, such as isolation and loneliness (Alfermann, 1995; Greendorfer &
Blinde, 1985; Roberts et al., 2015; Schmid & Schilling, 1997; Werthner & Orlick, 1986). Alternate sources of social support outside of the sporting environment were available to all participants. This appears to have prevented them from having negative retirement experiences associated with loss of social support from within the sporting environment. Therefore, this study indicates that losing social support from the sporting environment after retiring does not necessarily affect adaptation to retirement if alternate social support is available.

Most studies that have examined athletic retirement clearly defined the participants’ transitions as either positive or negative (e.g. Sinclair & Orlick, 1993; Werthner & Orlick, 1986; Wippert & Wippert, 2008). The retirement experiences of the participants in this study appear to fit on a continuum, ranging from semi-difficult adaptation to unproblematic adaptation, which has only been reported in a small number of other studies (e.g. Alfermann et al., 2004; Lally, 2007; Roberts et al., 2015). This finding is perhaps representative of the multi-causal nature of the participants’ retirements (as described in section 4.1). Despite no direct link between singular reasons for retirement and retirement outcomes as there was in other studies (e.g. Lavallee et al., 1997), the fact that most participants reported having positive and negative retirement experiences appears to be reflective of the involuntary and voluntary nature of most participants’ decisions to retire.

Other studies indicate that elite athletes feel less negative about the retirement transition as time passes following their retirement. For example, Young et al. (2006) reported a 50% decrease in participants’ feelings of negativity from when they retired up to six months after their retirement, and this decreased by a further 75% 18 months later. Petitpas, Champagne, Chartrand, Danish and Murphy (1997) reported that emotional and attitude changes occur from several months to several years after retiring. This is possibly due to the fact that athletic retirement is a significant life event for elite athletes (Werthner & Orlick, 1986) that requires them to change a pattern of living which they have become accustomed to (Malim & Birch, 1998). As noted several times during the present study, retirement was a significant event for the participants accompanied by major life changes. Therefore, the negative experiences that they had during the transition may have been strongest immediately after retiring and eased once they became accustomed to their new lifestyle.

Furthermore, most athletic retirement-related studies (e.g. Kerr & Dacyshyn, 2000; Lavallee & Robinson, 2007) were retrospective with memory and recall bias noted as limitations. This
study was also retrospective and, thus, may not have accurately depicted the participants’ adjustment experiences at various stages of the transition. Negative feelings that were potentially experienced early in the transition may not have been fully encapsulated and positive feelings were potentially overstated. Future studies that utilise longitudinal designs may be better suited to capture the experiences of elite athletes as they occur.

4.5 Retirement interventions available to participants

Participants were asked if retirement interventions were available to support their transition from competing in elite-level sport to retiring. Specifically, they were asked if career/education interventions and psychological/emotional interventions were available to them and, if so, who were they provided by and did they utilise them. Two key sub-themes (described below) that emerged from analysis were: 1) career/education interventions, and 2) psychological/emotional interventions.

4.5.1 Career/education interventions

All of the participants were asked to describe what, if any, assistance they were offered from career/education interventions during their career as an elite athlete and, if so, who provided them. Twelve participants reported that they were offered career/education assistance from ACE advisors via the NZAS prior to 2012 and/or from ALA via HPSNZ after 2012. All of these participants were carded athletes for all or some of their athletic career. Two participants had the following to say.

“There were athlete life advisors and so they were there to talk about career and education options...it was always clear that they were there and available if I needed to discuss anything” (Participant 15).

“We could contact them [ALA] if we needed to otherwise they would get in touch with us to check in and see how things were going” (Participant 9).

Twelve participants noted that career/education planning was the greatest form of retirement assistance offered. Eleven participants utilised this to help them plan their study and prepare for alternate careers after they retired from elite-level sport, as noted by the following comments.
“Also career advisors…the lady we had was fantastic and especially good from my perspective in terms of mapping out study and kind of being a career coach I guess” (Participant 13).

“Umm career advice, like after London [2012 Olympic Games] she was really awesome...really got me thinking ‘why are you doing this?’…” (Participant 3).

“We had a career advisor through HPSNZ…I’d be able to sit down and have a chat with her mostly around the career side of things and what I was studying and how that was going...so she was good...good sounding board” (Participant 8).

One participant chose not to utilise assistance offered because they had already gained academic qualifications and started an alternate career prior to being offered career/education assistance. Participant 10 said,

“I knew that assistance was there if I needed it...I already had a degree and I was working full-time anyway so I didn’t think that it was necessary for me to use it [assistance] to be fair”

Four participants reported that they were not offered and, consequently, received no assistance from career/education interventions during or after their career. None of these participants were carded athletes during their athletic careers. Two participants had the following to say.

“I don’t think so...no I don’t think we ever had [any assistance]...nothing sort of comes up” (Participant 2).

“No...there was never anything at all...nothing to help with career or study...and definitely nothing to cope with retirement...we pretty much paid to play so there was never going to be any of that kind of support” (Participant 6).

Eight participants commented that being contacted by ALA and ACE advisors reminded them of the importance of planning for post-athletic career life and that this encouraged them to use the support that was available. All participants who received career/education assistance transitioned into new careers after their athletic retirement, as did those who received no assistance. Nine participants who received career/education assistance studied and gained qualifications prior to or after retiring. Eleven participants reported that ALA and ACE advisors would contact them regularly to assess their progress and development, and whether they required further assistance, as noted in the following comments.
“With the career advisor’s service you had a six-monthly catch up regarding your studies...whether your scholarship is sorted...so you’d have yearly and half-yearly reviews so she’d touch base and send emails out to everyone” (Participant 8).

“They would check in from time to time” (Participant 3).

Five participants were granted a Prime Minister's Athlete Scholarship to fund their study during and after their athletic career. One participant was awarded the Prime Minister’s Athlete Gold Level Scholarship, which they used for study following their retirement from elite sport. These participants acknowledged that they would have been less inclined to have studied if the scholarships were not available to them.

Five participants were de-carded by the NZAS or HPSNZ before they retired from elite-level sport due to changes to the carding system (one) or failure to achieve performance standards required to be a carded athlete (four). However, despite continuing to represent New Zealand at an elite level, they were not offered any further support after being de-carded, as is highlighted in the following responses.

“It disappeared as soon as I was de-carded even though I was still representing New Zealand” (Participant 5).

“I was de-carded when I got sick so I had no support in the last 18 months [of athletic career]...I had no support...no athlete life support” (Participant 14).

The remaining carded participants mentioned that they continued to receive career/education assistance for up to six months following their retirement. After this period they lost their carding status, as per HPSNZ’s policy for retiring carded athletes, at which point access to career/education interventions ceased.

The positive response of utilising available interventions conflicts with other studies that report low usage of career/education interventions by elite athletes in other countries (Gorely et al., 2001; Roberts et al., 2015). Gorely et al. (1998) identified lack of accessibility as a leading reason why less than 1% of elite Australian athletes utilised the career transition services in the Australian ACE programme. It appears that the participants in this study who were carded had greater access to and, thus, reported greater usage of the available services because ALA and ACE advisors proactively offered career/education assistance regularly during their athletic careers. This suggests that contacting elite athletes regularly to discuss
available career/education assistance is an effective way to increase access and usage of such interventions. Because career/education assistance was only available to carded participants, it is evident that only the best performing and most successful elite athletes from targeted/campaign sports in New Zealand have access to career/education interventions during their athletic career.

Being carded was a major contributing factor to accessibility and usage of career/education interventions for participants. It is important for all of New Zealand’s elite athletes to have access to career/education interventions to help them prepare for their athletic retirement regardless of whether they are carded or not, and what sport they play. Athletes who have access to career/education interventions typically experience reduced athletic identity prior to retiring (Cecic-Erpic et al., 2004; Lally, 2007; Stambulova, 1994), higher perceived control (Alfermann, 2000), improved life satisfaction (Alfermann et al., 2004) and enhanced self-efficacy regarding their ability to adjust (Alfermann et al., 2004; Taylor & Ogilvie, 1994; Webb et al., 1998). Such responses are likely to positively impact cognitive, behavioural and emotional readiness for post-retirement life (Alfermann et al., 2004; Fortunato & Marchant, 1999; Park et al., 2013; Taylor & Ogilvie, 1994). Because all participants, carded or non-carded, had positive experiences and due to the effect of other mediating factors, it is unclear whether the high usage of career/education interventions in this study influenced their adaptation to retirement in this way. All participants, carded or non-carded, also successfully started new careers after retiring, thus it is unclear how influential career/education interventions were for participants’ post-retirement career success. It was clear that receiving assistance via scholarships was influential towards encouraging participants to study and gain qualifications. Future research that exclusively examines non-carded New Zealand athletes might provide a clearer picture regarding retirement-related interventions offered to all elite New Zealand athletes.

4.5.2 Psychological/emotional interventions

The availability of psychological/emotional interventions was described as minimal by three participants and non-existent by 13 participants. This is reflected in the following comments.

“No support around how I was going to feel or the mental side of things...no one’s come along and checked up on me” (Participant 1).
“No...there wasn’t really a system in place for you as a retired athlete to ease your way into retirement...I guess by offering counselling if you needed it” (Participant 13).

“Nup... there was nothing...like I don’t remember having discussions with anyone really about retirement” (Participant 15).

Fifteen participants reported that they were not made aware of the possible psychological/emotional impact of retiring or the need for interventions to cope in this area. One participant was aware of the need for such interventions and received assistance from a sport psychologist prior to retiring to prepare for potential psychological/emotional distress after retiring and stated,

“I had a really good relationship with our psych...he’d been with our team for about 18 months to two years and he was well aware of the position I was in [thinking about retiring]...and I spoke to him as I went along” (Participant 10).

This participant felt that the assistance received from the sport psychologist helped to prepare them for potential negative psychological/emotional experiences during retirement. They also reported that their athletic retirement was a completely positive experience. Three participants said that they were aware that assistance was available from sport psychologists if they required it. Participant four said,

“I always felt that support was there. It’s just a matter of people being able to speak up and actually put their hands up and say ‘I need help’...”.

None of the participants were offered support from psychological/emotional interventions after they had retired from their athletic career. This was evident in the following comments.

“Once you’re outside the team no...there’s certainly no net underneath” (Participant 12).

“Nope...nothing...nothing at all” (Participant 7).

However, independently, four participants hired a sport psychologist for psychological/emotional assistance after they retired because they experienced psychological distress, such as depression and loss. Three of these participants had the following to say,

“I sought out the people I wanted to help me deal with the transition” (Participant 16).

“I had a sport psychologist...that was not provided...I created that support” (Participant 1).
“It took a good six months to work through it...and to the point where I actually did go and talk to someone about it...it was initiated by myself” (Participant 5).

Participants believed that the assistance they received from the sport psychologist enabled them to develop and use strategies that helped them to cope with the distress that they experienced. Participant five said,

“Yup, it definitely helped...I had a better idea of how to deal with things when they were getting on top of me”.

Consistent with findings from previous studies (e.g. Crook & Robertson, 1991; New Zealand Rugby Players Association, 2011; Stephan et al., 2003), the present study indicates a lack of psychological/emotional interventions for elite athletes to cope with retirement during and after their athletic retirement. This suggests that less importance is placed on retirement-related psychological/emotional interventions for elite athletes in New Zealand compared to other interventions, such as career/education. This could be due to a number of potential interrelated factors, such as lack of general awareness of their importance to retiring athletes, limited research regarding their effectiveness and limited funding. Nevertheless, it is currently unclear why there is a lack of retirement-related psychological/emotional interventions for elite New Zealand athletes.

The positive response that receiving psychological/emotional assistance from a sport psychologist prior to retiring had on adaptation to retirement indicates that this form of intervention might be valuable for preventing potential negative adjustment experiences for future elite New Zealand athletes. However, having access to a sport psychologist prior to retiring and evaluation of whether this was beneficial only occurred from one participant and there is very little research at present to support such a finding. Future studies that examine the influence of pre-retirement psychological/emotional assistance from sport psychologists might provide insight regarding whether this influences the adaptation of elite athletes to retirement.

The link between post-retirement psychological/emotional assistance from a sport psychologist and alleviated distress after retiring in this study is consistent with reports from several researchers (e.g. Lavallee & Andersen, 2000; Murphy, 1995; Stephan et al., 2003) who have emphasised the importance of post-retirement counselling. For example, Lavallee (2005) found that post-retirement counselling helps retired athletes adjust to retirement by
learning how to utilise coping skills. Therefore, availability of this type of intervention is, potentially, integral to helping future retiring elite New Zealand athletes to develop strategies to cope with retirement-related distress. Due to the lack of interventions available at present, elite New Zealand athletes may have to employ sport psychologists themselves in order to receive assistance after retiring to cope with potential psychological/emotional difficulties adapting to retirement.

4.6 Participants’ suggestions for retirement interventions for future retiring athletes

All of the participants were asked whether they thought alterations to the interventions currently offered to elite athletes in New Zealand regarding retirement were necessary or if they had suggestions for interventions to support future retiring athletes. Twelve participants felt that there were sufficient career/education interventions offered during their career. The consensus amongst the participants (who were carded athletes for all or some of their career) was that adjustments to current career/education interventions were not needed. Participant 13 said,

“I think it was pretty good…I can’t give any advice on how they could have done it better because it seemed to work for me”.

However, the four participants who were not carded athletes during their careers believed that career/education interventions should also be made available to non-carded athletes in the future. One participant suggested that half-yearly seminars could be offered to non-carded athletes while another felt that support similar to that from ALA would be beneficial to all elite New Zealand athletes. Twelve participants suggested that more psychological/emotional interventions should be available, especially post-retirement, as was evident in the following comment.

“I think that the psychological side is huge and it needs more attention and just making people more aware of it I guess and maybe a little more education around what people are likely to experience post-retirement so that you are a little more aware of what you might feel or expect to feel and know that that’s ok to feel that and to work through those issues if you do happen to have them” (Participant 5).

Six participants suggested that having greater access to psychological/emotional interventions would reduce or eliminate negative experiences during the retirement transition. Seven participants suggested that they would like to see other interventions such as work
placements, workshops and advice from former athletes, as is evident in the following remarks.

“As far as I’m aware...there is little to support people with gaining work experience and I think that’s a really big hole...and I would definitely support some kind of work placement” (Participant 10).

“I think sitting down with someone who was say two or three years retired who could come and talk...to say look this is what you might experience...this is what’s great about it...this is what’s bad about it...that might make it more relevant” (Participant 15).

“I think that there needs to be some more programmes...whether it’s a day workshop...just to let people know that other athletes are dealing with the same things...to know that you’re not alone is a really big thing” (Participant 3).

The disparity between career/education interventions offered to elite New Zealand athletes who are carded compared to those who are non-carded was highlighted by suggestions made for future career/education interventions. Carded participants felt that sufficient career/education interventions are offered, whereas non-carded athletes would like more interventions to enhance the career/education development for all future retiring elite New Zealand athletes. If this suggestion materialised, more elite New Zealand athletes would have access to career/education interventions. This would increase the likelihood that a higher number of retiring athletes would have better post-retirement career prospects and, subsequently, adjust well to post-retirement life.

The most requested form of intervention for future retiring athletes was psychological/emotional interventions. This is reflective of the lack of psychological/emotional interventions currently and the high level of importance placed on their future availability by both carded and non-carded athletes. Research supports suggestions for increasing the availability of retirement-related psychological/emotional interventions to elite New Zealand athletes. Several studies (e.g. Baillie & Danish, 1992; Smith & McManus, 2008; Taylor & Ogilvie, 2001) have found that psychological/emotional interventions are crucial to the adaptation to the retirement transition for elite athletes. Many elite athletes require post-career psychological/emotional interventions to cope with negative experiences including loneliness and depression (Baillie, 1993; Baillie & Danish, 1992; Danish et al., 1992; Smith & McManus, 2008; Taylor & Ogilvie, 2001) associated with changing identities.
As noted in section 4.6, psychological/emotional assistance from sport psychologists pre-and post-retirement was associated with positive adjustment and reduced distress, respectively. As such, more psychological/emotional interventions would potentially help elite New Zealand athletes to cope better when faced with retirement-related distress.

Suggestions for workshops and seminars is consistent with findings from Hawkins and Blann (1996) that programmes that help athletes to gain actual work experience are a highly-desired form of career assistance by elite athletes. Some countries have provided workshops and seminars to assist elite athletes with their adjustment to retirement, such as the post-Olympic excellence seminar in Canada. At this stage their effectiveness is largely unknown. Pre-retirement workshops and seminars (e.g. age with attitude workshop - “retirement” life planning, New Zealand) were found to be effective for educating individuals regarding financial planning for retirement from the work force (e.g. Bayer, Bernheim, & Scholz, 2009; Lusardi, 2004). Therefore, workshops and seminars might, potentially, assist elite New Zealand athletes with financial planning for retirement also. However, most of the pre-retirement seminars and workshops for the work force appear to focus exclusively on financial planning and it is currently unknown whether seminars and workshops would assist athletes during the retirement transition in other aspects, such as starting new careers.

It is currently unclear whether more retirement-related interventions will be available to elite athletes to support their retirement in the future. Greater funding for athlete retirement-related interventions in New Zealand would potentially increase the number of elite athletes who receive career/education assistance and, thus, adjust well to retirement. Due to a lack of research regarding the effectiveness of retirement interventions and the benefit of investing funding into these compared to other aspects of elite-level sport, there is a lack of evidence to support sport organisations, such as HPSNZ, investing additional money into athlete retirement-related interventions. Therefore, the financial viability of implementing suggested strategies is questionable. Cost-benefit analysis that examines the importance of investment into retirement interventions in relation to other areas could potentially provide insight regarding the value of investing in such interventions for elite New Zealand athletes.
4.7 Summary

The chapter began with an overview of its contents. Subsequently, key themes and sub-themes were presented, analysed and discussed. It was found that participants’ retirements were multi-causal in nature and typically due to both voluntary and involuntary reasons. Participants’ perceptions of control and athletic identity were high, and were identified as key mediating factors influencing adaptation to retirement. Pre-planning was the most highly-used resource by participants and supported their adjustment to the retirement transition. Most participants had both positive and negative retirement experiences, and some retirements were exclusively positive or negative. Career/education interventions were available to participants who were carded athletes, and availability of psychological/emotional to all participants was minimal. Participants who were non-carded suggested that career/education interventions should be made available in the future to all elite-level New Zealand athletes. Most of the participants would like to see more psychological/emotional interventions available in the future for elite-level New Zealand athletes. To conclude the chapter, a summary was provided. The conclusion chapter summarises the main findings from the study, discusses its limitations and provides future directions for future research.
CHAPTER FIVE: CONCLUSION

5.0 Introduction

This study identified and discussed a range of retirement experiences unique to the participants in this study. It enabled clearer understanding of the current level of retirement-related assistance available to elite New Zealand athletes and provided suggestions for assistance for future retiring athletes.

In Chapter One, the study, research question and objectives, and need for the study was presented. In Chapter Two, athlete retirement-related literature was reviewed showing a gap in the literature and thus the need for the research topic to be studied. In Chapter Three, the methodology and methods utilised for collecting and analysing data in this study was described, discussed and justified. Chapter Four provided results related to the key themes that were identified from the data analysis and a discussion of the results. This chapter presents a brief overview of the thesis and conclusions drawn from the study. Strengths and limitations of the study are discussed as well as future directions that include suggestions for further athlete retirement-related research in the future. Finally, a summary of the contents of the chapter is included.

The purpose of the present study was to answer the following research questions and objectives:

Research questions:

- What were the experiences of elite New Zealand athletes regarding the retirement transition from elite-level sport in New Zealand?

- What are the perceptions of elite New Zealand athletes regarding the interventions available to them in their retirement transition?

Research objectives:

- To review and critique existing elite athletic retirement-related literature.

- To explore and describe the experiences of elite New Zealand athletes during the retirement transition based on Taylor and Ogilvie’s (1994) conceptual model of adaptation to retirement.
• To gather and report on the opinions and/or perceptions of elite New Zealand athletes regarding future retirement-related interventions that would potentially improve the adjustment to the retirement transition for future retiring athletes.

5.1 Conclusions

The main findings and conclusions drawn from this study are summarised below. New findings from this study are presented first, followed by findings that align with or contest findings from previous literature.

New findings:

• Career/education planning was the greatest form of retirement assistance offered to the participants. This was offered by ACE advisors via the NZAS prior to 2012 and/or from ALA via HPSNZ after 2012. The twelve participants who were carded for all or some of their career were offered this assistance and 11 participants utilised it, noting that they were contacted regularly by ALA and/or ACE advisors to assess their progress and development and whether they required further assistance. Five carded participants were granted a Prime Minister's Athlete Scholarship and one carded participant was awarded the Prime Minister’s Athlete Gold Level Scholarship. The four non-carded participants reported receiving no career/education assistance. It appears that the participants in this study who were carded had greater access to and, thus, reported greater usage of the available services because ALA and ACE advisors proactively offered career/education assistance regularly during their athletic careers. This suggests that contacting elite athletes regularly to discuss available career/education assistance is an effective way to increase access and usage of this. Because career/education assistance was only available to carded participants, it is evident that only the best performing and most successful elite athletes from targeted/campaign sports in New Zealand have access to career/education interventions during their athletic career.

• Because all participants, carded or non-carded, had positive experiences and due to the effect of other mediating factors, it is unclear whether the high usage of career/education interventions in this study influenced their adaptation to retirement in this way. All participants, carded or non-carded, also successfully started new careers after retiring, thus it is unclear how influential career/education interventions were for
participants’ post-retirement career success. It was clear that receiving assistance via scholarships was influential towards encouraging participants to study and gain qualifications.

- All of the participants described the availability of psychological/emotional interventions as minimal or non-existent, regardless of whether they were carded athletes or not. None of the participants were made aware of the possible psychological/emotional stress they might experience during the retirement transition. Only three participants were aware that assistance was available from sport psychologists (for carded athletes) if required. This suggests that less importance is placed on psychological/emotional interventions for elite athletes in New Zealand compared to other interventions, such as career/education. This could be due to a number of potential interrelated factors, such as lack of general awareness of their importance to retiring athletes, limited research regarding their effectiveness and/or limited availability of funding.

- One participant actively sought out pre-retirement psychological/emotional support from a sport psychologist and felt that it helped them prepare for potential negative psychological/emotional experiences during retirement. Four participants hired a sport psychologist for psychological/emotional assistance after they retired because they experienced psychological distress, such as depression and loss. They believed that this enabled them to develop and use strategies that helped them cope with the distress. This suggests that receiving psychological/emotional assistance from a sport psychologist prior to and after retiring might be valuable for preventing potential negative adjustment experiences and developing strategies to cope with retirement-related distress for future elite New Zealand athletes.

- Twelve participants felt that there were sufficient career/education interventions available during their career. However, participants who were not carded athletes during their career believed that career/education interventions should be made available to non-carded athletes in the future.

- Twelve participants suggested that more psychological/emotional interventions should be made available, particularly post-retirement. Psychological/emotional interventions have been recommended in previous studies (e.g. Baillie & Danish, 1992; Smith & McManus, 2008; Taylor & Ogilvie, 2001) for reducing retirement distress as discussed in Chapter Four, section 4.6. Consequently, more
psychological/emotional interventions could potentially help elite New Zealand athletes to cope better if they experience retirement-related distress.

- Seven participants would like various other interventions made available, such as work placements, workshops and advice from former athletes to support the adjustment of current elite athletes in their retirement. However, it is currently unclear whether or not these types of interventions would be beneficial for helping elite athletes adapt to retirement.

- Greater funding for athlete retirement interventions in New Zealand could potentially increase the number of elite athletes who have access to career/education interventions and, thus, adjust well to retirement. Due to a lack of research regarding the effectiveness of retirement interventions and the benefit of investing funding into these compared to other aspects of elite-level sport, there is a lack of evidence to support sport organisations, such as HPSNZ, investing additional money into athlete retirement interventions. Therefore, the financial viability of implementing suggested strategies is questionable.

**Findings that contest or align with previous literature:**

- Injury was the most common reason given for retirement and age and free choice were frequently mentioned. This indicates that the most common causes of retirement for elite New Zealand athletes are similar to those internationally.

- Consistent with the emerging consensus in athletic retirement-related literature, multiple reasons contributed to the ultimate decision to retire from elite-level sport for all participants. This was potentially influenced by the fact that most participants were either semi-professional or amateur, which meant that a number of other related factors (e.g. cost of competing, time spent away from other jobs, need to earn money) contributed to their decisions.

- All but one of the participants described having high levels of athletic identity during their career. It was postulated that a major contributing factor for 12 participants was that they competed at Olympic Games and/or Commonwealth Games level and had high profile lives, which was linked with being fully immersed in their athletic lifestyle and, thus, leading to high athletic identity.

- Reduction of athletic identity prior to retiring was linked with positive adaptation to retirement. The availability of career/education assistance via the ACE programme
and/or ALP may have had a role in encouraging participants’ use of such services and, thus, assisted in reducing their athletic identity and promoting positive retirement experiences.

- All of the participants pre-planned for retirement, using strategies such as gaining academic qualifications, starting new careers and developing new interests (e.g. investment, corporate networking). This is significantly higher than statistics from overseas studies suggesting that elite New Zealand athletes might be more aware of the importance to pre-plan for life after retiring. This might be due in part to heightened awareness from academic/career assistance, which 12 participants had access to.

- To varying degrees, all of the participants felt that pre-retirement planning led to positive retirement experiences. Pre-retirement planning appears to have helped the participants cope and adjust with the transition because they had new challenges and responsibilities to concentrate on and were able to develop identities separate to their athletic identity. This finding supports suggestions from previous literature (e.g. Cecic-Erpic et al., 2004; Stambulova, 1994) that encouraging elite athletes to pre-plan (i.e. study and gain qualifications) prior to retiring from elite-level sport is an effective strategy to increase their career prospects when they retire and help them adjust well to retirement.

- The diverse range of voluntary and involuntary factors influencing each retirement meant that it was not possible to determine whether any of the participants’ retirements were exclusively voluntary or involuntary. Each participant appeared to retire due to varying degrees of both voluntary and involuntary reasons.

- Five participants had completely positive retirements and 11 participants had at least some positive experiences (in addition to some negative experiences) adjusting to retirement. This appears to be the outcome of new opportunities in the participants’ lives, including personal development, starting a family and spending more time with family and spouses, which provided them with different aspects of life to focus on.

- In addition to having some positive experiences, 11 participants also reported having some negative experiences. Not being able to replicate the thrill of competing and the adrenaline rush experienced at various stages throughout their careers was a challenging aspect of retirement for 11 participants. For seven participants this was a source of loss and three participants also noted that this contributed to feelings of
depression. Six participants continued to compete at lower levels of play in an attempt to replicate their experiences from elite-level competition. However, all of them found that their experiences competing at lower levels were incomparable to elite-level sport. Nevertheless, competing at a lower level of play after retiring was associated with reduced feelings of loss for four participants and, thus, is potentially an effective strategy for positive adaptation to retirement.

- All of the participants missed the social relationships that they developed with other athletes during their careers more than any other aspect of their careers. However, none of the participants reported having negative experiences or trouble adjusting to retirement associated with missing social relationships. This was linked to the fact that all of the participants had alternate sources of social support outside of the sport environment, such as friends and family. Therefore, this study indicates that losing social support from the sporting environment after retiring does not necessarily affect adaptation to retirement if alternate social support is available.

- The retirement experiences of the participants in this study appear to fit on a continuum, ranging from semi-difficult adaptation to unproblematic adaptation. The fact that so many of the participants had positive and negative retirement experiences appears to be reflective of the complex involuntary and voluntary nature that was characteristic of the participants’ decisions to retire.

- Nine of the participants reported that their negative feelings about retirement were greatest within six months of retiring, and then eased considerably after this time. Retirement was a significant event for the participants accompanied by major life changes. Therefore, the negative experiences that they had during the transition may have been strongest immediately after retiring and eased once they became accustomed to their new lifestyle. Furthermore, this study was retrospective and, thus, may not have accurately depicted the participants’ adjustment experiences at various stages of the transition. Negative feelings that were potentially experienced early in the transition may not have been fully encapsulated and positive feelings were potentially overstated.
5.2 Strengths/limitations

Several strengths and limitations were identified relevant to the present study.

5.2.1 Strengths

Semi-structured interviews were an asset because they enabled participants to lead the interview into areas of personal significance in addition to gathering information in areas of predetermined interest. The interviews also enabled participants to provide elaborate, unrestricted responses to the questions. An equal number of male and female participants, amateur/semi-professional/professional, from a wide range of team and individual sports were included in the study. Because all of the participants had retired within seven years to one month prior to commencement of the study, it enabled the researcher to gather some of the most recent and relevant data available.

5.2.2 Limitations

The apparent multi-causal nature of athletic retirements in this study meant that it was difficult to accurately gauge the level of actual control compared to perceived control that the participants had over their retirements. During the study potential links between variables such as pre-retirement planning and positive retirement experiences were identified. However, it was unclear at times which variables had greater effect on the adjustment of the participants, and this made it difficult to identify, specifically, the degree of influence that some variables had on the participants’ adjustment. Furthermore, this also made it difficult to establish the influence of career/education interventions on adaptation to retirement. The study involved retrospective recall and in some cases the participants provided an account of events and experiences that occurred up to seven years prior to commencement of the study. Therefore, the data was, potentially, subject to response or retrospective recall bias, faulty recall and/or poor articulation (Warriner & Lavallee, 2008). However, this approach did enable the participants to reflect on and discuss their experiences in a manner that may not have been possible if other approaches had been used.

5.3 Future directions

Several other routes for future research investigating aspects of sport retirement derive from the study.
Several possible links were found in the study between a number of variables (e.g. pre-retirement planning, retirement assistance offered) and outcomes of the retirement transition. Consequently, future studies that examine and compare the influence of these variables on adjustment to retirement for elite athletes (e.g. by multiple regression analysis) will potentially lead to a better understanding of which variables had greater effect on the adjustment of the participants to the retirement transition and to what degree.

Despite the participants being unable to recreate the thrill of winning by playing at lower levels after retiring, the positive experiences that were associated with this beg the question as to whether this is an effective strategy for reducing retirement distress. Examining whether the retirement experiences of elite athletes are influenced by playing sport at lower levels after retiring from elite-level competition might offer further insight regarding its effectiveness as a measure for preventing adjustment distress.

In this study, participants were asked to recall previous experiences they had during the retirement transition which is subject to memory and recall bias. This leaves a level of uncertainty as to whether their opinions or interpretations of the experiences they had changed over time. Future studies that utilise longitudinal designs may be better suited to capture the experiences of elite athletes as they occur and provide researchers with a more accurate account of the effects of retirement on elite athletes.

It is apparent from the study that carded New Zealand athletes are eligible for a number of benefits that do not appear to be available to non-carded athletes. Future research that exclusively examines carded and non-carded New Zealand athletes might provide a clearer picture regarding retirement-related assistance offered to both segments of elite New Zealand athletes and their transition experiences.

Some researchers (e.g. Lavallee, 2005) have endorsed post-retirement assistance from sport psychologists to cope with transition distress. However, there appears to be little known regarding the influence of pre-retirement support from a sport psychologist and the potential influence of this on retiring athletes. Future studies that examine the influence of pre-retirement psychological/emotional assistance from sport psychologists might provide insight regarding whether this influences the adaptation of elite athletes to retirement and its future potential as a strategy for easing retirement-related distress.
The participants in this study offered a number of suggestions relative to the types of intervention they felt should be offered to elite athletes in New Zealand to support their transition to retirement. However, the benefit of funding retirement interventions in relation to other aspects of elite level sport in New Zealand, such as development pathways, is currently unclear. Future cost/benefit analysis of current athlete retirement interventions in New Zealand could potentially enable clearer understanding regarding the financial viability for sport organisations to develop suggested interventions, such as workshops and psychological support, for retired elite athletes in New Zealand.

5.4 Summary

This chapter presented the main conclusions and findings drawn from the study. Strengths and limitations of the study were identified and suggestions for future athletic retirement-related research were provided.

A number of conclusions were drawn from the study, such as:

- Multiple reasons contributed to the participants’ retirements and injury was the most common reason.

- Each participant retired due to varying degrees of both voluntary and involuntary reasons.

- All participants reported high levels of perceived control over their decisions to retire; however, levels of actual control were found to be low for several participants.

- Twelve participants suggested that more psychological/emotional interventions should be made available, particularly post-retirement.

- Seven participants would like additional interventions made available, such as work placements, workshops and advice from former athletes to support the adjustment of elite athletes to retirement in the future.

Several limitations were identified, including difficulty to accurately gauge the level of actual control compared to perceived control that the participants had over their retirements, lack of clarity regarding which variables had the greatest effect on the adjustment of the participants to retirement and use of retrospective recall. Strengths of the study were the use of semi-structured interviews, inclusion of an equal number of male and female participants from a
wide range of team and individual sports, and the collection of recent and relevant data due to all of the participants retiring within seven years prior to commencement of the study.

Suggestions for future directions included using different research designs, methodologies and approaches, such as multiple regression and longitudinal designs. Furthermore, suggestions for future research topics were made and these included the effect that playing sport at lower levels after retiring from elite-level competition has on the adjustment of elite athletes, the influence of pre-retirement assistance from a sport psychologist on adaptation to retirement and cost/benefit analysis of current athlete retirement-related interventions in New Zealand.
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Interview schedule

1. Tell me about your career

   1. When did you become interested in the sport?
   2. When did you start playing at elite/international level?

      a) For how long did you play at elite/international level

   3. What was/were your greatest achievement(s)?

      a) Did you achieve everything you wanted to during your career?

   4. What was/were your biggest obstacle(s)

2. What was your reason(s) for retiring from elite-level sport?

   1. Was your decision to retire voluntary or involuntary?
   2. Did you discuss your decision with others (e.g. family/coach/friends)?
   3. Did external factors (e.g. time commitments) contribute to your decision?
   4. Do you feel that you were performing at the “top of your game” when you made the decision?

      a) Did form contribute to your decision?

      b) Did non-selection contribute to your decision?

      c) Did injury contribute to your decision?

3. What, if any, mediating factors were linked with your adaptation to retirement?

   1. What level of control, if any, do you perceive that you had over your decision to retire?
2. How highly did you identify as an athlete during your career?
3. What about social identity and self-identity?
4. Was your retirement voluntary, involuntary or both? To what degree?
5. Were there tertiary contributors? If so, what were these? Where did they come from?

4. What, if any, resources did you use to help you prepare for life after sport?

1. Did you pre-plan for retirement? If so, how?
2. What, if any, social support did you have during the retirement transition? where did this come from?
3. Did you use any other resources to cope with the transition? What were these?

5. Can you describe the actual process you went through in regards to retiring?

1. When/how did you decide to retire?
2. When did you inform people (e.g. coaches/administrators/family) about your decision?
   a) Who did you inform first?
   b) What reactions did people have to your decision?
3. What was the legal process?
4. Did you make a press release?
5. Tell me about your life since retiring
   a) What are you doing now?
   b) Do you still compete in the sport at a lower level?
   c) Are you in contact with any of your former colleagues (e.g. players/coaches)?
   d) Do you compete in any other sports?
   e) Please describe some of the challenges/opportunities (if any) which you have experienced since retiring?
   f) How have you spent the time which you previously spent training/competing?
6. What emotions did you experience as you made the decision to retire, and went through during the retirement transition?

1. Was retirement a positive or negative experience for you? What positive and/or negative experiences did you have?
2. What was your mood like before, during and after your retirement?
3. Did you experience any doubt about your decision?
4. What about friends/family? What was the experience like for them?
5. What impact did retiring have on your life?

7. What, if any, assistance was available to support your transition from competing to retirement?

1. What, if any, career/education assistance was available to you? Where did it come from? Did you use it?
2. What, if any, psychological/emotional assistance was available to you? Where did it come from? Did you use it?
3. How did the assistance you received during your playing career prepare you during the latter stages of your playing career for the transition from competing to retirement?
4. How did/does the assistance you received/receive assist your transition from competing to retirement?
5. How does the quality/quantity of assistance you receive/received compare to what you feel is adequate to support the transition from competing to retirement?
6. What is your opinion regarding the need for assistance programmes to prepare and assist athletes for the transition from competing to retirement?
7. What advice would you offer to current elite athletes in New Zealand regarding the utilisation of available assistance to support their own transition from competing to retirement in the future?

8. What, if any, suggestions do you have regarding assistance offered for future retiring athletes?

9. Is there anything else you would like to add that we may have missed regarding your retirement?
APPENDIX B - INFORMATION SHEET

Retiring athletes: when the spotlight dims.

INFORMATION SHEET

We would like to invite you to take part in this study which aims to explore the perspectives of retired New Zealand athletes regarding the assistance they received from support interventions/programmes offered by sports institutions in New Zealand and if/how this influenced their transition from playing to retirement.

Please read this information sheet carefully before deciding whether or not to participate.

Researcher introduction
I, Andrew Lenton, am a postgraduate student conducting this research as part of my Master of Sport and Exercise degree at Massey University. Dr Ajmol Ali is a Senior Lecturer in the School of Sport and Exercise at Massey University and is a supervisor for the project. Mr Warrick Wood is an Assistant Lecturer in sport psychology in the School of Sport and Exercise at Massey University and is a supervisor for the project.

Why is this research important?
It is imperative for athletes to receive assistance via support interventions/programmes during their transition from elite sport to retirement. Existing literature suggests that athletes may experience challenges (e.g. financial difficulties and/or opportunities (e.g. more family time) following retirement. Many sporting institutions offer athlete support services in preparation for post-sports life. However, currently it is not clear whether or not such programmes offered in New Zealand sufficiently support elite athletes during their transition from competing to retirement. This project will offer insight into the perspectives of retired New Zealand athletes regarding the assistance they received from support interventions/programmes offered by sports institutions in New Zealand and if/how this influenced their transition from playing to retirement. The results from this project will potentially create further opportunities for research related to this topic.

Who are we looking for?
We are looking for male or female participants who retired from playing elite individual or team sport in New Zealand within the last 5 years. You should be aged 18 years or over.

What is going to happen?
Taking part in this study involves attending one interview session of approximately 30-60 minutes duration. You will be asked approximately 4-8 questions and you will be invited to share your experiences, relative to the assistance you received from support interventions/programmes offered by sports institutions during your transition from competing in elite sport to retirement.

You will be informed verbally and in writing, of the aims, procedures and demands and any potential risks and discomfort that the study will entail. If you wish to participate in the study, we will ask you to complete a written consent form after reading this information sheet. Please note that you will still retain the right to withdraw from the study, without reason, at any stage; your current or future relationship with any of the researchers, including academic grades, will not be affected whether or not you choose to participate in this study. Please note that the results of the study will be made available to the School of Sport and Exercise at Massey University.

Risks / Discomforts of the study include:
Although you will not be identified by name at any stage in the research, there is potential that you may be identified by readers of the research. There is potential that you may experience psychological discomfort during the interview process. If you feel unable to continue, you may withdraw from participating in the interview at any time. If you would like to speak to a counsellor regarding your experiences then please feel free to contact the...
following: Lifeline Aotearoa (0800 543 354), Samaritans (04 473 9739), Auckland Therapy – Counselling & Psychotherapy (0800 611 116), Auckland Counselling Network (09 630 3030).

**Time commitments are as follows:**
The interview will take 30-60 minutes of your time.

**Project Procedures and Participant Involvement**
You will be asked to meet for a one-to-one interview, of approximately 30-60 minutes duration, which will be audio-taped, at a pre-determined mutually suitable location. You will be asked to share your experiences in your capacity as a retired elite athlete regarding assistance you received from support interventions/programmes offered by sports institutions during your transition from playing elite sport in New Zealand to retirement.

**Participant’s Rights**
You are under no obligation to accept this invitation. The decision to participate in this study will not in any way affect your current or future relationship with any of the researchers. Should you choose to participate, you have the right to:
- withdraw from the study at any time up until approval of the transcript by the participant following the data collection
- ask any questions about the study at any time during participation
- have your identity remain undisclosed throughout the entire project, including the documentation of the report
- return of data- participants have the right to review the results of the study.

**Confidentiality**
All data collected will be used solely for research purposes and has the possibility of being presented in a professional journal. All personal information will be kept confidential by assigning numbers to each participant. No names will be visible on any papers on which you provide information. All data/information will be dealt with confidentially and will be stored in a secure location for 5 years on the Massey University Albany Campus. After this time it will be disposed of by an appropriate staff member from the School of Sport and Exercise.

**Project Contacts**
If you have any questions regarding this study, please do not hesitate to contact any of the following people for assistance:

Researcher: Andrew Lenton
0211495480; andrewlenton@gmail.com

Supervisor: Dr Ajmol Ali (School of Sport and Exercise, Massey University)
(09) 414-0800 ext. 43414; a.ali@massey.ac.nz

Supervisor: Mr Warrick Wood (School of Sport and Exercise, Massey University)
(09) 414-0800 ext. 43663; W.Wood@massey.ac.nz

**Committee Approval Statement**
This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 14/043. If you have any concerns about the conduct of this research, please contact Dr Andrew Chrystall, Acting Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800 x 43317, email humanethicsnorth@massey.ac.nz.
Retiring athletes: When the spotlight dims.

CONSENT FORM FOR STUDY PARTICIPANTS

This consent form will be held for a minimum period of five (5) years

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I understand that I have the right to withdraw from the study at any time and refuse to answer any question if I experience discomfort in any way.

I agree to provide information to the researcher on the understanding that my name will not be used without my permission. (The information will be used only for this research and publications arising from this research project).

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature: ____________________________________________  Date___________________

Full Name (printed)
APPENDIX D - ETHICS APPROVAL LETTER

14 November 2014

Andrew Lenton
cc: Dr Ajmol Ali
School of Sport & Exercise
Massey University
Albany

Dear Andrew

HUMAN ETHICS APPROVAL APPLICATION – MUHECN 14/043
Retiring Athletes: when the spotlight dims

Thank you for your application. It has been fully considered, and approved by the Massey University Human Ethics Committee: Northern.

Approval is for three years. If this project has not been completed within three years from the date of this letter, a reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

[Signature]

Dr Andrew Chrystall
Acting Chair
Human Ethics Committee: Northern

cc Dr Ajmol Ali

Research Ethics Office
Private Bag 102 904, Auckland, 0745, New Zealand Telephone +64 9 414 0800 ext 43279 humanethicsnorth@massey.ac.nz
APPENDIX E – PORTION OF A TRANSCRIBED INTERVIEW

INTERVIEWER- What was your reason(s) for retiring from elite-level sport?

PARTICIPANT- “It was fatigue that I had...cronic fatigue which kind of went undiagnosed for a while...I had food poisoning a couple of years before I finished my career and it knocked me around quite a bit and I was never really the same rider again after that...and yeh I kind of battled to come back a couple of times and I ended up having 6 months off one year...kind of doctor’s orders to take some time out and re-charge and refresh and I came back and raced in the states my last year and was going really well and then pretty much my body just couldn’t handle it and yeah made the call to give it up soon after that and yeh the mind was willing but the body wasn’t”

INTERVIEWER- When did the thought of retirement start?

PARTICIPANT- “I it was probably the last year that I was competing ...I was pretty motivated at the start of the season so I wasn’t thinking about it at the start of that season but I think as I went back into that hole again of feeling tired and fatigued and not feeling great it kind of dawned on me that yeh this might not be the right thing to be doing so it was probably a few months beforehand (before retiring)”

INTERVIEWER- How voluntary would you say the decision was?

PARTICIPANT- “It’s difficult to say because I could have kept going and could have taken some more time off but I just didn’t have it in me to...I don’t think I wanted it enough at that stage to go again and at that stage I was starting to think of other things in my life that I could do and then I tried to turn it around into a positive and thing this is a chance for me to do something else so I guess in that sense it was more voluntary that involuntary”

INTERVIEWER- How highly did you identify as an athlete during your career?

PARTICIPANT- “It was everything that I focussed on...I guess in saying that I did study as well...but yeh while I was competing I focussed 100 percent on that and did a bit of study on the side”

INTERVIEWER- Did your athletic identity reduce in the later stages of your career?
PARTICIPANT- “No I don’t really think it did until I actually retired because I was so focussed on it then and like I said it was only really a few months before I retired that I kind of started to think about it”

INTERVIEWER- What are your thoughts on athletes trying to reduce their athletic identity gradually while still competing?

PARTICIPANT- “I think not even mentioning retirement to them but making sure they have other interests so making sure they are studying or learning a musical instrument or making sure they don’t lose contact with their friends and things like that so many athletes fall in the trap of…and I think coaches need to be more aware of that of making sure that they encourage well roundedness and that that’s not a bad thing…so making sure that you focus 100 percent on your sport but not forgetting other aspects of your life”

INTERVIEWER- Did you pre-plan for retirement? If so, how?

PARTICIPANT- “Yes, Prime Minister’s Scholarship”

INTERVIEWER- Did you complete that while competing?

PARTICIPANT- “My undergrad I did…my post-grad I did while I was overseas and I finished that the year I retired”

INTERVIEWER- What, if any, social support did you have during the retirement transition? Where did this come from?

PARTICIPANT- “My teammates…we all got pretty close living together so I’m lucky now I still get to see a lot of them…I definitely missed that companionship that you get being part of the team…so it’s replaced in a sense through work and other friends you have and things like that I guess…but it is a little different”

INTERVIEWER- What emotions did you experience as you made the decision to retire, and went through during the retirement transition?

PARTICIPANT- “I think because as an athlete there’s always that dream of going to the Olympics and World Champs and then all of a sudden that’s all gone so I think that was the biggest thing just thinking that gosh that will never happen now”
PARTICIPANT- “I definitely felt flat for a while but then I came back to NZ after a few weeks holiday and then came back and thought what am I going to do now and then decided that I wanted a break from sport completely so I got a part-time job and then I worked on my own business doing some coaching …but it was definitely hard to adjust coming back and getting a job and things like that”

INTERVIEWER- Did the adjustment to retirement get easier over time?

PARTICIPANT- “Yes I mean it definitely got easier and easier to accept but there were definitely times when it was tough…but yes over time you just accept it”

INTERVIEWER- How did it feel watching the sport just after you had retired?

PARTICIPANT- “That’s definitely hard to do like even going and watching nationals was really hard to do but now it’s because it’s so long ago but definitely at the start it was hard to watch and think gosh I could be out there”

INTERVIEWER- How did you replicate the thrill and adrenaline of competing after you retired?

PARTICIPANT- “Yes that’s the hugest thing and that feeling of when you do well it’s so hard to replace so I guess the adrenaline of doing well in a sporting event is one of the hardest things to replicate”

INTERVIEWER- What, if any, assistance was available to support your transition from retiring to retirement?

PARTICIPANT- “So when I competed I was a carded athlete but not right through my…I had an athlete life advisor who was really good who I worked with but then I was decarded when I got sick so I had no support in the last two years or 18 months I had no support so I had no athlete life or sports psych support”

INTERVIEWER- What support did the athlete life advisor give you?

PARTICIPANT- “From what I can tell it was pretty similar to what the athletes get now in terms of helping to decide what to study…when I was studying they helped me to determine my workload and what I could handle and organising scholarships and things like that…I got a scholarship to study for that…pretty limited other than that but we had discussions career wise and that’s why I was studying what I was”
INTERVIEWER- Was it that you were aware of the support? or did they come and tap you on the shoulder to let you know it was there?

PARTICIPANT- “Um a bit of both…they would contact me at certain times of the year when things needed to be done like the applications and things for scholarships but ultimately it’s still up to the athlete to make the call whether you utilise that person or not…when I was de-carded all of the services that I got stopped but now when you’re decarded you get six months sports psych and athlete life and medical if it’s signed off by a medical director…whereas I don’t remember getting continued athlete life support back then”

INTERVIEWER- Were you away of support regarding potential emotional or psychological issues from retiring?

PARTICIPANT- “No..no I can’t recall…and it probably didn’t come up because it was never a factor until I was decarded…but that doesn’t mean it shouldn’t be talked about”

INTERVIEWER- What, if any, suggestions do you have regarding assistance offered to future retiring athletes?

PARTICIPANT- “Well I guess it’s difficult because it depends how you end your career cause like with me being decarded before I wasn’t even eligible for any support so I just dealt with it on my own but for athletes who are still in the system I think that the support is pretty good now in terms of what they actually get. I think people are actually a lot more aware of what’s going on in retirement and having that sport psych support is really good that you can get six months after being decarded or retirement. If decarding and retirement happens at the same time I guess that’s ideal but it doesn’t always work that way but I guess some athletes were decarded and then kept going like me and then you’ve kind of got no support”

INTERVIEWER- do you think every athlete whether carded or decarded should have the same access to support?

PARTICIPANT- “Ideally, but I don’t think the system is set up to allow that like they wouldn’t be able to handle the workload of that I think “