HIGH PERFORMANCE SCHOOL-AGE ATHLETES AT AUSTRALIAN SCHOOLS: A STUDY OF CONFLICTING DEMANDS

Maureen O’Neill BSc. (Hons) Grad DipEd

This thesis is submitted in fulfilment for the degree for Doctor of Philosophy at the University of the Sunshine Coast

Supervisors: Dr Bill Allen and Angela Calder

This qualitative research study explores the various demands of high performance athletes who are still at school. There is an increasing number of such children in Australia (Australian Bureau of Statistics [ABS], 2009), and this means that these young people, under the age of 18, are engaged in two demanding, full-time ‘lives’; that of being a school student and that of being a high level athlete. Three phenomena have resulted in a growing number of high performance school-age athletes. One is the increasing range and number of international sports competitions. The second is the younger age of many competitors, and the third is the increasing requirement in Australian educational jurisdictions for young people to stay at school until they are 17 years old. These high performance school-age athletes have to meet the demands and commitments of being both a full-time high school student and a full-time athlete; in essence, these young high performance athletes at school are trying to fit two lives into one. Thus, the study focuses on two factors; first, how these young people cope with their dual lives, and second, what are the models of schooling that may best support them in their endeavours.

The purpose of this study was to enhance understandings of the way that high performance school-age athletes deal with their situations and predicaments. Using 39 in-depth interviews and document analysis and some field notes, the research sought to give primacy to these young people’s voices and by so doing, to develop theory around the conflicting needs of the high performance school-age athlete. Participants interviewed were athletes (19), parents (10) and teachers (10). Within the group of athletes were two subgroups: those currently at school and those who had been high performance school-age athletes but had now left school. This last group offered reflective perspectives. Using NVivo™ 9.2 to analyse the data, three major themes emerged: ‘impacts of their double life’, ‘who can help them cope’ and ‘what support sources do they need’. The findings highlighted the athletes’ physical and psychological demands and social and family predicaments, such as issues of self-imposed guilt and time-wasting. One significant outcome was the extent to which all female athletes experienced bullying. Parents’ perspectives focused on the home environment of sibling rivalry, disruption and separation of family life. Teachers’ perspectives centred on empathy for such students and the concern of guiding them in the value of education and encourage them to plan beyond short term goals.

Two theoretical constructs pertain to these young people: one is Fine and Sirin’s (2007) idea of the ‘hyphenated being’; the other is Robinson and Aronica’s (2009) concept of
the ‘Element’. Finally, a list of schooling characteristics known as ‘athlete friendly school’ was developed to help these talented individuals to cope better in their demanding lives. These include education, as well as social, physical and psychological needs, and, to a lesser extent, the issue of economic difficulties, when the demand arises.
Style

The style and format contained within this dissertation document is in accordance with the *Publication Manual of the American Psychological Association (6th Edition)* (APA, 2009). There is one modification to the style. Because of their large number, quotations from interview data in the text are indicated by using single spacing and italics, to ensure clarity. The quotations are reproduced verbatim and any grammatical or syntax errors have not been removed or changed; so *sic* will not be used.
Declaration of Originality

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signed and dated: ___________ MO’Neill ____________________

Maureen O’Neill
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Last, but by no means least, I thank my friends elsewhere for their support and encouragement throughout, some of whom have already been named. For any errors or inadequacies that may remain in this work, of course, the responsibility is entirely my own.

In the words of John Burroughs “Leap, and the net will appear”. I took a flying leap of faith, which resulted in a remarkable journey.
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List of Abbreviations

ABS Australian Bureau of Statistics
ACT Australian Capital Territory
ACTIS Australian Capital Territory Institute of Sport
ACE Athlete Career and Education
AEI Australian Education International
AFL Australian Football League
AIS Australian Institute of Sport
ASC Australian Sports Commission
DEEWR Department of Education Employment and Workplace Relations
NACE National Career and Education
NTID National Talent Identification Development
QSA Queensland State Authority Board
Qld Queensland
QAS Queensland Academy of Sport
QSA Queensland Studies Authority
SAS State Academy of Sport
SAIS South Australia Institute of Sport
SIS State Institute of Sport
SA South Australia
TAS Tasmania
TID Talent Identification Development
TIS Tasmanian Institute of Sport
TSP Talent Sport Trial
TAFE Technical and Further Education
VIC Victoria
VIS Victorian Institute of Sport
WA Western Australia
WAIS Western Australia Institute of Sport
Preface

Personal influences led to the genesis of this study. Not only is the researcher an experienced teacher who has taught and guided many school-age athletes through the struggles of combining sport and education attainment, but also a mother. Personal interest in this project began from being a concerned mother of six children, all involved and engaged in various sports at state, national and international levels. Three out of the six children have been identified in the national program known as National Talent Identification Development (NTID) and three have been involved in a State Academy of Sport (SAS) in Queensland, known as Queensland Academy of Sport (QAS). The children’s involvement has been in sports ranging from water polo, kayaking, soccer, rugby league, rugby union, swimming, netball and athletics. Every one of these children has been privileged to have gained scholarships to various schools with different schooling models.

The oldest son was honoured with a prestigious sport scholarship for rugby union and gained entry into University in Queensland, and secured accommodation at a residential college within this university to complete a degree in Physiotherapy. One daughter, while she was still in Year 10, gained selection and competed for Australia in Royal Life Saving at the Commonwealth Games in 2006. Another daughter was identified in water polo at the age of 15. Because of her regional location, she had to travel by train or car-pool with parents to the city two hours away, six days a week, to undertake compulsory attendance at the QAS training sessions and competition events. Another son was selected in a NTID squad in the sport of kayaking and competed at the national championships in December 2009 in the U18 category, for both individual K1 and team events in K2 and K4. As a result of this performance at national level, he gained selection on the 2010 Youth Olympic Sprint Kayaking/Slalom squad. Furthermore, he was selected on the U18 Australian Sprint Kayak team to compete at the European Junior World Regattas in Germany, Poland and Italy in June to July 2010. After returning to Australia, he gained a scholarship and entry into the University of the Sunshine Coast to study one subject, whilst still at school, on the ‘Head Start’ program, based on his academic results in Year 11 science (University of the Sunshine Coast, 2010). His final senior year exit grade gained him entry into University in Queensland, to complete a degree in Physiotherapy. The two youngest children are competing at state and national competitions, in their age level, in the sports of soccer, rugby league, touch, oztag, futsal, surf lifesaving, surfing, kayaking, cross-country and athletics.
Chapter 1 Introduction

This study explores the competing demands on young people who are both high performance athletes yet still at school. Such athletes are likely to be recognisable in international competition sports, such as swimming and gymnastics. However, they are also evident in increasing numbers in other sports across Australia. For example, 400 Australian athletes competed at the 2012 London Olympic Games. Seventeen of these were still at school and were members of the diving, athletics, swimming, synchronised swimming, volleyball, shooting, gymnastic/artistic, cycling/track, canoe/kayak sprint and canoe/kayak slalom teams (Australian Olympic Committee [AOC], 2012). The term high performance school-age athlete is used to define these people.

For such young international competitors, the question arises as to how they cope with the demands of being both a high level sport competitor and with meeting the social and educational demands of being a full-time student at school. To provide focus and relevance to this research, the term school-age athlete will be used throughout this study. An apparent dichotomy exists as these young people, full-time athletes and school students, wrestle with the dilemma of the two full-time lives they are leading. Furthermore, they appear very confident on the outside but, scratch the surface, and what emerges is a deep-seated undercurrent of fear in simply trying to survive and maintain control of their lives.

1.1 Research Question and Guiding Questions

A review of the literature to date has revealed that there are few studies about the needs and problems of the school-based high performance athlete. In particular, research that focuses on athletes who are still at school and combine mainstream educational demands and high performance sport commitments is sparse. Therefore, this research has increasingly focussed on two issues. The first revolves around an exploration of the needs and problems of the high performance athlete who is still at school, and the second concerns what model of schooling might best meet the needs of these young people. As a result the following two research questions emerged:

What are the needs and problems of high performance athletes who are still at school?

What are the characteristics of successful schooling models that best meet the needs of these young people?
For reasons that will be explained in greater detail in Chapter 3, the study has been
designed as one that makes use of qualitative data to answer this question. O’Donoghue
(2007) has recommended that guiding research questions should be developed when planning
such a study, and to that end the following questions were developed:

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<td>What are the goals and expected outcomes that high performance school-age athletes have, and how might these different goals be in conflict?</td>
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<td>What schooling models exist in Australia for high performance school-age athletes?</td>
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<td>What are the experiences of the high performance athlete at school within different schooling models?</td>
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<tr>
<td>How do high performance athletes (who have left school) identify the strengths and weaknesses of the school model they experienced?</td>
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These guiding research questions will be helpful in directing the data collection and analysis,
especially as the study moves towards a better understanding of how different models of
schooling in Australia may support high performance athletes, as they pursue their sporting
ambitions and other educational aims.

1.2 Research Problem

Holliday (2007) provides valuable suggestions about the honesty and awareness the
researcher needs to bring to an appraisal of her position in the context of the research in a
qualitative study. He recommends:

Researchers need to be aware and honest about the influence they bring to their
thematic analysis from their original preoccupations, where the themes themselves,
although emergent, are also influenced by questions or issues that the researcher
brought to the research. It is also important that the researcher should acknowledge
this influence (Holliday, 2007, p. 97).

As a consequence of such experiences in schools and in high performance sport, the
researcher herself was led to question, read and begin investigating issues related to high
performance school-age athletes.

1.2.1 “Making the familiar strange”

In developing the theme of the position of the researcher in qualitative research, in an
earlier text, Holliday (2002) stated:

…like the stranger learning culture, the qualitative researcher as writer should see
every part of what she has done in the field as a fresh phenomenon. The researcher
should take nothing for granted and approach the familiar as strange. In this way the
researcher is setting aside judgements about the expected nature, essence, reality of things that should be applied to the research experience itself (Holliday, 2002, p. 22). In the light of this advice, it is important to explain how the consideration of the research area and topic was further developed. An initial exploration of the literature revealed certain aspects of the problem that a concerned mother had not understood. The underpinning aspect or issue appeared to be that the high performance school-age athlete has to meet the demands and commitments of being both a full-time school student and a high performance athlete. These young people attempt to fit two lives into one. Moreover, high performance school-age athletes face the demands of demonstrating excellence, passion and success in their full-time sport at the highest levels of representation, at national or international levels, whilst still undertaking full-time schooling and completing mainstream educational aims (Ericsson & Ward, 2007).

Another aspect of the problem is in defining the high performance school-age athlete. The description of an athlete as ‘high performance’ relates to what the athlete is actually accomplishing in sport (Chatziefstathiou, 2007). This eventually involves representation at the higher levels of sport, such as national and/or international standard, or being identified in the national program known as National Talent Identification Development (NTID) (Olds, Dollman, & Maher, 2009; Olds et al., 2004; Turner & Robinson, 2001).

There is an increasing number of school-age students in Australia who are identified as high performance athletes, as they engage in national and international competitive sports events (Australian Bureau of Statistics, 2009). For example, in 2009 a total of 52 AIS residential high performance school-age athletes at the Canberra Australian Institute of Sport (AIS) attended the preferred local state government school to complete academic studies (Australian Institute of Sport [AIS], 2010b). Additionally, others at school are age-range athletes or are in the national program known as NTID (Australian Sports Commission [ASC], 2010a). For example, in 2009 out of a total of 573 athletes selected in the 13 branches of NTID throughout Australia, 410 athletes were under the age of 18 (ASC, 2009, p. 15).

Throughout the various jurisdictions in Australia, schools may face problems of when and how to cater for the irregular occurrence of high performance athletes (ASC, 1994, 2010b; Education Department of Victoria, 2006). Consequently, such irregular occurrences of school-age athletes in schools may lend favour to the range of school models in Australia known as sport schools which will be outlined in detail in Chapter 2.
In defining and conceptualising high performance school-age athletes, an understanding of the nature of the principal issues of differing interests and problems such students encounter whilst at school, requires further research. High performance school-age athletes are attempting to complete educational aims and high levels of sport representation simultaneously (Shilbury, Popi, Sotiriadou, Kalliopi, & Green, 2008). High performance athletes at school have four essential points including: talent, ambition, work ethic and time for training (Collier, 2006). The term ‘high performance’ is considered a better description of school-age athletes, as they tend to be ‘experts’ and undertake consistent and reliable performances (Ericsson & Ward, 2007). Further, researchers have shown that such a definition of high performance more aptly identifies these high performance school-age athletes as both ‘physically’ and ‘mentally’ strong (Finney, 2001; Rynne, Mallett, & Tinning, 2006). Other researchers have suggested that high performance athletes could perfect developmental skills, especially life balance, over a ten year period of dedicated practice or sustained focussed effort (Ericsson, Krampe, & Tesch-Römer, 1993; Ericsson & Lehmann, 1996). Furthermore, Ericsson (2006) and Ericsson, Charness and Feltovich (2006) demonstrated that the performance level of each athlete will vary according to the amount of ‘deliberate practice’ they complete. The ten year dedicated practice needs to be focussed and sustained in order to achieve high performance levels (Colvon, 2008). Notwithstanding all such principal issues of varying needs and problems of these young athletes, it appears the schooling of these students poses a number of problems which may have severe short and long term implications (Binder, 2006; Chambliss, 1989).

There were five issues that have been identified which are associated with high performance athletes; specifically time, travel, financial demands, mixing with older adult athletes, and fatigue and recovery.

**Time.** Time is the one major constant relevant to high performance athletes of all age groups and is common to all these individuals (Burden, Tremayne, & Marsh, 2004; Cheng, Marsh, Dowson, & Martin, 2006; Christensen & Sørensen, 2009; Radtke & Coalter, 2007).

In relation to combining athletic training, balancing school work and socialising with friends, there are considerable requirements to organising and managing time effectively. One aspect of Radtke and Coalter’s (2007) research that is relevant to this study has identified difficulties with the organisational and management demands, required of high performance athletes.
Combining high performance sport with education without any special arrangements is a difficult task and may variously lead to poor educational performance, a failure to develop at an appropriate rate in their chosen sport, or even a drop-out from sport (Radtke & Coalter, 2007, p. 1).

This identified difficulty of time allocation and management indicates high performance school-age athletes need to develop exceptional organisational skills at a young age (Penney & Hay, 2008). High performance school-age athletes attempt to accommodate the academic and sporting demands of both distinct and often separate worlds (Burden et al., 2004). Additionally, such talented students require a healthy life balance and routine that “... may boost their sporting performance” (Price, Morrison, & Arnold, 2010, p. 70).

**Travel.** Travel can pose considerable financial and time strains on families. This may be especially heightened for families from rural and remote areas of Australia, when accessing major training and sporting venues, which are invariably found in metropolitan areas. To attend training and competitions in the metropolitan locations, the regional high performance athlete may have to organise to travel many hours over long distances (Fabiansson & Healey, 2007; Spillane, 2009). For these regionally-based athletes, travel compounds both financial and time management problems.

**Financial demands.** There are often financial pressures faced by the parents of a high performance school-age athlete. These pressures relate to the costs associated with travel, registration fees, competing and training (Berger, O’Reilly, Parent, Séguin, & Hernandez, 2008). Many families are likely to find the participation and inclusion of their children, who are high performance school-age athletes, may place a huge financial cost (Berger et al., 2008; Crawford, 2009; Olds et al., 2004; Tikly & Barrett, 2011; Spillane, 2009). Furthermore, Crawford (2009) and Olds et al. (2004) link these financial pressures to the secondary issue of being ‘time-poor’. These authors state that being time poor is a phenomenon for parents with low incomes. They have to work more hours to raise necessary funds, and they have less time to make up the time needed to support their children. The statement does not imply that these lower-income parents are bad managers of time; rather, their need to work longer hours prevents them from being available to drop off, pick up and attend all the training and competitions expected of their school-age athlete. Furthermore, other investigators have found that low economic status can often prevent school-age athletes from maintaining a commitment to high performance sport programs (Broom, 1980; Christensen & Sørensen, 2009).
Mixing with older adult athletes. Mixing with older, adult athletes can be a problem for the athletes still at school. High performance school-age athletes may be expected to train with adult squad members; and, perhaps of greater concern, to mix with them in an adult environment (Mullis, Byno, Shriner, & Mullis, 2009). This has sometimes resulted in exposure to inappropriate use of alcohol and drugs, occurrences of sexual misbehaviour and even sex abuse (Coleman, 2009; Mullis et al., 2009). An unfortunate outcome of such exposure is the younger athlete’s inability to cope with training and school commitments, and with what might be regarded as normal social behaviour of someone at that age (Weiss, 2002; Wilson, Stavros, & Westberg, 2008). Moreover, impressionable high performance school-age athletes may also experience socialisation problems in such adult environments (Starkes & Ericsson, 2003; Fraser, 2008).

Fatigue and recovery. Fatigue is a physical condition that arises from the extended, high-intensity training that is required of high performance athletes, particularly to increase strength and endurance capacities necessary for competition at the highest levels (Sibte, 2003). The physical demands of training may lead to psychological fatigue which will impact severely on the high performance school-age athlete’s ability to cope with the demands of school work. In high performance school-age athletes, fatigue may be due to the “professionalism of young athletes leading to specialisation and year round training” (Griffin, 2008, p. 11).

‘Recovery’ is a general term used to describe the adjustment to workloads after an athlete has been exposed to training or competition (Calder, 1996, 2003, 2007, 2010). The process of recovery in athletes incorporates three adaptation areas that are a response to athletic stressors, for the athlete including physical, neural and psychological factors (Calder, 2010). As suggested by Calder (2010), such adaptation to all three areas for the athlete is referred to as ‘restoration and regeneration’. Sibte (2003) argues that “recovery is often an area that is overlooked for many athletes, particularly young athletes who are trying to juggle school, training and competition” (p. 3).

Often the school-age athlete attempts to combine the training commitments of not only their selected sport but also attempt to play for their school and club. As a result, all additional training sessions and workloads can lead to increased fatigue and inadequate recovery. Furthermore, a failure by the athlete to incorporate the required rest periods that
their bodies need to recover could lead to, and also contribute to, overuse and chronic injuries.

The preceding section has served to show how an exploration of literature has broadened the understanding of the problem and shifted the research focus from that of a concerned mother, to someone prepared to investigate the research problem from a more objective perspective. Holliday’s (2002, p. 22) advice about making “the familiar strange” has been useful in that it has sharpened both the researcher’s understanding of the problem and directed the research more carefully.

1.3 Aims

This study had two major, related aims. The first was to find out what needs and problems high performance school-age athletes themselves identify, when they combine high level sport and academic endeavours. The second was to examine and propose some characteristics of schooling in Australia that may best support the high performance athlete while still at school.

Developing a list of characteristics, may help to create the conditions to support the high performance school-age athletes, in pursuing their sporting ambitions, concomitantly with other educational aims. To do this, this study determined what the needs of high performance school-age athletes might be and to identify relationships and potential conflicts arising from these needs. The researcher sought to do this by initially collecting data from athletes themselves, thereby giving them voice to outline their problems.

The study explored how different models of schooling may help, or hinder, these athletes in addressing the difficulties and problems from their perspective, based on what they confront in attempting to attain both sporting and educational ambitions. Again, data for this came in part from the athletes themselves, as they were given an opportunity to reveal what aspects of schooling they found supportive or obstructive in their school lives.

Furthermore, this study examined how high performance school-age athletes had understood their schooling, by attempting to find out how such athletes responded to the school they attended. This involved the researcher exploring athlete memories, feelings and experiences about the schools they attended.

An analysis of the available Australian schooling models formed the basis of this investigation, through document analysis, observation and interviews with stakeholders.
Schooling models examined in this study included government and non-government schools, in-school programs of excellence, scholarship, leadership and specialisation programs, sport high schools and colleges, specialist high schools and specific pathway high schools. The external sport programs in Australia include the Australian Institute of Sport (AIS), State Institutes and Academies of Sport (SIS/SAS) such as Queensland Academy of Sport (QAS), Regional Academies and National Sporting Organisation (NSO) Academies. This allowed the researcher to enquire about aspects in school organisations and curriculum offerings in schooling models, which consider the needs and problems of high performance school-age athletes.

There is a gap in the literature concerning the athlete’s own perspective of what the needs and problems may be in attaining their dual endeavours simultaneously. This research sought in the final analysis to generate theoretical perspectives about the conflicting needs of these students and the various schooling models they are currently accessing throughout Australia.

The findings of this study may offer insights to educational stakeholders, concerning schools, curricula and assessment, in relation to high performance school-age athletes and may identify any specific needs and problems of these athletes. This research was able to identify the key characteristics of successful school programs that cater for the high performance school-age athlete. These key characteristics may become the benchmarks for successful curriculum, pastoral care, life balance and transition into life after sport for these young people.

1.4 Rationale

There appears to be a shortage of literature on the problems and needs of the high performance school-age athletes, from the perspective of the athlete. This provides value in this qualitative research where the voice of the athlete will rise to the surface.

The lack of literature may be reflected in an apparent dearth of policies which could help the high performance school-age athlete. These limited policies include the opening of the first New South Wales (NSW) sport high school in 1991 and the Victorian State Education Jurisdiction of Australia nutritional ‘recovery bar’ report (Moneghetti, 1993; NSW Government, 2010; Westfields Sports, 2010).
Another reason for undertaking research about any difficulties that such athletes may encounter in adult environments has emerged in media articles (Coleman, 2009; Mullis et al., 2009; Wilson et al., 2008). Misbehaviours, which are reported in these disturbing media articles, seem to emerge whilst high performance school-age athletes are in an adult environment. In addition, as suggested by Mullis et al. (2009), this misbehaviour may have been due to learning from poor role models in such environments. One problem with socially inexperienced young people being placed in adult environments appears to be that the young athletes can physically perform at high level but emotionally struggle to cope. For example, incidents of bad social behaviour associated with the misuse of alcohol have occurred when young national rugby league players are exposed to adult environments (Coleman, 2009).

Furthermore, this research provides findings that may be incorporated into curriculum for high performance school-age athletes, in various jurisdictions of education throughout Australia. In addition, this study’s importance may be heightened by its ability to contribute to original and substantive knowledge pertaining to the conflicting needs and problems of the high performance school-age athlete. Consequently, this may inform policy and practice at various educational jurisdictions throughout Australia.

There is evidence of policy responses to the needs of these students already, such as the Queensland Studies Authority [QSA] (2005) instituting a three-year program in Year 11 and 12, known as Variable Progress Rate (VPR). This program provides opportunity for the student’s senior years to be extended and completed over 3 years instead of a 2 year period. High performance school-age athletes that opt for this variable progress rate of study in their senior years are then able to schedule their training and competitions of high performance sport around the demands of school work and final senior exams. It is also possible for the young athlete to complete a ‘Head Start’ course at university in these years so they are not delayed in their progression at tertiary level. Currently, at the University of Sunshine Coast students in years 11 and 12 are offered the opportunity of completing certain first year university courses whilst still at school (University of the Sunshine Coast [USC], 2011). The Head Start courses allow all students, who excel in subjects at school, to start studying at the university. For example, there is evidence of high performance sport students from the local schools, who are on a VPR program at school, gaining entry into the University of the Sunshine Coast to complete one course in a sport degree (USC, 2011).

Furthermore, as QSA (2010) suggests it is possible for only five subjects to be studied instead of six, which provides opportunity for the young athlete to have a flexible periods to
concentrate on the five subjects, to complete their final senior exit grade (QSA, 2010). Alternatively, some school-age athletes could elect to just complete core subjects and combine a certificate in sport and recreation at a registered tertiary organisation which is aligned with their school. This would allow such students to continue in high levels of high performance sport; and, when they are nearing the end of their sport career, proceed to a university that offers a pathway of entry into a university degree (University of the Sunshine Coast, 2010) and/or TAFE tertiary pathways (Griffith University, 2012). As supported by one aspect of Radtke and Coalter (2007), research relevant to this study about the high performance school-age athlete, is the examination of greater “flexible curriculum approaches” (Radtke & Coalter, 2007, p. 1).

To date, it would appear that high performance school-age athletes face a number of difficulties, including time allocation constraints, demands of the school curriculum, fatigue and recovery, and inequities. An investigation of these difficulties, together with an exploration into the range of school models across Australia, helped to ascertain how these students may attain both their sporting and educational goals. Furthermore, this study may provide guidelines that can be incorporated into curriculum for high performance school-age athletes, in various jurisdictions of education throughout Australia. Also, it may offer significant information and guidelines on the nature and quality of the support that may be given to athletes, who combine sporting and educational ambitions.

Overall, it is hoped that this study provides knowledge on the nature and quality of the help, which may be given to athletes, who combine sporting and educational ambitions. Furthermore, the acquired information about the necessary requirements for schooling characteristics to help young people combine both sport and education may transfer to multi-discipline areas for all young people, undertaking multiple endeavours whilst still at school.

1.5 Outcomes and the Significance of the Study

The premise of this study is that existing knowledge, concerning the problems and difficulties of the high performance school-age athlete, is inadequate. This research intends to make an original and substantive contribution to this knowledge. A focus on the school-age student athlete will facilitate the acquisition of relevant data. The intended outcome of this study is to develop features of better guidelines/benchmarks to inform school and education institutions. Such guidelines propose the characteristics of what might be termed an ‘athlete friendly’ school. In this theoretical template it is not expected to describe an ideal institution,
but rather to develop a comprehensive and adaptable list of characteristics that may be applicable in a range of schools. Such template will attempt to include the positive components of a school or learning environment supportive of high performance school-age athletes.

This study’s uniqueness lies in its approach to beginning the research from the perspective of the high performance school-age athlete. Although a large number of studies have identified the problems of the high performance athlete there are two major shortcomings in this research. One is that many of the problems described do not focus on the young, school-age athlete. The second is that the research invariably begins with one problem and looks at its impact on athletes. The absence of the athlete’s perspective is somewhat problematic; as such studies do not portray the athlete’s viewpoint of the difficulties in combining dual endeavours and do not connect with the athlete to being at school.

A recognised difficulty for most schools in Australia is the small number and irregular enrolments of high performance sports students throughout all Australian schools. Therefore, the significance of this study may well lie in helping schools to make the necessary, sustainable, economically viable adjustments to their programs, to meet the needs of such athletes, as and when they appear at a school. To that end, the study intends to be, as Dinham (2008) demands, “rigorous, readable and relevant” (p. xi). The last of these is particularly significant with regard to the outcomes of the study.

Additionally, this research may help achieve the utilitarian demands of schooling which, for the young athlete, is the successful attainment of a high enough standard to go on to university or other tertiary institution such as TAFE, to gain a job (Griffith University, 2012). Consequently, as Duda (2007) and Nicholls (1989) have theorised, there may need to be a balance in the relationship between the demands of sport, the values and development of social responsibility in high performance athletes at school, and achieving the educational qualifications necessary for entry into higher education or employment at the end of the sporting career. In addition to examining this issue, this research will inform and provide a considerable amount of important information about these young people for those that are teaching, supporting and caring for them. Those that will benefit from this study are: athletes themselves, schools, parents, coaches and society at large. Secondly, the researcher will seek to publish the findings of this study in articles in a variety of academic journals, to contribute to Australian Sports Commission [ASC], Coach Publications, and Physical Education publications, and to present at conferences including an international conference. Finally, the
researcher hopes to write a book on the demands high performance school-age athletes confront in combining high level sport and education concomitantly.

1.6 Overview of the Remainder of the Thesis

The research will be outlined in the chapters that follow. Chapter 2 contains the literature review and presents a critical review of both empirical and contextual literature encompassing discussion around six major areas of the study. The definitions and demographics of the high performance school-age athlete are first presented. Difficulties of time allocation and constraints, handling the demands of school and training, fatigue and recovery, and inequity faced by these students, are then examined. Next, school models and external sport programs that were used in this study and may cater for high performance school-age athletes are outlined. Sociological and psychological perspectives pertinent to the adolescent are also considered. Subsequently, aspects in regard to curriculum that the literature states may be important to high performance school-age athletes in school organisations and curriculum are considered. Finally, examples of overseas schooling examples are analysed to provide comparisons and contrast with Australian school models.

Chapter 3 examines the methodology used to answer/address the research question concerning the problem and issues high level competitors encounter when attempting to combine both endeavours. This chapter discusses the theoretical framework and methods adopted in this study. Furthermore, sections in this chapter outlined the design, collection and analysis of the data. Additionally, it delineates the manner in which constant comparison and interrogation of data occurred in this project.

Chapter 4 outlines the data analysis by use of the NVivo™ version 9.2 in this study. It is the ‘how to’ and then ‘conceptual’ way to build the study, using this qualitative tool. In so doing, this detailed chapter explains the use of certain ‘tools’ out of the ‘tool kit’ of this program. The content in this chapter is very contextual and descriptive. A number of screenshots have been directly exported from the NVivo project to provide clarification and explanation of the four stages of data analysis used in this study¹.

¹A Power Point™ of screenshots from NVivo in Chapter 4 can be electronically accessed by opening Appendix H on CD Rom attached at the back of this thesis.
Chapter 5 presents the data findings of the 19 athlete participants. In this section, the athlete’s viewpoint of the difficulties in combining dual endeavours whilst at school will be explored. Furthermore, the commonality of issues among the athletes will be outlined, thereby giving rise to the ‘voice’ of the athlete. Contrasts between current school-age athletes to adult athletes no longer in the school system, who had a more reflective perspective, are explored, thereby deriving a thoughtful perspective of school experiences.

Chapter 6 presents the perspective of the ‘significant adults’, comprising parents and teachers of high performance school-age athletes. These important adults are arguably the main support people for such young athletes who have viewpoints on the important demands in the life of these high performance school-age athletes (Hemery, 1991). In this chapter, the meaning the ten parents and ten teachers place on the schooling of such young athletes are analysed.

Chapter 7 makes meaning of the findings that were reported in Chapters 5 and 6, and discusses how school-age, high performance athletes, supported by their parents and teachers, cope with the demands that they face when trying to juggle the full-time commitments of high level sport and a full-time school program. Next, unexpected and expected issues that these young people perceive as significant are outlined. Here, the voice of the athlete comes to the foreground. Two theoretical constructs of Fine and Sirin (2007) and Robinson and Aronica (2009) are related to the experiences of the high performance school-age athlete. Finally, the four way communication channel required between athlete, parents, school and teachers is highlighted in schooling characteristics known as ‘athlete friendly school’ that comprises the five themes of education, as well as, social, physical, psychological and economic issues which could provide guidelines and benchmarks for schools that have high performance school-age athletes enrolled.

Chapter 8 concludes the thesis by detailing the, limitations, future research possibilities and implications that have been unearthed by this investigation.
Chapter 2 Literature Review

This chapter is concerned with the literature that directed the progress of the study to date. The literature reviewed has been instructive because, on the one hand; it has provided much useful information; but, on the other, a gap in the research that justifies the empirical research has been revealed. Much of the empirical literature available focuses on individual traits or problems as they applied to the athlete; what is clearly missing is literature that makes its starting point the perspective of the high performance school-age athletes and their understandings of what problems, if any, might exist. Notwithstanding the value of the literature that has been useful in informing the study, by suggesting avenues for data collection and potential themes for data analysis, the literature examined to date has confirmed the need for research that focuses on the needs and problems of the high performance school-age athlete from the perspective of the athlete.

Organising the literature into six major themes helped maximise an understanding of the knowledge that the literature provided. The first theme relates to a definition of high performance school-age athletes, identifying some of the features about the broad cohort and justifying the need to find out more about these athletes. The second theme is found in the literature that informs this study, of the range and types of difficulties or problems that these young people might face. The literature explored in this area is largely based on empirical research; however, an interesting feature is that the research in these sources tends to be focussed on one aspect of the athlete, and is rarely confined to the school-aged athlete per se. The third theme in the literature is an exploration of the models of schooling that are available to the high performance school-age athlete in Australia. The literature here is far more descriptive and contextual. The fourth theme is derived from the literature concerning the sociological and psychological perspectives of sport. This section outlines characteristics of schooling which might be important to the young people looking at pursuing both sport and academic endeavours whilst still at school. The fifth theme explores aspects of school organisation and curriculum offerings. In the sixth theme the literature links schooling and high performance athletes in jurisdictions outside Australia.

Each of these six areas of the literature will be considered, analysed and critically evaluated. The chapter outline follows the development of these six themes before concluding with an overall assessment of the value of the literature to the study.
2.1 Definition and Demographics

This section is concerned with the literature surrounding definitions, terminology and demographics of the athletes. The limited literature referred to in Chapter 1 explained that the term ‘high performance’ related to the level of performance of an athlete (Olds et al., 2009). For the purpose of this study ‘high performance’ is the most appropriate term as no pejorative is implied when using this term in reference to school-age athletes. However, throughout this search of the literature it was apparent Australian athletes can be referred to not only as high performance but also ‘elite’ and ‘gifted’. Thus, there appears to be slippage between, or more informal exchange of, such terms.

‘Elite’ has been a longstanding term used in Australia, particularly during the 1980s and 1990s to describe athletes engaged in high level sporting competition (Australian Sports Commission [ASC], 2010e). It was considered to represent more than just performance, perhaps even symbolising negative social emotive connotations (Adair & Vamplew, 1997; Cashman, 1995; Clough & Trail, 1989; Elias, 1978, Fraser, Fogarty & Albion, 2009a, 2009b). The term ‘elite athlete’ is still used in some reports and documents in the literature emanating from the Australian Sports Commission (ASC) and Australian Institute of Sport (AIS) databases (Australian Institute of Sport [AIS], 2011; Australian Sports Commission [ASC], 2011a). For example, a search across the websites of AIS (2011a, 2011b) and ASC (2011a) revealed there were 841 exactly matching results to the term ‘elite athletes’. Furthermore, from a search of the ASC website, ‘elite’ is also currently used in the name of a significant national sporting committee known as National Elite Sports Council (NESC). Formed in 1993, NESC is Australia’s national network of sports institutes and academies (Australian Government, 2011).

The Western Australian Institute of Sport (WAIS) (2011) refers to these high performing athletes as ‘gifted’. For example, when searching the website of WAIS (2011), it resulted in ten completely matched results of athletes termed ‘gifted’ (WAIS, 2011). Colvon (2008) suggests the term ‘gifted’ tends to imply the belief that such athletes are blessed with talent and enjoy an elevated status by ‘birth right’. Furthermore, an aspect of Colvon’s (2008) and Syed’s (2011) research that is relevant to this study, is that school-age athletes are recognised as having to undertake a huge amount of dedicated training and the term ‘gifted’ may suggest that they have an inherited advantage over others. As stated by Syed (2011), of particular importance to
these athletes, there is “myth in talent and power in practice” (p.1). Hence, the term ‘gifted athlete’ is deemed inappropriate for this study as it suggests negative connotations.

Despite references made earlier, the term ‘high performance’ is deemed by the ASC to be the most appropriate (of the three) description of the endeavours of athletes and coaches (ASC, 2010c, 2010f). In a search of the AIS (2011b) and ASC (2010f) websites, 968 exactly matched results of the term ‘high performance’ athletes ensued. However, there appears to have been no formal document stating that the classification of athletes should be termed ‘high performance’ rather than other descriptive terms. Correspondence from a coach operating at the highest levels of sport in Australia confirms that this term is in the official discourse (Calder, personal communication, February 9, 2011). For the purpose of this study, the term high performance school-age athlete will be the select term used to provide focus and relevance to this research.

Harreveld and Singh (2006) suggest an increased number of school-age athletes remain at school until at least the age of 17 years, due to the inclination among state governments across Australia to keep young people in school until this age. This growing phenomenon has been affected by the mandatory policy of extending the ‘compulsory participation phase’ of schooling. This compulsory requirement permits continued engagement in education or training of all students until they have completed a “Senior Certificate or a Certificate III or IV vocational qualification, or until they have turned 17 years of age” (Harreveld & Singh, 2006, p. 3).

Researchers have indicated that high performance school-age athletes who have reached ‘expert’ proficiency levels tend to have talent, ambition and a strong work ethic as well as the capacity to organise time for training (Baker, Cote, & Abernethy, 2003; Barnett, 2009; Collier, 2006; Ericsson, 2006; Ericsson & Charness, 1994; Ericsson, Charness & Feltovich, 2006; Ericsson, Krampe & Tesch-Römer, 1993; Ericsson & Lehmann, 1996; Syed, 2011). However, such talented athletes encounter difficulties in combining their twin endeavours of high performance sport and schooling (Burden et al., 2004). In this way, as suggested by Walshaw (2010) and Campion (2011a), the high performance athlete at school is attempting to achieve a dual life. Furthermore, Campion (2011b) writes about the gruelling and unrelenting training schedule a high performance school-age youth attempts when trying to “balance up to 23 hours of training in the week as well as attempting to complete the school day” (p.53).
Included in high performance school-age athletes are three subsets of athletes. The first group comprises the cohort of the school-age athletes who are already competing with adults nationally and internationally, most likely found in early specialisation sports such as swimming and gymnastics. The second group are age level athletes who are representing their state or country but only at their own age level. Examples of these abound in a myriad of sports (Bailey, 2006). The third group are school-age athletes who have been selected for later competition at international level. This group constitute athletes within the National Talent Identification Development (NTID) program operated by the ASC.

Talent Identification Development (TID) programs have been established in Australia since 1990 to provide a link and pathway for athletes to improve and enhance high level representative performance in sport. The national program became known as the NTID in 2006 with the purpose of assisting nationally to develop their performances. The Australian Government aim was to invest in the “enhanced identification and development of the next generation of high performance athletes” (ASC, 2009, p. 1). State and regional offshoots are linked to the national programs so that, currently, 13 NTID high performance programs operate throughout all jurisdictions of Australia (ASC, 2009).

These high performance school-age athletes are selected through high performance testing in 13 NTID sports including athletics, badminton, beach volleyball, boxing, canoeing, cycling, diving, hockey, judo, rowing, shooting, skeleton and triathlon (ASC, 2009, p.14). Once selected, NTID athletes are provided with support in the form of specialist coaches, equipment and facilities. For example, in 2009 “573 high performance athletes were selected for the 13 NTID sports; 410 or 72% of these athletes were under the age of 18” (ASC, 2009, p. 15). This age distribution is a conservative representation of the number of high performance school-age athletes who were identified into NTID programs and were “also concomitantly attempting to complete their educational commitments” (Australian Olympic Committee, 2009, p. 4).

An analysis of the data available in the literature revealed the age distribution of all 13 NTID sports throughout Australia and found that 36% of all NTID athletes fall into the Under 16 year old age category. Figure 2.1 illustrates the 13 sports played by these young high performance school-age athletes and the number of athletes in each sport.
Figure 2.1 Under 16 year athletes in NTID sports throughout Australia Sourced from ASC (2009) National Talent Identification and Development in three: A three year snapshot of the NTID program 2006-2007 to 2008-2009 (ASC, 2009, p16).

The 2012 London Olympic Games occurred at the end of this empirical study. Interestingly, statistics of school-age athletes’ inclusion on the 2012 Australian Olympic team highlights the increasing trend of high performance athletes being full-time athletes and still at school (Figures 2.2).

Figure 2.2

Figure 2.2 Age and sport distribution of school-age athletes on the 2012 Australian Olympic team. Adapted from AOC (2012) School-age athletes on the 2012 Australian Olympic team.

Referring to Figure 2.2, 17 athletes on the 2012 Australian Olympic team were school-age (aged 16-18 years) (AOC, 2012). These athletes were training and competing for the 2012 London Olympic Games whilst still at school.
The literature explored in this section indicates that the best term to apply to athletes at school for the purpose of this study is ‘high performance school-age athletes’. To provide relevance to this research such athletes still at school will be referred to as ‘student-athletes’. This definition is based purely on performance rather than any social status construct. Furthermore, the term ‘high performance school-age athlete’ incorporates all three subsets. The first group comprises athletes at school who are already engaging in sport at international level. The second group includes athletes who are engaged in national age-level competitions representing their state in a myriad of sports. The third group of athletes represents those engaged in NTID programs.

2.2 Difficulties and Problems Faced by the High Performance Athlete at School

A tenet underpinning the design of this study was that these young people face a number of problems when combining the endeavours of being a full-time school student and a full-time athlete. Potential conflicting demands of being both are expected to develop. The literature reviewed in the section that follows is based on research that focuses on the problems that high performance athletes may face. What became clear from the review is that the literature focuses on a singular problem approach, rather than from an integration of all the problems that a high performance school-age athlete may face.

2.2.1 Time allocation and management

Burden et al. (2004), Christensen and Sørensen (2009) and Radtke and Coalter (2007) found that a major difficulty confronting high performance school-age athletes relates to time allocation and management issues. High performance athletes at school have very time consuming training programs that tend to impact upon school life, socialising with school peers and even the decision to continue in high performance sport. Furthermore, Penney (2000) states that high performance school-age athletes need to address re-arranging their time schedules and actions. High performance school-age athletes dedicate a number of hours each day to training of high intensity or voluminous training. Therefore, these athletes need high level, mature organisational and management skills in order to allocate time for their educational and sport commitments (Penney & Hay, 2008; Penney & Houlihan, 2001; Price et al., 2010). Often by the time the mainstream student arrives at school, the high
performance school-age athlete has completed hours of gruelling physical training (Khan, 2009). Time may be one of the crucial and common factors for such athletes in dictating the amount of dedication, effort and commitment in their chosen sport (Christensen & Sørensen, 2009; Ericsson & Ward, 2007).

Price et al. (2010) in a study of 143 AIS athletes found that 72% of athletes surveyed who were working or studying in higher education believed incorporation of extra-curricular activities “aided their sporting performance to gain maximum benefits from their physical training when all other facets of their life are healthy” (p. 69). Similarly, other researchers have argued that allocating time and actively supporting athletes to pursue and value activities and interests outside of their sporting life helped them with their sense of life balance (Fraser, Fogarty, & Albion, 2009a, 2009b; McKenzie, Hodge, & Caranachan, 2003; Hodge, Kozub, Dixson, Moore & Kambon, 2005).

Further, others such as Berger, O’Reilly, Parent, Séguin and Hernandez (2008), Olds et al. (2004) and Spillane (2009) suggest that school-age athletes from ‘time poor’ families face issues in supporting their high performance school-age athlete engagement in high levels of sport. Such families usually find the participation and inclusion of their high performance school-age athlete may involve prioritisation of time management and allocation due to working commitments.

Time may be the over-riding problem for these athletes because so many of their demands impact on the limited number of hours in a day. However, as Burden et al. (2004), Finney (2001), Gurkan(2009), Helsen, Starkes and Van Winckel (1998), McKenzie et al. (2003), Palmer (2010), Radtke and Coalter (2007) and Walshaw (2010) suggest there are other problems facing these athletes, to which the following sections now turn.

2.2.2 Handling the demands of school and training

The high performance school-age athlete is attempting to address the demands of school and sport commitments and each of these may be full-time demands on a young person’s life (Burden et al., 2004). Hemery (1991) suggests that to pursue excellence it may be necessary for the high performance school-age athlete to make it “their top priority” (p.142).

Investigators who researched demands of the school curriculum have shown that talented young athletes at secondary schools are “inevitably confronted with difficult
and often complex issues relating to achieving an appropriate balance between the demands of education and the time commitment required to achieve and maintain top-level performance” (Radtke & Coalter, 2007, p. 1).

Consequently, the problem of combining sport commitments with education can result in the high performance school-age athlete missing crucial class time and might lead to poor educational performance, a failure to develop at an appropriate rate in their chosen sport and some athletes dropping out of sport (Radtke & Coalter, 2007).

Burden et al. (2004), Finney (2001), Gurkan (2009), Helsen, Starkes and Van Winckel (1998), and McKenzie et al. (2003) have shown that the demands placed on young people who are both high performance athletes and still at school are considerable. All suggest that these athletes could be offered options of flexibility in their schooling that may help the school-age high performance athletes manage the demands of both education and high performance commitments. Furthermore, Christensen and Sørensen (2009) in a study of young, school-age Danish high performance football players found that the demands placed on high performance football had a negative impact on both their schooling progression and potential. As a solution to this problem Price et al. (2010), in another study, argue that the ability to take time off certain subject electives in school may permit relaxation with family and friends to provide life balance.

One response to the problem of handling the demands of school and training is through the concept of Variable Progress Rate (VPR). In some Australian states, such as Queensland, options of distance learning and/or delayed graduation, as in the case of, VPR, are offered to students (Department of Education, Queensland, 1999). VPR spreads the completion of senior years over three years. High performance school-age athletes can complete nominated subjects whilst still maintaining their high performance levels in their selected sport (University of the Sunshine Coast, 2010). Similarly, for the school-age AIS athletes the preferred school of Lake Ginninderra College offers such athletes the opportunity to complete Years 11 and 12, spread over a, three year period (Department of Education, ACT, 2010b).

Researchers have indicated that parents of high performance school-age athletes should discuss with schools the ways their high performing sports child can achieve academically (Queensland Studies Authority, 2005). The learning environment and subjects offered for high performance school-age athletes may be tailored to the needs of such students (Collier, 2006). For example, some parents may consider the option of
‘home schooling’ also known as ‘home education’ as an alternative approach of schooling for their high performance school-age athletes (Queensland Government, 2012).

The term ‘home schooling’ may conjure the idea that this schooling approach may only be a ‘school at home’ and learning only in the home. The more modern term ‘home education’ incorporates a broader concept of educational experiences based in and beyond the home. Both terms are interchangeable. This system allows adapting or developing the program to their individual needs. Queensland Government (2012a) provides home education programs that allow the versatility for the child and parent to access “a wide range of community resources such as local libraries, museums, sporting clubs, Scouts and other facilities which offer learning opportunities” (Queensland Government, 2012a, p.1). Additionally, this ‘alternate’ schooling provides the student and parent with all required units of work. Scheduled times for completion of all subject units are provided allowing the child and parent to complete the necessary school modules in a ‘no-stress’ environment. Currently, as the Queensland Government (2012a) suggests, home schooling is being trialled for professional circuit surf board riders’ as the nature of their sport surfing is very dependent upon the weather and tide, thereby allowing the surfer to ride the waves when the ‘surf is up’ and when the swell is not appropriate to complete all units of scheduled work in their own home. Also all high performance surfers are linked into all local community services such as gym facilities, local surf board riders association for competition news and local library access for studying purposes. Another such example is the sport of Tennis where a non-government school on the Sunshine Coast region is trialling ‘home education’ for their high performance school-age tennis players (Queensland Government, 2012a). This trial program provides for the athlete to complete all core subjects at home and use the school’s tennis facilities and gym, plus club and accredited tennis coaches. Athletes are additionally linked into the local and state Tennis Associations which keeps them updated with all competition details (Sunshine Coast Grammar School, 2012).

The approach to distance education is slightly different to that of ‘home education’. There are state schools and accredited non-state schools of distance education throughout Australia. As the Queensland Government (2012b) recommends, athletes who elect to complete their senior years of study by this approach, must have their parent enrol them in a school of distance education, thus a study program is provided by that school for the child. This system does provide teachers on line to
monitor the child’s learning. Additionally, just as in mainstream schooling, the teacher from the distance education school completes school reports for the participants of the distance education program. The biggest difference is that the parent is the supervisor or home tutor to the child within the home. It is also possible with distance education for the student to do core subjects whilst at school and the remaining subjects with distance education school. For example, one government school in Queensland that is offering high performance athletes the opportunity to combine variable progress rate (VPR) over three years plus the option of distance education in the third year. In this way, the athletes attend school for the first two years and in the last year complete the remaining subjects for the Senior Certificate with the accredited distance education state school (Kawana Waters State College, 2012).

One such program that is tailored to address identified high performance athletes’ needs is the National Athlete Career and Education (NACE) program (ASC, 2010d; Dagley, 2004). The Athlete Career and Education (ACE) program was initially developed in Australia in 1991 to mentor athletes that had been identified and drafted into national levels of sport (Australian Institute of Sport, 1996). The program was initially established as the national ACE program in partnership with State Institutes and Academies of Sport, entering into the National Athlete Career and Education (NACE) program in 2006. The NACE program provides the mentoring, links and pathways to both national and international levels for such athletes (Athlete Career & Education, 2009). For example, in 2010, the NACE program organised and supported 3000 Australian high performance athletes (ASC, 2010a). However, it appears a very limited number of school-age athletes receive support from the NACE program as only a few scholarships are available to such athletes (ASC, 2010a).

Additionally, as suggested by Calder (personal communication, March 7, 2012) during the lead up to the 2000 Sydney Olympic Games, all high performance school-age athletes were provided with a personalised academic program and a one-on-one tutor to assist their academic studies. As recalled by Calder the ‘study hall model’ functioned as follows:

The AIS would engage tutors to be available in a ‘hall’/ room between 7-9 pm Monday to Thursday evening - for all the school-age athletes at the AIS. There was no Study Hall on Friday or at weekends. These tutors were suitably experienced adults who could provide help with any subjects that the athletes were doing as homework or assignments for school. Study Hall was compulsory.
for all the school age athletes - and this extra support for schoolwork helped massively to keep the athletes on track with their school work commitments. Of course students could do extra work outside these times - in their own room in the residential area they lived in at the AIS. AIS Houseparents or any tutors who were also residential would be available on a more casual basis outside the Study hall times for extra help. The AIS had residential Houseparents for residential blocks, and these also had some residential tutors - often PhD students attached to one of the Sport Science areas (Calder, personal communication, March 7, 2012).

Moreover, at the AIS the gymnastic program also had an academic model somewhat similar to the AIS study hall model. The Gymnastics Program had a “different hall with separate tutor as the athlete’s age-ranges spanned from primary school to senior High School” (Calder, personal communication, March 7, 2012).

Another scheme for high performance school-age athletes piloted by Gymnastics Australia was a scheme known as ‘Gymnastic FOCUS School’ (McCharles, 1993). As suggested by McCharles (1993) this scheme adopted a government primary school and then provided two additional teachers, a Physical Education (P.E.) specialist and a teacher for gymnasts from the state academy. Not only did all children benefit from this scheme by acquiring a strong grounding in gymnastics, but it also allowed those top identified state academy gymnasts in the school to be allocated to the one teacher with empathy for this scheme. The teacher for the Gym focus form class was handpicked which provided a happy, relaxed and caring atmosphere for students. Furthermore, as the gym was located close to the school, the high performance school-age gymnasts had flexible school hours to fit into their training commitments. However, some problems arose from other students and teachers in the school over the issue of the identified high performance gymnast class not commencing till 10.00am in the school day.

2.2.3 Fatigue and recovery

Anderson and Butzin (1974) and Burden et al. (2004) suggest fatigue resulting from training and competition demands may temper the athlete’s motivation to engage in a high level of academic undertaking. Walshaw (2010) has provided evidence of fatigue in high performance school-age swimmers preparing for the Delhi 2010 Commonwealth Games. In this article, Walshaw graphically illustrated the gruelling early morning training sessions required by these athletes. Quite frequently, these school-age high performance swimmers would fall asleep in class during the school day. Additionally, Campion (2011b) writes of the challenges of a gruelling training schedule for a 17 year old high performance school-age ocean paddle boarder. This
young athlete was challenged both mentally and physically in preparing for the 52km race. Furthermore, Campion (2011b) described how this young person was required to train at least 23 hours per week to be considered competitive enough to compete at this international level with adult paddle borders. The one crucial ingredient Campion notes about the strenuous training schedule of this young person was that she always rested on a Sunday to avoid fatigue and give her body the necessary time to recover. Similarly, Griffin (2008) in a study of 9th and 12th graders in Canadian sport schools, found evidence that the stress of fatigue influenced students to drop out of the sport altogether. Marks (2011) describe the psychological and physical fatigue athletes’ encounter from high level sport. Physically the tiredness is a result of the intensive physicality of the training sessions; mentally it is the prolonged muscular pain that induces psychological fatigue.

The nutritional demands on exercising adolescent students going through puberty are very high (Blanksby & Whipp, 2004). These athletes require extra fuel and fluids to maximise training loads and competition demands, as well as provide for nutrition in their growth spurts (Monti & Stone, 2004). Researchers theorize that the normal recovery requirements for adult members of the squad may not be sufficient for the high performance athlete at school. Kellmann (2009), Khan (2009), Manore, Meyer and Thompson (2009), Moneghetti (1993) and Waddington, Malcolm and Green (1997) have suggested that school canteens could provide training snacks in a ‘recovery bar’, where high performance athletes can purchase the nutritional balanced food they require to eat. A nutritional balanced diet may help the young athlete to maintain energy levels to cope with the increased demands that may aid recovery from fatigue (Blanksby & Whipp, 2004). Of importance to the high performance school-age athlete is the selection of a beverage to hydrate before, during or after exercising to prevent excessive sugar and caloric intake that may encourage dental erosion, overweight and obesity. As Marks (2011) suggests, athletes should simply be encouraged to hydrate themselves prior, during and after intensive training sessions.

2.2.4 Inequities

A study outlining case studies in a number of Australian schools found evidence of “social and structural inequities in sport and physical education, with particular attention to poverty, age, disability, sexuality, religion and ethnicity” (Palmer, 2010, p. iv). Similarly, studies conducted in Denmark found how high performance school-age
athletes’ recruitment and entry into high performance sport and sport schools can be cut short, due to low economic status (Christensen & Sørensen, 2009; Heinilä, 1982).

Lumby (2011) states “for primary and secondary school-aged people, it is essential that Australia addresses the social and economic injustices preventing many young people from participating in sport” (p.11). Furthermore, Lumby (2011) suggests the factors that influence such inequities in Australian schools for school-aged people are firstly, the variable way in which sport is accessed in schools. Lumby proposes:

There needs to be a proper resourcing of socio-economic disadvantaged communities, particularly remote and rural communities. Many public schools struggle to provide the most basic facilities. This is a crying shame if we really care about the health and future of our children (p.11).

The second factor that influences greater inequities in school about sport is “often in schools girls want to participate in contact sport but resent not being able to do so” (Lumby, 2011 p.11). To elaborate upon this factor for girls in reference to contact sport Lumby states:

We need to look beyond a gender when thinking about sport and develop a more diverse understanding of physical activity. Rather than focus on the traditional competitive male-dominated sports, if we broaden our view to include yoga, dance and skateboarding, for example, and provide appropriate community resources for kids to be part of these activities, then we can promote much more physical engagement for kids (p.11).

Furthermore, Hemery (1991) revealed that in recent times “the power and stamina of the female is being acknowledged” (p. 143). Moreover, female athletes are recognised for the qualities of “grace and fluidity that are not mutually exclusive of those of strength and endurance” (p.143). The ASC (2012) advocates the aim of creating a sporting environment which “is more inclusive and supportive of women and girls in high performance sport” (p.1).

Crawford (2009) found that, because of low socio-economic status and the high financial demands required for participation into high performance sport, many programs essential for athlete development are closed off to some individuals. One aspect of both Houlihan’s (2000) and Roderick’s (2006) research suggests the younger the entry age into high performance sport, the greater the number years of financial commitments placed on the families of the high performance athlete which may lead to financial pressure on the families of such athletes.
To date research has indicated that an issue these athletes may face tends to be more problems-based rather than athlete-based. This suggests a need for research that starts its inquiries from the perspective of the athlete rather than the other way around.

The next section will discuss contextual literature concerning a range of school models and external sport programs that may cater for the needs and demands of the high performance school-age athletes throughout the various jurisdictions of Australia.

### 2.3 Range of School Models and External Sport Programs throughout Australia

The main focus of this area in the review surrounds the range of school models that cater for high performance school-age athletes. The largely contextual literature reviewed for this section tends to suggest that specialist school models and external sport programs could be a response to the small but significant high performance school-age students who are unevenly distributed across the country. For example, Queensland Government (2010) states in the report - ‘Flying start for Queensland children’- that in order to give young people a ‘flying start’, the “school leaving age was raised to 16, with young people required to be ‘earning or learning’ for another year after that” (p.1). As this is the requirement now throughout Australia, this means an increasing number of young people are required to complete their schooling whilst also being a full-time high performance athlete.

#### 2.3.1 School models

Education in Australia is regulated by the individual state governments. Pupils go from primary to secondary school at age 12/13 (Year 8) and are generally required to stay to Year 12. Although it does vary from state to state, students have to complete Year 11 and 12 to achieve high school graduation. The student’s results in the last two years of high school are important for entry to universities or jobs (Radtke & Coalter, 2007; Commonwealth of Australia, 2010).

The range of school models throughout Australia includes: government and non-government schools, in-school programs, sport high schools, specialist schools and specific pathway high schools.
2.3.1.1 Government schools and non-government schools

Government and non-government schools in mainstream education are clearly within the ambit of the study. Council (1992) suggests that there is limited literature published about these organisations’ ability to cater for high performance school-age athletes. Radtke and Coalter (2007) argue that school-based management is incorporated in both government and non-government school models which allows them to operate autonomously in terms of the content of the curriculum.

Government schools generally allow all students in their catchment areas or ‘zone’ boundaries to attend. Such schools are normally considered the default option for students unless they choose another school model (Department of Education, Employment & Workplace Relations [DEEWR], 2011a). Baum, Bush, Modra, Murray, Cox, Alexander and Potter (2000) suggest that government schools may provide the high performance school-age athlete with ‘anonymity’ which may allow them to simply focus on their high performance sport. However, associated with this feature may be the issues of the teachers being unaware of the demands such athletes confront and so they may not necessarily cater for these students’ needs (Collier, 2006).

In Australia, there are very few government schools that attempt to meet the demands of high performance school-age athletes with the exceptions being Lake Ginninderra College and Dickson College in Canberra (Department of Education, ACT, 2010b; 2012). These schools are the preferred schools for athletes that attend the AIS campus in Canberra to complete their senior schooling years over a two year to three year period (Department of Education, ACT, 2010b). For example, in Canberra during the 2009 school year, 52 AIS residential high performance school-age athletes attended Lake Ginninderra College to complete academic studies (AIS, 2010a, 2010b). This government school is very aware of the high performance sport student’s commitments at the AIS campus and they provide programs and services to help such athletes to achieve the best outcomes in both sport and education (AIS, 2010b). Such a situation is very much a one-off situation as the AIS Headquarters are in Canberra and a number of high performance athletes training facilities are co-located in Canberra. It is difficult to replicate this model elsewhere as high performance school-age athletes are more thinly spread throughout Australia.

In contrast, non-government schools usually have high school fees but students can attend from a wider catchment area (Cotton, 2011). What advantages non-government schools have may be offset by the fees that parents are required to pay and
these come on top of the high costs that high performance athletes are already meeting. Furthermore, non-government schools tend to have the resources to employ specialist coaches, but such coaches may not be part of the National Sporting Organisations (NSO) pathways. For example, Brisbane Grammar School in Queensland provide specialist coaches for the students to gain experience in a range of sports, but these sports may not cater for high performance school-age athletes (Brisbane Grammar School, 2011).

2.3.1.2 In-School programs of Excellence, Scholarship, Leadership and Specialisation

Shilbury, Popi, Sotiriadou, Kalliopi and Green (2008) and Siedentop (1994, 2007) suggest that school-age high performance students may benefit from the opportunity to gain specialisation in sport by utilising in-school programs including those of excellence, scholarships, leadership and specialisation.

Excellence programs are co-ordinated so that the student must attend trials to gain entry to the program they intend to undertake. High performance athletes that are selected into such excellence programs can gain an exemption and attend the state school from outside the ‘zoned’ area. For example, Mountain Creek State High School in Queensland is one such school offering excellence programs in various sports including the Rugby League Excellence program (Department of Education, Queensland, 2010). Rugby League players undergo trials and are then selected into the Rugby League program. Unfortunately, as suggested by Adair and Vamplew (1997) it appears the term ‘excellence’ in the title of the sport program at the school may generate the connotations of high profile and ‘elitism’. In such cases, as suggested by Thompson (1980), the managing of the ‘elite’ concept and how the school itself builds the culture and citizenship of elitism through managing pastoral care may need to be critically reviewed.

The graduation certificate awarded to most students in Australian high schools is known as the Senior Secondary Certificate of Education (SSCE) and the name and assessment is different in each state and territory. The government of each determines these themselves, although “the curriculum must address mutually agreed national competencies” (Australian Curriculum, Assessment & Reporting Authority [ACARA], 2011, p. 10). The name and assessment of the Senior Secondary Certificate of Education (SSCE) in each state varies. The system in all states are known as: New
South Wales it is Higher School certificate (HSC), Victoria it is Victorian Certificate of Applied Learning (VCE) and Victorian Certificate of Applied Learning (VCAL), Queensland it is Queensland Certificate of Education (QCE), South Australia it is South Australian Certificate of Education (SACE), Western Australia it is Western Australian Certificate of Education (WACE), Tasmania it is Tasmanian Certificate of Education (TCE), Australian Capital Territory it is Australian Capital Territory Year 12 Certificate, Northern Territory it is Northern Territory Certificate of Education (NTCE) (Australian Curriculum, Assessment & Reporting Authority [ACARA], 2011).

The ENTER score is known as the Australian Tertiary Admission Rank (ATAR) in New South Wales and the Australian Capital Territory, and the Tertiary Entrance Rank (TER) elsewhere. For example, Queensland ranking system is known as the Overall Position (OP). Furthermore, the ranking system in Queensland constantly assesses the student throughout their senior study years, which may be more demanding for students with ongoing demands of training. However, this can be alleviated in some jurisdictions by the use of the Variable Progress Rate (VPR) option (Department of Education, Queensland, 1999).

In response to academic demands rather than sporting ones, the program known as International Baccalaureate (IB) is offered in two hundred schools throughout Australia (Australian Education International, 2010; Department of Education, Queensland, 1999). The IB program allows students to attain an entry into universities nationally and internationally. For example, students in the state of Queensland, as stated by Allen and Readman (2009) may prefer IB programs as this system is an examination assessment mode. Allen and Readman found that principals believe that young people who have heavy demands may prefer this system as the narrower window of assessment may fit their training and competition regimen.

In-school programs of scholarships based on general excellence or sport achievements provide opportunities for high performance sport students who excel in sport and/or academic pursuits to afford school fees (Bloyce & Smith, 2009). Scholarship holders have to maintain high performance levels in their chosen sport, behaviour and academic studies to maintain as well as their scholarship.

As suggested by DEEWR (2011a, 2011b, 2011c) Indigenous students are provided with the ‘Earn Learn Legend!’ programs that may support such students in
sport and educational pathways within a number of government schools throughout all jurisdictions of Australia. As part of being a member of such programs it is anticipated that the Indigenous students can contribute back to local Indigenous communities (Aboriginal Affairs, 2001). For example, in some New South Wales and Victorian schools Indigenous school-age high performance students can join the ‘Koori Kid’ program which provides a structure to their heritage (Coram, 2007; NSW Department of Education & Training, 2010b).

Specialisation sport programs are invited by most government and non-government schools to visit and conduct courses that incorporate specialist coaches and equipment. For example, surfing programs provided in many coastal area schools around Australia are intensive surf courses and are coordinated by an outside interest, such as the local council. Researchers have shown such programs put the ‘fun’ element into schooling for the young, high performance school-age athletes (Barnett, 2009).

2.3.1.3 Sport Schools

From a search of the Department of Education, Employment and Workplace Relations [DEEWR] (2010) website there are 30 sport schools and colleges operating throughout Australia for high performance school-age athletes (see Appendix A). Radtke and Coalter (2007) have estimated the number of sport schools in Australia as totalling 36. However, this over-calculation incorporates six schools that are actually identified as schools with specific pathways rather than actual sport schools.

Sport schools may use sport as “the core of their mission for the development of a flexible curriculum approach for high performance school-age athletes” (Radtke & Coalter, 2007, p. 1). In Australia, the development of sport schools is largely a matter for individual schools and is often pursued as part of a strategy to create a distinct identity (Radtke & Coalter, 2007). By combining all the talent development in the one learning environment, this allows sport schools to integrate the education and sporting prowess of the students.

For the scope of this study nine sport high schools and colleges will be examined. These are Westfields, Matraville, Narrabeen, Endeavour, Illawarra, Hills, Hunter, Forrestfield and Maribyrnong High Schools. Westfields Sports High School in the state of New South Wales was opened in 1991 with the aim of combining sport and academic success for high performance school-age athletes (Westfields Sports, 2010; NSW Government, 2010). Interestingly, in this same year the Athlete Career and
Education (ACE) program commenced directing the focus towards high performance athletes. Westfields Sport High school seeks to provide a unique, balanced program that allows for high performance athletes to pursue their sporting and educational goals (Westfields Sports, 2010).

Bailey (2006), Bailey, Armour, Kirk, Jess, Pickup and Sanford (2009) and Bailey and Morley (2009) found evidence that enrolments of high performance school-age athletes in sport schools vary markedly over time and by sport. High performance sports offered in sport schools include netball, rugby league, rugby union, surfing, dance, soccer, golf, cheerleading, basketball, softball, swimming, tennis, touch and athletics. Each of the sport schools includes state-of-the-art facilities, specialist training and links with state sport academies, institutes, national sporting bodies and universities (Gurkan, 2009). For example, at Matraville Sports High School, the sport programs offered include: netball, rugby league, surfing, and football (NSW Department of Education & Training, 2010b). All high performance programs offered at this sport high school are aligned with national sport associations, specialist coaches and the NSW Academy of Sports (Rapp, personal communication, September 15, 2011). In particular, the school rugby league sport program at this sport school is aligned to the national rugby league club of Sydney Roosters. Talented rugby league players in the school’s rugby league sport program have the opportunity of being selected and contracted into the National Rugby League competition. Furthermore, all sport high schools have Talent Sport Program (TSP) trials that allow the school specialist coaches to select the talented school-age players that will be in the sport programs at the school (Department of Education & Training, 2007; NSW Department of Education & Training, 2010a, 2010b). Such trials are based on strict entry criteria set by the specialist coaches and sports bodies associated with the sport school. Additionally, Maribyrnong College in Victoria offered a number of sport programs which are co-ordinated by specialist school coaches (Victorian Department of Education & Training, 2010).

Forrestfield State High School was Western Australia’s first sport academy school (Department of Education & Training, 2007). Opened in 2007, this school has existing specialist programs in swimming, cricket, netball, cricket and boys’ and girls’ soccer, AFL and rugby union. This sport school enables high performance athletes to access both highly specialised sports training and mentoring and regular academic classes (Albion & Fogarty, 2005). The unique and unusual element to this sport school is the inclusion of expert coaching staff with high level credentials. The specialist
coaches at this school help to develop the talents of high performance school-age athletes. Furthermore, the mentoring provided by Forrestfield State high School tends to improve the school-age athlete’s self-confidence and ability to balance physical and emotional demands of their sport and academic programs.

2.3.1.4 Specialist Sport High Schools

Collier (2006) has suggested specialist sport high schools offer only select sport programs for small numbers of high performance school-age students. This schooling model provides opportunity for school-age athletes who have expectations of high level representations in specialised sport. Examples of this school model are Kent Street Senior High School for cricket and Como Secondary College for hockey and golf; both these schools are in Western Australia (Como Secondary College, 2010; Kent Street Senior State High, 2010). In these specialist sport high schools some teachers have superior knowledge and practices in cricket or hockey which supports the high performance cricket or hockey player to achieve high representative levels in these sports.

The Box Hill Senior Secondary College in Victoria has three specialist sports namely, tennis, basketball and football (soccer) (Victorian Department of Education & Training, 2011). This school offers a sport development elective subject in each of these sports for potential athletes. In particular, it caters for students who have aspirations and potential to reach the highest level in their chosen sport. Students at this school may be provided with the opportunity to combine studies with intensive training and skills development during normal school hours (Victorian Department of Education & Training, 2011).

Another such example is the AM Basketball School in Sydney. This specialist school is specifically designed as a ‘feeder’ for basketball players and includes targeted academic subjects that focus on gaining entry scholarships to the USA for college placements and/or National Basketball Association (AM School Basketball, 2009).

2.3.1.5 Specific Pathway Schools

Dance schools are an example of specific pathway schools where the athlete dances during the day and is home schooled at night in the core subjects (Council, 1992). However, as suggested by Albion (2007), this schooling model may overlook the needs of young people to socialise with school friends. Such a schooling approach tends
to focus on one aspect of the student skill development and may not embrace the holistic development of the student.

2.3.2 External sport programs

The external sport organisations comprise those high performance sport programs school-age athletes can be selected into throughout all jurisdictions of Australia. In 1990 the Talent Identification Development (TID) program was established to initiate pathways in high level sport for all school children in Australia. Such development was expected to expose students in Australia to a wide variety of sport.

The AIS was formed in 1981 out of what was then known as the Department of Sport and Recreation (AIS, 1996). Furthermore, the AIS now deliver 34 sport programs across 26 different sports (ASC, 2011a). In 1989 the Australian Sports Commission (ASC) was established as a statutory authority of the Australian Government to promote greater development of high performance athletes in Australia by providing a broader framework of sport programs (ASC, 2010a; David, 2007). The role of the Commission is to achieve more Australians to participate and excelling in sport.

In 2006, the focus moved to high performance sport through the development of the National Talent Identification (NTID) program. The AIS delivered these programs and there have been some changes since then. Over the last 30 years, the establishment of the various State Institutes and Academies of Sport across Australia has enabled high performance school-age athletes to attend and/or gain selection into high performance training centres. As suggested by Baum et al. (2000), the question remains, though, as to whether these institutions and academies meet the needs and wants of all high performance school-age athletes and this is something the empirical research is keen to explore. The ASC (2012a) reported that from 2012 the TID program (along with the broader Australian Sports Commission) will undergo significant structural and operational changes relating to athlete identification and development. These opportunities will be developed over time and in consultation with National Sporting Organisations (NSOs). The ASC (2012b), in association with the high performance sport networks, will publish a report ‘Australia’s Winning Edge’, which is due for release after this empirical study is concluded. This report will outline such important structural and operational changes for TID programs for the upcoming time period of 2012 to 2022 (ASC, 2012b).
2.3.2.1 Australian Institute of Sport (AIS)

The AIS was established in 1981 with the purpose of providing high performance athlete development within sport programs (ASC, 2011b). Initially seven sports were introduced, three of which were initially non-residential sport programs. In 2011, the Australian Sports Commission (2011c) reported that 700 scholarships were awarded to school-age athletes across 26 sports. All scholarship holders must be of Year 11 or 12 school age and either are at school or involved in some other type of formal education, for example, TAFE or an apprenticeship (ASC, 2011c).

Gymnastics was the first early specialisation sport introduced at the AIS, involving the development of both primary and secondary high performance athletes (Australian Institute of Sport, 1996). Initially, the AIS campus had no residential facilities, which meant that families of the school-age gymnastics had to relocate to Canberra (AIS, 1996). Up until the year 2010, the AIS program offered high performance school-age athletes the opportunity of residential accommodation, state-of-the-art facilities and provided expert coaches to enhance the development of talented athletes (Bailey & Morley, 2009). However, as of 2011, state-based programs will now supersede this model, as they are more cost effective (Calder, personal communication, January 5, 2011).

At the AIS campus in Canberra, school-age high performance residential athletes are schooled at government preferred schools located near to the residential campus (Bailey et al., 2009). For example, in 2009, 52 AIS athletes attended Lake Ginninderra College from the Canberra AIS campus from the sports of archery, basketball, soccer, swimming and volleyball (ASC, 2010b). Students thereby attend the residential AIS campus while simultaneously completing their senior schooling years over a two year period or three year period, known as Variable Progress Rate (VPR). Furthermore, Lake Ginninderra College in Canberra permits the school-age high performance students to attend classes after morning training at the AIS, and then return to the campus in the afternoons for further training (ASC, 2010b). In particular, the teachers at Lake Ginninderra College are very aware of the school-age athlete’s commitments in the AIS program (Department of Education, ACT, 2010b). Lake Ginninderra College attempts to encourage and support high performance school-age athletes in the AIS program to achieve the best outcome for them in both sport and career pathways (Department of Education, ACT, 2010b).
However, major controversy arose about the mandatory requirements of gymnasts’ families having to leave their homes to be located at the AIS campus in Canberra. As revealed in a national ABC Radio interview by Smith (2002) the high performance school-age Australian gymnast Sarah Lauren, at the age of 14 years, desired to be at the top of her sport but the family wanted to stay in their home state of Western Australia at the Western Australian Institute of Sport (WAIS) rather than relocate to Canberra. The personal dilemma faced by this young, high performance school-age athlete was one of desiring to stay in her family, school and training environment, rather than being made to move to the Australian Institute under the direction of the National coach of gymnastics.

Sarah Lauren’s interview (Smith, 2002) revealed the ‘balancing act’ is just not for the school-age high performance gymnast, but also involves their parents and families. Further, an ASC (2007) review of women’s gymnastics in Australia, made recommendations suggesting there is a need for greater co-operation and consultation between the national based AIS and the State Institutes of Sports to meet the personal needs and requirements of young, school-age high performance gymnasts and their families (ASC, 2007).

Another such example of a young high performance school-age gymnast who has also confirmed the need for the ‘balancing act’, was Lauren Mitchell who chose to stay and train in her own state institute of sport where she was familiar with her own coaches, schooling and family support. Mitchell lived, schooled and trained at the Western Australian Institute of Sport (Sutcliffe, 2011). In an interview (Sutcliffe, 2011), Mitchell outlined the enormous benefits of staying in an environment where she was very comfortable with all aspects her life, including her level of development in the high performance sport of gymnastics. Mitchell has suffered a number of injuries in her career as a gymnast and, in this interview, emphasised that she needed to be where she could overcome this hurdle and have necessary support to keep her internally motivated to stay in the sport (Sutcliffe, 2011).

Several authors (for example: Colvon, 2008; Syed, 2011; Ericsson, 2006) argue dedicated practice or sustained focused effort is the essential element of a high performance athlete. Mitchell in this interview revealed that she believed she is not naturally talented but has had to complete a lot of dedicated practice to stay at the high performance gymnastic level to make Australian teams to compete at World, Commonwealth. In particular, Mitchell mentioned the dedication of her family and the
enormous sacrifices they all make to assist in attaining the high performance level of 
gymnastics. She highlighted the enormous benefit of having a family surround you with 
keen interest, dedicated to the commitments of training and competitions. Interesting, 
Mitchell herself admitted that without this extraordinary belief and dedication of her 
high performance coaches and her family, she would have left the sport, especially after 
the number of intense injuries she suffered in 2010.

The decision to stay in her own home state was supported by ASC (2011b) who 
agreed that all high performance athletes can stay within their own state to train at their 
own state or territories institutes and academies. For Lauren Mitchell staying at the 
Western Australian Institute of Sport has proven to be the most efficient decision for her 
training and competition in gymnastics as she made the 2012 Australian Olympic team.

2.3.2.2 State Institutes and Academies of Sport (SIS/SAS)

State Institutes and Academies of Sport throughout all States and Territories of 
Australia are detailed in Table 2.1. The State Institutes and State Academies of Sport 
(SIS/SAS) organisations throughout Australia that developed from 1981 to 1997 are: the 
New South Wales Institute of Sport (NSWIS), the South Australia Institute of Sport 
(SAIS), the Western Australia Institute of Sport (WAIS), the Northern Territory 
Institute of Sport (NTIS), the Australian Capital Territory (ACTIS), the Victorian 
Institute of Sport (VIS), the Queensland Academy of Sport (QAS) and the Tasmanian 
Institute of Sport (TIS) (ASC, 2010d).
Table 2.1

State Institutes of Sport and State Academies of Sport.

<table>
<thead>
<tr>
<th>State Institute of Sport (SIS)</th>
<th>State Academy of Sport (SAS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New South Wales Institute of Sport (NSWIS)</strong> Established in 1981, includes sports of basketball, bowls canoe(slalom/sprint), cycling, diving, equestrian, golf, men’s artistic gymnastic, netball, rowing, sailing, soccer, swimming, tennis, triathlon, water polo, weightlifting, wheelchair track and road, winter sport.</td>
<td><strong>Australian Capital Territory Academy of Sport (ACTAS)</strong> Established in 1989, includes the sports of baseball, basketball, cycling, football, hockey, rowing, cricket, orienteering, netball, rugby union, rugby league, and individual athletes e.g. judo, triathlon.</td>
</tr>
<tr>
<td><strong>South Australia State Institute of Sport (SASI)</strong> Established in 1982, includes the sports of basketball, canoeing, cycling, diving, football, gymnastics, hockey, netball, rowing, sailing, volleyball, trampoline, tennis</td>
<td><strong>Queensland Academy of Sport (QAS)</strong> Established in 1991, includes sports of athletics, canoeing, cycling, men’s artistic gymnastics, hockey, rowing, swimming, men’s water polo and associated programs e.g. volleyball soccer.</td>
</tr>
<tr>
<td><strong>Victorian Institute of Sport (VIS)</strong> Established in 1990, includes sports of aerial skiing, athletics, badminton, canoeing(slalom), cricket (women’s), cycling, diving, equestrian, fencing, football (women’s) elite athletes with disabilities, golf, gymnastics, hockey, judo, bowls, pentathlon, motor sport, motorbike, netball, rowing, sailing, taekwondo, water polo, table tennis, softball, surfing, swimming, skiing, snowboarding, shooting, ski cross.</td>
<td></td>
</tr>
<tr>
<td><strong>Western Australia Institute of Sport (WAIS)</strong> Established in 1984, includes sport of canoeing, cycling, football, water polo, swimming, sailing, rowing</td>
<td></td>
</tr>
<tr>
<td><strong>Tasmanian Institute of Sport (TIS)</strong> Established in 1997, includes sports of cycling, hockey, rowing, track and field, basketball, men’s football</td>
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Sourced from ASC (2010d), Research: Australian sports organisations p.6.

Table 2.1 provides an overview of the variety of sport programs offered by each institute and academy throughout Australia (AIS, 2010b; ASC, 2010c). Additionally, in some sports such academies and institutes act as feeders into the AIS (Council, 1992). All the SIS/SAS operate independently of each other and represent their own state or territory requirements or interests. While each State funds and organises its own institutions and academies, there are many similarities. Each State Institute and Academy of Sport provides resources and an environment throughout Australia where athletes can train and compete (ASC, 2010c). Further, each State and Territory organisation provides specialist coaches and state-of-the-art facilities to athletes. The support and work of coaches and support staff within these state institutes and academies greatly assists in the identification of high performance school-age athletes, for the purpose of possible inclusion in national teams at international levels (Cote & Ericsson, 2005). However, as of 2011, each State Institute and Academy of Sport will
coordinate the high performance sports’ process. This is due to cost effectiveness (Calder, personal communication, January 5, 2011).

### 2.3.2.3 Regional Sport Academies

Regional Sport Academies were first established in the State of New South Wales (NSW) in 1995 and cover the Central Coast, Hunter, Illawarra, North Coast, and Western Regions (Spillane, 2009). Regional academies across Australia strive to service athletes from non-metropolitan areas in regional Australia (Zaugg, 1998). Furthermore, such academies provide school-age athletes in regional areas of Australia with opportunities to move onto State Academies of Sports in basketball, netball, soccer, surfing, swimming, tennis and touch (Shaw, 1997).

Several authors (for example: Casey, Eime, Payne & Harvey, 2009; Lee, 2005; Shaw, 1997) have noted that a greater understanding of the demands of sport training for the regional high performance school-age athlete has encouraged the involvement of local regional schools. As suggested by Lee (2005), the opportunity to have skill development in local regional area sports facilities is then provided to high performance school-age athlete in these areas. Shaw (1997) has argued that regional academies allow the school-age athletes in regional areas throughout Australia to access high performance coaching, sports science testing, personal development, competition, and possible links to high performance sport institutes and academies. The ASC (2012b) report ‘Australia’s Winning Edge’ that is due for release at the end of this empirical study will outline issues of accessibility for rural athletes.

In response to the perceived need to support Indigenous high performance school-age athletes, a program known as ‘Clontarf’ (Aboriginal Affairs, 2010) has been developed. Currently, as Aboriginal Affairs (2010) state, this program “caters for almost 2,500 indigenous boys in 44 schools across Western Australia, Northern Territory and Victoria” (p. 3). The Clontarf program encourages Indigenous male high performance athletes to aspire and be involved in sport skills and mentoring with specialist coaches at state-of-the-art facilities. In return, such athletes must attend school regularly and live by the program’s requirements for behaviour and self-discipline with the aim of promoting to promote personal leadership qualities for younger Indigenous high performance school-age athletes (Aboriginal Affairs, 2010). Furthermore, school academies modelled on the Clontarf program for the boys have now been developed in four government schools in the Northern Territory for female Indigenous high performance athletes. As suggested by Aboriginal Affairs (2010), female Indigenous
academies are supported at the schools and provide counselling, training and mentoring in leadership and programs in behaviour, health, life skills and self-esteem development.

2.3.2.4 National Sporting Organisation (NSOs) Academies

Related to these regional academies are National Sporting Organisations (NSOs) which often have development programs (sometimes also called Academies) that focus on the training of young athletes. These organisations visit regional schools (Bloyce & Smith, 2009) and provide high performance clinics in the sports of cricket, AFL, rugby league, rugby union and soccer (Australian Rugby League, 2010). They also provide specialist coaches. As suggested by the Australian Rugby League (2010), the talent identification process offered by the NSOs academies can often create pathways to other external sport programs for students in rural and remote areas.

2.3.3 Conclusion

This section has revealed a number of schooling models that may provide a range of opportunities for high performance school-age athletes throughout the states and territories of Australia. For parents, there is a daunting choice of schooling models but it is not always clear to them what are the advantages or disadvantages of the different types of school. The research proposed in this study intends to explore how each school model and external sport program operates to support athletes at school, and to what extent they are able to do so.

In the next section there will be a focus on the sociological and psychological theories that may offer some understandings of adolescents.

2.4 Sociological and Psychological Perspectives Concerning Adolescents

Many social factors directly or indirectly shape opinions and thus influence an individual’s decision to participate in physical activity (Yu & Patterson, 2010). Most young people play sports for fun, fitness and to socialise; while others, particularly in the case of the high performance school-age athlete, do so to compete and achieve in high level sport. These factors change throughout an individual’s life. For example, some children start playing sport because it is fun; others may join a sporting group because their older brother or sister plays that sport. Obviously, teachers are viewed as
role models for many school students and can provide both positive and negative sporting experiences for children in the school sport system. At school, peers can change an adolescent’s attitudes about a sport which was previously enjoyed. In the worst case scenario, even students who are talented at a particular sport may quit because a sporting career is not realistic or because of the social expectations of their gender (Lumby, 2011). Work commitments, financial and equipment costs are all factors that can have a negative effect on sport involvement and to eventual aspiration to the higher levels of high performance sport.

The reasons for the high performance school-age athlete participating and succeeding in high level sport can be explained through the use of Peter Figueroa’s Framework. Figueroa, a sociologist, developed a framework to analyse racism within society, particularly to look at how equity and access to society’s resources are affected by a person’s race. This framework can also be applied to other aspects of sociology, including equity and access in sport. Figueroa’s framework explored equity and access through five levels in society: cultural, structural, institutional, interpersonal and individual levels (Figueroa, 1959).

Figueroa (1959) developed these five levels to examine all aspects of society, beginning with “the ‘big picture’ of society and working down to the individual” (p. 281). These levels provide only a starting point as to how Australian society affects Australian sporting involvement. Of essence is the importance placed in remembering that sport participation is a complex issue and that each school-age athlete is affected differently. The level of Figueroa’s framework that has the greatest influence on an individual’s sports attainment will vary. A simplistic response might portray that only one level has affected an individual athlete; a deeper analysis will reveal that factors from each of the five levels have played an influential role. The interpersonal level of Figueroa’s framework is used to investigate the relationships that influence whether an individual will develop a lifelong association with sport. It also considers who influences the athlete either directly or indirectly to play high level sport.

What motivates someone can be examined using Maslow’s hierarchy of needs. To achieve human performance it is necessary to “create, initiate, maintain or coach individual and /or group motivation” (Maslow, 1954, p.15). This hierarchy, developed in the 1930s, primarily recognises individual and team goals and helps everyone to play their part in achieving these goals. Simply put, Maslow’s hierarchy of needs is a psychological breakdown of what we humans are motivated by. Humans are designed to
seek satisfaction of our needs and our psyche rewards us with a feeling of satisfaction when these needs are met. The order of the hierarchy is significant. As soon as any level on the pyramid is attained and overcome, and these needs are satisfied and sustained, we instinctively and innately motivate to achieve the next level.

Not everyone reaches self-actualization but it is something that everyone strives for, especially in the field of high level sport performance. Perhaps for the high performance school-age athlete, applying Maslow’s hierarchy of needs, the levels of belonging, esteem and self-actualization are the goals to success in high level sport. With regard to the top level of self-actualization the school-age athlete in high level sport is continually reaching that level. This occurs as they develop new skills through constant dedicated practice (Ericsson, 2006), and improve on the techniques of the high level sport, returning to the belonging level and working back up to the self-actualization level. It is therefore an ongoing process as the athlete is constantly trying to better themselves (Maslow, 1954). Additionally, levels of success and involvement in high level sport are also determined through personnel and socio-cultural factors that influence a person, as an individual. For instance, on the personnel level, if a high level sport does not receive a certain status in the community, then the athlete is less likely to continue in this sport.

In a recent research study of athletes in high level sport, the Australian Sports Commission [ASC] (2012) identified that sons and daughters of a parent who played or had played high level sport throughout life, were more inclined to play that sport as well. The reverse also applies, where the sons and daughters are less likely to take up or enter into high level sport that their parents did not play (ASC, 2012).

Parents who are overly ‘pushy’ may not be exhibiting very good leadership. As suggested by Robinson and Aronica (2009), parents can often be the athlete’s hero; however, they do not make a very good mentor or role model if they themselves are overly competitive. Parents just want the best for their children (Kanters, 2002). However, as suggested by Green and Chalip (1997) there is “a growing number of parents at youth sport events that seem to be out of control” (p.61). Furthermore, Green and Houlihan (2005) contend that there is a “rising tide of violence and verbal abuse by adults at youth sports events” (p. 77). Interestingly, Kanters, Bocarro, Casper and Forrester (2008b) graphically described a problem of the escalation of “violent and vulgar behaviour of parents at competitive matches between teams in t-ball games from top level players down to five-year-olds” (p. 77).
Rothschild (1999) suggests that in the context of youth sports and parent behaviour “a social marketing campaign might try to show target parents that by behaving appropriately, their child will have more fun and get more out of their sport experience” (p. 36). For example, a program that National Recreation and Park Association (2002) suggest as a parent-education tool is “NRPA’s Fun First!”. This program works on the assumption that “most parents want their kids to get the most out of sports” (National Recreation & Park Association, 2002, p. 3). Most importantly this program does not require parents to sign any contracts. The simple message for sport parents is to let their children “simply play the sport” (p. 4).

Additionally, the ASC (2002) outlined essential principles in a junior sports behaviour code of conduct to promote positive parent behaviour which schools and sporting associations could encourage athletes, their parents and coaches to take notice of. Four principles in this code of behaviour are quite relevant to the athlete and their parents and coaches that may be promoted to enhance fun and good sportsmanship. These are:

- Encourage children to play according to the rules and to settle disagreements without resorting to hostility or violence;
- Never ridicule or yell at a child for making a mistake or losing a competition; Remember that children learn best by example;
- Appreciate good performance and skilful plays by all participants;
- Support all efforts to remove verbal and physical abuse from sporting activities (ASC, 2002, p. 10).

The emotions and conditions within the home environment need to be reconciled to help understand the commitments of high performance school-age athletes. In some circumstances, sibling rivalry may occur between the high performance child and the other siblings. As Maslow (1954) contends, small amounts of bickering between sisters and brothers may happen. It is only when too much attention is directed to one child that ill feelings can occur (Carr-Gregg, 2005). Positive parenting would suggest counteracting such feelings of the non-high performance siblings by providing equal attention to all siblings in the household.

Robinson and Aronica (2009) suggest that the key factor for an individual is to find the place where natural talent and passion meet; referred to as the individual’s “Element”. Similarly, young athletes achieve their “Element” as they are highly motivated and have immense passion about their sport. For young athletes the most crucial point about the “Element” is that they “couldn’t imagine doing anything else but the high performance sport they are involved in” (p. xii). The individual in finding the
“Element” needs the “aid and guidance of others” (p. 174). Similarly, the young school-age high performance athlete has ‘significant adults’; these being the parents and teachers who could provide guidance, encouragement and certainly the reassurance needed for them to pursue the goal of high level sport.

Nagel (2006, 2008) contends the psyche of boys and girls is quite different in the adolescent years. A tentative explanation for gender specific problems between the adolescent boys and girls, especially in relation to high level sport, may lie in the nature of how the sociological problem may impact across the two sexes. For example, Nagel emphasises boys’ bullying tends to have a physical dimension to it and thus a high performance athlete is less of a target for such action (Nagel, 2006). However, the psychological dimension of female bullying makes all girls, irrespective of physique or reputation, a potential target (Nagel, 2008). Furthermore, the functioning of the male and female brain in this developmental adolescent stage may also accentuate vast differences in the ways in which a girl to boy athlete in high level sport may cope. For example, in general, a boy athlete may not be focussed on organisational skills whereas the girl athlete at the same developmental adolescent stage will have pedantic tendencies about such skills. Harris (2009) argues that “kids are not that fragile” (p. 331). In the majority of cases, young adolescents are tougher than what adults think they are. Hence, when young athletes are bullied, it is hoped that their own natural instincts in the majority of cases will help them overcome such unsavoury behaviour from other school peers.

Hemery (1991) revealed that bullying or taunting of the athlete may emanate from the “widespread beliefs that top performers are often selfish individuals” (p. 134). Perhaps this may suggest such young people are not very nice to be around (Penney, 2000). It could conjure the idea that such athletes may be selfish and, in the words of Hemery (1991), be “deficient in one’s consideration of others” (p. 134). However, many high performance school-age athletes would not see themselves as selfish. They may portray this persona but such high achievers would more aptly be considered as egocentric.

As suggested by Hemery (1991), the “ends to which athletes have to go themselves almost force that state upon them” (p. 134). For example, Atkinhead (2009) graphically describes the bullying of Tom Daley a 14 year old English high performance school-age athlete. After Daley gained gold medal in the 2008 European championship in Diving, on his return to school his peers bullied this athlete simply
because he was a high achiever. He was so badly treated he had to move schools to escape the bullying. The school he moved to was Plymouth College which had the philosophy of allowing all “children to flourish in happy and well-disciplined environment” (Plymouth Preparatory School, 2012, p. 1).

A second incident was described by Corbett (2011), who reported on the bullying of Hazem el Masri, a former professional rugby league player. Hazem moved to Australia at the age of ten to escape a war torn country. On his first day of school, Hazem did not speak a word of English. Corbett’s article outlines how Hazem was bullied because he was different, spoke a different language and could not communicate with other children at the school he attended. However, Hazem believed he was luckier than a lot of children, who were also bullied at school as he was able to perform on the sports field and this saved him from far greater teasing that may have occurred had he not been talented in football. Hazem believed that, if you are bullied, you need to talk to someone such as a teacher, parent or coach as you do not have to struggle alone (Corbett, 2011). This sound belief by such a renowned rugby league football player lends support to a developmental approach to pastoral care for high performance school-age athletes.

An area of concern for the high performance athlete is associated with their awareness and understanding of their Emotional Intelligence. Segal and Smith (2012) describe Emotional Intelligence (EQ) as:

The ability to identify, use, understand, and manage emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges, and diffuse conflict. Emotional intelligence impacts many different aspects of your daily life, such as the way you behave and the way you interact with others (p. 1).

For the high performance athletes, EQ can help build the mindset of resilience enabling them to take the onus of responsibility of their own emotions which could aid in achieving success in their lives (Call, 2008; Fredrickson & Branigan, 2005). EQ has four key attributes including “self-awareness, self-management, social awareness and relationship management” (Segal & Smith, 2012, p. 2). Importantly for the student-athlete knowledge of these four attributes could help them manage their stress and emotional levels which can be in the form of a program that instils emotional responsibility such as Fuller’s (2012a) ‘Ten Tips’ for resilience. This program embraces the skills for an individual to keep going even when you may encounter tough times of
life. Closely associated with the psyche of the athlete is their ability to learn. Biggs (2006) and Biggs and Tang (2007) suggest that a student should aspire to deep learning as opposed to surface learning.

The next section will now turn to aspects of schools such as curriculum offerings and pastoral care support systems, which may help young people, cope with their double life.

2.5 Aspects of School Organisation and Curriculum Offerings

The actual components or features of schools that may be important in helping such students cope with their twin endeavours will now be examined. Thompson (1980) suggests that school organisations could have an acceptance of the culture of sport in curriculum offerings for high performance school-age athletes. Acceptance in school organisations and curriculum offerings may be apparent in approaches to pastoral care, life after sport and the science of the sport principles. All such approaches or principles may provide insights into the perspectives school-age athletes prioritise of the needs they themselves require to attain both sporting and educational ambitions.

Several authors including Hargreaves (2004), West-Burnham and Coates (2009), and the Department of Education and Skills (2004) suggest there is a distinction between ‘personalising’ and ‘individualising’ learning for students. Aspects of the school curriculum are individualised for such students when “the learner works in isolation” (Hargreaves, 2004, p. 10). For example, the student in the individualised learning situation would study exclusively on line making the computer screen the only interaction between the students and learning. Conversely, personalising learning is where learning is clustered on the three main concepts of “the individual in society, the nature of the learning process and the role of the organisation” (West-Burnham & Coates, 2009, p. 17).

In the context of this study, personalising learning for the high performance school-age athlete as suggested by Harreveld and Singh (2006) instils in such students the processes that will “refine, modify and customise” (p. 10) to better cater for individual needs. Therefore, certain select principles for the curriculum of the high performance school-age athlete need then to be instituted for such athletes to succeed in the pursuit of combining their twin endeavours. Concomitantly the curriculum offerings for the school organisations should include:
• Regularly checking on their individual athletes’ progress
• Being involved in the planning of their athletes’ future education and
• Having an active role in the knowledge of the athletes’ school life (Department for Education and Skills [DfES], 2004, p. 6).

In reference to significant adults who include parents and teachers, it is further stated that:

• A regular check of the child’s progress, planning future education plans and having an active role in the knowledge of the athlete's school life.
• For the teacher it may also mean providing confidence and skills to succeed, planning for each individual athlete, increase teaching strategies to include more comprehensive knowledge Information and Communications Technology (ICT) to allow more access of technological aides such as Skype (DfES, 2004, p. 7).

Finally, for school organisations, the DfES (2004) suggest that schools require a professional ethos that accepts the high performance school-age athlete as having “varying aptitudes and aspirations and provide and develop determination of their talents to be assessed through the use of diverse teaching strategies” (p. 10).

To this end, the next section now turns to examining the principles of pastoral care of individual high performance school-age athletes, that best cater for the personalised learning of such students within school curriculum and organisations as suggested by Best (1999), Lang (1984), Lang, Best and Lichtenberg (1994).

2.5.1 Pastoral care

Several authors including Best (1999), Lang (1984), Lang, Best and Litchenberg (1994) suggest that pastoral care encompasses structures and philosophies in schools related to the care and support of young people. A leading authority in pastoral care is Peter Lang from the United Kingdom and he suggests that pastoral care principles in the school curriculum can be seen as one of three types; i.e. “reactive, proactive and developmental care” (Lang et al., 1994, p. 18).

A reactive approach involves teachers and other significant adults in schools responding to children who present with problems of a personal, social, emotional or behavioural kind. For example, a form teacher who is a case manager or mentor gets to know the high performance school-age athletes well, which makes the athletes feel comfortable in bringing any personal concerns to the teacher as and when they arise.

For Lang et al. (1994) the second proactive approach is where programs meet predicted problems of students. One example is a tutorial program which aims to
provide programs and opportunities to develop skills and support, so that students can appropriately respond to challenges which occur in their life. In this approach, students are provided with practical knowledge and coping skills that are expected or predicted to be required. Suggested by Duda (1989, 2007) and Nicholls (1984, 1989), the student in a proactive approach explores what it means to become a respectful and responsible person by attaining the correct balance between sport, values and the development of social responsibility.

A developmental approach acknowledges that schools have a responsibility to develop the values, skills, and attitudes of the school-age student (Hodge & Cranachan, 2003; Lang et al., 1994; Lines & Gallasch, 2009, 2010; Marland, 2001). Such programs may incorporate personal development aspects of the young person’s passage through adolescent. For example, Lines and Gallasch (2009, 2010) revealed how in most Lutheran schools throughout Australia, a personal development program initially commenced for young adolescent boys but then quickly incorporated both male and female adolescent school-age students. This program, known as ‘Rite of passage’, was introduced to help any such young student better cope with personal issues of adolescent years. School mentors endeavour to guide adolescent students in relation to personal issues of development in the adolescent years. Other authors such as Arnold (1984) and Bloyce and Smith (2009) argue that this approach may be more specific to the needs of high performance school-age athletes. Such athletes need to be aware of social morals and values (Hodge & Cranachan, 2003). Additionally, some researchers suggest that students need to know how to use both morals and values effectively in the community to promote citizenship (Arnold, 1984; Bloyce & Smith, 2009). In this approach the teacher/mentor introduces such concepts to students to prepare them for any personal incidents that may develop.

In the context of this study, the lifestyle concepts of leadership, goal-setting, mindset, life balance, role models, peer pressure, injury and prevention management courses, provision of nutrition and diet education and time management could be incorporated for the high performance school-age athletes.

**Leadership.** Leadership skills could encourage participation in school activities for such athletes and promote opportunities to develop orderly and supportive leader roles within the schools (Bennis, 2003). Investigators have shown that leadership skilling for high performance school-age athletes could offer senior students opportunities to make a real difference within the school (Robinson, Lloyd, & Rowe, 2008; Threlfall, 2008).
Hemery (1991) suggests that schools should be places “for learning for life” (p.129). Furthermore, the promotion of leadership positions within the school for young athletes can foster self-confidence, self-respect and especially the respect of others (Hemery, 1991; Penney, 2000).

**Goal-setting.** Duda (2007) argues that the important skill of goal-setting could be significant in the development of the young athlete. Goal-setting allows the high performance school-age athlete to set short, medium and long term goals for sport and career pathways. Similarly, Fogarty and McGregor-Bayne (2008) suggest goal-setting varies according to the time period. Long term goals are plans of life pathways up to ten years in advance; medium term goals as up to five years in advance and the short term goals are those in the the next day or week.

Albion and Fogarty (2005) question whether goals for the high performance school-age athletes need to be “specific, measurable, achievable, realistic and conform to a time-frame” (p. 51). In this context, gains in mastery of the chosen high performance sport indicate competence and achievement of goals in sport pathways for students (Duda, 2007). The essence of attaining personal sport goals lies in the combination of a support network behind the athlete consisting of coaches, trainers, managers and mentors (Dinham, 2008). Such a support network would consistently encourage and care for the high performance school-age athletes and their attainable goals in sport and education.

**Mindset.** A concept that could motivate school-age high performance students to improve and reach both personal and professional ambitions is known as ‘mindset’. As suggested by Dweck (2006) and James, Griffin and France (2005), by allowing the student to have a stronger personal belief can help guide attainment of goals in one’s life. As Dweck (2006) states “athletes with a growth mindset find success in learning and improving, not just winning” (p. 107).

**Life balance.** As revealed by Hemery (1991), for personal balance young athletes could best benefit from retaining a view of “the bigger world” (p. 112). For example, in a study of 143 AIS athletes, Price et al. (2010) found that “90% of participants surveyed indicated that actively engaging in a non-sporting pursuit helped to enhance life balance” (p. 73). The study surveyed all participants to determine the amount of time engaged outside of the sport (Figure 2.3).
Figure 2.3 indicates the number of athletes that participate in an activity outside of sport. 97 athletes spent 20 hours per week in employment outside of sport. Interestingly, 133 athletes spent an average of four hours a week on social media sites, such as Facebook™.

In a study of 9th and 12th graders in Canadian sport schools, the ‘fun element’ connected to playing multiple sports is slowly disappearing for the high performance athlete (Griffin, Chandler & Sariscsany, 1993). Questions arise about whether the earlier the athlete specialised in their chosen high performance sport, meant that there was less time to join in other sports and just participate simply to enjoy being active (Griffin, 2008). Another curious aspect of fun that Griffin (2008) raised that “talented young athletes are told to go out and have fun in their competition games” (p. 21). However, the author revealed the meaning of fun is misconstrued and parents, coaches and the like who support their high performance young athletes do not mean the type of fun one has at an amusement park or jumping on a jumping castle. Furthermore, Lumby (2011) argues in her research that “sport and physical activity should be about promoting health and wellbeing rather than rewarding the most athletic competitors” (p. 11).

**Role models.** Role models encourage competence and self-confidence of students in ways other than through formal curriculum (Fraser-Thomas, Cote, & Deakin, 2005). As suggested by Hemery (1991), for school-age children, parents are foremost the obvious role models. Additionally, Hemery (1991) further reveals that many athletes regard their...
school teachers as playing “an important role in their initial introduction to sport” (p.116). Many teachers introduce the child to sport and kindle an interest in it through the way they present it and/or the enthusiasm they exude (Hemery, 1991, p. 117). These significant adults may witness many young talented athletes and additionally encourage them in their sporting pursuits of high level sport.

Coram (2005, 2007), has suggested that the essence of high performance sport playing a crucial role in the socialisation of young people was established in a study of Indigenous high performance school-age athletes. This study found values attributed to high achievers in sport correlate to the role of sport as a medium for generating respect and citizenship within marginalised communities.

A concept put forward by Fraser, Fogarty and Albion (2009a, 2009b), was the identification of the role as an athlete affects identity, and life satisfaction. Furthermore, to use the role models of renowned high performance athletes to encourage indigenous students to continue in education to attain their career pathways, is currently being encouraged in a program for such young athletes known as “Earn, learn legend” (Department of Education, Employment & Workplace Relations [DEEWR], 2011c).

There are already responses in Queensland government schools to encourage and support indigenous students to improve their numeracy and literacy levels. This program, introduced by DEEWR is known as ‘ARTIE’ (DEEWR, 2011b). This program currently has 21 Queensland government schools involved, including the following High Schools and Colleges: Beenleigh, Redbank, Bundamba, Ipswich, Loganlea, Marsden, Woodridge, Nambour, Beerwah and Kawana Waters (DEEWR, 2011b). ARTIE utilises the renowned legends of Queensland Rugby League to encourage indigenous students to stay and improve in school.

**Peer pressure.** Athletes may feel the stress of peer pressure, particularly in relation to social activities and norms. For example, this kind of pressure can cover and influence the young person from fashion through to drugs and alcohol. Some peer pressure may be a positive influence and help to challenge the athletes to motivate themselves to achieve their best performances. For example, Hemery (1991) and Penney (2000) revealed that athletes believed that sacrificing social life is a matter of choice where they can gain more then they may lose. Hemery (1991) spoke of athletes viewing the loss of a social life not as a sacrifice but a privilege, when you succeed in high level sport.
Peer pressure may also result in doing an activity foreign to the young person’s sense of what is right and wrong. In a retrospective study of 297 American undergraduate university college athletes, that investigated the perceptions of these students’ high school life, Brown (1992) found that peer pressure influenced teenagers' attitudes and behaviors. Brown further concluded that “one-third of both genders identified peer pressure as one of the hardest things they had to face as a teenager” (p. 121). Additionally, this retrospective study established that “perceptions of peer pressure were significantly associated with dating attitudes, sexual activity, and use of drugs and alcohol” (Brown, 1992, p. 131). In the final analysis, Brown concluded that “adolescent athletes may be their own worst enemy in any attempt to break away from gender-stereotypic attitudes and behavior” (p. 133).

Monti and Stone (2004) argue that acquiring knowledge in the three areas of substance abuse, recreational drugs and ‘doping’ is essential in the school curriculum for high performance school-age athletes. In relation to substance abuse, high performance school-age athletes should be aware about the harmful effects of cigarettes, alcohol and cannabis on their bodies. In addition, several researchers (for example: Hodge, Kozub, Dixson, Moore & Kambon, 2005; James, Griffin, & France, 2005) have shown the benefits and positive outcomes of peer health promotions, as they may provide credibility, a source of information and enhance empowerment to both students and peers.

There is a need for high performance school-age athletes to gain current knowledge about the dangers of illegal performing enhancing substances and practices as well as recreational drugs. Schools could incorporate drug awareness programs to help understand the importance of appropriately developed and delivered anti-doping policies, programs, and procedures, and the need for their harmonization (Mendoza, 2002). Mendoza (2002) calls for consideration to be given to a comprehensive approach to doping control. Similarly, drug programs could include information to high performance school-age athletes about the procedures of drug testing that school-age athlete are likely to confront at national and international competitions (Parris, 2007).

**Injury and prevention management programs.** Pearson and Petitpas (1990) and Penna, Burden and Richards (2004) suggest that the developmental programs could include injury and prevention management courses for high performance school-age athletes. In addition, Mullis, Byno, Shriner and Mullis (2009) and Shannon, Stewart and Stewart (2009) have shown there are benefits for high performance athletes at school to
gain knowledge pertaining to injury prevention and rehabilitation programs. High performance school-age athletes gain valuable knowledge from being aware of how to prevent serious debilitating injuries. If promoted correctly, this component of the school curriculum may protect the health of young high performance athletes by gaining valuable knowledge in preventing serious injuries to their bodies (Junge, Engebretsen, Alonso, Renstra, Mountjoy, Aubry & Dvorak, 2008). Furthermore, for the school-age athlete, there is great benefit in educating these young people in how to transition through their high performance sport (Anderson, 2009; Harris & Anderson, 2009).

**Provision of nutrition and diet education.** Enhancing the benefits of physical exercise and improving health and growth of high performance school-age athletes underpins the importance of nutrition and diet education. Blanksby and Whipp (2004), Education Department of Victoria (2006), Manore et al. (2009), Moneghetti (1993), Lumby (2011) and Tzar (2011), suggest well-rounded young people require, and should be encouraged to have, good habits about diet and regular physical exercise. Furthermore Lumby states that “these young well-rounded people have a good balance in their lives when it comes to diet, exercise, family, friendships and work. That’s what we should worry about...not only what people weigh” (p. 11). Interestingly, Tzar (2011) further supports that “if exercise was a pill it should be one of the most effective medications on the planet—without the negative side-effects” (p. 1).

Similarly, Ford (2008) argues that providing knowledge of oscillating blood sugar levels is imperative to high performance school-age athletes, as it may highlight the problem of depleted energy and performance levels in training sessions. To prevent high performance school-age athletes having insufficient carbohydrates and protein in their diet during the school day, schools could possibly be provided with the requirements of such athletes’ diets. As suggested by Schneider and Benjamin (2011), the essential part of the daily diet especially for the young athletes at school is water. For these young people adequate hydration is necessary for “maintaining normal cardiovascular, thermoregulatory and many other physiologic functions during exercise and routine daily action” (p. 1183).

**Time management.** As suggested by Jordan (2011), the learning of time management is of primary importance for student-athletes as “…the ability school-age athlete’s gain in organising a routine of training, games and classes is a crucial skill that takes many hours of the student-athlete’s time each week, and for each athlete, the time
commitment is different” (p. 1). Furthermore, Walford (2011) suggests to the high performance school-age athlete that sport and academic progress reports, self-reports, parent, teacher and coaches reports could be used. Jordan (2011) reveals the self-motivation and discipline gained from efficient time management skills as a young athlete could possibly be of benefit and carried over into their future careers.

This section has examined Peter Lang’s work in pastoral care. The reactive and proactive approaches have value; but the developmental approach better meets the needs of such athletes in areas of lifestyle. For the high performance school-age athlete, the problem comes back to the overarching fact which is that the vast majority of schools would not have developmental pastoral care approaches that would be more specific to the needs of such students. The main factor influencing this lack of approach in schools is that there is not a steady flow of high performance school-age athletes. The only schools that would be able to provide such an approach are Lake Ginninderra and Dickson Colleges that have the advantage of being the preferred schools for AIS high performance school-age athletes; therefore creating a regular and predictable flow of such students to attend the school.

2.5.2 Principles of ‘life after sport’ and ‘science of the sport’

As suggested by Haslam (2009) and Marsh, Hey, Roche, and Perry (1997), a perspective of high performance school-age athlete life journey and concept of self could be embellished in ‘life after sport’ and ‘science of the sport’ components of school curriculum. Furthermore, the works of several authors including Albion (2007), Burden, et al. (2004), Price (2007, 2010) and Turner and Robinson (2001) describe how knowledge on ‘life after sport’ can benefit such students’ awareness of what happens after sport in order to give high performance sport students the options for later life. Furthermore, Anderson (2009) argues that the skills required by athletes to focus and meet demands of both high level sport and life “are more often than not under developed as a result of the myopic environment typically created for the elite performer” (p. 203).

Wenden (2003) suggests the school experiences and career transition of Shane Gould, a former high performance Olympic swimmer for Australia, was sadly misguided. Gould gained many world and Olympic records and medals by the age of 16. As a high performance school-age athlete, she simply lost sight of what to do with her life after such amazing accomplishments in swimming. Her experiences at school
were troubling as she never fitted into the mainstream student’s schedule. On accepting a boarding school scholarship, Gould’s sudden exit after only six months contributed to her interests not being embodied in this new school environment. In all, Gould admits that she had no career transition into life after sport. Gould ended up pursuing a life very different to a high performance swimmer. Gould married very young to an older man and her new life was extremely different to that of her former high performance swimming life (Wenden, 2003).

Teaching the ‘science of sport’ could help in the underlying understandings of the sport such athletes have chosen and assist in providing valuable knowledge for these students (Shilbury, Popi, Sotiriadou, Kalliopi, & Green, 2008). For example, at Raglan surf school in New Zealand, all students get the opportunity to be involved in surfing camps in order to learn about, and manufacture, the surf boards on which they will surf. In this way, students gain the understanding of the ‘science’ of surfing in order to competently perfect the skills required for such sport.

From the literature reviewed in this section there appears to be two main principles for schools that may be important in helping such students cope with being a fulltime student and a fulltime athlete. Life after sport and science of the sport principles may provide the high performance school-age athlete with perspectives for post-sport life and a deep understanding of the sport they are involved in. The knowledge and awareness of such principles may even allow a successful career transition for athletes.

The next section will discuss overseas sport schooling examples and will draw comparisons to those currently operating throughout Australia.

2.6 Overseas Sports Schooling Examples

Australian education and sport bodies have often looked elsewhere for ideas and practices that would provide the best of systems for all Australian children. This section looks at the literature of what overseas school models and Australian school models have in common and whether information from these models can inform this study. Some examples of overseas sport schooling examples will be outlined in this section and will bring together some aspects of schooling that empirical and contextual research suggests might be useful to this area of the study. Overseas countries to be discussed include: Great Britain, New Zealand, Canada, India, Turkey, Singapore, Malaysia, Japan, Sweden, Denmark and Finland. In contrast, there is reference to the rigid socio-
political regime in Chinese sport schools and Russian sport schools (before 1989),
where the emphasis on sporting success is paramount, but where the social and
academic effects of schooling may be less important.

2.6.1 Great Britain

As mentioned in a previous section of this chapter, Atkinhead (2009) revealed
the bullying of Tom Daley to the extent that he was forced to move schools. This
school-age athlete moved to Plymouth College to escape the bullying he was enduring
from his school peers and younger children at his previous school. Plymouth College
boosts it has a philosophy to allow all children to ‘flourish’ in a ‘well-disciplined’
environment (Plymouth Preparatory School, 2012). As revealed by Plymouth College,
there were four high performance school-age Olympians on the 2012 Great Britain
Olympic team who also attended this school (Plymouth Preparatory School, 2012).

At this school the pastoral care system is designed to enhance every aspect of the
student’s peer development (Plymouth Preparatory School, 2012). The pastoral care
program at this school predominantly promotes social education that involves moral and
emotional issues important to the growing child. The pastoral care teachers are
responsible for academic progress, discipline and personal development. Small pastoral
care groups are encouraged in the school to ensure the highest care to all children.
Pastoral care teachers liaise between classroom teachers and the head of school in
reference to all aspects of the student’s needs. Career advice is provided from middle
school years. Most importantly, constant contact with parents occurs including informal
contacts, parent interviews on the individual need of the child.

2.6.2 New Zealand

Thompson (1980) suggests that in New Zealand, cultural awareness promotes
valuable knowledge and pride for the school-age athletes to achieve in their chosen high
performance sport. For example, at Kamo High School, ‘culture’ of the region is
enhanced when high performance athletes are encouraged to attend to experience the
‘culture of excellence’.

A program for the holistic development of the school-age athlete is promoted by
incorporating leadership programs, a range of sports, and local knowledge of the
village, culture and heritage (New Zealand Department of Education, 2010). The
awareness of the student’s culture and heritage promotes and encourages the goals of
the high performance school-age athlete. As suggested by Spindler and Spindler (1987),
New Zealand schools encourage the concept of exploring and learning the culture. For example, in New Zealand there were a large amount of high performance rugby union players that attend Wesley College (Wesley College, 2012). The overarching influences at this school are the shared Maori and Polynesian culture together with an excellent development program for the college’s rugby union players.

The ‘science of sport’ in New Zealand school curriculum is seen in specialist outdoor activities for school-age athletes. In such programs the students are provided with an all-round learning environment (New Zealand Department of Education, 2010). For example, the Raglan Surfing School incorporates the outdoor program which provides 35 schools with specialist surfing programs as the tool to educate, by highlighting the ‘science’ of surfing. Opportunities are provided to each student undertaking the programs to learn how to design, construct and surf on their own surf board. The importance of this schooling model in New Zealand is that it is one of the few schools where the whole person of the athlete development is prioritised.

2.6.3 Canada

In Canada the main event in the development of Canada’s young athletes is the Canada Games. Since 1967, over 75,000 athletes have participated in the Games with hundreds of thousands having engaged in try-outs and qualifying events (Canadian Sports Centre Calgary, 2010). As Canadian Sports Centre Calgary (2010) reported, such games are held every two years, alternating between summer and winter. Young athletes train for the two key events at these Games, which are the Canada Games Flag and Centennial Cup. In both these events, the young athletes who competed were the best in each age group. These Games prepare the future developing stars of each of the sports represented, and Canada’s next generation national, international and Olympic champions (Canadian Sports Centre Calgary, 2010).

‘Sport for life’ is the focus in the school curriculum for Canadian high performance school-age athletes. The holistic development of the school-age athlete in this sport model is channelled through emotional, cognitive and social areas (Canadian Sports Centre Calgary, 2010). Commencing with sport participation, the sport curriculum offers the school-age athletes closely linked pathways. The first incorporates fit for life in sport outcomes; however, to perfect excellence, the second pathway is for the development of high performance sport for the school-age athlete. College sport in Canada is the pathway to professional sport.
Some Canadian schools align themselves with high performance external sport programs such as water polo. The high performance athletes are identified by being invited to specialist and intensive training camps, known as ‘boot’ camps, all year round (Saanich Water Polo, 2010). This program most closely parallels the external program in Australia of the AIS campus, where residential accommodation for high performance school-age athletes in a number of sports is provided (AIS, 2010b).

Interestingly, in a study of Canadian youth high performance soccer players, it was found such players gained initiative, respect, teamwork and leadership from their soccer involvement (Helsen, Starkes, & Van Winckel, 1998). However, as suggested by Helsen et al. (1998), many of the participants said that they felt pressure in trying to cope with the training and schoolwork and “some even considered dropping out from the soccer program” (p. 179). In addition, researchers have shown that a learning and development program of wellbeing was suggested to help prevent burn out of high performance school-age athletes (Mind Matters, 2010).

Griffin (2008) suggests that professional sport attainment demands specialisation and year round training for high performance athletes and, in some instances can result in burn out. Griffin (2008) further states that the “lure of attracting college scholarships is the main reason behind specialisation by the sport student” (p. 57). Selectors or ‘scouts’ from college sport identify the select high performance athletes to gain entry to the professional levels.

2.6.4 India

In contrast to Australia, India has vastly different social structures, based on a religious scheduled caste system. There are a number of sport schools in India, including Chennai, Koodgie, Kerala, and Sree Ayyankali Memorial Residential sport schools (Krishnaswamy, 2009). In some instances, the lower scheduled caste Indian school-age high performance students may not be permitted entry into many Indian sport schools. However, an exception to such inequity is evident in Sree Ayyankali Memorial Residential Sport School that targets and admits 30 high performance sport students every year, regardless of such athlete’s low scheduled caste (Krishnaswamy, 2009). For example, the Sree Ayyankali Memorial Residential Sport School pay entry fees and board the selected high performance school-age athlete at the school. In this way, such athletes have the opportunity to develop their chosen talent by the school’s specialist coaches and facilities.
2.6.5 Turkey

Gurkan (2009), in the only study of the 11 Turkish sport high schools, found evidence of insufficient facilities available for school-age Turkish high performance athletes. Participants in the study indicated the main reasons for dissatisfaction were the lack of facilities, specialist coaches and equipment. Although the participants indicated discontent with the facilities, sport students themselves felt a sense of belonging to and contentment with their particular Turkish sport high school.

2.6.6 Singapore, Malaysia and Japan

Singaporean sport school students tend to face similar difficulties to Australian school-age athletes when attempting to complete mainstream education plus heavy training regimens (McNeill, Sproule, & Horton, 2003; McNeill, Wang, & John, 2005). For example, high performance school-age swimmers have to maintain very heavy training schedules and train exclusively with the specialist coaches at the school at least ten sessions a week (McNeill et al., 2003).

Singapore sport schools provide “better opportunities to learn sport science principles that will stand them in good stead when they go to the Youth Olympic Games in Singapore 2010” (McNeill et al., 2005, p. 56). Similarly, this rigid practice is imposed upon high performance school-age athletes who gain selection to the external sport program based at the AIS campuses throughout Australia (Australian Institute of Sport, 2010b).

Many Malaysian sport schools’ school-age high performance students tend to encounter difficulties of not being able to discern their life choices and pathways after they conclude at the sport school (McNeill et al., 2003; McNeill et al., 2005). Furthermore, McNeill et al. (2003) found evidence of components of school curriculum being important with regard to life after sport, in order to provide many Malaysian high performance school-age athletes with career transition.

Jegathensan (2012) revealed that more Malaysian teachers and parents need to see the value of sport to encourage greater aspirations to high performance sport. Furthermore, Singh (2012) contends that the challenges in Malaysian schools are the upskilling of teachers in Physical Education and the lack of facilities within the schools. Singh outlines that in 2012 there was over 10,000 schools and 450,000 teachers. The greatest problem within the schools was the high rate of obesity levels in the five million plus school-age children (Singh, 2012). Singh suggests that the prime
contributing factor to this trend lies in the huge issue of the inadequate student activity in Physical Education in schools. Additionally, Singh acknowledged that the ‘one-student-one-sport’ concept in Malaysian schools limits children to ever aspire to high performance sport as the child is only provided with the opportunity to engage and develop skills in the school in at least one sport.

In Japan, the traditional sport is the oldest of martial arts known as ‘sumai’, meaning ‘struggle’. In contrast to many high performance sports offered in Australian sport schools, sumo wrestling has been around for 2000 years (Rohlen, 1983). This martial art is based on ancient combat skills. The works of Stevenson (2006) suggest that the ‘sumai’ is a form of ritual dedication to the gods for good harvests.

An example of a school that identifies school-age sumo wrestlers is the Tokyo Sumo School. In contrast to the Talent Sport Trial testing for Australian high performance school-age athletes in sport schools, potential sumo school-age athletes are identified based on weight and fundamental movements of stamping, arm thrusting and shuffling.

2.6.7 Sweden, Denmark and Finland

Throughout Sweden there are 61 sport schools covering 32 sports (Radtke & Coalter, 2007). The overall national strategy in Sweden is that all sport schools have at least one high performance sport and all are mostly designed as boarding schools. The early specialisation sport of gymnastics is the main sport in all Swedish Secondary Schools (Radtke & Coalter, 2007). Investigators have shown the main problem high performance Swedish students have to deal with is that of time allocation, when balancing the demands of education and the time commitment needed to gain top level performance in their selected sport (Radtke & Coalter, 2007).

Radtke and Coalter (2007), in a study of Swedish high performance school-age athletes, found a proportion of such athletes select a flexible education schedule similar to that of the VPR program in Australia, to complete their senior years of education. Participants reported having less stress and more successful completion of senior studies (Radtke & Coalter, 2007). Similarly, in a study of elite football players in Denmark, the difficulty faced by many school-age high performance footballers is the demand for concurrent education while developing their full potential and proceeding into elite professional football scene (Christensen & Sørensen, 2009). This study also found
evidence that the ‘flexible’ education system in Denmark appears not be sufficiently utilised by high performance school-age athletes.

Some high performance students, who choose to extend their school education over a longer period of time in Sweden, report less stress and concerns about their everyday life (Roderick, 2006). In both Sweden and Denmark, those students who choose to benefit from individual supervision found that it provided for flexible planning and successful completion of their youth education (Christensen & Sørensen, 2009; Roderick, 2006).

2.6.8 China and Russia

The literature on Chinese schools provides an overview of a vastly different socio-political regime to that of Australia. It is more authoritarian in approach and compares more closely with Eastern Europe before 1990. In Australia’s liberal social-democratic system, parents largely determine the choice of school in consultation with the needs and desires of their child. Conversely, in China where it has a rigid socio-political regime where the government can determine to what school a talented child is allocated (Parris, 2007).

The Chinese sport schools are quite well supported in facilities for school-age high performance athletes, similar to those sport schools found in Australia. The Chinese sport students attend the school for all their needs in education and chosen sport. All training for the high performance school-age Chinese sport students is catered for at the school.

Questions arise concerning the pursuit of ‘excellence’ for Chinese high performance school-age athletes. Researchers have shown there is evidence that this Chinese rigid and regimented regime has produced some unsavoury elements in attaining results in sport (Kirk, 1997; Kirk & Gorely, 2000; Parris, 2007). For sport students in Chinese sport schools of Anshan and Liaoning Shenyang, the works of Parris (2007) have shown these schools were embroiled in the controversial and illegal practice of ‘doping’. The main incentive for these schools reverting to such unsavoury tactics was to win high level competitions and accolades for China (Parris, 2007).

Cheng, Marsh, Dowson and Martin (2006) highlight the demands placed on young, school-age gymnasts and figure skaters. The main problem faced by such young school-age athletes is the very high demand on their small bodies. In addition, the
pursuit of educational aspirations combined with high levels of sport commitments are time-consuming (Cheng, Marsh, Dowson, & Martin, 2006).

Russia has transitioned from a highly centralised controlled society such as currently seen in China to a more liberal democratic one. However, the one available study on Russia (Riordan, 1980) was written in 1980, which was before the collapse of the Soviet Regime. It outlined how Russian sports were under the control of the Federal Agency of Physical Training and Sports of Russian Federation. Hence, all sports in Russia was organised according to the Federal Statute of Russian Federation (Federal Agency of Physical Training & Sports of Russian Federation, 2010). The study is illuminative as it shows the extent to which some states would go for sporting success among its young people.

In this study Riordan (1980), explains that sport in Russia was known as ‘physical culture’. A Russian sport school had four mandatory components for all school-age athletes in training and skill development. Commencing with organised physical education, the skills of gymnastics and acrobatics was key focus. The second component was playful activities which incorporated mass organised games, which had rigid rules and conditions of conduct for school-age athletes. The third component was socially approved leisure pursuits known as ‘tourism’ in physical culture (Riordan, 1980). This component added to mental and physical wellbeing of individual and community. Such acceptable tourism included outdoor activities of hiking, camping and rock climbing. All three components contributed to amateur sport. In contrast to the Australian sport schools, all three components in the Russian sport schools provided all sport students with the skills and appreciation to follow a military career pathway (Riordan, 1980).

Organised sport, similar to that in Australian sport schools of TSP trials, was the final component for Russian school-age athletes where compulsory strict rules apply to achieve a result in their selected high performance sport. Such a component in Russian sport schools for the school-age athletes was considered to be the ‘professional sports’ pathway for such athletes. For example, two known sport schools in Russia are Tallium and Kiev Sport High schools. Both follow the four components of physical culture and are residential boarding schools for all selected high performance school-age athletes (Federal Agency of Physical Training & Sports of Russian Federation, 2010).

The high performance specialised sports provided for high performance school-age athletes in Russia included winter sports, free-standing exercises, track and field
athletics, Greco-Roman and freestyle wrestling, biathlon, soccer, ice hockey, volleyball, figure skating, tennis, boxing, judo and chess. In particular, Russian sport schools are intensively involved in specialized sports and compete in special sports contests of high performance school-age athletes across Russia at the ‘Cross-Country of Nations’ and the ‘Ski Track of Russia’ (Federal Agency of Physical Training & Sports of Russian Federation, 2010).

The literature reviewed within this section has focussed on overseas schooling examples in response to questions that may arise about the commonality of features, if any, that Australian schooling models have with overseas models. Furthermore, the literature serves to ask what, if anything, can be learned from knowledge of overseas models. The concepts that surfaced from this review indicate that there are a number of common aspects that could be related to Australian schools such as ‘cultural awareness’ and ‘pastoral care programs’ as observed in the New Zealand school and Great Britain models. Interestingly, Russian and Chinese schooling models may not be suitable for the holistic development of the Australian high performance school-age athlete, as the rigid structure of development for athletes is not necessarily conducive to foster and nurturing high performance school-age athletes in their sport and educational ambitions.

2.7 Literature Review Conclusion

The purpose of this chapter was to highlight the six major areas that have come to inform the study. The definition ‘high performance’ in this study relates to the sport level of performance of an athlete. This is the best definition appropriate to school-age athletes as it is based purely on the performance level of the athlete, rather than any idea of social status. Within this definition of high performance, there are three subsets of school-age athletes. In the first group are those who engage in sports at international level, most likely swimming and gymnastics. The second group is made up of those athletes engaged in age level state and national representations in a myriad of sports. The third group includes those athletes that engage in NTID programs.

Questions arise about what are the needs and problems of high performance school-age athlete, as they perceive them. There is almost a complete dearth of empirical literature that focuses on the high performance school-age athlete as a whole person, or begins with the athlete. Interestingly, it was revealed that the majority of the literature only focuses on one aspect or problem of the high performance athlete and tends to disregard the whole person. Problems and difficulties such athletes confront
focus on time allocation and constraints, handling the demands of school and training, fatigue and recovery and inequities. There appears to be a lack of cohesion in literature about the effects each difficulty and problem may have on the school-age athlete, in coping with the heavy demands of their dual lives. Similarly, the understanding of social and psychological factors that may influence the high performance school-age athlete could help these young people cope better with the combination of high level sport and academic achievements. Contextual literature, on the range of schools and external sport programs that exist throughout Australia, detailed the characteristics of schooling models that attempt to meet the needs of these young people.

Overseas school examples included Great Britain, New Zealand, Canada, North America, India, Turkey, Singapore, Malaysia, Japan, Sweden, Denmark, Finland, China and Russia. These overseas countries supplied literature surrounding high performance athletes and the different models available in other parts of the world. As established in schooling models of Sweden and Denmark, flexible school options for high performance school-age athletes are available in their senior study years. Similarly, Australian school models can offer the option of VPR which may provide longer time period for high performance school-age athletes to complete both demands of education and sport commitments. Interestingly, overseas countries school examples of Russia and China resoundingly illuminated what is not required for Australian high performance school-age athletes. Furthermore, the treatment of school-age athletes in these two countries particularly emphasised the fine line of such young athletes being pushed or not.

The problems and difficulties that school-age athletes confront as outlined in this chapter illustrated one of the telling futures of this research. The literature confirms that investigations need to begin from the perspective of the athletes. All studies examined here confirmed the first question to be asked is what the athletes themselves perceive to be the problems and needs of combining their twin endeavours. There appears to be no literature focusing on the perspective of the athlete, thus not providing a holistic view of these athlete-students still at school. The significance of this confirms the study was appropriately targeted.
Chapter 3 Methodology and Methods

To this point, this thesis has investigated what is distinctly visible in the literature about the problems as they applied to the athlete. Clearly missing is the gap in the literature that commences with the perspective of high performance school-age athletes and their understandings of what their needs and problems might be. This project seeks to highlight these young people’s perspective of their needs and problems encountered, when they attempt to combine both sport and education ambitions.

This chapter outlines and justifies the research design and the methods that were used in the research process. It also explains the foundation methodology and research paradigm that informed the research strategy. To achieve this, the chapter begins by restating the main research question, and the four guiding questions that directed the research. The methodology that underpinned the approach to the research, and the research paradigm that supported this approach, follow. Next, the methods of data collection and data analysis were considered. This is essentially an overview of the process as the following chapter goes into detail about the data analysis; however, the key processes of constant comparison and constant interrogation are described. The qualitative program tool known as NVivo™ version 9.2 was used primarily to provide transparency of the data, an entire chapter, Chapter 4, has been devoted to outlining the ‘how NVivo version 9.2 was used in this study’. Finally, there is a consideration of the ethical issues involved, leading to some reflection on the issues of reliability, validity and reflexivity.

3.1 Research Question

As outlined in the first chapter, and subsequently developed in the literature review of Chapter 2, it is clear that there was a paucity of literature discussing the needs and demands of high performance school-age athletes, from the perspective of the athletes themselves. Furthermore, the research concerning some of the difficulties high performance school-age athletes faced was based on the problem rather than on the athlete. As a result the research needed to focus on two aspects: first to gain an understanding of the conflicting demands on these young people; and, secondly, to understand what schools should provide to help them meet these difficulties. As a result, the following research questions were formulated:
O’Donoghue (2007) argues that, in planning a research study using qualitative methods, it is advisable to have a number of research guiding questions which actually structure and drive the research process. Following his advice, a number of research guiding questions were developed. These are:

The research questions and guiding questions seek to gain a better understanding of how different models of schooling support the high performance athlete in pursuing their sporting ambitions, concurrently with educational aims, whilst at school.

The aim of this study was to acquire a greater comprehensive understanding of, and theory around, the conflicting needs of the high performance school-age athlete in the context of mainstream educational settings. These young people strive to pursue both educational and sporting endeavours; and understanding their situations and possible predicaments may reveal better strategies to help them cope better in their demanding lives.

As the inquiry of this qualitative study concerns the needs and problems of high performance school-age athletes from their own perspective, an interpretivist paradigm as suggested by Blumer (1969) was adopted in this research. According to Erickson (1984), the central questions of interpretivism should concern issues of “human choice and meaning” (p. 525). Interpretivism, in this particular study, is the rich description, and better understanding, of the context in which the participants live their lives. It is
how the high performance school-age athletes deal with the demands of schooling and that of sport concomitantly.

To distinguish the approach to knowledge in using in-depth interviews, Kvale (1996), suggests two metaphors. The first of these is the ‘miner’ metaphor, or as Corbin and Strauss (2008) deem, the ‘micro analysis’. During the interview the researcher assumes the role of the miner, and here is where knowledge is assumed as given; the researcher simply has to locate it and pick it up. The second is the ‘traveller’ metaphor, or as Corbin and Strauss (2008) argue, the macro analysis, where a broader overview of the topic is gathered. In this broader view, deeper knowledge is created and negotiated. Kvale puts it like this “The traveller...asks questions that lead the subjects to tell their own stories of their lived worlds, and converses with them in the original Latin meaning of conversation as wandering together with” (Kvale, 1996, p. 4).

The rigour of this process of qualitative data collection and the quality of data analysis will be explained later in this chapter and in more detail in Chapter 4.

3.2 Research Paradigm

This study was conceptualized within the interpretive paradigm to unveil the perspectives and understandings of high performance athletes at school and in their dual lives. It is concerned with the rich description and better understanding of the high performance athlete’s social world. The four major theoretical perspectives within the interpretivist paradigm are hermeneutics, phenomenology, ethno-methodology and symbolic interactionism (O’Donoghue, 2007). Symbolic interactionism is one of the classical traditions within interpretivism (Morris, 2004). The social researcher has to explore and understand the ‘social world’ by using both the participant’s and the researcher’s own understanding and perspectives.

3.2.1 Interpretivism

As Veal (2005) suggests, interpretivism assumes that firstly, people experience physical and social reality in different ways. Secondly, reality is socially constructed, through “language, norms, values and beliefs” (p. 24). Thirdly, the researcher becomes fully involved with individual subjects.

According to Guba and Lincoln (1994), ‘interpretivism’ is a “paradigm for inquiry and not methods for inquiry” (p.105). Interpretivism is the study of a phenomenon in a particular context and therefore constitutes the set of assumptions
about the ‘social world’ of these athletes and their dual life (Creswell, 1994, 2007; Punch, 2005, 2009). O’Donoghue (2007) explains interpretivism as “understanding of the meanings that create, and are created by, interaction between human beings [which are] essential to an understanding of the social world and the myriad phenomena which it contains” (pp.16-17). Furthermore, as Holliday (2002) argues, real life research is a very human process involving “shortcuts, guesswork, opportunism and serendipity” (p. 7). In this way, an interpretive model of inquiry is suited to research questions that study human understandings and behaviour. In part, as Willis (2007) suggests, humans are products of their objective environments, as well as products of their subjective perceptions of their environments.

Of critical importance to the interpretivist researcher is what the world means to people, whether it is a group of people or an individual. Hence, the goal of social science is to understand about the ‘lived experiences of the humans’ (Willis, 2007, pp. 6-7). Interpretivism is not experimental; however, it is at liberty to make propositions about human behaviour and understandings - to generate theory. Accordingly, as Punch (2009) suggests, this study will generate substantive theory that both describes and explains phenomena. Furthermore, this kind of theory involves content-based propositions that explain the data by deduction and ‘if then’ links (Punch, 2009, p. 20). Therefore, in the data analysis phase of this study, description of the understandings of how the participants view the problems of being a high performance athlete at school, and what they think might be the best schooling models suited for high performance school-age athletes, will be outlined. In this way, the study will unfold, where the data is unstructured, though the theory which emerges will do so in a structured fashion (Punch, 2009). This entire process is encapsulated under the umbrella of interpretivism.

The central questions of interpretivist research concern issues of ‘human choice and meaning’ creating an interpretive description that taps thematic ‘patterns’ and ‘commonalities’ (Erickson, 1984). Willis (2007) proposes that interpretivism combines two essential threads of thought: rationalism and relativism. Rationalism proposes an alternative view to traditional empiricism, arguing the experience of the senses is not always the best way of knowing something. Rationalism promotes the idea of thinking your way to understanding. Alternatively, as Willis argues many interpretivist researchers prefer relativism as it adopts the perspective that knowledge is socio-culturally embedded, reality is constructed, and understanding is context-specific. Consequently, the researcher will direct questions to participants concerning the
strengths and weaknesses of the schooling models they experienced, to gain an understanding of their dual life and what support the high performance school-age athletes received to help them cope with both.

### 3.2.1.1 Symbolic interactionism

Willis (2007) contends that qualitative interpretivist research takes the position that “the reality we know is socially constructed” (p.97). Here the researcher herself seeks to understand the meanings the participants; that is the athletes’, parents’ and teachers’, hold of the phenomena and how their meanings inform their actions.

Symbolic interactionism is a lens through which the researcher seeks to understand meanings of phenomena and their interaction. Natural science methods are not appropriate for social investigation as the ‘social world’ is not governed by regularities that hold ‘law-like’ properties (Ritchie & Lewis, 2003). The researcher and the ‘social world’ impact on each other and the facts and values can be somewhat indistinct, and findings influenced by the researcher’s perspective. However, the researcher declared her bias and as a result became ‘transparent’ about her assumptions (Ritchie & Lewis, 2003).

Investigators rationalise that “people are active constructors of lines of action” (Morrione, 2004, p. xii). When reflecting on Mead (1934), in considering the origin of ‘human capacity’, Blumer (1937) emphasises that “The active nature of the child, the plasticity of this nature, and the importance of the uniformed impulse…[A] view taken by the group of social psychologists who may be conveniently labelled symbolic interactionists” (p. 52).

The distinctive features of symbolic interactionists are as follows:

Symbolic interactionists view social interaction as primarily a communicative process in which…a person responds not to what another individual says or does, but to the meaning of what he says or does. Their view, consequently, might be regarded as inserting a middle term of interpretation into the stimulus-response couplet so that it becomes stimulus-interpretation-response (Blumer, 1937, p. 171).

Later, Blumer (1969) outlined three major premises as fundamental aspects of symbolic interactionism. Firstly, human beings act toward things and other beings on the basis of the meanings that the things or other beings have for them. Secondly, language gives people a means to negotiate through symbols. Thirdly, meanings are handled in and modified through, an interpretative process used by the person in dealing with the things they encounter.
The first of these premises assumes that one cannot ignore the meaning of things toward which people act or which causes people to act (Blumer, 1969). Such ‘things’ include everything a human being may note in the world including, firstly, physical objects such as a tree or a chair; secondly, other human beings, (for example a mother); and thirdly, categories of human beings such as friends or enemies. The second premise assumes that, for each individual, the meaning of things derive from, or arise out of, the social interaction one has with one’s fellows. The third premise assumes symbolic interactionism can be the “action based around the meaning arising in the process of interaction between people” (Blumer, 1969, p. 4). In addition, it is the creations that are formed in, and the defining activity of, people as they interact, that necessitates meanings, through a process of self-interaction (Blumer, 1969).

The essence of symbolic interactionism is grounded on a number of basic ideas or ‘root images’. These include “human groups or societies, social interaction, objects, human being as an actor and interconnection of the lines of action” (Blumer, 1969, p. 6). All of these root images taken together represent the way in which the lens of symbolic interactionism allows the researcher to view human society and conduct. Furthermore, as Blumer (1969) suggests, symbolic interactionism is considered to be the “presentation of gestures and a response to the meaning of those gestures” (p.6). Gestures are the part of, or aspect of, an ongoing action that signifies the larger act of which it is a part (Blumer, 1969). For example, the warning whistle of the sprint starter indicates the ‘get ready’ signal. This conveys to sprinters, (who recognise the starter’s whistle), the idea of readiness to start the race and a plan of forthcoming action by the starter who presented the whistle blowing.

In addition, Mead’s analysis, as outlined by Blumer (1969), further highlights that parties to such interactions must necessarily take each other’s roles. To indicate to someone what has to be done, one has to make the indication from the standpoint of that other. In such an instance, to order the sprinters in a 100 metre track final to stand up again, due to an unsteady start, the sprinter has to see this response in terms of the starter’s actions. Simultaneously, the sprinter has to see the command from the standpoint of the starter blowing the whistle to grasp the intention and forthcoming action of the starter (Blumer, 1969). In all, such mutual role taking is the ‘sine qua non’ of communication; and, according to Blumer (1969) is effective symbolic interaction.

Symbolic interactionism views a human society as people engaged in living that is considered the “ongoing activity where the participants develop lines of action in
countless situations they come across” (Blumer, 1969, p. 20). Symbolic interactionism is therefore the appropriate approach for this study, as attention is accorded to two perspectives. The first is how the perspectives of high performance school-age athletes are interpreted and reinterpreted. The second is how participants engage in the everyday activity of high performance sport and school concomitantly.

It is the participants’ knowledge, interpretations and perceptions of their experiences and interactions that are the properties of the social reality, which the research questions and guiding questions are designed to explore and examine. For example, in this study, the interviewer is trying to find out how the school-age athletes and their parents feel about school; and then what meaning their teachers have of schooling for such young people.

Ideally, it is hoped that the teachers in an ‘athlete friendly’ school have the same perspective towards schooling as the young athletes. It is the teachers’ approach to the meaning of schooling that may impact on these young people, therefore contributing to a successful or otherwise school experience. If the teacher does not have the same understanding as the school-age athlete, then this is where the conflict may arise and perhaps induce an unsuccessful school experience for these young people.

3.3 Data Collection and Analysis

3.3.1 Data collection techniques

The most taxing questions that qualitative researchers face tend to concern the techniques of observation, interviewing, tape and video recording, generating personal histories and accessing records and other documentary materials (Charmaz, 2003). In this qualitative study, data was collected through semi-structured in-depth interviews, document analysis and some observations and field notes.

The focus of the data collection is in the form of ‘words’, aptly put by Woods (1985) as ‘watching’, ‘asking’ or ‘examining’ (cited in Wolcott, 1988). In this study, by using data collection in such a manner, the researcher ascertained experiences and perspectives of athletes, parents and teachers, concerning the strengths and weaknesses of schooling models.
3.3.2 In-Depth interviews

Interviews can be an essential form of symbolic interaction permitting further discussion, as a focused interaction between the interviewer and the interviewee (Silverman, 2006). The fundamental ‘legitimising’ for using in-depth interviewing as stated by Schultz (1962) is based on acknowledging:

The thought objects constructed by the social scientist in order to grasp ....social reality, have to be founded upon the thought objects constructed by the common sense thinking of men [sic] living their daily life within their social world (p. 49).

The use of in-depth interviews allowed the researcher to identify what participant athletes, parents and teachers thought in order to understand the conflicting needs of the high performance athletes at school. The decision to use semi-structured in-depth interviews of the three groups was a major methodological consideration in establishing the overall direction of the research. Using in-depth interviews in this situation, (with face to face encounters), allowed the researcher to understand the perspectives of the participants’ lives, experiences and situations which were expressed in their own words (Taylor & Bogdan, 1998). By using interviews, the researcher spent enough time with participants, in order to focus on the level of value each accorded to their experiences. For example, most of the 39 interviews were at least 40 to 45 minutes; yet, in a number of the interviews, the time spent with the participants was over an hour in duration.

In-depth interviews provided the interviewer with an opportunity to explore the participant’s social reality - in this case, high performance athletes at school- through the process of ‘listening’ (Kvale & Brinkman, 2009; Legard, Keegan, & Ward, 2003). The Livescribe™ pen was used to record all interviews, as it provided a very useful and convenient way of recording the interviews. Additionally, it has an associated software program which permitted the download of all notes written on the Livescribe™ writing pad as well as audio recordings.

The fundamental principle of listening was used in all the 39 in-depth interviews. This helped the interviewer really hear the meaning of what the participants were actually saying. Furthermore, such an interviewing skill allowed the researcher to understand the themes that needed to be explored and the hints of the themes in the participants’ accounts. This type of interviewing allowed focus on verbal accounts of the participants’ social realities (Taylor & Bogdan, 1998).
The key features and experiences of this face-to-face technique facilitated flexibility, natural interaction and probes to achieve in-depth answers (Legard et al., 2003). Furthermore, Lichtman (2006) describes in-depth interviewing as more of a process than a predetermined list of questions. This process involved the building of rapport, orienting the participants with the purpose of the research and engaging in deep conversation. In this way, as suggested by Burns (2000), this allowed room to create complexity, where a whole phenomenon was able to emerge.

The researcher undertook semi-structured in-depth interviews, with particular interest in participant’s experiences of social reality, through their own interpretations of high performance sport and schooling. In this way, the risk of constructing and imposing on the participants a fictional view of their reality was avoided (Minichiello, Aroni, & Hays, 2008).

Semi-structured interview schedules were formulated (Appendix B) to serve as a common starting point. This allowed the participant groups incorporating athletes, parents and teachers to have the opportunity to tell their own experiences in a more unstructured fashion. A semi-structured, open-ended interview is not restricted by fixed wording or ordering of questions. Rather, it allowed more free-flowing conversation, that some would argue produced more valid participant responses, as they were able to share the versions of their reality (Burns, 2000). Further, the nature of unscheduled probes and questions, incorporated in this type of interviewing, provided the freedom for the interviewee to have the choice to express and digress as they felt inclined. The ‘open-ended’ quality of this interview style prevented the interviewee from being ‘pigeon holed’ into standardised categories; and permitted interviewees to have a more reflective and meaningful perspective on being high performance athletes at school (Patton, 2002).

An interview protocol (which asked questions and recorded answers of the interviewee) was followed for each of the 39 participants. The six stages of in-depth interviews followed, directing the participant from beginning to end, were: arrival, introduction to the research, commencement of the interview, body of the interview, ending the interview and after the interview (Legard et al., 2003).

In the first stage, the interview commenced from the moment the researcher arrived at the participant’s designated venue. The ‘business’ in stage two began when the researcher informed the participant about the research topic. In the third stage, the researcher guided the participant through the key themes, by exploring the subject in
depth with a series of questions and probes. In the fourth stage, the researcher signalled the ending of the interview about ten minutes before it concluded, by indicating ‘the final topic’ or ‘in the last few minutes’. For example, as seen in Appendix B towards the end of each interview if it was necessary the researcher directed questions to the participants:

- Have you ever...?
- When you mentioned...?
- Do you then think...?

The set of open-ended and probing questions used gave direction to each interview, allowing participants to freely express their personal perspectives and/or to reflect upon their perspectives of being a high performance athlete still at school (see Appendix B). Furthermore, this allowed each participant’s dialogue to shed light on either their current or reflective stance in relation to high performance athletes at school. As stated by Legard et al. (2003), the aim of such in-depth interviews was to “achieve both breadth of coverage across key issues and depth of coverage within each” (p. 148).

The two distinct types of questions were content mapping and content mining (Legard et al., 2003). Content mapping questions included ‘ground’ mapping which attempted to ‘open up’ a subject. They were intended to encourage naturalness and provided the interviewee with the opportunity to raise issues relevant to them. For example, as seen in the interview schedules in Appendix B the researcher asked the over 18 year athlete participants introductory questions of:

- Can you tell me about experiences of being a high performance athlete whilst you were at school?
- Do you remember a time when you were having such experience(s)?
- Could you describe in as much detail as you can an experience you think or thought was one in which school-age athletes faced problems in combining school and sport commitments?

Such questions allowed the adult athlete participant to express the true issues that related to them personally.

The content mining questioning obtained a full description of phenomena, providing the researcher with a deep understanding of the participants’ attitudes and behaviours. The four main probes are amplificatory, exploratory, explanatory and clarificatory - all designed to achieve depth and fullness of data (Ritchie & Lewis, 2003). The probing questions used in the interviews provided the researcher with the
opportunity to explore, clarify and explain the issues of being a high performance school-age athlete. For example, as seen in Appendix B in the athlete participant interviews the probing questions used included:

- Could you say something more about (support)…?
- Can you give a more detailed description of…?
- Can you think of any times when…?

‘Dimension’ and ‘perspective-widening’ questions were two further aspects considered, during the interviews. The first of these was the question which focused and tapered the participant on a particular detail. The latter was the use of questions that enticed the participant to look at issues from a different perspective and uncover more layers of deeper and greater richness of information. Such scheduled interview questions directed to the student group of participants included:

- What problems did you encounter?
- Whilst at school, how did you balance between your sport and education commitments?

A metaphorical interaction of the role of interviewer and interviewee can be encompassed as a symbolic action as audience and performer (Miles & Huberman, 1994, 2002). The setting is natural and is where the research takes place. The interviewee is the ‘actor’ performer, reflecting on their ‘events’ in high performance sport, thereby producing the ‘process’ or recreating the events undertaken by the actors in their setting. In this way, the audience [interviewer] grasped and produced the ‘lived experiences’ of the participants. The finale is to locate meanings about the actors’ lives with reference to their ‘perceptions’, ‘assumptions’, ‘prejudgements’ and ‘presuppositions’ (Van Maanen, 1977 as cited by Miles & Huberman, 1994).

Some fundamentals of good in-depth interviewing involved ‘open’ questions, such as ‘what happened next?’ instead of the closed question ‘So what did you do?’ This suggestion of open questions worked well for all semi-structured interviews in each participant group. For example, as seen in Appendix B, questioning for athletes over 18 years commenced with:

- Can you tell me about experiences of being a high performance athlete whilst you were at school?

For school teachers, the open question was:
- Can you tell me about experiences of high performance athletes at your school?

Further, Ritchie and Lewis (2003) suggested the avoidance of leading questions as being crucial in producing a full answer. One such question was:

- How did you react when you made nationals?

In another, (available in Appendix B), athletes between the ages of 15 to 18 years old were asked:

- How do you think young athletes balance between sport and education commitments?

The other necessary techniques used to achieve depth were listening and remembering, facilitating a relationship with the participant. This turned assumptions and interventions into questions, indicating neutrality, and responding to different interview situations, through demonstrating sensitivity (Ritchie & Lewis, 2003). The researcher facilitated these techniques by being mindful of allowing all participants to fully express themselves without interruption.

As suggested by Veal (2005), the researcher also used ‘Whyte’s hierarchy’ of encouraging the participant to speak fully and freely about their experiences by following six verbal prompts of: “uh-huh, that’s interesting, so does that mean, can you give me an example, let’s go back to that, and that’s great, can we move onto” (Veal, 2005, p. 23). To encourage all the participants to continue to express themselves freely, without the researcher interrupting their flow of conservation, it was necessary to reiterate ‘Uh-huh’ quite frequently. For example, in one 15 year athlete interview, it was necessary to ask him to talk more about the term he used of ‘procrastination’, by saying: ‘so does that mean not doing your homework after training?’ Another female athlete was particularly coy in speaking, so using ‘uh-huh’ allowed time for her to express her issues freely in her own time. Also, in the aforementioned male 15 year old athlete, the use of ‘Uh-huh’ gave him time to further discern the major issue for him of ‘procrastination’. In one parent interview, the mother kept diverging into a discussion on the details of the issues of club sport. The researcher was able to redirect the conversation back to issues of her high performance school-age athlete by saying: ‘That’s great about the gymnastic club, but can we move onto your experiences of the needs of your high performance school-age athlete at school?’.
It was particularly important to be alert to two different kinds of sensitive interviews. The first was where a fundamentally sensitive topic arose, due to the information being disclosed by the participant being very private or emotional. The second was when the discussion triggered a strong emotional response from the interviewee, as it may have raised a particular touchy incident in their past. In both instances, the interviewer required an element of diplomacy and delicacy in handling such sensitive situations. The researcher only encountered one interview where the participant talked of the emotional trauma that they had to face, when their father passed away in his early days of school-age high performance sport. This participant was able to explain how a mentor helped him overcome many issues and encouraged him to continue in his high level sport. Finally, when the Livescribe™ pen was switched off, the researcher thanked the participant and stressed the “importance of their contribution to the research” (Legard et al., 2003, p. 147).

The researcher pursued interviews of participants until theory that is grounded in the data was achieved, thereby reaching ‘saturation’ of all interviews audio taped and then the interviews were transcribed verbatim (Richards, 2009). The researcher experienced saturation when the issues talked about by participants in each group were all very similar and added no new issues. In this way, it allowed analysis and feedback from the researcher’s supervisors with regard to improving the interviewer’s skills and overall interviewing process.

Finally, the researcher gave practical considerations for every interview with each participant including venue, choice and time of interviews. Every interview was at the preference of the participants, including at their own homes, public places, cafés, university, and/or places of employment and training. In many instances, the interviews with athletes were usually at the training venue after they had completed a training session. Two interesting venues were at the airport in the boarding lounge, and on the side of a highway in the pickup venue for carpooling to the state training session. Four of the interviews were completed at a venue and time suitable for the participant in the State of New South Wales.

3.3.3 Observations and document analysis

Other data collection included observations of key informants in the study, who appeared to be particularly well informed, articulate, approachable or available (Wolcott, 2009). Including some observations, field notes and informative documents
provided greater depth and broader understanding of the participant’s view on high performance athletes whilst at school (Killeen & Fetterman, 1988; Wolcott, 1988). As further suggested by Killeen and Fetterman (1988) and Wolcott (1988), such inclusion in this study generated a rich seam of data.

Observations arose from athletes who were high performance whilst at school and certainly provided reflective views of what it was like to combine both sport and academic endeavours simultaneously. In the select group of athletes who were aged between 15-18 years, they were able to provide current views of what these young people face in their dual life. The adult athletes were over 18 years and had left school, and had more reflective perspectives of the issues that face young athletes who undertake high level sport while still at school. Parents were able to shed light on the crucial relationship between the athlete, school and home life.

School teachers, who had taught high performance athletes during their schooling years, were astutely aware of the needs and problems of these young people. In one of the teacher’s interview, at the specific request of the teacher participant, the interview was conducted in the school office, during the school lunchtime break, which generated some empirical research. As the researcher walked through the school to the interview venue, she was able not only to make some observations, but also some brief field notes about this particular school environment.

Document analysis included literature produced by schools and education departments. For example, for issues concerning curriculum, the Australian Curriculum, Assessment and Reporting Authority [ACARA] was sought. Also, for issues about high performance sport, the renowned Australian sport authorities such as the Australian Institute of Sport (AIS), and Australian Sports Commission (ASC) were consulted. Furthermore, autobiographies of athletes who were high performance whilst at school were analysed for suggestions of their educational experience at school. For example, Gould’s autobiography, where she talked about her experiences at school, was analysed. As previously mentioned in Chapter 2, the story of Shane Gould shed light on the lack of career transition offered to her after attaining such great heights in her swimming career, with the void and absence of direction after school and retirement from the high performance sport of swimming (Wenden, 2003).

Additionally, another example of an athlete’s report of school days was referenced in Chapter 2, where Corbett (2011) revealed the Rugby League legend Hazem el Masri’s stories. Masri’s personal reflections of the cultural prejudices he
encountered, whilst in the schooling system, were simply due to him being an immigrant with a different first language. Furthermore, mention was made of the publicised incident reported by Atkinhead (2009) of the bullying experienced by Tom Daley in his school, after returning from the 2009 European Championships as a gold medallist in Diving.

3.3.4 Sampling and participants

The sampling in this research was targeted and deliberate and had some ‘purpose’ or ‘focuses’ in mind (Punch, 2005, 2009). This study’s sample was ‘purposively’ designed and generated to reflect an awareness of the likely and prevailing variations within the phenomenon of high performance athletes at school (Thorne, Kirkham, & O’Flynn-Magee, 2004). It was necessary to identify ‘purposefully selected’ individuals, as it best assisted the researcher to understand the difficulties associated with high performance athletes at school (Creswell, 2003). For this reason, three groups of participants were identified to interview, including athletes, parents and teachers.

As this was an unfolding, qualitative study, the interviews began with athletes, then parents and teachers. The researcher was open to bringing in the high performance coaches to the study. However, some athletes themselves felt that their coach had a baseline around their rigid training regimen. For example, a 17 year old kayaker who was in training for the 2012 London Olympics confirmed such inflexibility of the coach by stating ‘I don’t receive the kind of support I get from my parents and teachers from paddling and school as my high performance coach can’t get close if he needs to work me so hard to get to the Olympics’ (Annette).

Additionally, Creswell (2007) argues the importance of acquiring participants who will be “willing to openly and honestly share information or their story” (p. 133). For this reason, the researcher made a conscious decision not to interview any of her six children, as this may have created some tension in the home environment if they simply said - “you know that mum”.

In the design of this study, a total of 39 semi-structured in-depth interviews were conducted. Overall, 19 interviews were conducted in the athletes’ group2; ten interviews were completed in the parents’ group3; and ten interviews in the teachers’ group4.

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2 Demographics of athletes 15-17 year (Table 5.1) and over 18 years (Table 5.2) listed in Chapter 5.
All 19 athlete participants had varying school type experiences located throughout Australia and in one adult athlete case, overseas. The athletes interviewed made up two groups:

(i) Those still at school, who were aged between 15 and 17, and
(ii) Those that had left school.

Nine athletes still at school were interviewed. These nine younger athletes still at school provided information on experiences of living in the so-called ‘here and now’. The three athlete participants aged 15 years old included:

- One male
- Two females.

These young people were first asked if they desired their parents to be present before the interview commenced. The parents were invited to stay for the 15 year old participants; but, in all three cases, the three sets of parents declined, preferring to allow their 15 years old athlete to answer the interviewer’s questions independently of them. However, if the parents were to stay, they would have been informed that the interview was to gather the young person’s views, thus avoiding having to deal with the parents interrupting the interview. As the parents did not stay during all three interviews, it avoided the possibility of any discrepancies in answers occurring between the child and the parent.

Additionally, the six athletes in this group who were still at school and aged between 16-17 years old included:

- Four females
- Two males.

The second sub-group comprised ten adult athletes, over the age of 18 years who had left school. They provided more reflective experiences of being a high performance athlete whilst at school. These ten athlete participants included:

- Six females
- Four males.

All these participants provided ‘reflective’ school experiences of varying schooling models located throughout Australia. The young, high performance athletes,
still at school, were continuing to experience this phenomenon, and may not have had the capacity to extrapolate or appreciate or reflect upon their experiences. The questions that were posed to this group incorporated:

- Can you tell me about experiences of being a high performance athlete whilst you were at school?
- Do you remember a time when you were having such experience(s)?

In the parent’s group, there were ten parents including:

- Nine females
- One male.

Although the researcher invited both parents to the interview, the fathers mostly said: “Just ask mum, she knows all the details”. For this reason, nine mothers and one father made up the parent group. Parents are the care-givers who bring up these children and deal with the day to day management of their high performance children. Interestingly, two interviews with mothers were conducted in their kitchen, as they had to complete the precooked meals for the week. Furthermore, one interview of a parent was conducted in the boarding lounge of an airport, whilst waiting for the plane to board to an overseas destination for an international competition for their high performance school-age athlete. All parent participants were able to shed light on their young athlete’s situation and contributed valuable experiences to the study. Interview questions directed to these parent participants included:

- What do you look for in schools and the support they offer your school-age athlete?
- Can you tell me about the relationship you have with your school?

In the teachers’ group, there were ten teachers including:

- Five males
- Five females.

All ten teachers interviewed were all known to deal with high performance school-age athletes. Additionally teachers in this group all had different years of teaching experience ranging from one to 20 years. Their teaching positions included:

- Classroom teachers
- Physical Education teachers
- Co-ordinating teachers
- Principal
• Co-ordinating teacher of many high performance school-age athletes.

The Principal was from a government school that had many high performance athletes attend from the Australian Institute of Sport [AIS] residential campus. Of particular interest was one male school teacher, who had current teaching experiences of high performance school-age athletes in a New South Wales Sport High School.

As models of schooling were being examined, some empirical research into the teacher’s experiences of best practices within their schooling models was gathered. Interviews were important here and questions touched on:

• How do you support your high performance school-age athletes?
• Can you tell me about experiences of high performance athletes at your school?

All participants interviewed were located in the two states of Queensland and New South Wales. The interviews in New South Wales were planned and organised to fit on the one day, so the researcher could travel to this state and return home promptly. Furthermore, participants school types included:

• Government schools
• Non-government schools
• Sport schools
• In-school excellence and scholarship programs
• Home schooling
• Specialist schools
• Specific pathway schools.

Snowballing occurred in all groups as one participant would refer the researcher to a particular close friend, who also had experiences of high performance school-age athletes. For example, an unexpected participant in this study was an athlete who had the experience of home schooling. This home-schooled, 17 year-old athlete was recommended by another high performance school-age athlete, who ‘hangs out’ with him. This participant provided an interesting perspective of a school-age athlete who chose to be educated at home.

For every interview, the participant was contacted by email and followed up by a phone call, to discern the most appropriate and convenient place to be interviewed. Times for all interviews did vary according to the time constraints of the participant;
but, in general, all interviews were at least 45 minutes in duration at a place and time suitable for the participants. Committing adult athletes to interview was difficult, as they had extremely hectic schedules combining high level sport and other demands such as study, family and work. For example, one interview of an over 18 year old surf lifesaving iron woman had to be conducted on the beach where she trained. In the case of the three 15 year old athletes, they were conducted at a suitable time at the home of the athlete. These interviews went for 35 minutes as the young person in all interviews seemed very tired, as the only time available being after their training sessions at night.

All interviews were transcribed, edited and, if the participant requested a copy of the transcript, were returned for the participant to review. Six participants requested a transcript to be returned to them for review. The researcher found the taping functions of Livescribe™ pen made it quite easy to transcribe the interviews, as the functions of bookmarks, pause, fast forward, and rewind, worked very efficiently.

3.3.5 Data analysis

According to Jorgenson (1989) analysis is a:

...breaking up, separating, or disassembling of research materials into pieces, parts, elements, or units. With facts broken down into manageable pieces, the researcher sorts and sifts them, searching for the underlying meaning, classes, sequences, processes, relationships, patterns or wholes. The aim of this process is to assemble or reconstruct the data in a meaningful and comprehensible fashion (Jorgensen, 1989, p. 107)

The three components of data analysis in this study included data reduction, data display and, drawing and verifying conclusions (Miles & Huberman, 1994, 2002). These three processes were ongoing from the start of the first interview, and were interwoven throughout the study. This constitutes a method of analysis approach known as ‘transcendental realism’ (Miles & Huberman, 2002). This implies the researcher is committed to seeking an understanding of the perspectives of others, rather than simply judging them as true or false. Primacy of data occurred in this study as understanding emerged, commencing from the initial codes. These developed into broader themes about high performance school-age athletes’ perspectives concerning their dual life.

Data reduction is the process of selecting, focusing, simplifying, abstracting and transforming the data (Miles & Huberman, 2002). Such processes permitted the continuous occurrence of data throughout the life of this qualitative research. In this study, data reduction commenced from the first interview of the athlete group and
continued through the groups of parents and teachers. A sample of the 39 interviews listed in Appendix C\textsuperscript{5} outlined the initial data reduction, completed on an Excel\textsuperscript{TM} code spread sheet. Included on this Excel\textsuperscript{TM} code spread sheet were the marking off of all initial ideas, themes and codes that the participants mentioned in the interview. For example, listed in Appendix C\textsuperscript{6} was the interview of Lee (adult athlete). On the Excel\textsuperscript{TM} code spread sheet, marks were clearly indicated for the lower order codes of ‘willingness of teachers to help’, ‘lack of recognition of sport as a career’, ‘backup plan for tertiary studies’, ‘drugs and alcohol’, ‘maintenance of grades’, ‘pressures with choosing pathways so young’, ‘multi-dimensional learning’, ‘mentoring from accomplished athletes’, and ‘social media as an outlet’. Additionally, the researcher noted the terms of ‘encouragement’, ‘self-efficacy’ and ‘focus’.

Athlete, parent and teacher code spread sheets were then extrapolated. Furthermore, at the end of each group of participants’ code spread sheets were abstracted and simple constructs comprising the phrases, themes and statements of each group of participant listed in the spread sheet were then outlined (see Appendix C). As seen in the athletes’ code spread sheet, 165 common codes were initially delineated from the 19 manual interview transcripts. At the bottom of the spread sheet, the constructs commenced. This assisted in developing and transposing of details of the participants into NVivo version 9.2 to form ‘nodes’, which will be further detailed in Chapter 4.

Abstracting and simplifying continued for the next 39 interviews and, as each theme and common phrases or statements emerged from the transcription, they were added to the Excel code spread sheet and their presence indicated with the asterisk (as seen in Appendix C). When the researcher came across a certain phrase or theme, the preceding interviews were reviewed to ascertain if any themes were overlooked and needed to be included on the spread sheet. For example, in the column indicating the interview of Ned (a 15 year old athlete), the stated term ‘procrastination’ was entered in row 135 of the participant’s Excel code spread sheet.

\textsuperscript{5} Appendix C: The Excel\textsuperscript{TM} code spread sheet of the sample of the 39 interviews and the 19 athlete group (including Lee’s interview) can be opened up on the CD Rom attached at the back of this thesis.

\textsuperscript{6} Appendix C: The Excel\textsuperscript{TM} code spread sheet that includes Lee’s interview can be opened up on the CD Rom attached at the back of this thesis.
The three main documents of data display were interview transcript, themes of all interview transcripts and the text of major points expressed by participants (Martin & Turner, 1986). Coding of transcripts began based on:

(i) Pre-determined codes that have come from the literature, and 
(ii) Codes that emerged from the data.

Here, the unexpected arose. Further reduction to abstraction occurred where themes appeared.

Each of the 39 interviews were transcribed individually and then manually examined and edited. The format of each interview was converted to wide margins so a blank column to the right and left of the transcribed interview appeared. The researcher then went through each line of every interview individually and, in the right column, commenced manually writing the simple concept the participant was discussing; and, then in the left hand column, noted if there appeared to be a need, problem or tension developing from each of these simple concepts. For example, as seen in Appendix D, Celia’s transcript, illustrated how the researcher used individual underlining of sentences of simple concepts, which were then written in the right hand blank column and in the left column; and any pertinent issue was noted, such as need, problem or tension. An example in this interview was of the simple concept of homework written on the first page of the interview in the right hand column; and noted, in the left hand column, is the word ‘tension’. Additionally, pertinent notes were made on the left hand column about how ‘tired’ this athlete was during the interview and points of interest to be followed up, such as ‘problem’ and ‘procrastination’.

According to Punch (2009), data storage requires an index readily retrieved; and outlined how ‘codes’ in the data consisting of tags, names and labels attached meaning to pieces of data. Furthermore, the researcher channelled all participant data into a smaller number of concepts that were “mentally encoded, stored and readily retrieved” (Miles & Huberman, 1994, p. 69).

Endnote™ bibliography program was used to collect and collate themes pertaining to the literature in custom groups and was easily imported into a Computer Assisted Qualitative Data Analysis (CAQDAS) program of the software of NVivo version 9.2, used in this study. The use of NVivo software version 9.2 in this study helped to establish common concerns about the perceived needs and problems for high performance athletes (Bazeley, 2007; Maxwell, 2004; Richards, 2002; QSR
International, 2010, 2011). All data was entered into ‘sources’ which contained three sub-sections of the program including:

(i) ‘Internals’ - project information and notes on all participants
(ii) ‘Memos’ - the store of additional notes on each participant, and
(iii) ‘Externals’ - all interview transcriptions on each participant were stored.

The above three sub-sections of ‘sources’ will be detailed more fully in Chapter 4.

In this study, ‘memos’ were substantive, theoretical, and methodological. Inductive analysis pulled together incidents that appeared to have ‘commonalities’ (Martin & Turner, 1986). The abstracting of memos led to general theory and reorienting the views about the high performance athlete’s dual life and the best schooling models to attain their successful preparation, to support their sport and academic pathways. Further, it allowed movement through the three aspects of analysis. Specifically, as suggested by Edhlund (2011, p. 13), as this project used NVivo version 9.2, the overall representation is developed by stages of coding including:

1. Descriptive
2. Topic
3. Analytic
4. Drawing conclusions.

Further, Edhlund recommends that the use of NVivo “helps to organise data so that analysis and conclusions will be safer and easier with the ultimate goal being drawing conclusion and developing theories” (p. 13). Finally, conclusions are most readily verified as the analysis continues; and, certainly do not appear until the data collection is finalised (Miles & Huberman, 2002). NVivo version 9.2 helped in drawing conclusions in this study.

Frequently throughout the study the researcher, had to refer back to transcribed interviews to verify the accurate account of findings about difficulties athletes confront on a daily basis in their dual lives, thereby constituting confirmability. Constant referral back to original transcripts was necessary in confirming certain themes. For example, the particular term of ‘procrastination’ was initially defined by a 15 year-old athlete. Reflection on the original transcripts discerned that all athletes spoke of this term as ‘time-wasting’.

If the researcher did not stringently complete this process, this thesis would simply have been an interesting story about high performance athletes. Rather, this
thesis maintained the objective to gather a fullness of rich data concerning high
performance school-age athletes through the views of participants, and subsequently
draw conclusions.

Chapter 4 will provide an exclusive and comprehensive understanding of how this
project used NVivo version 9.2 software progressed the coding of data by descriptive,
topic and analytic categories and eventually to draw conclusions and develop theories.

3.3.6 Constant comparisons and interrogations

Constant comparison and interrogation is the analytical process that as Boeije
(2010) suggests:

Constitute the cornerstones of the research, as their purpose is to describe the
variation that is found within a certain phenomenon, and wherever possible to
indicate in which situations different variations of the phenomenon manifest
themselves (p. 83).

Furthermore, Bryman (2008) reveals that constant comparison is the process of
“maintaining a close connection between data and conceptualisation, so that the
correspondence between concepts and categories with their indicators is not lost” (p.
542).

The four phases, as suggested by Wester (1995) and Boeije (2010), were
adopted in this thesis, to verify a comprehensive comparison and interrogation in this
research, as seen in Table 3.1.
**Table 3.1**

_The four phases of comparison and interrogation translated from Boeije (2010), p.84._

<table>
<thead>
<tr>
<th>Analytical stage</th>
<th>Process</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>Discovery of concepts</td>
<td><strong>15 concepts</strong> including: transition, time, support networks, study habits, sibling rivalry, role models, recognition, life after sport, learning theories, issues, individual plans for athletes, homework, flexibility, dimensions, assignments.</td>
</tr>
<tr>
<td>Specification</td>
<td>Development of the concepts</td>
<td><strong>Merge to eight concepts</strong> including: support networks, individual athlete plans, issues, flexibility, time, recognition, life after sport and transition</td>
</tr>
<tr>
<td>Reduction</td>
<td>Determining the core concepts</td>
<td><strong>Condensed to three concepts</strong> of: support networks, individual features and personalised strategies where issues within each of these concepts patterned issues relating to in school, out of school and equally relevant to both dimensions. All of which merged into <strong>three themes</strong> of: ‘impact on double life’, ‘who can help’ and ‘what I need to cope’.</td>
</tr>
<tr>
<td>Integration</td>
<td>Developing the final theory</td>
<td><strong>Relate to two theoretical concepts</strong> which provide understanding of the athletes’ experiences. Proposal of the ‘Athlete-friendly school’</td>
</tr>
</tbody>
</table>


The constant comparison started in this stage, as one transcript was compared to another, allowing the same phrases and statement to then be allocated the same names or codes. For example, the researcher coded ‘flexibility’ to fragments from all transcripts concerning options, strategies to completing senior study years in the forms of VPR, nominating five subjects instead of six subjects, and even home schooling.
The specification stage allowed the researcher to commence selecting eight key concepts from the original 15 concepts that were developed in stage one. As suggested by Boeije (2010), this permitted the researcher to explore for variances and resemblances in the “fragments that have been awarded that code” (p. 84). As seen in Table 3.1, the next stage was the analytical stage. The eight key concepts were now: ‘support network’, ‘individual athlete plans’, ‘issues’, ‘flexibility’, ‘time’, ‘recognition’, ‘life after sport’ and ‘transition’.

In the reduction stage, as suggested by Boeije (2010), “the goal of the analysis is to describe the core concept and the relationship this concept has with other concepts” (p.84). For example, the eight concepts merged to the three major concepts of support networks, individual features and personalised strategies, which eventually conceptualised into the three themes of ‘impact of double life’, ‘who can help the athlete’ and ‘what did the athlete need to cope’.

As Boeije (2010) advises, the final stage is that of integration where a “theory is developed, and constant comparison is used to search for cases” (p. 84). In the final stage of this study, two theoretical constructs were related to the understanding of the athletes’ experiences. In this stage, the proposal of the ‘athlete friendly model’ of schooling emerged. Proposed school characteristics contain the key characteristics of educational, as well as, social, physical, psychological and economic issues that athletes, schools, parents, teachers, coaches and sporting associations could use in dealing with high performance school-age athletes. These school characteristics will be discussed in Chapter 7.

3.3.7 Ethics permission

Ethical approval was sought from the University of the Sunshine Coast Higher Research Ethics Committee (HREC). The ethics approval letter is listed in Appendix E. Informed consent of the participants was sought before formally interviewing, and was addressed by use of the National Ethics Application Form (NEAF) to ensure all participants of this study were (and continue to be) guaranteed privacy and confidentiality (Australian Government, 2010).

All 39 participants were issued with information sheets (see Appendix F), outlining the title, research question and sub questions (Richards, 2009). In addition, informed consent (Appendix G) was detailed in letter form and all ensured of complete and continuing confidentiality, from the time of commencement of their participation to
its conclusion. The participants’ involvement in this study was completely voluntary. For the select group of 15 year old participants, consent was sought from the parent or guardian. Transcripts were all de-identified by incorporating pseudo names and codes against each of their names (refer Table 4.2, Chapter 4). A copy of each of the de-identified audio recordings and transcripts remain locked in a cabinet at the University of the Sunshine Coast for protection from harm and risk.

During all interviews, the researcher adhered and conducted herself with professional ethics as outlined in the code of conduct for researchers. In particular, for the school teachers in the school official participant group, the interviews were outside of school hours at a place convenient with them. However, one school teacher did request the interview at his school in his non-contact time. In this one case, as the teacher specifically requested and desired the interview on the school location, the interview was then conducted at the school location.

After each interview was completed, the researcher sent a thank you to the participant for their time and valuable contribution of experiences to this thesis. In the appreciation letter sent to all the participants, individual transcripts (for the six participants that requested it) were returned.

3.4 Reliability and Validity to Thoroughness and Credibility

Richards (2009) writes “to make qualitative data is ridiculously easy. The challenge is not so much making data but rather useful, valuable data, relevant to the question being asked, and reflecting on the process of research” (p. 33). Similarly, Punch (2009) argues that in qualitative data there is a need for consistency, compatibility and integrity between research paradigms, questions and methods.

Pollyman (2008) theorises the meanings of reliability and validity of data in the terms of ‘internal’ and ‘external’. Reliability in qualitative approaches is more to do with accuracy and comprehensiveness of the data, rather than literal consistency or replica (Bogdan & Biklen, 1992; LeCompte & Goetz, 1982; Ritchie & Lewis, 2003). The researcher needs to be aware of the problem arising with what to do with such data when it has been collected. Reliability of interviews is very difficult to achieve, as every participant had their individual responses to the same set of questions. The researcher repeated the same question in different versions to the athletes, parents and teachers. In this way, the ‘same’ answer was achieved. ‘Trustworthiness’ is then ascertained and
allowed for self-interpretation of the interview (Kvale & Brinkman, 2009). In this study the researcher needed to be transparent about the issues of research process itself, intersubjective construction of knowledge and the ‘positioning’ of the researcher (Thorne et al., 2004).

This study validated its findings, thus ensuring its quality. Validity must be distinguished from the researcher’s own sincerity and enthusiasm in presenting the findings as ‘truths’. Reliability of the study corresponds to ‘dependability ‘and ‘objectivity’, and to that of confirmability (LeCompte & Goetz, 1982). Further, this study must pass the ‘thoughtful clinician test’, which means:

Those who have expert knowledge of the phenomenon in a particular way find that the claims are plausible and confirmatory of ‘clinical hunches’, at the same time as they illuminate new relationships and understandings (Thorne et al., 2004, p. 8).

This implies the researcher had to examine, and be very alert to, information gathered from the participants about the essence of high performance and how it relates currently to high performance athletes at school.

The external validity is difficult to meet in qualitative research as it refers to the degree to which the study can be replicated. Lincoln and Guba (1982) and Guba and Lincoln (1994) propose four primary criteria for assessing a qualitative study’s ‘trustworthiness’. This study had a manageable, purposive sample of 39 participants. Although the researcher cannot claim this study is a representative sample, neither is there any evidence that the sample in this study is unrepresentative of other situations and contexts.

Integrity was achieved in this study as the interpretive process of this research generated ‘credible’ findings (Thorne et al., 2004). Credibility will occur “when complexities are made visible through the analytical process” (Emden & Sandelowski, 1999, p. 206). To establish credible findings in this study the researcher, sought to carry out canons of good practice and submit her findings to the members of the social world (Pollyman, 2008). In this way, it was established that the researcher had correctly understood the social world of the high performance athletes at school. Further, the process needs were articulated in a ‘criterion of uncertainty’ that acknowledges certain ‘tentativeness’ about the final research outcomes (Emden & Sandelowski, 1999).
More importantly, the descriptive or contextual account of this research needed to be complete and thorough. This technique, also referred to as ‘triangulation’, was reached in the final section of Chapter 6, which allowed the researcher of this study to make use of multiple and different sources, methods, investigators and theories to present ‘corroborating evidence’, shedding light on the perspective of high performance athletes at school (Lincoln & Guba, 1995).

3.5 Reflexivity

‘Reflexivity’ is the process of critically reflecting on self as researcher (Guba & Lincoln, 1982, 1994). Utilising this process allowed the researcher to question the binaries and paradoxes that shape, discoveries, processes of writing and interactions with participants (Denzin, 1998, 2009; Schwandt, 2000). The researcher had to have self-trust and “a conscious experiencing of the self as both inquirer and respondent, as teacher and learner, as the one coming to know the self within the processes of research itself” (Alverson & Skoldberg, 2009, p. 185). As implied by the words in this quote, in this study the researcher had to be conscious of her personal bias due to her own experiences of being a mother of six children, all of whom are or have been high performance athletes at school.

Holliday (2007) explains managing the tension between a researcher taking advantage of a presenting opportunity and the research protocol and principles of social science. Furthermore, Holliday (2007) suggests the embedded nature of a researcher’s role, and their rationale for their relationship with the research setting, is vital to the integrity of a qualitative study. Additionally, it is essential that a researcher remembers to justify their interpretations (Burns, 2000), making the familiar strange.

It will be remembered from the preface that the researcher acknowledged that the study arose from the personal interest the researcher holds - that of being a concerned mother of six children. All six children are, or have been involved in, various sports at state, national and international levels. The researcher’s children fit into the three groups of school-age athletes: those already competing nationally or internationally, age level and members of NTID sport programs. At times the researcher had difficulty in separating herself from the plights of some of the parents she interviewed. This was particularly notable in the interview of the adult female soccer player, who was raised by a single mother with eight siblings.
Therefore, as suggested by Turner (2010), in the interview process (although it may be a plain conversation), it is enmeshed with power relationships and agendas. Several authors (for example: Lichtman, 2006; McCracken, 1988; Rubin & Rubin, 1995) describe the in-depth interviewing as a conversation between the interviewer and participant. The purpose in such an individual in-depth interview as stated by Lichtman (2006) is then to hear what the participant has to say in “her own words, her own voice, with her language and narrative” (p. 119).

Furthermore, Lichtman aptly surmises “individual in-depth interviewing is more a process, not just a predetermined list of questions” (p. 119). Hence, the researcher adopted a form of self-reflective perspective, which can be explained by five stages of self-reflective perspective that is considered as obligatory (Rossman & Rallis, 2003). Firstly, the researcher viewed the phenomena of high performance holistically. Secondly, she used complex reasoning and constantly adapted one or more strategies of inquiry. Thirdly, the study took place in a natural setting; and, in stage four, the researcher adopted multiple methods that were interactive and humanistic. Finally, interpretive perspective results were gained (Rossman & Rallis, 2003). In this way, the researcher filtered the data concerning such athletes through her personal lens and therefore needed to be aware of her bias, based on her own parenting of high performance school age athletes.

Some of the common pitfalls and analytic errors the researcher aimed to avoid were ‘going native’, which assumes the researcher alone has come to an understanding of the phenomenon as an insider. In the totality of this research, an imperative role or ‘positioning’ for this researcher needed to be an acute awareness of where she is in the research (Thorne et al., 2004). ‘Premature closure’ would have occurred if the researcher affixed existing structure onto the findings, early in the analytic process; and then sought only to confirm it. Finally, ‘bloodless findings’ are the technical reports that survey the topic and fail to capture anything of its essence or depth. Fortunately, this did not occur in this study.

Analytic errors are the ‘determination of pattern’ which the researcher avoided, by not assuming or ignoring the logic of probability and peculiarities of chance (Thorne et al., 2004). Finally, ‘peer review’ or ‘debriefing’ as referred to by Lincoln and Guba (1995) was provided as the external check for this research process. Such de-briefing allowed the peer de-briefer, or the supervisors of this thesis, to assume the role of ‘devil’s advocate’ to keep the researcher honest and ask the hard questions about
methods, meanings, and interpretations. The peer reviewer was the sympathetic listener to the researcher’s own feelings. As recommended by Creswell (2007), written ‘peer debriefing’ sessions were filed and kept locked in cabinets at the university.

3.6 Methodology and Methods Conclusion

In conclusion, this chapter embraced the research design process, explaining the development of this research project so far, and discussed the supporting methodology of symbolic interactionism. It has also provided a detailed account of the data collection process that took place, and foreshadowed the anticipated data analysis process. Finally, this chapter has wrapped the methodology and methods in the overarching research paradigm of interpretivism.

This project will now move to the next chapter, Chapter 4, where the data analysis using the CAQDAS software of NVivo version 9.2 is outlined and described, to explain how this study was conceptualised in this qualitative tool kit. The specifics of this tool kit from initialising the project, the breakdown of running queries and analysing the data of all the interviews are contextually described and explained in full, using exported screenshots from the study.
Chapter 4 Data Analysis and the Use of NVivo Version 9.2

The purpose of this chapter is to describe how the data analysis of this study was conducted using NVivo™ version 9.2 software, to demonstrate the rigour of the data analysis process. Successful research using qualitative data relies on the rigour and thoroughness of the data analysis methods; and, consequently, this whole chapter is given over to explaining how the data in this project was analysed. The key themes were to diminish the doubt surrounding the reliability and validity of the qualitatively produced findings, and to formulate a serious method of data analysis (Miles & Huberman, 1994). As Miles (1979) argued:

The most serious and central difficulty in the use of qualitative data is that methods of analysis are not well formulated. For quantitative data, there are clear conventions that the researcher can use. But the analyst faced with a bank of qualitative data has very few guidelines for protection against self-delusion, let alone the presentation of unreliable or invalid conclusions to scientific or policy-making audiences. How can we be sure that an “earthy”, “undeniable”, “serendipitous” finding is not, in fact, wrong? (p. 591).

In defence of the qualitative researcher using software such as NVivo in their project, Richards (2002) suggests that it is feasible to achieve transparency, rigour, rapidity and reliability of qualitative data:

Qualitative researchers are assisted by software tools such as NVivo in pursuit of each of the goals of rigor, rapidity, and reliability, but in each area there is a need for software design to address the tasks of research where rigour, rapidity, and reliability are paramount requirements (Richards, 2002, p. 425).

Furthermore, Bazeley and Richards (2000) suggest that NVivo makes it possible to “manage, access and analyze data and to keep a perspective on all of the data, without losing its richness or the closeness to data that is critical for qualitative research” (p. 1).

The content of this chapter is highly contextual; it was designed to provide explanation and understanding of how this qualitative ‘tool kit’ was implemented in the overall analysis of data from the 39 in-depth interview transcripts in this study. In this way, transparency of the data could be achieved. A number of screenshots were directly exported from the NVivo 9.2 project and appear in this chapter. Such inclusions were necessary to outline explicitly the skeletal map of how this study was conceptualised using NVivo 9.2 program functionalities, which the researcher refers to as the ‘tools’ in the NVivo tool kit.
Each interview was recorded using Livescribe™ pen, transcribed and then imported into the NVivo project entitled “high performance school-age athletes”, in audio and word document format. It must be mentioned that the researcher chose NVivo version 9.2 as it allowed storage and analysis of data in this project (370,000Kb). Endnote™ literature review themes, Livescribe™ audio transcripts and written notes on the attached notebook, field notes, YouTube™ clips and photos were also easily imported into the NVivo project. Additionally, this chapter relies heavily on NVivo terminology to assist the understanding and development of data analysis in this study.

There are five sections to this chapter. The first section explains the use of this ‘tool kit’ in this qualitative study. Table 4.1 in the first section of this chapter clearly highlights the four stages and the procedures by which the researcher built and processed data in this study. Next, sections 2 to 5 of this chapter describe and highlight the four stages of data analysis development from the lower order descriptive stage through the next levels of topic and analytic, to the highest order analysis of drawing conclusions. In each stage, data was exported from the NVivo project to Excel™ to produce figures and tables. Appendix H provides electronic access in Power Point™ format to examples directly exported from this project in each of the four-staged executions of data analysis, used in this study, by the tools of NVivo 9.2.

4.1 Use of NVivo Version 9.2 in Data Analysis of this Study

Computer Assisted Qualitative Data Analysis (CAQDAS), such as the software known as NVivo, varies from quantitative data analysis software predominantly in the “terms of the environment within it operates” (Bryman, 2008, p. 566). The NVivo ‘tool kit’ creates an “auditable ‘footprint’ of the progressive dialogue between the researcher and their data” (Sinkovics & Alfoldi, 2012, p. 5). The researcher used NVivo version 9.2 to enhance the transparency of the process in conducting and interpreting the qualitative data in this study. Furthermore, as suggested by Bryman and Burgess (1994) and Veal (2005), it compelled the researcher to be more explicit and reflective about the process of the analysis in this study.

Coffey, Holbrook and Atkinson (1994) argue that the style covered in the use of data analysis such as NVivo version 9.2 software results in the “emergence of a new orthodoxy” (p. 4). Moreover, as suggested by Bryman (2008), such conventions in this

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Any references to Appendix H: open the CD Rom attached at back of thesis.
study that “presume and are predicted on such certain style of coding and retrieving text owe a great deal to grounded theory” (p. 567).

By using NVivo version 9.2, new opportunities were offered in the process of analysing data in this study, which were helpful in the development of explanations (Mangabeira, 1995). The researcher could use any of the tools in this ‘tool kit’ to tease out themes from the data. It also made the researcher aware that constant reflection back to the participants’ transcripts, to re-examine and confirm certain aspects, was essential.

The project was built and conceptualised in four stages. Using this qualitative tool kit, it was possible to constantly interrogate the data, moving from lower order to higher order themes, which now will be considered in turn.

4.2 How the NVivo Picture was built in this Study

The overall picture of how this project developed using NVivo 9.2 is shown in four stages in Table 4.1. This follows the pattern suggested by Edhlund (2011).

Table 4.1

<table>
<thead>
<tr>
<th>Stages of NVivo version 9.2</th>
<th>Processes involved in each stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: Descriptive</td>
<td>Project details and research design Sources Attributes Values Classifications</td>
</tr>
<tr>
<td>Stage 2: Topic</td>
<td>Finding the obvious topics Creating initial nodes</td>
</tr>
<tr>
<td>Stage 3: Analytic</td>
<td>Merging nodes into hierarchies Data sets Models and relationships Using Queries Running Queries Matrix coding queries Cross case queries analysis</td>
</tr>
<tr>
<td>Stage 4: Drawing conclusions</td>
<td>Verification Developing theories</td>
</tr>
</tbody>
</table>


Referring to Table 4.1, the four stages of descriptive, topic, analytic and drawing conclusion were designed and then executed in this study. Each stage contains
important processes that need to be completed before entering the next stage. A similar progressive focusing model of the qualitative research process was designed by Sinkovics and Alfoldi (2012). The six steps Sinkovics and Alfoldi developed were as follows:

1. Choosing a topic, literature review, development of theoretical/conceptual foundations and research questions
2. Research design
3. Sample, context and negotiating access
4. Data collection and preparation
5. Data analysis and constant comparison with theory
6. Discussion and final write-up (Sinkovics and Alfoldi, 2012, p. 21).

After reviewing the design of Sinkovics and Alfoldi model, attending workshops, participating in QSR e-seminars and having colleagues enquire about the use of this software in their studies, the researcher designed her own stages and processes as seen in Table 4.1. Using the data from this study, the following sections of this chapter deconstruct each of the processes in the four stages as outlined in Table 4.1. Each stage is entitled as follows:

- Stage 1: Descriptive
- Stage 2: Topic
- Stage 3: Analytic
- Stage 4: Drawing conclusions.

Each of these stages will now be detailed in the next four sections of this chapter.

### 4.2.1. Stage 1: Descriptive

Stage 1 of this study involved entering the project details. All information relevant to the project which provided an overall picture of the project was imported into the project. Some of the examples of project details imported were: interview schedules for the three groups of athletes, parents and teachers, demographics of all participants, related journal articles (in PDF format), necessary school websites, ethical approval letter, schedule of all interview times and locations, field notes, recording of all interviews, and the recording of an ABC radio interview. All these necessary descriptive details of the research project were entered into the section of the program, known as ‘sources’, which contained the sub-sections of ‘internals’, ‘memos’ and ‘externals’ (Bryman, 2008).

#### 4.2.1.1 Sources

Referring to Table 4.1, the ‘sources’ section of the NVivo program consists of ‘internals’, ‘memos’ and ‘externals’. For this project, the internals coded all details of
the study of high performance school-age athletes including literature from the established Endnote™ bibliography program, details of each of the 39 interviews and any additional information, audio visuals, researcher’s ABC radio interview concerning this study and images relevant to this project. For example, Figure 4.1 illustrates a sample of the ‘internals’ entered for this project.

Figure 4.1

Referring to Figure 4.1, all the icons beside each internal highlight what type of file format it is. Additionally, the colour code is set for each category of information it contains. As seen in Figure 4.1, all ‘internals’, ‘memos’ and ‘externals’ were linked by a set colour code to delineate the group of participants each represents in the project. In this study, the attributes corresponding to the characteristics or properties were:

- Green - athlete
- Red - parents
- Pink - teachers
- Orange - sub categories athletes
- Blue - Endnote™ literature.
Sub-group categories within the athlete group were coloured coded orange. The colour code blue represented all Endnote™ literature PDF files and abstracts. The reasons behind such necessary colour coding categorisation will be further detailed later in this chapter.

As the Livescribe™ pen was used to record all 39 interviews, it was possible to download files from the Livescribe™ program as a podcast, and then import the audio of the interviews into the internal section of this project. The advantage this gave was that the audio could be played back and any bookmarks that were made on the tape during the recording of the interviews allowed direct access in NVivo to these initial thoughts.

‘Memos’ in the sources section of the program allowed any relevant footnotes and ‘annotations’ about the 39 interview word documents to be imported and stored. In some instances, as NVivo version 9.2 possesses a word processor the researcher, was able to create memos and notes directly into this section. However, 9.2 version spell check is not available, but such necessary functionality is present in NVivo version 10. A sample of memos from this project is seen in Figure 4.2.

![Figure 4.2 Sample of memos from this project.](image)

‘Memos’ stored all the ideas and reflections from all the individual interviews. Links of different kinds that might be important to the project were created between objects in the internals and memos and which can then be linked to externals that contained all the interview transcripts (Figure 4.3).
Referring to Figure 4.3, in this part of the program, the icon indicates whether there are links between participants’ interviews listed in the externals or just a note to self about a certain aspect the researcher thought was interesting. For example, as seen in Figure 4.3, ‘Jo’ has the link icon beside her name indicating a link exists with another participant in the project through a common thread which, in this case, was with the sport of gymnastics.

The section of sources known as ‘externals’ provided the researcher with the opportunity to import and/or copy and paste the transcribed transcripts of each of the interviews, under their pseudonym, as seen in the following sample of the externals in this study. In this project, internals and externals were coded in the colours of red, green, pink or orange that represented similar groupings of participants or attributes required, as seen in Figure 4.4.
Referring to Figure 4.4, the sub-group of athletes was delineated by orange, which identified the data for female athletes. This was deliberately designed to permit a higher order theme to be discerned about female athletes. Additionally, it assisted with the delineation of the values of node attributes to be used in queries. This will be outlined in a later stage of this chapter.

4.2.1.2 Attributes, values and classifications

‘Attributes’, as suggested by Edhlund (2011), correspond to “characteristics or properties of a source item or a node which has or will have an impact when analysing data” (p.123). Referring to Table 4.1 each attribute has a set value with the corresponding classification being the collective name given to the node or source. For example, in this project the attributes correspond to the characteristics or properties of the athletes, parents and teachers as seen in Figure 4.5.

Figure 4.5

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>school status</td>
</tr>
<tr>
<td></td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>age groups</td>
</tr>
<tr>
<td></td>
<td>participants</td>
</tr>
<tr>
<td></td>
<td>gender</td>
</tr>
<tr>
<td></td>
<td>SportType</td>
</tr>
<tr>
<td></td>
<td>Schooling model</td>
</tr>
<tr>
<td></td>
<td>option</td>
</tr>
<tr>
<td></td>
<td>assessment type</td>
</tr>
</tbody>
</table>

Figure 4.5 attributes used in this project.

Each ‘attribute’, as listed above, had a value attached. Examples are as follows:

- Gender - not applicable, unassigned, male and female.
- School type - government, non-government, specialist, specific pathway, in-school scholarship and excellence and home schooled.

These values were selected to run queries, and these will be outlined in a later section of this chapter.

Specific set values were assigned to the characteristics of the participants and the classification was the name given to such values. For example, athletes were grouped by school status which was made up of ‘at school’ or ‘left school’. Overall, a case classification sheet for the 39 participants in this study was generated by designing a demographics table outside of the project, and then importing it into the node classifications, as seen in the sample of the ten adult athletes as outlined in Table 4.2.
### Table 4.2

*Sample (Teachers) demographics created in Excel™*

<table>
<thead>
<tr>
<th>Code</th>
<th>School model and State</th>
<th>Sport Individual(I)/Team(T)</th>
<th>Age</th>
<th>Pseudo</th>
<th>Competition status</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>060911</td>
<td>Non-government In-school scholarship Qld</td>
<td>I</td>
<td>18</td>
<td>Tiana</td>
<td>International AIS</td>
<td>F</td>
</tr>
<tr>
<td>250811</td>
<td>Government VPR In-school excellence Qld</td>
<td>T</td>
<td>18+</td>
<td>Sue</td>
<td>NTID National</td>
<td>F</td>
</tr>
<tr>
<td>050811</td>
<td>Government Qld</td>
<td>I</td>
<td>18+</td>
<td>Kylie</td>
<td>International</td>
<td>F</td>
</tr>
<tr>
<td>160811</td>
<td>Government Qld, NZ &amp; USA</td>
<td>T</td>
<td>18+</td>
<td>Bob</td>
<td>International</td>
<td>M</td>
</tr>
<tr>
<td>160911</td>
<td>Non-government Catholic NSW</td>
<td>I</td>
<td>19</td>
<td>Teila</td>
<td>Age range National</td>
<td>F</td>
</tr>
<tr>
<td>160911</td>
<td>Non-government Catholic NSW</td>
<td>I</td>
<td>18+</td>
<td>Lee</td>
<td>International</td>
<td>F</td>
</tr>
<tr>
<td>160911</td>
<td>Government NSW</td>
<td>T</td>
<td>18+</td>
<td>Will</td>
<td>International</td>
<td>M</td>
</tr>
<tr>
<td>240911</td>
<td>Government SA</td>
<td>I</td>
<td>18+</td>
<td>Cameron</td>
<td>International AIS</td>
<td>M</td>
</tr>
<tr>
<td>260911</td>
<td>Government Qld</td>
<td>I</td>
<td>18+</td>
<td>Sun</td>
<td>International</td>
<td>F</td>
</tr>
<tr>
<td>290911</td>
<td>Government Qld Scholarship</td>
<td>T</td>
<td>18+</td>
<td>Pete</td>
<td>Age group</td>
<td>M</td>
</tr>
</tbody>
</table>

Assigning specific demographics in the manner outlined in Table 4.2 allowed attributes and values to be assigned and imported into the project for each of the 39 participants. A sample then generated in the NVivo project is presented in as Table 4.3.
Table 4.3

Sample of case classification sheet from this project: Case attributes and values.

<table>
<thead>
<tr>
<th>Case</th>
<th>Age</th>
<th>Schooling model</th>
<th>Sport Type</th>
<th>age groups</th>
<th>assessment type</th>
<th>gender</th>
<th>option</th>
<th>participants</th>
<th>school status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nodes\people : Annette</td>
<td>16 years old</td>
<td>government</td>
<td>Individual</td>
<td>15-18 years</td>
<td>formative</td>
<td>female</td>
<td>VPR over 3 years</td>
<td>athletes</td>
<td>at school</td>
</tr>
<tr>
<td>Nodes\people : Belinda</td>
<td>17 years old</td>
<td>specific pathway</td>
<td>Individual</td>
<td>15-18 years</td>
<td>formative</td>
<td>female</td>
<td>2 years full load</td>
<td>athletes</td>
<td>left school</td>
</tr>
<tr>
<td>Nodes\people : Bob</td>
<td>18+ years old</td>
<td>government</td>
<td>Team</td>
<td>18+ years old</td>
<td>summative</td>
<td>male</td>
<td>2 years full load</td>
<td>athletes</td>
<td>left school</td>
</tr>
<tr>
<td>Nodes\people : Bella</td>
<td>18+ years old</td>
<td>government</td>
<td>Unassigned</td>
<td>18+ years old</td>
<td>Unassigned</td>
<td>female</td>
<td>Unassigned</td>
<td>teacher</td>
<td>Unassigned</td>
</tr>
<tr>
<td>Nodes\people : Cameron</td>
<td>18+ years old</td>
<td>government</td>
<td>Individual</td>
<td>18+ years old</td>
<td>summative</td>
<td>male</td>
<td>2 years full load</td>
<td>athletes</td>
<td>left school</td>
</tr>
</tbody>
</table>

4.2.2 Stage 2: Topic

Stage 2 commenced the abstraction of obvious topics from the transcripts. Coding in NVivo 9.2 program permitted the grouping of related concepts known as ‘nodes’. This process was promoted by allocating coding stripes and highlighting certain phrases and sentences that denoted obvious topics that originated from the formulation of nodes. Coding stripes are set on the side of each transcript in the program and, if clicked on, open up and highlight the exact node to which they are directly related.

4.2.2.1 Creating initial nodes

The creation of ‘nodes’ began at this stage. Referring to Table 4.1, each initial node was considered to be a topic, an idea, or an abstraction that came from the study (Bryman, 2008). It was imperative at this stage for the researcher to link nodes to each of the 39 participants’ characteristics and values. This was enabled by inputting ‘node classifications’. In order for the program to associate data for each source so queries could be generated, a node classification sheet was created in the relevant section of the program (node classifications). All participants’ pseudonym names were imported and a source and reference to each was nominated. For this project, this meant that a node classification was attached to all participants, and thus linked all nodes to each participant’s attribute and values (Figure 4.6). This is an imperative process as it permits queries to be generated, which will be detailed in a later section of this chapter.

Overall, such mapping made it easier for the researcher to initialise the beginning nodes. Excel™ concept maps were designed outside of the NVivo project for each group. Each of these was imported into the ‘internal’ section of the project to provide easy cross-reference. Samples of the athletes’ (Chapter 5) and parents’ and teachers’ (Chapter 6) concept maps designed, outside of NVivo are seen in Figure 4.7.
<table>
<thead>
<tr>
<th>Chapter 5</th>
<th>common issues at school</th>
<th>left school</th>
<th>dispute issues between at school to left school</th>
</tr>
</thead>
<tbody>
<tr>
<td>school</td>
<td>missed class time</td>
<td>culture embedded</td>
<td>empathy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>teacher specialisation</td>
<td>on on tutoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>school environment</td>
<td>school facilities</td>
</tr>
<tr>
<td>Flexibility</td>
<td>technological aides</td>
<td>support networks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mentor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>parent</td>
<td>assistance of teachers</td>
<td>reinsurance</td>
<td>role models</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pressure to achieve ‘pushy’</td>
<td></td>
</tr>
<tr>
<td>coach</td>
<td></td>
<td>coach support</td>
<td></td>
</tr>
<tr>
<td>emotional</td>
<td>emotional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>specialist</td>
<td>specialist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Individual Features**

<table>
<thead>
<tr>
<th>social</th>
<th>inequity</th>
<th>bullying</th>
<th>social media</th>
<th>prejudices</th>
<th>preferential treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>sacrifices</td>
<td>drugs and alcohol</td>
<td>procrastination</td>
<td>disruption to family life</td>
<td>adult squad members</td>
<td></td>
</tr>
<tr>
<td>social fit</td>
<td>life balance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mental</td>
<td>mindset</td>
<td>resilience</td>
<td>anxiety</td>
<td>focus</td>
<td>motivation</td>
</tr>
<tr>
<td>physical</td>
<td>nutrition</td>
<td>fatigue and recovery</td>
<td>injury prevention</td>
<td>heavy training sessions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tiredness</td>
<td>soreness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>physical</td>
<td>physical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>personalises</td>
<td>strategies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>time management</td>
<td>study habits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>adaptive</td>
<td>essential classes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>scheduling</td>
<td>assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>goal setting</td>
<td>life after sport</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>assignments</td>
<td>communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>homework</td>
<td>back up plans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>self efficacy</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Three Themes**

1. What’s happening to me?
   - as I try to cope with the double life
2. What I need?
   - to help me cope with the double life
3. Who can help me?
   - Who can help me cope with the double life?
<table>
<thead>
<tr>
<th>Chapter 6 common issues</th>
<th>Parent issues</th>
<th>Teacher issues</th>
<th>conflict issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>learning difficulties</td>
<td>school</td>
<td>school facilities</td>
<td>to help me cope with the double life</td>
</tr>
<tr>
<td>empathy</td>
<td>school</td>
<td>flexibility</td>
<td>school</td>
</tr>
<tr>
<td>mixed class time</td>
<td>school</td>
<td>school policies</td>
<td>school</td>
</tr>
<tr>
<td>mentors</td>
<td>school</td>
<td>specialist</td>
<td>specialist</td>
</tr>
<tr>
<td>spare lessons</td>
<td>school</td>
<td>policy</td>
<td>policy</td>
</tr>
<tr>
<td>technological aides</td>
<td>school</td>
<td>specialist</td>
<td>specialist</td>
</tr>
<tr>
<td>who can help me?</td>
<td>school</td>
<td>specialist</td>
<td>specialist</td>
</tr>
<tr>
<td>what's happening to me?</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>individual features</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>social</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>inequality</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>prioritisation</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>mental</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>mindset</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>motivation</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>resilience</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>physical</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>tiredness</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>nutrition</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>personalisation</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>assessment and homework</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>time management</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>scheduling</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>communication</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>assessment</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>essential classes</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>3 Who can help me?</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>who can help me cope with the double life</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>2 What I need?</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>to help me cope with the double life</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>1 What's happening to me?</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>as I try to cope with the double life</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>coach</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>emotional</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>specialist</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>coach</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>emotional</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>specialist</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>coach</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>emotional</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>specialist</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>coach</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>emotional</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
<tr>
<td>specialist</td>
<td>school</td>
<td>psychological</td>
<td>psychological</td>
</tr>
</tbody>
</table>

Figure 4.7 Athletes (Chapter 5) and Parents and Teachers (Chapter 6) Excel™ concept maps.
As seen in Figure 4.7, these two concept maps provided a vehicle not only to move outside of the project and reflect on aspects that were developing, but also to identify the emergence of higher order themes. Such concept maps then allowed the researcher to easily discern the different issues that directly related to athletes, parents and teachers. As indicated in Figure 4.7, Chapter 6 (parents and teachers) concept map commenced the extrapolation of concepts facilitating the triangulation of the data between the three groups of participants. Thus, the beginnings of the higher order themes commenced appearing outside of the project, which could not be adequately discerned whilst entrenched in the NVivo project.

4.2.3 Stage 3: Analytic

The analytic stage of this project involved the initial merging of ‘nodes’ and the running of ‘queries’. Bryman (2008) suggests that this is the process of exploring more complex aspects of the nodes.

4.2.3.1 Merging nodes into hierarchies

Stage three commenced with initial nodes being moved, merged and renamed into eight nodes of ‘support network’, ‘individual athlete plans’, ‘issues’, ‘flexibility’, ‘time’, ‘recognition’, ‘life after sport’ and ‘transition’, some of which are listed in the compressed screen shot in Figure 4.8.

Figure 4.8

<table>
<thead>
<tr>
<th>Life after sport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meg</td>
</tr>
<tr>
<td>Vce</td>
</tr>
<tr>
<td>Recognition</td>
</tr>
<tr>
<td>Role models</td>
</tr>
<tr>
<td>Sidings every</td>
</tr>
<tr>
<td>Study habits</td>
</tr>
<tr>
<td>Test</td>
</tr>
<tr>
<td>Time</td>
</tr>
</tbody>
</table>

Figure 4.8 Formation of merged and renamed nodes in the study.
As seen in Figure 4.8, some participants had to be added to the project at various times based on their availability to complete an interview. As a result these transcripts were loaded as a node to allow their content to be incorporated into the data analysis.

Nodes were then renamed and merged into a hierarchical arrangement to allow greater analytical coding using queries (Edhlund, 2011). For example, the support of ‘school’, ‘parent’, ‘coach’, and ‘specialists’; and the in-school support issue of ‘flexibility’ were merged into ‘support network’. ‘Individual athlete plans’, ‘time’, ‘recognition’, ‘life after sport’ and ‘transition’ merged and were renamed ‘personalised strategies’. Finally, issues which incorporated ‘social’, ‘mental’ and ‘physical’ aspects were renamed and merged into ‘individual features’. The final structure and scaffold of the hierarchical layout of all nodes was eventually generated and shows the final nodal structure of this project, incorporating 15 nodal hierarchies as seen in Figure 4.9 (refer page 110). The diagram provided on the following page (page 110) is a snapshot only - to access the page electronically, refer to the attached Power Point™ presentation on CD Rom (Appendix H).

4.2.3.2 Data sets

To extrapolate higher order themes from the lower categories, it was necessary to colour code (yellow) as seen in Figure 4.9 and merge lower nodes together to create data sets - to access the page electronically, refer to the attached Power Point™ presentation on CD Rom (Appendix H). Merging of the higher order nodes streamlined the project into three main themes: ‘impact of double life’, ‘what I need as I try to cope with my double life’ and ‘who can help me’. The groupings of these data sets were also included in the last column of the concept maps as seen in Figure 4.7 (numbered 1 to 3). This allowed issues to be discerned that directly related to the higher order node. The conceptualisation of the data sets of higher order themes is available in the section of NVivo version 9.2 known as ‘collections’. For example, a snapshot of the data sets created in the collections sections for this project is seen in Figure 4.10.

Figure 4.10

<table>
<thead>
<tr>
<th>Name</th>
<th>In Folder</th>
<th>Created On</th>
<th>Created By</th>
<th>Modified On</th>
<th>Modified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of double life</td>
<td>Nodes</td>
<td>9/10/2013 3:44 PM</td>
<td>M</td>
<td>11/05/2013 3:09 PM</td>
<td>M</td>
</tr>
<tr>
<td>What I need as I try to cope with my double life</td>
<td>Notes</td>
<td>10/10/2013 6:10 PM</td>
<td>M</td>
<td>11/05/2013 4:00 PM</td>
<td>M</td>
</tr>
<tr>
<td>Who can help me</td>
<td>Notes</td>
<td>10/10/2013 4:14 PM</td>
<td>M</td>
<td>11/05/2013 2:10 PM</td>
<td>M</td>
</tr>
</tbody>
</table>

Figure 4.10 Data sets in the collection section of the project.
Figures 4.9 Structures of the nodal hierarchies in the project.
4.2.3.3 Models and relationships

The entire data sets including text, summary and references can be exported to an external file or copied and pasted into the ‘model’ section of the program. This provides a visual that clearly delineates all coded references and/or sources as seen in Figure 4.11.

Figure 4.11

Figure 4.11 Model of the data set impact of double life by sources and coded references.
Referring to the above model, in Figure 4.11, it is possible to show the relationships in each data set visually to assist analysis. For example, to explore the codes for ‘resentment’ from the above model it was possible to just click on ‘Donna’ and the visual (Figure 4.12) appeared.

Figure 4.12

![Visualisation of the node resentment.](image)

This process allowed the researcher the scope to define concepts and relationships directly from each participant’s visualisation in each of the three higher order themes.

Additionally, the same three themes were continued from data analysis of the athletes’ perspectives (Chapter 5) to the significant adults’ perspectives (Chapter 6). These output clearly indicated that the merged higher order nodes of ‘impact of double life’, ‘what I need as I try to cope with my double life’ and ‘who can help me’ had percentage data from all three groups. This reaffirmed that the themes identified by the athletes’ data could be carried through to the parents’ and teachers’ data analysis as seen in Figure 4.13.

Figure 4.13

![Impact of double life - Coding by Iren](image)
Figure 4.13 Visualisation of the percentage data of participants in each of the three main themes.

The visuals of the main three themes (Figure 4.13) confirmed that all three groups of participants had percentage data in the form of coded responses in each theme. In this situation, 20 participants across the three groups of athletes, parents and teachers made coded references to each of these three themes. By clicking on each column the participant’s response, including the frequency, appeared. This prompted the
researcher to access the audio transcripts imported from Livescribe™ to discern and more clearly interpret the meaning each participant spoke of in reference to each of the themes.

4.2.3.4 Using queries

‘Queries’, as suggested by Edhlund (2011), recognise the parts of the sources in a project that contained specific and desired information. A simple query is simply generated by clicking on the node. For example, when the node of ‘support network’ was opened a summary of all sources that were referenced in this node was produced as seen in Table 4.4.

Table 4.4

Query of support network node.

<table>
<thead>
<tr>
<th>Name</th>
<th>Externals</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annette</td>
<td>Externals</td>
<td>13</td>
<td>12.02%</td>
</tr>
<tr>
<td>Bob</td>
<td>Externals</td>
<td>6</td>
<td>4.01%</td>
</tr>
<tr>
<td>Cameron</td>
<td>Externals</td>
<td>5</td>
<td>3.88%</td>
</tr>
<tr>
<td>Celia</td>
<td>Externals</td>
<td>3</td>
<td>1.80%</td>
</tr>
<tr>
<td>Destiny</td>
<td>Externals</td>
<td>2</td>
<td>1.04%</td>
</tr>
<tr>
<td>Jodie</td>
<td>Externals</td>
<td>10</td>
<td>7.96%</td>
</tr>
<tr>
<td>Kylie</td>
<td>Externals</td>
<td>10</td>
<td>5.81%</td>
</tr>
<tr>
<td>Lee</td>
<td>Externals</td>
<td>1</td>
<td>1.71%</td>
</tr>
<tr>
<td>Ned</td>
<td>Externals</td>
<td>11</td>
<td>18.98%</td>
</tr>
<tr>
<td>Pete</td>
<td>Externals</td>
<td>5</td>
<td>4.13%</td>
</tr>
<tr>
<td>Phil</td>
<td>Externals</td>
<td>2</td>
<td>3.72%</td>
</tr>
<tr>
<td>Sue</td>
<td>Externals</td>
<td>4</td>
<td>4.34%</td>
</tr>
<tr>
<td>Sun</td>
<td>Externals</td>
<td>6</td>
<td>5.51%</td>
</tr>
<tr>
<td>Tiana</td>
<td>Externals</td>
<td>18</td>
<td>15.43%</td>
</tr>
<tr>
<td>Will</td>
<td>Externals</td>
<td>3</td>
<td>3.59%</td>
</tr>
<tr>
<td>Zac</td>
<td>Externals</td>
<td>7</td>
<td>4.34%</td>
</tr>
</tbody>
</table>

Table 4.4 illustrates the query of ‘support network’ that was run on the athlete group. This discerned that 16 athletes spoke of the importance of their support network. This allowed the opportunity of reflection on all 16 original interviews to elicit the issues mostly referred to by these athletes.

4.2.3.5 Running queries

Running queries is simply a process of exploring more complex aspects of nodes (Bryman, 2008). The researcher gave each ‘query’ a given name and applied an attribute, processed and saved all of them. A sample of the ‘matrix coding queries’ that were run in this project is seen in Figure 4.14.
Referring to Figure 4.14, these queries could be considered as the initial hunches that were beginning to appear from the data. For example, the first query was the characteristic of ‘age’ against all nodes in the project, as a means to begin teasing out associated themes. This was particularly useful for the athlete group where there were two distinct sub-groups, comprising still ‘at school’ and ‘left school’ athletes. By selecting the attributes associated to age of ‘15 years’, ‘16-17 years’ and ‘18+ years’, the queries that were generated prompted the researcher into considering themes that could be extrapolated about the differences and similarities of perspectives of the athlete group according to their ages.

**Figure 4.14** Sample of matrix coded queries run in this project.

<table>
<thead>
<tr>
<th>Name</th>
<th>Created On</th>
<th>Created By</th>
<th>Modified On</th>
<th>Modified By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group plus all nodes</td>
<td>16/12/2011 9:10 AM</td>
<td>M</td>
<td>9/01/2012 5:57 PM</td>
<td>M</td>
</tr>
<tr>
<td>Age plus all nodes</td>
<td>16/12/2011 9:05 AM</td>
<td>M</td>
<td>16/12/2011 9:08 AM</td>
<td>M</td>
</tr>
<tr>
<td>Assessment type of significant others</td>
<td>3/01/2012 12:48 PM</td>
<td>M</td>
<td>31/01/2012 6:52 PM</td>
<td>M</td>
</tr>
<tr>
<td>Athlete physical issues</td>
<td>6/01/2012 9:06 AM</td>
<td>M</td>
<td>15/04/2012 10:06 PM</td>
<td>M</td>
</tr>
<tr>
<td>Athlete schooling models</td>
<td>3/01/2012 12:14 PM</td>
<td>M</td>
<td>6/04/2012 8:16 PM</td>
<td>M</td>
</tr>
<tr>
<td>Common athlete issues of support networks</td>
<td>3/02/2012 12:30 PM</td>
<td>M</td>
<td>28/04/2012 10:59 PM</td>
<td>M</td>
</tr>
<tr>
<td>Common aspects of all school athletes to parents</td>
<td>3/01/2012 8:16 PM</td>
<td>M</td>
<td>28/02/2012 10:42 PM</td>
<td>M</td>
</tr>
<tr>
<td>Common aspects of individual plans for significant others</td>
<td>20/01/2012 12:01 PM</td>
<td>M</td>
<td>14/02/2012 1:18 PM</td>
<td>M</td>
</tr>
<tr>
<td>Common athlete and significant others issues</td>
<td>6/01/2012 12:46 PM</td>
<td>M</td>
<td>9/04/2012 2:22 PM</td>
<td>M</td>
</tr>
<tr>
<td>Common athlete social issues</td>
<td>6/01/2012 1:06 PM</td>
<td>M</td>
<td>19/02/2012 10:59 PM</td>
<td>M</td>
</tr>
<tr>
<td>Common mental issues of significant others</td>
<td>7/02/2012 11:30 AM</td>
<td>M</td>
<td>7/02/2012 11:38 AM</td>
<td>M</td>
</tr>
<tr>
<td>Common personalized strategies of athletes</td>
<td>5/01/2012 2:42 PM</td>
<td>M</td>
<td>28/04/2012 1:52 PM</td>
<td>M</td>
</tr>
<tr>
<td>Common personalized strategies of significant others</td>
<td>1/02/2012 9:49 AM</td>
<td>M</td>
<td>23/03/2012 12:30 PM</td>
<td>M</td>
</tr>
<tr>
<td>Common physical issues for significant others</td>
<td>7/02/2012 12:21 PM</td>
<td>M</td>
<td>7/02/2012 12:24 PM</td>
<td>M</td>
</tr>
<tr>
<td>Common school support issues for significant others</td>
<td>7/02/2012 9:36 AM</td>
<td>M</td>
<td>29/04/2012 11:56 AM</td>
<td>M</td>
</tr>
<tr>
<td>Common social issues for significant others</td>
<td>7/02/2012 10:19 AM</td>
<td>M</td>
<td>15/04/2012 10:20 PM</td>
<td>M</td>
</tr>
<tr>
<td>Dispute aspects of all left school athletes</td>
<td>3/01/2012 12:31 PM</td>
<td>M</td>
<td>25/02/2012 10:12 PM</td>
<td>M</td>
</tr>
<tr>
<td>Emergent issues that athletes reference and significant others omit</td>
<td>5/01/2012 9:44 AM</td>
<td>M</td>
<td>26/03/2012 11:14 AM</td>
<td>M</td>
</tr>
<tr>
<td>Female athletes social issues</td>
<td>3/01/2012 8:06 AM</td>
<td>M</td>
<td>24/06/2012 10:57 PM</td>
<td>M</td>
</tr>
<tr>
<td>Gender</td>
<td>16/12/2011 9:15 AM</td>
<td>M</td>
<td>28/04/2012 1:41 PM</td>
<td>M</td>
</tr>
<tr>
<td>Left school athlete individual plans aspects</td>
<td>4/01/2012 11:42 AM</td>
<td>M</td>
<td>25/02/2012 8:17 PM</td>
<td>M</td>
</tr>
<tr>
<td>Parents unique aspects of individual plans</td>
<td>14/02/2012 5:54 PM</td>
<td>M</td>
<td>15/02/2012 12:27 PM</td>
<td>M</td>
</tr>
<tr>
<td>School officials unique aspects</td>
<td>2/03/2012 12:23 PM</td>
<td>M</td>
<td>9/02/2012 10:30 AM</td>
<td>M</td>
</tr>
<tr>
<td>School support network for significant others</td>
<td>23/01/2012 6:48 PM</td>
<td>M</td>
<td>23/01/2012 6:53 PM</td>
<td>M</td>
</tr>
<tr>
<td>Significant others mental issues</td>
<td>26/01/2012 11:49 AM</td>
<td>M</td>
<td>26/01/2012 11:47 AM</td>
<td>M</td>
</tr>
<tr>
<td>Significant others conflict issues of school support</td>
<td>23/01/2012 9:30 PM</td>
<td>M</td>
<td>28/04/2012 6:58 PM</td>
<td>M</td>
</tr>
<tr>
<td>Significant others gender and three major concepts</td>
<td>16/12/2011 9:13 AM</td>
<td>M</td>
<td>29/04/2012 7:22 PM</td>
<td>M</td>
</tr>
<tr>
<td>Significant others physical issues</td>
<td>20/01/2012 11:07 AM</td>
<td>M</td>
<td>26/01/2012 11:46 AM</td>
<td>M</td>
</tr>
<tr>
<td>Significant others schooling models</td>
<td>31/01/2012 3:30 PM</td>
<td>M</td>
<td>6/04/2012 8:29 PM</td>
<td>M</td>
</tr>
<tr>
<td>Significant others social issues</td>
<td>20/01/2012 11:13 AM</td>
<td>M</td>
<td>26/01/2012 11:14 AM</td>
<td>M</td>
</tr>
<tr>
<td>Support network of athletes</td>
<td>8/01/2012 8:34 PM</td>
<td>M</td>
<td>14/02/2012 2:46 PM</td>
<td>M</td>
</tr>
</tbody>
</table>
4.2.3.6 Matrix coding queries

Matrix coding queries can produce a template in chart or table form represented as coded references, sources and/or the percentage data in each node cell. For example, the matrix coded references query of ‘athlete’ run against the node ‘school support network’ produced the chart in Figure 4.15.

Figure 4.15

For presentation and interpretation, it was necessary to export all three-dimensional charts out of the NVivo 9.2 program and convert them into two-dimensional Excel™ charts. For example, the three-dimensional chart in Figure 4.15 of athlete issues of ‘support network’ was exported out of the NVivo program into Excel™ and presented for thesis presentation in Figure 4.16.
Queries to determine differences in perspectives for athletes were run on ‘gender’, ‘school type’ and ‘sport type’ (individual and team). In relation to the parents’ and teachers’ groups, only ‘school type’ was used.

Queries were then produced as a matrix in chart or table form, represented as coded references, sources and/or the percentage data in each node cell (Edhlund, 2011). All queries could be numerically examined by coded references and sources by the use of ‘density matrix’ tables. For example, an initial run of athlete ‘school support’ issues produced the numeric number of coded references to issues, as seen in Table 4.5.

Table 4.5
Matrix density table initial run of athlete school support issues.

<table>
<thead>
<tr>
<th>Nodes</th>
<th>A : Case: participants = athletes coded references</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 : Technological aides</td>
<td>5</td>
</tr>
<tr>
<td>2 : Mentors</td>
<td>24</td>
</tr>
<tr>
<td>3 : Assistance</td>
<td>14</td>
</tr>
<tr>
<td>4 : Missed class time</td>
<td>23</td>
</tr>
</tbody>
</table>

By changing the cell content, it allowed the content to be viewed by coded references, coded sources or percentage coded data in each row or column. The option
available in the NVivo program to turn on ‘cell shading’, allowed the researcher to elicit the concentration of data in each node.

4.2.3.7 Cross case queries analysis

A more complex query known, as ‘cross case queries’, distinguishes and compares characteristics both within and between groups of participants in the project. For example, cross case queries could be established and findings extrapolated on the athlete group attribute of ‘school status’, and the node of ‘support network’, exemplified in Figure 4.17.

Figure 4.17

As previously mentioned, the ‘at school’ athlete coded references are delineated from the ‘left school’ athletes by designated colour codes in the project. The sources coloured green (representing ‘athlete’) were selected and then ran against the school ‘support network’ of ‘flexibility’, ‘coach’, ‘emotional’, ‘parent’, ‘school’ and ‘specialist’ support nodes to generate a cross case query. Additionally, the resulting visual from this cross case query in Figure 4.17 highlighted that no coded references were made by the athletes in relation to nodes of ‘coach’ and ‘emotional’. This finding prompted the researcher to the review all athletes’ audio tapes and discern that negligible responses were made by athletes about their coach. All charts were exported in three-dimensional chart form out of the NVivo program and converted into a two-dimensional presentation in Excel™, as seen in Figure 4.18.
A cross case query was also used to discern group commonalities of nodes. This allowed the teasing-out of the common concerns referred to all three groups. For example, a cross case query was run on the three groups of parents, teachers and athletes by selecting the colour codes of teacher (pink), athlete (green) and parent (red), and then selecting the node of ‘technological aides’, which resulted in Figure 4.19.

Figure 4.18 Cross case query on Athlete school issues.

Figure 4.19 Node of technological aides.
Referring to Figure 4.19, teacher (Glen), parents (Kerry and Donna) and athletes (Pete, Phil, Destiny and Meg) all collectively made comments about technological aides.

Another example of visualising a node that had common-coded references from the three groups assisted the researcher to discern issues that were collectively referred to by all participants. One of the major discussion points on common concerns for all three groups in Chapter 7 was that of ‘resilience’. In order for the researcher to be guided to this finding a query on the node ‘resilience’ was run on each group of participants by selecting the various colour code for each group. For example, the athlete group was selected by first choosing the colour green in the project and then selecting the node ‘resilience’ (Figure 4.20).

Figure 4.20 Athlete node of resilience.

This process was repeated for the parent (red) and teacher (pink) groups and it perceived what all three groups collectively spoke of the term ‘resilience’ (Figure 4.20).
The initial triangulation of the data between athletes, parents and teachers was commenced in conjunction with the manual concept maps (in Figure 4.6) to tease out the common themes of ‘resilience’. Additionally, the nodes of ‘mentors’, ‘scheduling’, ‘missed class time’ and ‘technological aides’ formed the higher order common theme of ‘connectedness to school’ (Figure 4.21).

Figure 4.21

![Excel representation: Identified issues for high performance school-age athletes as shared by Athletes, Parents and Teachers.](image)

Referring to Figure 4.21, this Excel™ chart defined the finding concerning the negligible amount of responses teachers made in relation to nutrition.

4.2.4 Stage 4: Drawing conclusions

Conclusions are more readily verified as the analysis continues but certainly do not completely appear until the data collection is finalised (Miles & Huberman, 2002). For this study, as recommended by Edhlund (2011), NVivo version 9.2 program assisted in organising the data so the analysis could draw conclusions that were reliable and unproblematic. Additionally, it allowed the researcher to view all 39 participants included in ‘externals’ and summarise the percentage coded references in each ‘node’.

4.2.4.1 Verification

Verifying higher order themes was aided by visualising each participant’s percentage of coverage of data in each node. For example, one significant findings of this study was the higher order theme of ‘female athlete bullying’. This finding was verified by extrapolating and initially examining each athlete’s visual of percentage
coverage of data in each node. For example, the visual of ‘Sun’s’ percentage coverage of data in all nodes is seen in Figure 4.22.

Figure 4.22

Referring to Figure 4.22, it was then possible to investigate more thoroughly the issue of bullying as mentioned by ‘Sun’. Sun’s chart of bullying led to the realisation that bullying of female athletes was a significant finding in this study and needed further interrogation of the original 12 female athlete transcripts.

One of the initial visuals used to determine this significant finding concerning bullying, mentioned by all 12 female athletes, is seen in Figure 4.23.

Figure 4.23

Figure 4.22 A summary of the percentage data in each node of the external Sun.

Figure 4.23 Visual of Female Athlete bullying issue.
The resulting visual in Figure 4.23 initially identified four female athletes. However, after re-examining the original 12 female athletes’ transcripts it was established that all female athletes spoke of bullying. This meant that the original transcripts were reviewed, and recoded accordingly and thus producing a summary of all text references. It also indicated the need to run another query, where the colour code of orange (female athletes) was selected and run against the node of ‘social issues’. This output additionally confirmed that all 12 female athletes spoke of bullying.

Another example using the initial visualisation of a node to delineate a significant finding was that of the athletes’ own words of ‘tired’ and ‘sore’ as seen in Figure 4.24.

Figure 4.24

![Figure 4.24 Athlete node of tired and sore.](image)

Referring to Figure 4.24, this initial visualisation indicated six athletes spoke the words ‘tired’ and ‘sore’. This prompted the examination of all the athletes’ original transcripts and the audio recordings replayed. By re-listening to the audio transcripts, it highlighted the point that no one seemed to be listening to the athlete about their physical symptoms of being tried and sore.

The analysis of sub-group data was also made possible by visualising nodes. For example, to determine the difference in the node of ‘procrastination’ between the athletes ‘at school’ to ‘left school’, athletes a visual of the node of ‘procrastination’ was produced (Figure 4.25).
Referring to Figure 4.25, data emerged for the two sub-groups of athletes ‘at school’ (Meg, Ned, Belinda, Celia, Annette and Destiny) to ‘left school’ athletes (Tiana and Sun), concerning time-wasting. With this knowledge, the original audio transcripts from Livescribe™ program were re-examined to determine the differences in comments between the athlete sub-groups concerning the theme of ‘procrastination’. This re-examination of the athletes’ transcripts established that both sub-groups of athletes spoke of time-wasting and, in particular the 15 year old athlete, Ned, described the wasting of time in his own words as ‘procrastination’. A concept picture in the ‘model’ section of the program was generated allowing it to be exported out of the program to Excel™ (Figure 4.26).
As seen in Figure 4.26, this visual model allowed the development of discussion around the main issues spoken about by the athletes, parents and teachers.

The ‘Key word advance finds’ permitted further extrapolation of aspects contained in the ‘data sets’. For example, the ‘advance find’ conducted on the keyword ‘guilt’ through the ‘sources’ and ‘nodes’ resulted in 390 results of similar content items. These were collated in the ‘collections’ section of the program. A sample of this result that the researcher viewed is available in the Figure 4.27.
To tease out further aspects that related to this higher order theme of ‘self-imposed guilt’ as listed in Figure 4.27, a list was produced from the data sets of the theme ‘who can help me’. Figure 4.27 is only a snapshot of the list produced of the similar content in nodes concerning ‘guilt’.

Furthermore, using grouped visuals of nodes provided some clarification of the higher order theme and the issues it may have incorporate. For example, the following visuals of the node - ‘loss of school friends’, ‘pressure to be social’, ‘social fit’, ‘compromise’ - were all charted to commence extrapolation of the higher order theme of ‘self-imposed guilt’ and its relation to time and family (Figure 4.28).

Figure 4.28
Collectively these four visual charts (Figure 4.28) assisted in extrapolating the highest order theme of ‘self-imposed guilt’ spoken of only by athletes. Again, the participant transcripts stored in the ‘external’ section of the project were re-examined to confirm this significant finding.

Another example of teasing out the significance of a higher order theme from interviewing the ten teachers was the delineation of the positive higher order teacher theme of ‘empathy’. This commenced a comprehensive search of the school nodes incorporated in the node of ‘school support’ (Figure 4.29).

Figure 4.29

<table>
<thead>
<tr>
<th>School support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accreditation of teachers</td>
</tr>
<tr>
<td>Assistance</td>
</tr>
<tr>
<td>Availability of help</td>
</tr>
<tr>
<td>Convenience of help</td>
</tr>
<tr>
<td>Culture of school</td>
</tr>
<tr>
<td>Enabling teachers</td>
</tr>
<tr>
<td>Empathetic teacher</td>
</tr>
<tr>
<td>Empathy</td>
</tr>
<tr>
<td>Enrolment</td>
</tr>
<tr>
<td>Exemption of certain school activities</td>
</tr>
<tr>
<td>Facilities</td>
</tr>
<tr>
<td>Increase range of sports offered</td>
</tr>
<tr>
<td>Learning difficulties</td>
</tr>
<tr>
<td>Missed class time</td>
</tr>
<tr>
<td>One on one tutoring</td>
</tr>
<tr>
<td>Preferential treatment</td>
</tr>
<tr>
<td>School being helpful</td>
</tr>
<tr>
<td>School environment</td>
</tr>
<tr>
<td>School policies</td>
</tr>
<tr>
<td>Specialised teachers at school</td>
</tr>
<tr>
<td>Teacher’s awareness</td>
</tr>
<tr>
<td>Willingness</td>
</tr>
</tbody>
</table>

Figure 4.29 School nodes as listed in the project.
Referring to Figure 4.29, opening each of the nodes of ‘empathy’, ‘assistance’, ‘teacher’s awareness’, ‘emailing teachers’ and ‘willingness’, it appeared that common responses were made about aspects of teacher ‘empathy’. After merging and exporting the data from each of the previously mentioned five nodes, the higher order node ‘empathetic teacher’ was created. Once this node was formed, it allowed the visualisation as presented in Figure 4.30.

![Figure 4.30](image)

In reference to Figure 4.30, seven teachers interviewed felt they were empathetic toward their student-athlete(s). Greater clarity and commencement of the discussion of the higher order themes were made possible by using such tools available in this program to complete a qualitative ‘cluster analysis’, using various coefficients of correlation. The researcher chose ‘Jaccard’s coefficient’ in the ‘Explore’ section of the program as seen in Table 4.6.

**Table 4.6**

*Cluster analysis using Jaccard’s coefficient of two nodes in the theme of bullying.*

<table>
<thead>
<tr>
<th>Node A</th>
<th>Node B</th>
<th>Jaccard’s coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nodes\Impact of double life\Social\No social life</td>
<td>Nodes\Impact of double life\Social\Bullying</td>
<td>0.1</td>
</tr>
</tbody>
</table>
Referring to Table 4.6, the resulting numeric coefficient provided a helpful guide concerning the similarity in content of coded references in both nodes. For example, in Table 4.6, the Jaccard’s coefficient when run on the nodes of ‘no social life’ and ‘bullying’ identified a coefficient of 0.1, suggesting that both nodes contained coded references that closely related to the higher order theme of ‘bullying’.

At this point, it was possible to return to the original transcripts and reflect on the significant findings and the meaning of each to the high performance school-age athletes. This allowed the extrapolation of an overall Excel™ table summary of the findings, presented in Table 4.7.

Table 4.7

<table>
<thead>
<tr>
<th>Higher order findings of Chapter 7.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The findings of the Higher order themes</strong></td>
</tr>
<tr>
<td><strong>Athletes’ perspectives</strong></td>
</tr>
<tr>
<td>Physical and psychological fatigue</td>
</tr>
<tr>
<td>Physical</td>
</tr>
<tr>
<td>Guilt</td>
</tr>
<tr>
<td>Appropriate levels of recognition</td>
</tr>
</tbody>
</table>

The formation of Table 4.7 allowed the NVivo program to be closed and reflection on the meaning of the above-listed higher order themes to occur, outside the project/program. These reflections will be further discussed in Chapter 7.

**4.2.4.2 Developing theories**

To finalise and postulate a theoretical model, Bloomberg and Volpe (2008) suggest that the researcher had to be constantly “evaluating, analysing and synthesizing information” (p. 156). As Sinkovics & Alfoldi (2012) contend “during this step, having a well-documented, searchable record of each step of the research process can be a vital tool for insightful discussion and thoughtful evaluation of the research findings” (p. 15).
The conclusions made from completing the procedures in each of the above four stages, as outlined in Table 4.1, permitted the development of a list of characteristics in the ‘athlete friendly school’. It contains features around education, as well as, social, psychological, physical and economic areas that can, at any one time, assist the young athlete(s) in any given school type, to cope better with high level sport and school commitments, through using a developmental pastoral care approach with an element of personalised learning. This permits school to cater for the needs of each athlete. A template of the suggestions and practical applications, as discussed in the last section of Chapter 7, entitled the ‘athlete friendly school’ can be viewed in Appendix I.

4.3 Conclusion

By using the tool kit provided by this program, the development of analysis of the data from lower order to higher order themes emerged through each of the four stages of processes. After completing the procedures in the four stages, as listed in Table 4.1, the researcher was then able to move from the NVivo project to consider the meaning of higher order themes for the discussion in Chapter 7. In particular, using NVivo 9.2 software in the procedures as outlined commenced the conceptualisation of the list of characteristics that Australian schools could implement to better help the school-age athlete cope with dual endeavours of high level sport and schooling.

Miles and Huberman (1994) suggested that the qualitative researcher has very few guidelines for reliable and thorough findings. However, the choice of tools available to the researcher from the NVivo tool kit provided the researcher with techniques to ensure the thoroughness and reliability of this study. The next chapter, Chapter 5, will analyse the perspectives of athletes, in so doing highlight their ‘voice’. 
Chapter 5 Athletes’ Perspectives

This chapter is the first of two that outline the findings from the empirical research. Three groups of participants contributed to the data and this chapter details the findings from the first, and arguably the most important of these groups - the athletes themselves. Thus, this chapter will accentuate the ‘voice’ of the athlete. Interviews of the 19 participants were analysed for meaning and comprehension of the athletes’ perspectives of what the needs and problems are in combining both high level sporting commitments and education concomitantly.

The chapter begins by outlining the demographics of the 19 athletes. Attributes of the participants include their age, gender, school type and the high performance sport in which the athlete was or is involved in. It will be remembered that two categories of athletes were chosen to be interviewed; those that were still at school, aged 15 to 17 years (nine); and those over 18 years (ten), who had left school and were chosen because they would provide more reflective memories of being a high performance athlete whilst at school.

In the second and fullest section, the data are organised into the three distinct themes that emerged from the interviews. These themes can best be categorised by employing the terminology of these young athletes themselves; so, for want of better descriptors, they are called:

(i) “How are the two lives that I am leading impacting on me?”
(ii) “What do I need to help me to cope with my two lives?”
(iii) “Who can help me meet my needs?”

The findings under these three themes are some of the most important outcomes of the research in that they reveal the complexities of the lives and the commitments that drive these young people.

The next sections involve organising the findings around differences rather than similarity. The first explores the differences in findings between those athletes who are still at school compared with those who have the opportunity to look back and reflect on their experiences. Particular attention is paid to discerning how athletes, currently embroiled in the process of dual lives, view their dilemma as opposed to the situation of those adult athletes, who had the ability to reminisce about the certain issues they
encountered, once the school phase had finished. Next, the findings that differ according to gender are outlined under the section entitled “what boys say and what the girls say”. This final section is concerned with social issues that athletes mentioned concerning school and sport types and whether these had any impact on the themes that the athletes projected in the main section of this chapter.

5.1 Athletes’ Demographics

The high performance school-age athletes were made up of two groups: (i) those still at school, who were aged between 15 and 17; and (ii) those that had left school, i.e. over 18. The younger category of athletes still at school provides the fresh ‘voice’ of the high performance school-age athlete. On the other hand, a reflective experience was portrayed from the more mature adult athletes, who had the benefit of hindsight, and could reminisce about what should have been provided whilst they were at school.

The nine athletes still at school competed in a variety of high level sports: surfing, water polo, rugby league, swimming, ocean ski paddling, surf lifesaving, gymnastics, dance and kayaking (Table 5.1).

Table 5.1

Demographics of 15 to 17 year-old Athletes (n=9).

<table>
<thead>
<tr>
<th>Participant</th>
<th>Schooling type and location</th>
<th>Age</th>
<th>Gender</th>
<th>Attributes</th>
<th>Sport type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annette</td>
<td>Government Qld</td>
<td>16</td>
<td>F</td>
<td>NTID sprint kayaker</td>
<td>Team</td>
</tr>
<tr>
<td>Belinda</td>
<td>Specific pathway Qld</td>
<td>17 years</td>
<td>F</td>
<td>Age level dancer</td>
<td>Individual</td>
</tr>
<tr>
<td>Celia</td>
<td>Non-government Qld</td>
<td>15 years</td>
<td>F</td>
<td>Age level Gymnast</td>
<td>Individual</td>
</tr>
<tr>
<td>Destiny</td>
<td>In-school scholarship program Qld</td>
<td>17 years</td>
<td>F</td>
<td>National Surf lifesaving Iron Woman</td>
<td>Individual</td>
</tr>
<tr>
<td>Jodie</td>
<td>Non-government Qld</td>
<td>17 years</td>
<td>F</td>
<td>International ocean ski paddler</td>
<td>Individual</td>
</tr>
<tr>
<td>Meg</td>
<td>In-school scholarship program Qld</td>
<td>15 years</td>
<td>F</td>
<td>Age level swimming</td>
<td>Individual</td>
</tr>
<tr>
<td>Ned</td>
<td>In-school excellence program Qld</td>
<td>15 years</td>
<td>M</td>
<td>Age level rugby league</td>
<td>Team</td>
</tr>
<tr>
<td>Phil</td>
<td>Non-government Qld</td>
<td>17 years</td>
<td>M</td>
<td>Age level water polo</td>
<td>Team</td>
</tr>
<tr>
<td>Zac</td>
<td>Home schooled Qld</td>
<td>17 yrs</td>
<td>M</td>
<td>International professional surfer</td>
<td>Individual</td>
</tr>
</tbody>
</table>

As seen in Table 5.1, six of these young athletes were from individual sports and three were from team sports. One unexpected participant in this group was a 17 year-old
home-schooled athlete, recommended by another high performance school-age athlete; this participant provided a very different perspective.

The second group comprised athletes over the age of 18 years who had left school, but provided reflective experiences of being a high performance athlete whilst at school. The ten participants who had left school were involved in a variety of sports, including surf lifesaving, water polo, rugby league, royal lifesaving, swimming, soccer, sailing, surfing and kayaking (Table 5.2).

Table 5.2
Demographics 18+ years Athletes (n=10).

<table>
<thead>
<tr>
<th>Participant</th>
<th>Schooling model and State</th>
<th>Age</th>
<th>Gender</th>
<th>Attributes</th>
<th>Sport type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bob</td>
<td>Government Qld, NZ &amp; USA</td>
<td>18+ years old</td>
<td>M</td>
<td>Former Olympic water polo player</td>
<td>Team</td>
</tr>
<tr>
<td>Cameron</td>
<td>Government SA</td>
<td>18+ years old</td>
<td>M</td>
<td>Former Olympic kayaker</td>
<td>Individual</td>
</tr>
<tr>
<td>Kylie</td>
<td>Government Qld</td>
<td>18+ years old</td>
<td>F</td>
<td>Former international Iron Woman in Surf lifesaving</td>
<td>Individual</td>
</tr>
<tr>
<td>Lee</td>
<td>Non-government NSW</td>
<td>18+ years old</td>
<td>F</td>
<td>Former women’s World Champion surfer</td>
<td>Individual</td>
</tr>
<tr>
<td>Pete</td>
<td>In-school scholarship program Qld</td>
<td>18+ years old</td>
<td>M</td>
<td>Former international competitor in sailing</td>
<td>Individual</td>
</tr>
<tr>
<td>Sue</td>
<td>In-school excellence program VPR Qld</td>
<td>18+ years old</td>
<td>F</td>
<td>Former international women’s soccer</td>
<td>Individual</td>
</tr>
<tr>
<td>Sun</td>
<td>Government Qld</td>
<td>18+ years old</td>
<td>F</td>
<td>Former international swimmer and Royal lifesaving</td>
<td>Individual</td>
</tr>
<tr>
<td>Telia</td>
<td>Non-government NSW</td>
<td>18+ years old</td>
<td>F</td>
<td>National Iron Woman in Surf lifesaving</td>
<td>Individual</td>
</tr>
<tr>
<td>Tiana</td>
<td>In-school scholarship program Qld</td>
<td>18+ years old</td>
<td>F</td>
<td>Commonwealth medallist and Olympic swimmer</td>
<td>Individual</td>
</tr>
<tr>
<td>Will</td>
<td>Government NSW</td>
<td>18+</td>
<td>M</td>
<td>International National Rugby League player</td>
<td>Team</td>
</tr>
</tbody>
</table>

Committing these adult athletes to interview was difficult as they had extremely hectic schedules, often combining high level sport with other demands such as family, sponsorship and work. For example, one interview of an adult surf lifesaving iron woman had to be conducted on the beach where she was training.

In the second group, it will be noticed that the athletes attended school in a wider range of jurisdictions. Adult athletes provided a wider variety of experiences from a number of school types than the current school-age athletes. For instance, one adult athlete attended an in-school scholarship program; another attended an in-school
excellence program whilst completing senior studies over an extended period of three years known as, Variable Progress Rate (VPR). Eight of these adult athletes had been, or still are, involved in individual sports and two in team sports - all at national or international levels.

The demographics show that the athletes represent a range of sports, sports type and a range of school types attended, and therefore provide a useful cross-section of the overall cohort, although no claim is made about generalisation. The next section will now turn to the discussion of common concerns that these athletes spoke about; these were the three themes of ‘impact’, ‘means of support’ and ‘sources of support’, as they went about combining their dual endeavours of high level sport and academic studies.

5.2 Common Concerns

From the early stages of data analysis, it was clear that the athletes spoke about three sets of themes. These were:

- ‘Impact of their demands on their double lives’
- ‘What the athletes needed to help them cope with their double life’
- ‘The people who could help them’.

Within the first theme of impact, social, physical, educational, psychological and economic issues emerged as pertinent to the athletes’ dual lives. In the second theme, psychological and school needs surfaced as the means of support for the athletes to cope with their double life. The third theme encompassed those supportive personnel the athlete needed. Emerging in this theme were the personalised characteristics of designing and mapping out individual needs for these young people.

When the athlete responses about the three themes are matched against school types, an interesting pattern emerges. This is shown in Figure 5.1.
Figure 5.1 Athlete responses about the three themes according to schooling type.

It can be seen that five athletes from non-government schools reported 25 comments concerning the theme of ‘impact on double life’. These were all positive comments. For example, a positive comment was: ‘My teachers really care and help me in my school’ (Tiana, non-government school). Interestingly, a 15 year-old who attended a non-government school and had recently gained an in-school scholarship, made only positive comments about this approach as being ‘pivotal’ in her life, which as she stated: ‘I could not live without this scholarship from my school’ (Meg, non-government school on a scholarship program). Similarly, Zac, a 17 year-old home schooled professional surfer explained ‘my home schooling provides me with the flexibility to schedule my school work around my surfing’.

On the other hand, six athletes in government schools made 12 responses to this same theme. Unlike the positive responses of athletes in the non-government school type, these six athletes only made negative comments about their experiences in this school type. For example, an adult athlete said: ‘My school was ridiculous…it just had no sport facilities and equipment’ (Will - adult athlete, government school). Additionally, Cameron, a former Olympic sprint kayaker who also attended a government school, said: ‘My school was just really bad...bad kids, bad teachers’. This may suggest that the five athletes in non-government schools in this study may have had more positive experiences from this school type.

The first of these themes involved the analysis of the high performance school-age athlete’s needs and problems, pertaining to the idea of issues impacting on the
athlete as a result of their double life. In particular, this section will describe how the lives that the athletes lead affected them.

5.2.1 How are the two lives I am leading impacting on me?

When organising the data, the first important theme that emerged concerned how the athletes described what was happening to them whilst they were leading the double life of high level sport and academic studies. In particular, in this section, the athletes were endeavouring to indicate clearly the impact of their double life. Furthermore, it became evident in this section that there were five main areas that impacted on them in the areas of social, physical, educational, psychological and economic issues.

Social. This area was most primarily spoken of by athletes in the social terms of them trying to cope with their dual commitments of high level sport, school, family and friends. Athletes predominantly spoke of two main issues in relation to time, which were, procrastination and guilt. The other social issues athletes mentioned surrounded the social pressures of drugs and alcohol, inequity, sacrifices, social fit, life balance and unequal levels of recognition.

In the words of the 15-year male high performance rugby league player, ‘procrastination’ was a problem that most athletes experienced (Figure 4.25, Chapter 4). Only eight athletes in this study used and understood the terms ‘time-wasting’ or ‘procrastination’. Ned, the 15-year old rugby league player said: ‘I procrastinate by putting things off… it is an easy time wasting habit for me to slip into’. Another 15 year-old athlete stated: ‘I put things off; I push things aside to the end of the week’ (Celia). Meg, a 15 year-old swimmer shared a very interesting belief about the time she wasted ‘Facebooking’ on the social media site Facebook™. She decided to conduct her own research as she discussed:

*I had Facebook for possibly three quarters of the year. In term two I actually did a study on myself and I recorded the hours I spend on Facebook and times by 30. So I had a monthly figure and averaged that out in percentages. I then worked out I didn’t need to spend that much time on Facebook and work out what I could be doing instead of Facebook like stretching, reading or getting a head on study for a subject. I figured out that I spent 26% of my time on Facebook and I know this is a lot less than other kids and in my sport. I know some kids spend their whole study lesson on Facebook. So in term two I deactivated my Facebook account and ever since then my academic and sporting results have increased* (Meg – aged 15).
Four athletes spoke of deliberately wasting time in their ‘down times’ from training and school. For example, Tiana, a recent school leaver, recalled in the time after her physically exhausting day she sometimes deliberately ignored her chores and school work and instead, she admitted, ‘I would play my favourite music and deliberately just waste time because this was the only time I could do this’. Similarly, Sun, an adult athlete also admitted wasting time by ‘playing my music’. Ned, the 15 year old rugby league player, shared that he deliberately chose to ignore completing his homework, instead choosing to ‘play my MP3 player and iPod and just waste time instead of doing my homework’. Belinda, a high performance dancer, further stated: ‘There were so many times that I should have been completing my school assignments or studying for a test, but I just listened to my music on my iPod instead’.

In relation to the impact of how the athletes felt about others sacrificing time for them, two types of guilt feelings emerged (Figure 5.2).

Two athletes reported that they harboured feelings of guilt about disrupting their family schedules and placing social and financial burdens on their families. Ned, the 15-year old athlete, said: ‘My mum is running her own business from home and I feel so bad when she has to change her client appointments to drive me to my training sessions’. Additionally, Zac, a home-schooled professional surfer, said: ‘It makes me feel so bad when mum has to stop what she is doing for the rest of my brothers at home and drive me up the coast for a surf’. This may suggest that athletes felt guilty in relation to the amount time their friends and family tend to give up for them to do high
level sport. Eight athletes reported the underlying guilt they felt in letting their friends down socially. These athletes spoke of the understanding their friends shared with them about their high level sport commitments. When they could not socialise with these important school friends at various school parties or nights out, the athletes spoke of the guilt they felt. For example, Kylie, an adult athlete, said: ‘It’s not that I wanted to go to blue light discos as I always had to train early the next morning…but that I felt I wanted to go to just see and be with my friends as they were the ones that understood my commitments of being an iron woman’. Tiana, a high performance iron woman, explained that her feeling of guilt was about the things completed by her friends for her to simply commit to being a top iron woman as she stated: ‘my friends just were always there for me like they would take notes for me in classes I missed because I was competing and would always text me or Facebook me to let me know what was going on’. Additionally, Belinda, a 17-year old dancer who travelled to Russia in her final year of senior school studies to compete at the World Professional Latin Dance Championship 2011, spoke of the guilt she felt in the lack of her communications with her school friends, as she said:

To dance overseas it meant I was away from my school friends for some long periods of time and even though they we were all on Facebook, text and Skype because of my long dance hours and the time zone difference it just wasn’t possible for me to get back to them … this made me feel so bad.

Other social problems athletes constantly commented on were sacrifices; in particular ‘the major sacrifice for athletes was socialising’ (Bob), social fit, balance and drugs and alcohol (Figure 5.3).

Figure 5.3

![Figure 5.3 Social issues of drugs and alcohol, life balance, personal sacrifices and social fit that impacted on athlete double life.](image-url)
Referring to Figure 5.3, one school-age athlete explained that her social life was not really a problem to her as it was ‘normality to me not to go out late due to my early training sessions’ (Jodie). Additionally, Jodie felt said ‘I really don’t miss it late night partying as it makes it too hard to get up for the early morning training’. For example, an adult athlete recalled she always had to be in bed so early and she never went to ‘blue light disco or even an all night movie or things that kids that age would be doing’ (Kylie).

Fitting into the social scene, or as athletes termed it, ‘partying’, was the social pressure linked to constantly staying in contact with school friends. One athlete felt she ‘needed to try to keep in contact with my friends by trying to fit my training in and partying or I just simply I get left out’ (Celia). Older athletes could extrapolate that they often ‘burned the candle at both ends’ (Cameron) to simply be a part of the peer friendship group at school.

Sue, a former high performance women’s soccer player, stated: ‘You need to mix and network between sport and academic friends...you need a whole world of different people but often this meant I was burning the candle at both ends simply to keep up with the social scene and not be left out’. Not fitting in or being left out of the social scene made the athlete feel isolated. On the other hand, a younger athlete suggested that being selective in friendship was a positive way of staying connected to school friends, as she said: ‘I’ve always been very careful in picking and choosing my friends because you can spot those who care about you and your achievements and success’ (Meg aged - 15).

Some of the key issues athletes mentioned were their struggles to balance dual commitments of high level sport and school. An adult athlete recalled:

*To balance life around sport so I make sure I balance family time, eating, sleeping and have enough time to study and probably the most important one is to have some of your own time to be yourself and do something like read a book, watch TV and make sure you have a balance in there* (Kylie).

Annette, a high performance school-age kayaker, felt that the balance is about allowing yourself to have some ‘time off’ and ‘find the balance between fun, career in professional kayaking, educating myself and having a social life’. Destiny, a current school high performance athlete, explained: ‘It is so difficult to balance my sport and my study’. Additionally, a 17 year-old athlete spoke of his difficulty in juggling between his high level sport of surfing and home study as he shared ‘having to juggle so many things in my life is so hard’ (Zac). Jodie, a high performance ocean ski paddler, further
explained: ‘Now I just have to find how to combine all these things together and balance them all. I struggled with the decisions of what I deserved and needed in my life’. An adult athlete summarised the task of balancing as being somewhat challenging, as she stated: ‘It always was a challenge to balance the many demands of sport and academic side of study’ (Sun).

Illegal use of drugs and alcohol were mentioned by all athletes regardless of their age. An adult athlete said: ‘At my school drugs were rife and alcohol was rife’ (Cameron). Another adult athlete openly admitted that he relieved his stress levels by ‘smoking dope’ (Pete). His explanation for partaking of this somewhat inappropriate social habit was: ‘It relaxed me so I could overcome my insecurities which translated into a bad habit of me smoking dope’ (Pete). Interestingly, a current school-age high performance athlete spoke about smoking cannabis for anxiety relief, but found it to be, in his own words, ‘futile’ (Phil). This same Year 12 athlete made it known: ‘I was doing it [dope] and I found it [dope] did nothing but make my situation of anxiety worse’. Mostly athletes currently at school spoke about the prevalence of underage binge drinking. Destiny, a high performance iron woman, spoke about the binge drinking going on at school parties, as she admitted: ‘A lot of my friends at school do this… but I don’t do it [drink]’. Additionally, Annette admitted: ‘I know a lot of my school friends just binge drink at parties all the time’.

**Physical.** The three main physical aspects commented on by athletes in undertaking high level sport included firstly, fatigue, especially symptoms of tiredness and soreness. The second issue athletes mentioned was the requirements for nutritious food and drink intake to maintain their healthy diet. Thirdly, most athletes spoke of the struggle of the long and intense training hours.

Six athletes all used the words ‘tired and sore’ to describe their constant physical symptoms (Figure 4.24, Chapter 4). One 15 year-old athlete specifically suggested that tiredness and soreness, more than any other physical symptoms affected her mentally in coping with the demands of the dual endeavours, as she verbalized: ‘it’s just the tiredness and soreness that really gets to me. I’m just so sore all the time’ (Meg). Another 15 year-old athlete stated: ‘I’m always tired and sore’ (Ned). One adult athlete shared that he ‘constantly felt tired at school and I often fell asleep in classes’ (Bob).

Another adult athlete remembered that a concerned teacher would see him sleeping in the classroom and ask him: ‘Are you okay and getting enough sleep?’
(Pete). This same athlete reported this important issue of him sleeping in class three times. Kylie, an adult athlete, remarked that she constantly required ‘rest, hydration and sleep because I was just so tired all the time’. Bob, an adult former high level water polo player, stated: ‘as an athlete it was critical for me to maintain my body’. One adult athlete noted that many people really did not understand the complexities of his athletic contest, sharing his favourite quote ‘Everyone wants to hear the baby ...but no one wants to hear about the labour pains’ (Will).

Belinda, a high performance dancer, felt the biggest issue she had to deal with whilst she was in senior years of study was ‘being constantly fatigued from the long hours of dance practice’. On the other hand, Destiny, a high performance iron women, felt that it was quite important to make sure her body was constantly recovering from the heavy training sessions she undertook, as she declared: ‘I constantly have to keep my energy levels up so my body doesn’t break down and I suffer from fatigue’. Interestingly, a home-schooled athlete shared: ‘you’re drained because you are up at such an early hour’ (Zac). A sensible solution for his physical condition was to ‘allow plenty of recovery time for your body’.

In one interview, a 17 year-old female athlete (who had just competed at the European World Junior Championships) shared how she felt her body was fatigued as she exclaimed: ‘I just pushed my body so hard and then when I was on the plane back to Australia it all fell apart for me’ (Annette). This same athlete alluded to the feeling of being a little depressed as she further stated: ‘I cried a lot at this time as I was so tired! I felt a little depressed’ (Annette).

Interestingly, Meg, a 15 year-old female swimmer, thought a creative proactive strategy to counteract tiredness might lie in the provision of a ‘nap room’ at her school. She suggested that ‘There needs to be a room...not a sick room where there are germs etc... but a place when we can go when we are dog tired so we can just go and have a lie down and a nap in a real safe and comfortable place’ (Meg-aged 15).

In some instances, the struggle to maintain such long training hours is very difficult especially when training hours are in excess of 20 hours a week. Kylie, a former high performance iron woman, felt her training sessions were ‘very hard especially if you have early morning starts’. Associated with such intense training sessions is the prevention of injuries. Interestingly, Kylie, was the only athlete who mentioned that she had a ‘weekly massage’.
Good wholesome nutritional food intake for maintaining good health and energy levels was mentioned by most athletes. For example, an adult athlete suggested she needs to be ‘very proactive in maintaining my health and body’ (Kylie). Further, Zac, a home-schooled athlete, stated that his need for good food was to ‘keep my health up as I always have to train’. One adult athlete did suggest that his nutritional levels may not have been the best because he was ‘eating my cereal between the training session in the morning and going to school in the car’ (Bob). He further added that, in many instances, it had to be very convenient packaged food that would not spill on the hectic drive to school.

**Education.** In relation to how the school can help the athletes commonly referred to school equipment and facilities. The availability and quality of the school facilities were mentioned by athletes, particularly concerning the provision of school gymnasiums, indoor stadiums and swimming pools. For example, Destiny, a high performance iron woman, disclosed ‘I can even use the school gym during my school day’. Another athlete still at school also shared: ‘My school didn’t have all the facilities I needed, such as a pool but they certainly had a gym which I was able to use during my spares and this helped my training program significantly’ (Jodie).

However, one adult athlete felt that the government school he attended had extremely limited school facilities - no playing fields and gymnasium. Will, a former international rugby league football player, shared: ‘When I went to my high school it didn’t have any football fields or even a gym’. On the other hand, a 15 year-old high performance rugby league player emphasised: ‘My school has a great gym and once a week my footy class does weights which is so good for my football training program’ (Ned).

**Psychological and emotional.** In relation to psychological issues, the athletes spoke of stress factors that affected them. Sometimes the problem of stress and anxiety was coupled with the desire and drive to succeed. A 15 year-old high performance rugby league player disclosed: ‘sometimes I do get stressed’ (Ned). Additionally, uncertainty of the unknown is added into the athlete’s life ‘you tend to stress out or worry’ (Sue). Interestingly, only one current athlete still at school related the problem of stress to being ‘a creature of routine’ (Phil). Destiny, a Year 12 iron woman, said: ‘Sometimes I get anxious about my sport and schoolwork’.

Alternatively, older athletes remembered they overcame anxiety levels by having a focus and the ability to be motivated. One adult athlete admitted that ‘if I focus
Lee, a professional surfer, further remembered that ‘at school I was quick to enhance both aspects of what my focus was, which was studying and surfing’. Interestingly, most adult athletes remarked about being single-minded, as one athlete explained: ‘To hit my target I needed to be focussed on the task at hand’ (Will). Lee also felt ‘I had to focus on my strengths so they ultimately didn’t become my weaknesses’.

**Economic.** Athletes spoke of the economic burden placed upon their families. The travel costs to attend training sessions and competitions, such as petrol costs, were considered by athletes as an overall economic hardship on the family. Telia, a high performance iron woman, whose sport involves haulage of large and bulky surf equipment, shared: ‘It costs my parents so much, especially the cost of petrol to transport my boards and ski to every training session and competition around Australia’.

Sue, a high performance soccer player, who is from a single parent family with eight siblings, thought that ‘although it was a struggle financially to afford the high level sport costs it was still possible to travel and compete overseas’. This sentiment was also felt by another adult athlete, who articulated: ‘My parents certainly were not well off but they provided as much as they could and they kept me in sport’ (Cameron). One suggestion by some athletes to help with the cost of high level sport was to apply for sponsorship. For example, Zac, a home-schooled professional surfer, used his sponsorship to ‘pay for various things including the competition event fees and travel’.

**5.2.2 What do I need to help me to cope with my two lives?**

Athletes mentioned psychological and school requirements that may help them cope with the commitments of high level sport and education. Psychological issues mentioned by all athletes were resilience, passion and mindset. School issues, that most athletes felt could help them better cope, were the flexible school options, such as extending the study period of senior years. Additionally, the athletes mentioned the need for improved scheduling in regard to school workloads such as assignments and homework.

**Psychological and emotional.** Athletes used the term ‘resilience’ to explain the strength of character needed to cope with the commitments of both high level sport and school (Figure 4.20, Chapter 4). Three adult athletes felt ‘resilience’ was the strength of character required to overcome possible disappointments encountered in their dual life.
An adult athlete said: ‘I recall I always had a good amount of resilience to achieve my professional surfing dreams’ (Lee). Another adult athlete recalled how he had to maintain his resilience as he stated: ‘I remember always having, to be resilient to maintain and complete my commitments of sport and senior studies’ (Bob). Additionally, three athletes still at school mentioned the strength of character needed to juggle school and sport commitments. For example, Jodie, a high performance ocean paddler, mentioned in the interview that ‘my days are long so I just have to be so strong of mind to get through from early morning trainings to school and then train again’.

According to a young athlete, it may be passion that provides the drive of determination and enthusiasm that is required for combining high level sport and schoolwork, both in and out of school. One adult athlete referred to how she dealt with her sport and school commitments as having the ‘3 Ps’ as she stated ‘it takes the 3 Ps…passion, patience and perseverance’ (Lee). Additionally, Meg, a 15 year-old high performance swimmer felt ‘a lot of us have that extreme desire, passion and competiveness to succeed in everything you do’. On reflection, Cameron, a former Olympic sprint kayaker, felt sport makes you tougher all round and you are ‘a better person by being involved in sport’.

‘Mindset’ is a psychological issue that tends to focus on the belief in one’s personality to achieve (Dweck, 2006). Having a calm manner, but also being ‘a bit of a perfectionist’, (Destiny) may assist the athlete. A Year 12 athlete shared: ‘It helps to be in the same sort of familiar mindset with my other school friends who are athletes’ (Belinda). Additionally, Belinda felt there is a need to be in the midst of like-minded competitors that ‘want the same’. A 15 year-old gymnast commented that the cohort of athletes at the school she attended was unusually talented as she declared: ‘At my school there are lots of us [high performance athletes] who tend to be all like-minded towards our sport’ (Celia).

**Education.** The struggle of meeting deadlines on school assignments was spoken about by most athletes. A 17 year-old water polo player admitted that he created problems for himself ‘especially at times when I didn’t complete my assignments’ (Phil). One athlete noted: ‘There is a need for the school to gather the high performance athletes together to assess what they may require and set assignment guidelines to help us achieve this’ (Jodie). Additionally, homework becomes a complication for athletes, especially if it had to be completed on weekends. Many athletes admitted that they left most of their
schoolwork to be completed till the weekend. Tiana, a high performance swimmer, stated: ‘When you find out the teachers could drop some of the assessments on the subjects it allows you breathe’.

Athletes spoke of various school options that influenced the action to organisation and scheduling of their schooling life. The main options that athletes spoke of were extending senior studies over three years and spare lessons in the school day. Sue, a former women’s soccer player, shared how grateful she was in having her school approve her senior studies over three years as she stated: ‘I was travelling overseas with the Australian school girls soccer team by Year 11...trying to combine so much training commitments, the knowledge that I only had to do three subjects a year really assisted my workload’. However, Sue highlighted the drawback of this system for her was the lack of extra support outside of the classroom, as she commented: ‘The only problem I found on this program I didn’t have any extra support outside the classroom to study or any influence to what to do assignments in the extra time I had. I actually used it for part-time work and recovery’. Additionally, Sue commented that she was often left to schedule and manage her own studies as she said:

I was a sunset student so we just had to run our own schedule. We could easily skip class, not proud of this but I was a kid so often we could skip. It was up to us to go to the library or stay for lunch. But it wasn’t appealing to stay when you didn’t have friend support or teacher support.

Some athletes felt that they would have considered the extended studies program but were not provided with the information or procedures to do so. For example, Jodie, a high performance ocean ski paddler, felt upset by not being informed of all the details to undertake Variable Progress Rate (VPR) as she stated:

I did think about VPR, but I didn’t understand this option and didn’t get many details on it and I didn’t know anyone doing it so it didn’t seem like an available option...but maybe it would have been a good idea as it would have given me everything I was looking for...like the extra time and the leniency of due dates on assignments...Maybe this would be good for sport people. But I wasn’t aware of all my options as I didn’t get told about the information. Maybe VPR would have worked for me (Jodie-aged 17 years).

Another adult athlete also admitted that she did think of extending her senior years of study but she ‘didn’t want to lose my group of friends and in a sense I didn’t want to be a year behind at university and all that kind of thing (Kylie).
Celia, a 15-year old gymnast, spoke of the usefulness of having a free lesson during the school day as she said: ‘The three spares I have a week just allow me to complete my homework’.

An interesting view of planning the week’s activities was held by a home-schooled professional school-age surfer who explained:

*The nature of surfing I had to plan and work all my home schooling around the swells. There is a certain amount of work I want to achieve each day or a certain amount of hours or a set chapter and you could achieve or set times like 2 to 6pm or 7am in the morning to 11 am in the morning. (Zac-home schooled).*

Zac’s words highlight his need for planning his home schooling around his sport of surfing. Similarly, Lee, a high professional adult female surfer, planned her surfing around her study in a similar fashion to Zac as she revealed: ‘I would either get up early, surf, then study, then surf’.

Some other suggested methods of organisation by athletes included a pin board and highlight pens to mark all the ‘many activities and tasks I need to do’ (Pete). Additionally, most adult athletes felt organisation needed to be coupled with the requirement to plan ahead. As Lee, stated: ‘I guess it just comes down to planning ahead’.

### 5.2.3 Who can help me meet my needs?

The two main support bases the athletes spoke of were the school and home. In the school dimension, athletes spoke of two forms of help. The in-school issues athletes spoke of focussed firstly on the levels of recognition of athletes’, and secondly, their need for technological aides, mentors, teacher assistance to be provided for missed class time, lectures from specialists and chaplaincy programs. On the other hand, the need for athletes in the home was that of reassurance, particularly from their parents.

**School.** In relation to school, an interesting comment was made by Lee, a professional women’s surfer, who remarked: ‘It’s about the school asking the questions of athletes of “How can we help you?”’ Varying recognition levels afforded to athletes from the school were uncovered in the athletes’ comments about the under and over recognition. Phil, a water polo player, felt that often his teachers ignored what he did outside of school as he said: ‘Most of the time my teachers just simply ignore anything I do outside of school’. Conversely, Tiana, a recent Year 12 school leaver, felt that too much
attention by teachers was given to her on her return from a very successful 2010 Commonwealth Games as she stated:

When I came back from the Commonwealth Games in my Year 12 and had medalled I noticed how all these teachers at school just paid too much attention to me. Yeh...it was really funny...all these teachers that didn’t really know me or even pay me the time of day before I medalled at the Games on my return would come up and talk to me. But because other athletes at my school didn’t have the same name as me or hadn’t medalled at the Commonwealth Games as me they didn’t get the same attention.

The words encapsulated in this quote from Tiana may suggest that assistance and recognition for all athletes could be more equitable in schools.

Technological aides such as a laptop, iPod™, iPad™, and iPhone™ to complete schoolwork were viewed by athletes as necessary support, especially when away from school on their sport commitments. Pete, an adult athlete who competed in very high levels of sailing around the world whilst still at school, stated: ‘Getting a laptop was so useful for my study notes and also taking it with me to do my assignments’. Phil, who was completing Year 12, said: ‘I used my desktop and laptop to access my student website all the time for my study notes and assignments’.

Online access to intra school student websites such as ‘Blackboard™’ and ‘Schoology™’ were seen as quite beneficial to the athletes’ completion of school work. Destiny, a high performance iron woman, felt ‘Blackboard really helps’. In particular, this convenient access to downloaded school work by teachers was seen as great worth for athletes especially ‘Schoology is great for sharing very useful class files which I utilise quite extensively in my study’ (Meg). Furthermore, Phil said ‘the fact I can access our student blackboard allows me the opportunity to download all the class notes I missed whilst I was away competing in water polo’.

The need for a school mentor to assist the athlete with their schoolwork was discussed by most athletes. Destiny, a 17 year-old high performance iron woman, stated: ‘My school mentor helps me out and makes sure I’m alright with my school work’. The ability to be monitored by a school mentor meant most athletes felt less anxious about their combination of high level sport and school work commitments. School mentors made athletes feel comfortable when in-school problems arose. Celia, a 15 year-old high performance gymnast, felt that school mentors ‘are always willing to
go above and beyond the expectations to help me resolve the problems I always have in completing my school work on time’.

Extra teacher assistance was seen as important in the issue of athletes missing valuable class time. Kylie, a former iron woman, explained she had to ‘organise a caring teacher to tutor me in chemistry and maths in my lunchtime’. Tiana, a high performance swimmer who missed a lot of class time after she competed at the Commonwealth Games in her final year of senior study, stated: ‘I missed the classroom time and school work and this made me feel so behind’.

Most athletes felt the struggle and pressure connected with catching up this valuable missed class time on their return. Destiny elaborated on this problem of missing class time by stating: ‘You miss class time which is valuable one on one with the teachers’. Additionally, Jodie, a high performance ocean ski paddler, further elaborated on the problem of struggling to catch up on missed class time when away with high level sport commitments. She stated: ‘It’s such a struggle to catch up on class work I missed as it is so hard to learn the stuff you missed plus all that is continuing on’.

Athletes felt school mentors could help to inform all class teachers what the athlete may miss and suggested that these teachers could explain and map out the missed work for them. Annette, a high performance sprint kayaker, said: ‘I think if I did have just one person to go to who could tell all my teachers what I was up to that would be so good’. Ned, a 15 year-old athlete, believed: ‘My mentor gets my class teachers to help me and explain the worksheets to me’.

Most athletes considered, as essential, schools incorporating information sessions from professional specialists about health and sport psychology into the curriculum. An adult athlete suggested ‘more need in the curriculum is for sport psychology that is addressed at all athletes. Behavioural psychology could be included in school (Will)’.

Some athletes experienced the pastoral care program known as the ‘Chaplaincy program’ in schools. This chaplaincy program in some schools provides a ‘chappy’ who provides pastoral support for students. Sun, an adult athlete, stated: ‘I could always go and talk to chappy anytime during the school day’. Additionally, some chaplains run community-based programs such as gym strength sessions. One 15 year-old male
athlete felt he was 'so lucky to have a chappy who helps me at the school gym with correct strength exercises'.

**Home.** Turning to the home front, two athletes interviewed spoke passionately of how their parents provided reassurance. Belinda, a high performance dancer, confirmed that ‘as a student I probably have the needs of just being reassured by my mum and dad that I can get it done’. Phil, a water polo player, said his mother always reassured him that he was capable of completing his schoolwork by stating ‘My mum sits and helps me at home at night to deeply understand what the questions are asking of me’.

5.3 Differences

This next section outlines differences rather than similarities concerned with the two areas that emphasise: the current and adult athletes’ perceptions and gender. These themes can best be considered by using the words of athletes themselves; so, for want of better descriptors, they are called the differences between:

(i) “What current school-age athletes compared to adult athletes say concerning the three themes?”
(ii) “What the boys say and what the girls say?”

The next section now turns to discussing unexpected issues that surfaced with athletes still at school, in contrast to those that could reflect back on their school days.

5.3.1 What current school-age athletes compared to adult athletes say concerning the three themes?

Young athletes are living in the ‘here-and-now’ and may not have the time to reflect on the many issues that impact on their combination of commitments. Conversely, adult athletes could recall issues that were relevant to them whilst they were at school. Interestingly, the younger athletes delineated the approach of cramming to complete their school work. Conversely, adult athletes recalled issues including: intrinsic motivation, benefits of tertiary education and training in adult squads.

Surface learning was an unexpected issue that only athletes at school mentioned in terms of ‘cramming’. Celia, a 15 year-old athlete, admitted: ‘I’m cramming it all in. I often leave it to the last night and them it is really hard for me to get my homework done on time’. On the other hand, a home-schooled athlete suggested that he attempts to strive for deep learning, rather than surface learning, as he stated:
With mum as teacher if I got my work wrong in home schooling it was “let’s understand why you got it wrong”. I got to fully understand the concept of the question and why it was wrong as it gave me a stronger base (Zac- homeschooled).

The ‘get-up-and-go’ and ‘do-it-yourself’ attitude was only mentioned by adult athletes. Sun, a former Commonwealth Games medallist in both pool swimming and royal lifesaving, stated: ‘I was very intrinsically motivated and I didn’t need extrinsic motivation’. Teila, a high performance iron woman who regularly competed throughout Australia in her schooling days, voiced: ‘The commitment I had of the top level sport training and getting through five subjects for my senior exams I just had to do it by myself and be motivated’. Further, an adult athlete said ‘I just had to be so motivated which gave me the knowledge to improve immensely in both my performance and schoolwork’ (Pete).

Older athletes had the opportunity to recall the benefits of getting into tertiary education. Pete, an adult athlete, stated: ‘without education your chances are made a little more limited’ (Kylie). An adult athlete noted: ‘Maybe I could have achieved a higher OP to perhaps get into a higher degree as I didn’t have aspirations to be a doctor or something where I needed an OP1’ (Kylie). Some adult athletes suggested they were savvy enough to work out what they required to enter into tertiary studies whilst at school. Will, a former rugby league player, stated: ‘I knew that I was aiming to do a Science Degree at uni, so I didn’t do any more academic study then necessary to get me the necessary grade for this degree’. Cameron, a former Olympic kayaker, concurred that being shrewd about gaining the tertiary mark to effectively get him into University was ‘something crucial I just had to do’.

Adult athletes remembered that they had no choice but to join into the same squads in which older athletes also were training. These athletes explained that this was a strategy that allowed the combination of training at such high levels and going to school. Sun, an adult high performance former swimmer and royal lifesaver stated:

I had to train with adults even though I was only 15 years old at the time. Many of them were tradesman and people like that who started work at 6am. That is just what I had to do to fit school and sport in. There was no one else in my squad who was still at school. The people I was training with were either high performance athletes or they could go home to sleep or the tradesman adults who would go onto work.

The athletes who were still at school referred to issues of ‘cramming’ to complete their school work. On the other hand, adult athletes who had the ability of
hindsight, specifically remembered, intrinsic motivation, benefits of tertiary education, and training with adult squad members.

5.3.2 What the boys say and what the girls say?

The important finding in this section that illuminated some major differences between what the boys said, to that of the girls concerned the unexpected and surprising finding of ‘bullying’. Notably, this issue was only spoken of by the 12 female athletes. Not one of the boy athletes interviewed mentioned this issue. Additionally, some significant differences were noted about female athletes according to their school type.

**Bullying.** The analysis of all 12 of the female athletes interviewed found all these athletes mentioned bullying. All 12 female athletes coded references about the bullying they experienced at school. A total of 29 negative comments were made by all 12 female athletes about how the bullying at school affected them. One female adult athlete summed up the impact of bullying by stating it was ‘bad and created troubles for her at school’ (Sun). Furthermore, Sun explained she experienced bullying from other school peers because she was not ‘mediocre’; rather she always achieved ‘excellence results in both academic subjects and sport’.

**Types of bullying.** The types of bullying the 12 female athletes spoke of ranged from taunts, teasing, name calling, alienation, judgemental comments, body language, gossiping, and mean behaviour to ostracising (Figure 5.4). Six of the female athletes felt this unsavoury behaviour by other school peers towards them was due to others regarding them as ‘tall poppies’. For example, a 15 year-old athlete stated: ‘Others at my school constantly teased me by calling me a tall poppy’ (Meg). Additionally, Sue an adult female athlete, said: ‘There was stigma in my school about being the tall poppy as some people assume that you perform at a high level so they try to take you down’.
All 12 female athletes spoke of the mean behaviours that some of their school peers showed towards them. Sue, a former high performance soccer player, reinforced how mean other school peers were to her by saying: ‘Other students just had vicious behaviours towards me which was unwarranted and they were so mean to me’.

The jealousy shown towards these female athletes by other school peers was noted by Destiny, a high performance iron women, who stated: ‘The kids that call me names are just jealous of me’. Similarly, Sun also said: ‘I got bullied from other students at my school as they were jealous that I achieved excellence in sport and education which others students in my school could never do’.

Inappropriate comments made by other school peers towards female athletes were also mentioned. For example, Destiny said: ‘Some kids at school often make rather harsh comments about me like “oh you win all the time” or “I might as well not compete as you always win...This hurts’. Four female athletes shared how they had other school peers call them inappropriate names such as ‘loser’ (Destiny, Sun and Telia). Sun, an adult athlete, recalled that ‘a number of students at school would call me “a bitch”. They made a judgement about me but, I’m no precious little princess’. Celia, a 15-year old athlete, said: ‘Some of the girls were so mean to me ...they called me “bitch”’.

One adult female athlete was so badly bullied at school she resorted to avoidance tactics, to simply get away from the bullying she experienced at school. She
withdrew from the school bullies by only attending the necessary school lessons. In her own words, she said: ‘I had to play the system and put my own strategies into place to get away from the bullies’ (Sun).

**Bullying and school type.** The data revealed distinct findings in the relationship of the female athletes bullying reports to school type (Figure 5.5).

Figure 5.5

![Figure 5.5 Female Athlete bullying in relation to school types.](image)

Referring to Figure 5.5, seven reports of bullying were made by the three females who attended a government school. These three female athletes that attended a government school made only negative comments about the bullying they experienced in this school type. For example, Sun, an adult athlete, spoke of the lack of care and response of teachers to her situation of bullying in her government school, as she stated: ‘I was being bullied and no one did anything about it’. Although there were bullying reports by female athletes in non-government schools, in-school scholarship programs and specific pathway schools, only the positive responses such school types put in place, to support the female athletes with bullies, were mentioned. For example, Meg, a 15 year-old athlete said: ‘As I was on the scholarship program when I got bullied, my school did try to help me overcome the bullying’.

To summarise, the social issue of bullying and its impact was reported frequently by the 12 female athletes. Notably, not one male athlete mentioned this unsavoury social issue.
5.5 Conclusion

The findings of the athletes’ perspectives in this chapter uncovered the main issues they referred to, when given the opportunity to talk about the demands of school and sport at the highest level. What becomes clear is that these athletes struggle to balance their two demands. These young people, both full-time athletes and school students, wrestle with the dilemma of the two full-time lives they are leading. Superficially they appear very confident on the outside but scratch the surface, and what emerges is a deep-seated undercurrent of fear in simply trying to survive and maintain control. This revelation is one of the principal outcomes depicting the athletes’ perspectives.
Chapter 6 Significant Adults’ Perspectives

This chapter is the second of two that outlines the empirical findings from the two groups of adults, or as termed in this chapter, the ‘significant adults’. These two groups of adults consist of the parents and the teachers who nurture, care and support the high performance school-age athletes; and help in meeting their needs and demands as they go about their twin endeavours on a daily basis. The athletes are very closely connected to their parents and teachers, as it is these adults who influence such young people to meet the demands of their high level sport and achieve the educational goals that they and others still consider important (Hemery, 1991; Duda, 2007; Kanters et al., 2008a).

It will be remembered from the previous chapter that three themes emerged from the athletes’ interviews, and these were:

(i) ‘The impact of their sporting and educational demands’
(ii) ‘What they needed to help them cope’
(iii) ‘Who could help them cope’.

Taking these same three themes identified by the athletes, this chapter seeks to explore the perspectives that the parents and teachers hold about the issues experienced by these young people. This broader section begins by outlining the demographics of the 20 participants who are parents and school teachers. Attributes of these participants included age, gender and schooling type they were involved with.

Next, the second section of this chapter examines some overall comments that were made with regard to the three themes parents and teachers perceived and categorised into:

(i) “How are the two lives that I am leading impacting on me?”
(ii) “What do I need to help me to cope with my two lives?”
(iii) “Who can help me meet my needs?”

The first of these themes involves the parents and teachers commenting on the impact on the athlete’s double life and on the two lives they are leading. Secondly, the parents and teachers comment on what athletes need to help them cope to combine their dual endeavours. The third and final area asks of these significant adults what support is required for athletes and actually enquires who can help them attain their needs.
The third section of this chapter revealed that there were very distinctive needs and problems concerning the home environment and school. On the home front, the parents mentioned quite surprising, almost shocking, issues of sibling rivalry, disruption to family life and separation from the family, in relation to how the parents delineate these marked issues surrounding the athlete. Teachers who guide and inspire such young people at school spoke of the empathetic understanding they exude to their students. As the teachers attempts to instil the value of education to athletes, they are aware of the issues and empathy to these young people who live in the ‘here and now’. As a result, teachers discerned that young athletes tend to focus on setting only short term goals.

Following this section, the final section of this chapter enriches the analysis by discussing the perceived differences based on the school type, that the significant adults mentioned. In particular, this final section outlines issues based on the three themes that the significant adults felt that, athletes who live in the ‘here and now’, were affected by.

6.1 Demographics of Parents and Teachers

There were 20 participants interviewed including parents and teachers. Arguably, the parent is the care-giver who has the personal relationship with the athlete; and, in this study, ten were interviewed (Table 6.1).

Table 6.1

Demographics of Parents’ group (n=10).

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<th>Participant</th>
<th>Child’s school type</th>
<th>Gender</th>
<th>Attributes</th>
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<tr>
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<td>In-school scholarship program</td>
<td>F</td>
<td>Parent of 15 year old athlete and experienced teacher</td>
</tr>
<tr>
<td>Donna</td>
<td>Non-government school</td>
<td>F</td>
<td>Parent of 15 year old athlete</td>
</tr>
<tr>
<td>Jenny</td>
<td>Government</td>
<td>F</td>
<td>Parent of 15 year old athlete and teacher</td>
</tr>
<tr>
<td>Jo</td>
<td>Government</td>
<td>F</td>
<td>Parent of 15 year old athlete, former high performance dancer</td>
</tr>
<tr>
<td>Kerry</td>
<td>In-school scholarship program</td>
<td>F</td>
<td>Parent of 17 year old athlete</td>
</tr>
<tr>
<td>Leanne</td>
<td>In-school excellence program</td>
<td>F</td>
<td>Parent of 15 year old athlete</td>
</tr>
<tr>
<td>Mark</td>
<td>Sport high school</td>
<td>M</td>
<td>Parent of 16 year old athlete, former high performance rugby union player and high performance coach</td>
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<td>F</td>
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</tr>
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<td>Shelly</td>
<td>Specialist sport</td>
<td>F</td>
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</tbody>
</table>
There were nine female parents interviewees/participants and one male parent participant. Many fathers said -“just talk to mum”- as they were of the opinion that the mother was very well acquainted and close to the daily organisational schedules of the child. The one interview conducted with a male parent occurred as the mother referred to the father as “knowing all the football details”. However, to conduct this interview it highlighted how hard it was to schedule interviews into the parents’ hectic timetables of work and family commitments. For example, the male parent’s interview had to be conducted in a busy boarding lounge of an international airport.

There were five parents of 15 year old high performance school-age athletes - two attended government schools in the state of Queensland, one in a non-government school in Queensland, one in-school scholarship non-government school in Queensland and one in an in-school excellence program in a Queensland government school. Of the four female parents who had 17 year old athletes, two were in non-government Queensland schools.

The second group comprises school teachers who witness school-age athletes on a daily base in their classrooms. Ten teachers were interviewed, comprising five females and five males (Table 6. 2). School teachers taught in a variety of schooling types including government and non-government schools, specialist sport school, sport high school, in-school scholarship and in-school excellence programs.

Table 6.2

Demographics of Teachers’ group (n=10).

<table>
<thead>
<tr>
<th>Participant</th>
<th>Schooling type</th>
<th>Gender</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candy</td>
<td>Government</td>
<td>F</td>
<td>Newly graduated sport teacher</td>
</tr>
<tr>
<td>Glen</td>
<td>In-school scholarship program</td>
<td>M</td>
<td>Co-ordinating pastoral care teacher</td>
</tr>
<tr>
<td>Linda</td>
<td>Non-government</td>
<td>F</td>
<td>Sport teacher</td>
</tr>
<tr>
<td>Melinda</td>
<td>Non-government</td>
<td>F</td>
<td>Co-ordinating teacher of sport</td>
</tr>
<tr>
<td>Mike</td>
<td>Government</td>
<td>M</td>
<td>Teacher of regional school sport</td>
</tr>
<tr>
<td>Noel</td>
<td>Specialist sport</td>
<td>M</td>
<td>Sport teacher</td>
</tr>
<tr>
<td>Tom</td>
<td>Sport high school</td>
<td>M</td>
<td>Sport teacher</td>
</tr>
<tr>
<td>Ted</td>
<td>Government</td>
<td>M</td>
<td>Teacher</td>
</tr>
<tr>
<td>Tia</td>
<td>Government school</td>
<td>F</td>
<td>Teacher</td>
</tr>
<tr>
<td>Bella</td>
<td>Government</td>
<td>F</td>
<td>Head teacher</td>
</tr>
</tbody>
</table>
6.2 Common Concerns

The three themes identified by the athletes’ in Chapter 5 concerning the ‘impact on the athlete’s double life’, ‘needs to help them in their double lives’ and ‘who could help the athlete meet their needs’ were continued into the analysis of the parents and teachers. Common concerns that parents and teachers referred to will now be detailed into the three themes entitled:

(i) ‘How are, the two lives impacting on the athlete?’
(ii) ‘What the athlete needs to help them in their two lives’
(iii) ‘Who can help the athlete meet their needs?’

6.2.1 How are the two lives impacting on school-age athletes?

In this first theme, parents and teachers commented on the double life, led by the young athlete and the impacts on the athlete in areas of physical and economic issues.

**Physical.** Interestingly parents and teachers spoke of athletes’ physical life in terms of exhaustion, or their own words, of the athlete being ‘weary’. In relation to the need for healthy food, parents spoke of the weekly organisation need to be undertaken; and, notably, one teacher spoke of the food types required for the long days where athletes combine training sessions and school.

The physical condition of exhaustion was mentioned by five parents and four teachers in the terms of being ‘weary’ (Cate) or ‘exhausted’ (Candy). Notably, Donna was the only mother interviewed that acknowledged: ‘Sleep is so important for the athlete’ (Donna).

A recently graduated sport teacher in a government school noted that: ‘Exhaustion is a huge problem’ (Candy). Additionally, Candy commented about the physical state of the high performance athletes in her Physical Education class as:

*There are a couple of grade 12 boys who are phenomenal at football. But they have on average about a day a week out of school even if it is just the travel down to NSW. Particularly if they have to play on a weekend in top premier league and then they usually have to have the Monday off as they are exhausted* (Candy).

A further observation by Candy is that the physical state of exhaustion may actually diminish the school Physical Education (PE) performances of the high performance school-age athletes. Candy stated that often these young high level sport athletes are half asleep in her class and not really able to demonstrate their skill accomplishments,
as they are ‘just too exhausted to do so’. In fact, Candy reinforced the inaction of some teachers in not following through and advising the parents of their observations about the athletes’ physical state as she disclosed:

Exhaustion is a huge problem for the young high performance sport kid! Often by the time they get to school they are physically exhausted from the early morning high level sport training sessions they have to do. The problem for me in senior PE is that I really only get to see them when they are so exhausted. The prac lessons they often can’t fully participate in and then in my theory lessons I constantly see them asleep on the desk (Candy).

On the other hand, a very experienced head teacher of a government school that has many high performance school-age athletes attending from the AIS campus stated:

Athletes at school are often exhausted. On numerous occasions they have fallen asleep in class. Seems to make no difference what sport whether ones with early morning training like rowing or afternoon like basketball. I constantly advise my teachers to be vigilant of this and even report this on (Bella).

Kerry, a mother of a high performance iron woman, was able to assess that her daughter ‘at the moment (she) is extremely weary’ A parent of a high performance ocean ski paddler said: ‘they come home, eat and they are so exhausted’ (Tammy). Donna, a mother of a high performance school-age gymnast, stated: ‘I constantly see how exhausted my daughter is after training’ (Donna).

Since these young people have such long days, often starting very early, attending school, and then heading straight back to another training session in the afternoon, there is a need for healthy and wholesome food. Most parents felt that this meant they needed to prepare ‘healthy, hearty meals’ (Donna). Notably, only one mother interviewed mentioned the importance of good food, particularly through the school day for athletes as, she stated: ‘My son needs good school lunch options plus a good variety of meals at night’ (Jo). Interestingly, only one teacher interviewed felt athletes needed ‘a good variety of food’ (Melinda).

Organising and cooking food for the week was mentioned by the nine mothers interviewed. For example, a parent shared her admiration for her young 15 year old high performance swimmer, as she discussed how her child cooked and created a food plan for the week. She stated: ‘some days she cooks stir fry, pizzas and other meals that add up to five days of meals. She then stores it in the fridge and then it is ready to just heat, so this way her food is organised for her to take to each early morning session’ (Cate).
The high costs associated with high level sport were mentioned by both parents and teachers. Mike, a regional sport co-coordinator of government schools, mentioned he constantly heard parents with children in high performance sport say: ‘The expense of high level sport is just so high’. Family financial hardship was spoken about by a fulltime working single mother, as she stated: ‘It is always a struggle’ (Jo). A mother of a high performance school-age tennis player stated the high costs encompassed ‘the tennis school charging additionally for all competitions and tournaments and so the tournament cost and the tennis school became so costly’ (Shelly).

The preceding section outlined that parents and teachers shared the views that physical and mental issues impacted on the double life of athletes. Two important points that both the teachers and parents equally shared were firstly, that, although these significant adults spoke of the athletes’ physical condition, such as exhaustion, not one significant adult interviewed mentioned being proactive about their observations of the ‘weary’ athlete. Notably, only one mother interviewed suggested that ‘sleep’ was important for these young people. Additionally, the huge costs of maintaining high level sport were also mentioned by both parents and teachers.

6.2.2 What the athlete needs to help them in their two lives?

Parents and teachers felt the psychological issues of resilience, mindset and motivation were important personal attributes in helping the athletes cope with their dual lives. Secondly, these significant adults highlighted specific school issues which can help athletes with the combination of dual commitments. These centred on open communication channels between the school and parents. In particular school issues which may help athletes, were those of managing, organising and planning the dual commitments in an athlete’s life.

Psychological and emotional. There were three main psychological characteristics that both parents and teachers felt school-age athletes needed, including resilience, mindset and motivation. Interestingly, both parents and teachers considered the strength of character they noticed in the school-age athletes as exemplifying the quality of ‘resilience’. Of significance, two mothers and one teacher interviewed used the exact term of ‘resilience’ in describing the character of their high performance school-age athlete.
Donna, the mother of a high performance gymnast, said: ‘I constantly see how my daughter show signs of having resilience in completing her physically draining demands of high level gymnastics’. She added that she believed her family unit in supporting their high performance school-age athlete, also had to be resilient: ‘Our whole family must be resilient to support our daughter’s high level sport and completion of academic aspirations’.

Glen, a co-coordinator teacher of high performance athletes, used the term ‘resilient’, stating that: ‘But our high performance athletes have to be resilient enough to realise that this is their time to do this and that, so these students are great examples of having and maintaining resilience’.

Two other important psychological issues that parents and teachers mentioned as necessary were mindset and motivation (Figure 6.1).

![Figure 6.1 Common reports about Athlete mindset and motivation issues from Parents and Teachers.](image)

‘Mindset’ was referred to by parents as the young athlete’s dedication to their high performance sport achievements. Shelly, a mother of a high performance school-age tennis player, commented: ‘The high level of tennis has made my son a better all rounded high level athlete’. Moreover, Melinda, a head sport teacher, felt that athletes need to ‘combine both high level sport and education’. It may be as Jenny, a parent of a primary high performance school-age track and field athlete, believes: ‘It can help young athletes become good people’.
Bella, a head teacher of a government school with many high performance school-age athletes, considered there may be a need to surround the athlete with like-minded people so they can ‘take the heart aches that high level sport will definitely present to them’. The ability of these young people to undertake both high level sport and education was considered by Mary, a mother of a high performance school-age kayaker, to ‘teach such kids to study well and to achieve’.

Intrinsic motivation encourages the young person to have inner self-motivation as opposed to external stimuli on a continual daily basis (Maslow, 1954). One parent commented about her athlete: ‘She did a lot of organising her schoolwork herself to all the individual teachers’ (Mary). Glen, who was a co-ordinator of high performance athletes at his school, commented: ‘Most high performance athletes are motivated and learn on their own’. Often, as noted by Noel, a teacher in a New South Wales Specialist Sport High school: ‘It is the self-motivated athletes that automatically just follow all matters up themselves’.

Linda, a former AIS mentor for high performance athletes, stated: ‘There is a need for the student to take responsibility...to help them and not be glorified’. Overall, as summarised by an experienced sport regional teacher: ‘They do have to make an effort to improve and keep up’ (Mike). Furthermore, Melinda felt the young athlete ‘has to be self-motivated enough to keep their high level sport going at the same time of studies’. The need for the athlete to combine both their motivation and ability levels to attain high level sport performances was referred to by Ted, a head sport teacher in a government school, as the ‘Influences model’ (Ted). In reference to this model, Ted felt ‘this model teaches the kids to be aware and help them learn and know that performance equals motivation times their ability’.

**Education.** Parents and teachers spoke of the two main areas which they felt could help athletes complete their two commitments. One concerned clear channels of communication between home and school. The other was the need to manage, plan and organise all aspects of home and school life commitments, including considering school options and school subjects.

Many parents felt comfortable to go and talk with the school. Jenny, a mother of a high performance track and field school-age, athlete affirmed: ‘I often update the school of my daughter’s busy commitments’ (Jenny). The common communicating point was mentioned as the parent/teacher meeting, explained by one parent as ‘a meeting
time that I could always talk openly to the teachers and update them to the heavy commitments my daughter had to complete’ (Tammy). Another parent shared how welcomed she was whenever she rang the school, as she shared: ‘I could even speak with the principal who always listened and informed me the school was there to assist my daughter’ (Mary).

Teachers who dealt with high performance school-age athletes felt that the regular updating of the schedule plan of the athlete was critical for reviewing their commitments, which may change over the school term. Noel, a sport teacher in a baseball school program, stated: ‘I meet regularly with the parents and the athlete to update monthly schedules of work and baseball commitments’. Jenny, a parent of a high performance track and field athlete, shared:

I always talk to the teachers about what my daughter needs to do especially when she travels. It is really a holistic thing as my daughter gains other aspects of learning when she travels. I find out the assignments and I’m sure the teachers will outline it and give her extra time.

A head teacher from a school that has many high performance athletes stated: ‘Show the school their training timetable and show them their competition timetable’ (Bella). Further, Linda, a teacher, suggested that for the athlete to avoid problems, ‘it is so easy for the school to simply have a system in place to outline the athlete’s high level commitments with ones of school work’.

The need to plan and be disciplined with timetables, subjects and schooling options combining both studies and high level sport commitments, was referred to by both parents and teachers throughout most interviews. A parent felt: ‘you could look at their schedule and plan that it may assist them to complete the assignment early, but also put in the option that if they don’t want to do it this way, that’s okay as well’ (Kerry).

Furthermore, Jo, a mother of a 15 year old high performance male gymnast, stated: ‘We would have to stick to our managed plan. We were very, very planned’. Another parent explained how her daughter meticulously set out all the competition dates for the entire year, and then combined all due assignments into this schedule, as she explained: ‘my daughter after setting out all her touring dates always then compares them to the commitments of assignments’ (Mary). Amazingly, Cate, a mother of a high performance swimmer, additionally explained how her young 15-year old created the ‘to do lists’:
There are more notes appearing in study and on the fridge with the words “To do”. Some days there is a long list of to do things...she comes to study in the afternoon and writes on the sticker notes the things to cover in study today. She is good at lists and I suppose she has just seen me to do this and copied me as I’m pretty good at the “To do lists”. This is creating an agenda for a day a week. As I say this helps her plan a day at a time (Cate).

A teacher in a sport school shared: ‘The biggest thing for these kids is time allocate between their school work and training sessions’ (Tom). A parent of a young high performance soccer player stated: ‘time is a big factor in trying to squeeze homework in and squeezing the work they are expected to do at school with the training as well’ (Leanne). Furthermore, a teacher, who dealt with high performance athletes on a daily basis, commented: ‘They need time mostly to manage their studies’ (Linda). The need for the athlete to learn to be a ‘time manager’ and compartmentalise many activities concomitantly was mentioned by some teachers. A teacher in a Specialist Sport high school stated:

The biggest issue is to instil in these kids the notion of time allocation. We have many useful strategies and lectures on how to organise and skill yourself in the activity of managing your time between competitions, of academic subject requirements, and sport commitments (Noel).

Furthermore, Linda stated ‘a high performance athlete that has good personal management does it a lot easier’. On the other hand, Tia, a teacher who co-ordinated an in-school excellence football program, felt that many of the athletes she dealt with were just ‘too young to manage their time appropriately unless they have role models at home’. Interestingly, Tom a head sport teacher in a Sport High school who deals with many high level rugby league open school boy players, stated:

The more people who can give clarity where everyone knows this is the weekly plan, this is where they will be at this time of the day, etc., is so crucial for the successful communications between the athlete and teachers. To give it a base skeleton then we can understand “wow this kid does a lot of stuff other than just sit in my classroom”.

Interestingly, parents and teachers had mixed reactions in relation to athletes considering extended periods of time to undertake their senior studies. One athlete interviewed, as mentioned in a previous chapter, spoke of the VPR (Variable Progress Rate) approach. One teacher, who had much involvement with high performance athletes, explained: ‘The extended year concept was spearheaded in the early 90’s and has grown fantastically. It allows flexibility for the athlete’ (Linda). Additionally, a head teacher of a government school who has many high performance school-age
athletes from the AIS campus, felt: ‘Flexible options need to be considered so that the outcome for the high performance athlete is optimised’ (Bella).

A recently graduated sport teacher in a government school commented about a couple of athletes at her school who were in an Olympic training team for rowing, all of whom have elected to complete grade 11 and 12 over three years. This teacher felt it was ‘good and it enables them to do half the subjects because they are away for half the year as they have to travel overseas in this elite sport for competitions’ (Candy). Some athletes need to have the extra year which may allow them to have ‘more time to do their study and complete their commitments of sport’ (Tia). Perhaps, as one teacher believed, such young athletes need ‘someone to cut them a bit of slack and I think schools can do this. Schools can do senior over three years’ (Tia). The extended year could facilitated the scheduling of the final senior exams, as Bella stated: ‘Certain exams must be sat within Australia as papers for these final exams are not permitted to be sent overseas’.

However, one mother felt that the extended time was not conducive to the athlete as, she believed ‘it lengthens the senior years too much. Also it is not good for these young athletes to have too much time on their hands’. A more favoured option, as mentioned by another mother, was to reduce subject loadings so that ‘my daughter could competently complete her OP while doing her high level of sport’ (Tammy). Notably, parents and teachers felt that greater flexibility in completing school loadings would be achieved by athletes only undertaking the necessary core subjects. For example, a mother exclaimed: ‘Japanese! Why should they do this subject? If they are not going to follow international careers in some way they don’t need to be doing this subject in high school’ (Leanne).

Tia, a teacher in a rugby league football excellence program, believed such school-age athletes should have modified study loads which may help the athlete, acknowledging: ‘We should be modifying things for these kids so they don’t have the need to do everything’ (Tia). Candy, a sport teacher in a government school, felt that athletes can ‘choose subjects that are based around their sport, fitness and health and that kind of stuff that they are good at’.

Subsequently, a head teacher of a government school suggested that the assessment could be ‘tailored’ to the athlete’s needs. Bella shared: ‘When school-age athletes are competing at the Olympics they can do some sports journalism type stuff
instead of trying to read Shakespeare alone’. A teacher in a New South Wales Sport High school commented that there are certain ‘boundaries that need to be instilled regarding the workload the athletes had to undertake’ (Tom). A suggestion put forward for his athletes in this Sport High School is to provide ‘a bit of leniency in say grand final week or a national championships week’ (Tom). Furthermore, Bella felt that teachers themselves needed to realise the demands of the schoolwork to be undertaken, especially if the athlete is travelling for high level sport training or competitions, and consider the requirements.

This section outlined some very important aspects that parents and teachers felt influenced young people attempting to balance the commitments of high level sport and education. Parents and teachers both spoke of resilience, mindset and motivation in regard to what athletes need to help them cope with their double life. Additionally, school issues that can prioritise athletes’ commitments, such as clear and open channels of communication between home and school were also considered essential. The next section will now discuss those whom the significant adults consider can help the needs of the athlete.

**6.2.3 Who can help the athlete meet their needs?**

The main area of the athletes’ life that both parents and teachers commonly mentioned, where these young people needed support, was in school. In particular, the issues concerning connectedness to school arose (Figure 6.2).
Figure 6.2 Identified school support issues that could help the athlete.

Mentors in school were considered by both parents and teachers to include care
or case manager teachers, older athletes in the school and outside community members
from representative sport bodies. Glen, a co-ordinator for high performance athletes, felt
it was essential to bring all athletes together and explain to them: ‘They are not alone’. Additionally, Kerry, a mother of a high performance iron woman, felt the care role of a
mentor teacher provided the support and understanding and even offered insight into the
‘problems athletes are having and where they need help’.

Teacher mentors may provide avenues for athletes within the school to share and
engage in a flow of conversation, to alleviate and sort out issues they may be
experiencing. Glen stated: ‘My role is to do the necessary talking between the class
teachers and the athlete at our school’. Community mentors who look after and care for
high level school-age athletes provided excellent role models and tended to exhibit good
influences for such students. Ted, a teacher who co-ordinates high level rugby league in
a government school in a New South Wales High School, instituted a mentor program
that involved local community members from the local football club. He commented:

The local community mentors provide the best influence for my high
performance rugby league footy players as opportunities are provided by them
that can help forge their footy careers forward in to NRL from the age of 18
year old and onwards (Ted).

Issues of extra help or specialised tuition and consultations for athletes during
lunchtimes in the school day were mentioned by parents and teachers. Tammy, a mother
of a high performance ocean ski paddler, believed that ‘high level athletes need some specialised help’. One parent felt that high level athletes such as her daughter should also be provided with ‘extra tuition which is one on one learning at lunchtimes or even once a month consults with teachers in various subjects’ (Kerry).

Similarly, some teachers and parents mentioned that extra tuition lessons could be provided on a regular basis to explain school work. Glen, a co-ordinating teacher of high performance athletes in his school, felt that: ‘High performance athletes that really miss the face to face need greater help in learning’. Jenny, a parent of a high level track and field athlete, commented that extra help was provided by the classroom teacher to ‘get her current assignments completed before she leaves for the national competitions’. Tia, a co-ordinating teacher of an in-school excellence program of rugby league, stated: ‘I used to run tutorials on Tuesday afternoons for the rugby league boys to get them up with their homework’. Additionally, Ted, a teacher who co-ordinates the high performance rugby league open boys team in a New South Wales government school stated: ‘I have allocated some English and Maths teachers at lunchtimes to tutor the footy boys who are struggling in these core subjects’. Furthermore, in relation to teachers instituting and supporting one-on-one tutoring programs, Noel, a teacher in a Specialist Sport High School, noted: ‘There is a program of one-on-one tutoring that is instantly put in place so that the kid does not lag behind in grades’.

The amount of time missed out of class by the high performance school-age athletes to attend their high level sport commitments was raised by both parents and teachers. As one teacher voiced: ‘These young athletes miss so much work during the year due to their high performance sport commitments’ (Linda). Missed class time may then create difficulties for the athlete in trying to catch up the schoolwork missed. Tammy, a mother of a high performance ocean ski paddler, who is also a high performance coach and former high performance gymnast, explained the issues of an athlete travelling overseas for international competitions. Often the athlete is advised by the school not to worry about taking schoolwork with them; but, on their return, experience that, ‘so much difficulties in catching up on the missed class work’ (Tammy). One parent felt to avoid upsets and issues when their child returned from overseas, was to find out ‘the work she had missed and if necessary get exams rescheduled’ (Kerry). Further, a teacher who deals with many high performance athletes felt that such athletes should perhaps accept the issue that they will miss class work, but
be aware that the main problem is ‘how the athlete can still get on’, when they return to school (Glen).

The versatility of the school technological support, especially while away on overseas competitions, was mentioned by both parents and teachers. Athletes who can access student websites such as a school portal or Blackboard™, can take advantage of school work that is posted or placed on ‘podcasts’ by the teachers in various subjects. Advanced technology, allowing accessibility of work posted on such a student site, allows the athlete to take advantage of scheduling and completing school work whilst away from the classroom. Kerry, a mother of a high performance iron woman, commented that if the work was posted on a Blackboard™, it would allow ‘more scheduling of assignments and then it gives the kid time to look at the assignments and then know what to ask the teacher for help on’.

Teachers felt by populating the student websites with resources, it provided ‘useful resources for the kids that are travelling’ (Glen). Some schools issued students with a laptop and/or iPad™ which allowed convenient completion of assignments for travelling athletes. Access to blackboard allows the students entry to their individual subject areas, posted on the student website and to discover what they needed to do. Communication between students to teacher is enhanced by discussion, wiki and blog postings.

An interesting discussion in an interview with a teacher, who is the co-ordinator of all high performance athletes at his school, focussed on the use of Skype™ as a tool for communication. At this school, some teachers have set up Skype so the high performance athletes travelling overseas could ‘Skype’ into their school class. Glen, a co-ordinator of high performance athletes, shared the case of a high performance school-age snow skier, who has to live in his parents ski lodge in the snow region of Australia for six months of the school year. Glen felt that the technology of Skype™ is quite special, particularly when the athletes can Skype into ‘their cohort of friends in the class to see what they are doing on a particular day’.

Glen added that this accessible school portal permits some extraordinary advancement for the travelling high performance athletes. Glen believed that the high performance surfer from his school, competing on the surfing professional world circuit, was able to ‘submit his history assignment on the due date from Peru’.
Spare lessons in the school day were mentioned by parents and teachers as it provided opportunity at school for the athlete to complete necessary school work which certainly would not be completed in the late evening, after a heavy training session. For example, Donna, a mother of a high performance 15 year old gymnast, concurred that spare lessons ‘gave my daughter time in the school day to complete her school work’. Further, a teacher supported the notion of spare lessons for high performance school-age athletes, as this may allow some free time in their school day and provide these students ‘with some extra study lessons during the day’ (Bella). Bella, a head teacher at a government school, suggested that much support is needed to be provided to the athletes in these spare lesson times, in terms ‘of structured study time’. One parent, whose school did not provide spare lessons, actually commented that this spare lesson approach would have been very useful as it would have provided her daughter ‘sometime in the school day to complete her school work’ (Kerry).

The fill-in, or ‘make-up’ (Glen) lessons, are those that just fill up the school day for the mainstream students. Such lessons are normally standard fitness or even personal development lessons that high performance athletes already adequately cover in their high level of sport sessions. For this reason, all teachers referenced the notion of the high level sport athletes putting these superfluous lessons to better use, by studying in the library or doing additional gym sessions. Glen stated: ‘We say to the high performance sport kids that they don’t have to do these make up and fill in lessons’.

Linda, an experienced teacher of high performance athletes, mentioned the learning difficulties that some athletes must deal with, commenting that ‘learning difficulties can often present major issues for some athletes who tend to struggle to pass in school subjects’. Further, Leanne, a mother of a high performance soccer player, tended to agree with Linda’s opinion, as she felt her own athlete (son) struggled at school due to his ‘low level of learning ability’. Both teachers and parents mentioned that talent in high level sport sometimes does not flow over into academics. Linda further voiced: ‘Talent in their sport is sometimes greater that their academics’.

6.3 Varying Concerns between the Parents and Teachers

Parents, being the primary care givers of the school-age athlete, have a flexible role as the provider of all the essential needs and demands of their young person. It is therefore no surprise that parents were the only group that raised the worrying home
issues of sibling rivalry, disruption to the family life and separation from the athlete’s family. Additionally, parents spoke of the ‘over-the-top’, ‘ugly’ and ‘pushy’ parents. The resounding significance of the teachers in schools centred on the amount of empathy and respect they gave to athletes they taught. Teachers also detected that athletes tended to live in the ‘here and now’ and as a result to focus on their short term goals.

Nine mothers suggested that sibling rivalry within the family emanated from resentment towards the high performance school-age athlete. Often the high performance school-age athlete in the family was given the benefit of not having to complete certain chores and that the other family siblings are then left to finish. Specifically five of these mothers felt resentment originated from the issue of the athletic child not doing the chores. For example, Leanne, a mother of a high performance soccer player, said: ‘This created the problem of resentment from the other siblings who often are left to complete all the chores’. Interestingly, Donna, a mother of a 15-year old gymnast, admitted that she may have been responsible for fuelling resentment between her two siblings, sharing:

There has been some resentment from the older sibling in the household that is not a high performance athlete. Often times the older sister has sometimes made comment about the times I have made allowances for our elite athlete for not doing of being diligent of chores so the older sister has to do them instead.

Donna further suggested that ‘the sibling in our family who is not a high performance athlete experiences regrettably a lot of big upheavals’. Additionally, Tammy a mother of a high performance ocean ski paddler further suggested that the other siblings in the family really have no choice but to just go along with the organised routine of the elite athlete in the family, stating:

The younger sister has to go with us and I feel the youngest one does all her growing up in the car. She certainly has to do homework in the car dropping off her oldest sister to the myriad of training sessions and most definitely the competitions.

Another issue commented on particularly by one mother was the problem of having to separate the very young high performance school-age child from the family home. In some sports, acceptance of the Australian Institute of Sport (AIS) scholarship necessitates the relocation of the young child to the residential AIS campus, located in the Australian Capital Territory in Canberra. Such circumstance allows the identified talented young athlete to live on the AIS campus and train and school at a nearby
government school. However, this interrupts family life and much controversy has arisen about this requirement, as mentioned by the much-publicised case of the gymnast Sarah Lauren, outlined in Chapter 2.

Tammy, who herself was a former Australian gymnastic representative and coach, raised the aspect of disruption of family life, and the problems caused from the stress of separating the athlete from the family base. Quite interestingly she was placed in the dilemma of having her own daughter offered an AIS gymnastic scholarship. In the interview, Tammy explained the reasons behind declining the scholarship for her own daughter, as she shared the following:

*I had a lot to do with gym at AIS level. Ten years ago they would take kids and put them into specialised school...they went to one school and moved to the AIS under a house mother. This doesn’t happen anymore at the AIS as a controversy happened in 2002 with the Chinese coaches wanting the kids and their families to move to Canberra but many gymnastic families like in the case of Sarah Lauren (top gymnast in Western Australia and made the Australian team and now the 2012 London Olympics) made a decision not to move. The reason this entire situation happened is because as parents of talented gymnasts at such young ages we want our kids to be at our home environments and not be forced to move and leave their families and their state institutes where they love to train. My daughter got offered this scholarship in 2002 and we as a family were not prepared to move our whole family to Canberra and we certainly felt she needed the family (Tammy - mother).*

This mother’s comments highlight the disruption to family life that separation may cause to young school-age athletes. It illustrates that the school-age athlete’s family support emanates from their own home. The separation of these young children from their families at a young age may not be a preferable option for some families. However, the younger age high performance athletes, such as the young child in gymnastics and the effects of family separation could be a topic of future research.

Three parents mentioned the ‘pushy’, ‘over-the-top’ parents and ‘ugly parent’. Most mothers interviewed suggested that this trait of being ‘pushy’ or ‘ugly’ often was seen in ‘other’ mothers of athletes (Mary). This may generate pressure impacting on the athlete to constantly perform and to please their parents. Mark, the father of a high performance football player, had witnessed a very ugly incident in which parents brawled with each other on the field. He stated: *’I was appalled by the ugly parents who had started yelling offensive abuse at the referee and players on the field, then it developed into a full scale brawl on the field...it was quite disgusting and ugly’*. The ‘over-the-top’ or ‘pushy’ parents were accentuated by Cate, the mother of a 15-year old...
The high performance swimmer, who felt ‘over-the-top-parents try to over protect and live their own dreams through their own children’. This type of behaviour is not something that children need to witness or emulate.

The problems for children who feel pressured to perform to please their parents is exacerbated if they ‘lose’ and/or perform badly. Not only have they ‘failed’ in their own eyes - they have ‘let down’ their parents. This is an enormous ‘guilt’ burden that has serious negative implications for such pressured athletes (Calder, personal communication, October 20, 2012). Whateley (2011) reported this type of pressure was experienced by an Australian tennis player, Jade Hopper, who revealed her father was angry with her when she lost her tennis matches.

On the other hand, teachers interviewed spoke of being optimistic, and having the overall knowledge of their student-athlete demands. Of significance, seven teachers felt they were ‘empathetic’ to the needs of their student athletes (Figure 4.30, Chapter 4). Bella, the head teacher of a government school that has many high performance school-age athletes attend stated: ‘An empathetic teacher helps, listens and relates to the student who has the demands of school and high level sport’. Further, Bella asserted: ‘I constantly have to remind my teachers to try and envisage the workloads of these young high performance athletes by putting themselves in their shoes’. Most teachers interviewed believed that having an understanding of the background of the student athlete provided explanation for the prioritisation of school workloads. For example, Noel, a teacher in a specialist sport school, stated: ‘I find out the big picture about my kids’. Also, Ted felt the need for ‘understanding what these kids have on their plates and try to work with them not against them’. Glen, a co-ordinator of many high performance students in a non-government school, said:

I have the formal interviews with the high performance kids and their parents and most importantly I constantly have informal chats with the kids in the playground or whenever I pass them in the school just to let them know I’m there for them and I understand what they are going through....also to informally check if they really need some help.

Furthermore Candy, a first year sport teacher in a government school, said: ‘I know what these kids are about ...I listen to them and find out if they are off to an Australian championships or just back from one’. Linda spoke of understanding the needs of student-athletes’ by ‘cutting them a bit of slack’. Tom, a teacher in a sport school also felt that being understanding to athletes sport demands could be handled in
school by ‘cutting these kids a little bit of leniency in say grand final week or a national championships week or something like that’.

Metaphorically, ‘to walk in the shoes’ (Bella) of a high performance school-age athlete, is required of teachers. Linda, a teacher who was a former mentor of high performance athletes, felt that there was a need for teachers to understand the athletes and ‘be aware of the activities such athletes should be undertaking’. Furthermore, Glen, a co-ordinator of high performance athletes at a non-government school spoke of discussing and understanding the commitments of athletes, saying: ‘The athlete meets with me at the start of each term and tells me this is what they are heading off to do this term and next term and we can deal with the things coming up for these kids’.

Six teachers commented that these young people only have the time to set short term goals. For example, Glen, felt that although these ‘kids are good at compartmentalising, but they live in the here and now’. This may impact on them for their future pathways. As Candy, a first year sport teacher, felt these young people only have the ability to see their goals in short term only, as she said: ‘These kids say to me I just need to only think about winning the race’. This teacher was herself a high performance swimmer whilst at school, and she believed athletes only think in the short term as opposed to middle and long-term goals. Additionally, two teachers detected that the order of priority with commitments for these young athletes is not necessarily their order of preference. For example, Tom, a sport teacher in a Sport High School actually related that ‘their priorities go to what is happening at the moment and in my experience with these kids they prioritise differently to the way the long term is going to affect them’. In general ‘Generation z’ tend to “live for the moment” (Fuller, 2012b, p. 76) and this is not just a feature of high performance school-age athletes. However, more pressure is placed on such athletes who compete at higher levels of sport.

Interestingly, parents and teachers had diverging views on the ways school policies and procedures impact on the athlete. Most parents commented on school policies concerning directives. Some parents mentioned being left puzzled by these statements, and they often resorted to guessing what was the right thing to do: for example one such policy concerned the athlete’s schoolwork/sport ratio. Jo, a mother of a high performance male gymnast, commented: ‘There was no directives, no guidelines that comes out on your child at this level in sport. I just had to feel my way and hope that I was never pushing the mark’. On the other hand, most teachers felt that codes and
policies were present for all students in the school. Glen, a teacher in a non-government school, used the term ‘unwritten policy’ that the teachers understood. This allowed the students to go away and ‘represent for the school or themselves at high levels and on their return they will not be disadvantaged’.

This section highlighted that parents who deal with the daily demands of the athlete spoke of the unexpected home issues of sibling rivalry, disruption to the family life and separation from the family and pushy parents. On the other hand, teachers care for such student athletes in the school environment. In the school area, teachers portrayed their unique ability of empathetic understanding towards such students’ situations, attempting to combine two twin endeavours.

6.4. Differences Based on School Type

The data analysis across parents and teachers, based on the school type and the three themes, appears in Figure 6.3.

The ten parents and ten teachers interviewed had their child’s and own experiences in six school types in this study. 20 participants made 14 responses about government schools concerning the theme ‘what the athletes needs to cope with in their double life’. Interestingly, 12 of these responses were critical about how government schools cater for the needs of high performance school-age athletes. For example,
Candy a first year teacher in a government school, said ‘at my school we just are not really doing enough for these young kids’. Notably, Bella the head teacher of a government school that had many high performance athletes attend, commented: ‘I have to remind my teachers constantly to be aware of the athletes needs’.

Interestingly, common issues between all three focus groups now surfaced (Figure 4.21, Chapter 4). All focus groups have identified similar psychological and school issues concerning the high performance school-age athlete’s double life. The underlying meanings for this apparent pattern that is collectively shared by the athletes, parents and teachers will be further discussed in Chapter 7.

### 6.5 Conclusion

This chapter carried forward the three themes discerned by the athletes in Chapter 5, to determine if parents and teachers spoke of similar issues concerning the ‘impact on the athletes’ double life’, ‘what the athlete needs to cope with their double life’ and ‘who can help them’. To enable high performance school-age athletes to maintain their double life, it requires flexibility; and ultimately, that comes from the home and the school. Thus, it is the parents and teachers who play a significant role in introducing children to high level sport; and, additionally, encourage and support them in the pursuit of excellence in the athlete’s dual endeavours.

Of interest were the home issues uncovered by parents, concerning the worrying home issues of sibling rivalry, disruption to their family lives and the issues caused by the athlete being separated from their family. Markedly, the issue that teachers discerned was that school-age athletes only plan for the short-term which may not benefit them in the long term for life. Notably, two theoretical constructs will be related to the life of the school-age athletes, one a somewhat negative connotation from the study of Fine and Sirin (2007) and a more positive view by Robinson and Aronica (2009). Furthermore, a list of school characteristics known as the ‘athlete friendly school’ will also be explored.
Chapter 7 Discussion

The purpose of this chapter is to explore the meanings, significance and ramifications of the principal findings of this study. One of the main goals of this research was to explore the nature of the lives of school-age high performance athletes through their voice, and the voice of their parents and teachers. Previous chapters have outlined these findings and now the study considers what these findings mean.

This chapter comprises four major sections. The first discusses the troubles that the athletes spoke about in relation to their physical, social and family predicaments and about the stabilising areas of their life. The athletes exuded a persona that was confident on the outside but actually they appeared to be living on a ‘knife edge’. The main issue encompassing the athletes’ physical demands was fatigue, both physical and psychological. Problems associated with the social and family predicaments of an athlete’s life surfaced in relation to school matters concerning appropriate levels of recognition and bullying. In the part of their life that incorporated friendships and family, the athletes revealed the underlying feeling of self-imposed guilt. To balance their lives, athletes mentioned the term procrastination, which in their own words was time wasting. At the end of this section, the experiences of these athletes will be related to two theoretical perspectives, one adapted from Fine and Sirin (2007) and one based on Robinson and Aronica (2009).

The second section of this chapter discusses the themes in relation to ‘significant adults’, the parents and teachers who play the role of support and carers for these athletes. Athletes need the support of significant others and for the school-age athletes who by legal definition are still minors, such aid and guidance is particularly important. Concerns that parents spoke of were those of the siblings’ relationships, parental perspectives of high expectations and misconstrued notions of fun and winning. Teachers, on the other hand, revealed their unique attribute of empathy and the difficulties associated with athletes only setting short term goals. As suggested by Robinson and Aronica, this often takes the form of others “seeing something in you that you do not realise yourself or encouraging you and, by so doing, bringing out the best in you” (p. 138).

The third section of this chapter compares the research findings that emerged from this study with those that were consistent and expected from other studies.
empirical literature reviewed in Chapter 2 used methodologies that focussed on investigating the concerns of athletes from the perspective of identified difficulties, rather than from the perspective of the athlete. What is of interest here is how far the conclusions of these research studies, outlined in Chapter 2, and were replicated by athletes, their parents and teachers in this study. In particular, the discussion centres on the common themes of resilience the school-age athletes and their connectedness with educational institutions, in handling school and training commitments. These were raised by athletes, their parents and teachers as key factors in providing awareness to cope with dual endeavours.

The final section of the chapter identifies key dimensions, comparable to those that Broadfoot, Claxon and Deakin Crick (2005) and Radtke and Coalter (2007) argue should be within schools for appropriate learning to occur. Such features could encapsulate the individual’s learning capabilities of “resilience, curiosity, creativity and learning relationships” (Broadfoot et al., 2005, p. 158). The section then moves towards postulating a theoretical design for an ‘athlete friendly school’, which incorporates a developmental pastoral care approach for schools, as suggested by Lang et al. (1994). Guidelines discussed could be implemented for schools throughout Australia when they have one or more high performance school-age athletes enrolled. In particular, it adopts recommendations by Radtke and Coalter (2007) about flexible options for senior years of study, and also two of the twelve major principles of Lackney (2001) concerning flexibility and active/passive places in school classes. Considering the four key elements of education, and social, physical and psychological/wellbeing areas, these options could be important in providing personalised learning outcomes in a pastorally caring school. Additionally, this school model could assist in helping students to flourish in a happy and well-disciplined school environment, thereby creating ‘a gold mine’ effect that Ankersen (2012) argues encapsulates talent and high performance.

7.1 The ‘Voice’ of the Athlete

One of the defining aspects of this study was to give the athletes the opportunity to reveal their perspectives of the situations they found themselves in. Primarily this study was concerned with discovering and then reporting from the athletes the findings, directly that they themselves raised, about the awareness of their situational perspectives. Difficulties for the athletes tended to be categorised into physical, social and family parts of their lives, while some important matters were regarded as the
'stabilisers'. Physical demands were those that involved physical and psychological fatigue. The social and family predicaments tended to have difficulties associated with inappropriate recognition and bullying in school. For athletes, there were feelings of self-imposed guilt that emanated from the aspect of time that family, friends and coaches sacrificed. Time wasting or, in the terms of the youngest athlete, procrastination, consumed both dimensions of an athlete’s life. As this may be the only area of their life they can have control over, athletes may choose to have mental and physical ‘down-time’ to recover.

7.1.1 Physical demands and fatigue

Fatigue in an athlete’s life is the consequence of intense physical workloads required for high level sport performances, something that is expected in the regimen of most athletes. However, for these school-age athletes, recovery from fatigue could be more difficult because they have commitments at school that may disrupt the recovery activities which are demanded by the coach or their associated conditioning staff. The fatigue can be both physical and mental and these are considered in turn.

7.1.1.1 Physical fatigue

Athletes in this study constantly commented that they were chronically tired and sore. It would seem that the young people interviewed obviously spent a lot of time in school and at home physically exhausted and this impacted on their school, social and sporting life. Like the ‘elephant in the room’, the significance of what the athletes said was that no one is hearing them or doing anything about these chronic symptoms. The problem may be that parents and teachers either do not know what to do about such athletes’ claims of tiredness and soreness, or they simply choose to ignore it. Notably, parents interviewed mentioned their observations of their exhausted child, yet not one parent spoke of their child’s own descriptive words of tired and sore. This may be due to parents’ feeling that these symptoms are considered normal, or that they have heard the athlete say this so often they become immune to hearing it. Conversely, parents simply may not know how to respond to dealing with the type and amount of fatigue these children experience. Teachers observed the exhausted athlete in their classroom but may feel that reporting their observations could be fruitless, as it is probably stating the obvious about the athlete being tired. They may also assume that these conditions are being addressed by the parent or coach of their student. It would appear that someone needs to be listening to the athletes.
The implication for school-age athletes is to recognise, and monitor, their adaptations to training fatigue (Calder, 2007). Firstly, athletes need to be taught how to take ownership of their training responses. This means that these young people need to recognise these fatigue symptoms and seek advice about the correct preventative measures that suit their own bodies in order to address the tiredness and soreness. Early detection of these symptoms may prevent serious consequences for athletes including chronic tiredness, reduced immune system function, moodiness and lack of motivation (ASC, 2010f). Secondly, parents need to be proactive by not treating the athlete’s concerns ambivalently. More communication is needed to clarify whether either the parent or the athlete is recognising, monitoring and managing training fatigue. A parent resource available, as suggested by Calder (2007), provides tips for recovery strategies that relates to the athlete’s development and enhanced workloads and stress.

A simple and effective strategy is used by many athletes and could easily be adapted and downloaded as an app on their iPhone™ and iPad™, or through training diaries. This self-monitoring approach may assist athletes and their parents to detect acute signs of fatigue. For example, a technique used by many athletes, known as the ‘smiley faces’, is designed to monitor fatigue signs and symptoms (Calder, 2010; Goldsmith, 2012). This means the athletes and their parents could have a quick and easy way to record and visually view symptoms of fatigue either in the emotions represented by smiley faces or in a numbered Likert-scale. The parent can then alert the coach. Calder (2010) further identified that the amount of sleep for school-age athletes should be between 8 to 10 hours a day. However, too much or too little sleep may be counterproductive to the athlete’s ability to train well, and also to their health. Athletes and their parents need training about how to monitor the adaptive responses of the athlete to training and to school workloads.

Thirdly, teachers may need to alert parents about their observations of the exhausted athlete in the classroom, especially when they are falling asleep on the desktop. For example, Samuels and Alexander (2012) have outlined the “sleep, recovery, and human performance” tips for athletes, their parents, teachers and coaches, to recommend the quality and duration of sleep required for school-age athletes to sustain long development and performance in high level sports. If teachers do observe athletes constantly falling asleep during class, they could contact the parents to inform them about their observations, before the issue develops into a disciplinary/behavioural management issue.
7.1.1.2 Psychological fatigue

Athletic training loads involve both physical fatigue and sometimes pain and also psychological fatigue (Marks, 2011). The muscle ‘soreness’ athletes spoke of is the result of prolonged exposure to intense physical exertion of their bodies. The psychological drive required to perform intensive training activities can lead to psychological or cognitive fatigue. This is especially so for sports that require complex cognitive challenges such as spatial awareness, decision making and tracking fast objects in space. The relevance of mental fatigue for school-age athletes is that it could become a big issue as they attempt to engage their brains and focus on school work, once they return to school after an intense early daily morning session. This may negatively affect their overall school performance.

Psychological fatigue may also result from athletes being dehydrated or loss in blood glucose (Marks, 2011). This is because the decrease in blood volume in their bodies limits oxygen and nutrients supplies to muscles and the brain, resulting in psychological fatigue (Marks, 2011). This is important because athletes need to be aware of these fluids and fuel requirements, as drivers of the central nervous system. As Calder (2010) suggests it is imperative to educate athletes to hydrate and refuel before, during and after training and competition. Calder further explains that often water is not sufficient. This means that both parents and athletes need to be aware of the drinks that are more beneficial for hydration and refueling, as they contain appropriate essential carbohydrates, electrolytes and protein.

A notable omission identified from the analysis of the data was the negligible amount of importance teachers placed in this critical aspect of nutritious drink and food intake for school-age athletes. Markedly only one teacher interviewed spoke of good food intake with regard to the variety of food athletes require. Amazingly, not one of the teachers mentioned the connection of nutritious intake of drink and food to athletes’ attention and learning engagement in the class room. Similarly, although most parents interviewed spoke of the planning and organising of food for their child, only one mother associated the need for nutritious lunches in maintaining appropriate energy levels for athletes during the school day. Without a nutritious and healthy diet, athletes in the school day are bound to illustrate symptoms of lethargy (Manore et al. 2009). Teachers could more readily engage these students in their classroom by being aware of their nutritional requirements. For example, the Canadian Sport Centre Calgary (2010)
and Samuels and Alexander (2012) provide tips that teachers and parents could download off the internet, to be aware of athletes’ needs of amount, timing and type of nutritious intake required. If the student appears to be drained, the teachers could permit them to eat a nutritional snack or piece of fruit from their lunch boxes to bolster their energy levels, thus focusing on the school task. Similarly, to prolong attention and focus in the classroom, rehydration and refuelling is one important issue for the school-age athletes, as the classroom rules may not permit them to leave their desks to refuel and rehydrate.

Interestingly, there were two arguments concerning recovery, mentioned by the athletes interviewed. The first is where the coach and athlete negotiate a day-off training each week which is essential for their recovery from the intense week of training. This concept of a day-off training was described by Campion (2011b) in relation to the training regimen of a 17-year old high-performance school-age paddler. This young athlete spoke of the inbuilt training progress of having one day-off completely from all training. Both coach and athlete incorporated this rest day into the intense training program.

The second aspect most athletes interviewed mentioned is post exercise recovery. This type of recovery involves procedures that most athletes mentioned, such as showers, sleep, food, stretching, massages and ice baths (Calder, 2007). Samuels and Alexander (2012) recommend (for the Long Term Development of Athletes [LTDA]), that Post-Exercise Recovery and Regeneration (PERR) are essential as a training regimen to the “complex, adaptive process of increasing athletic performance…the foundation of PERR is sleep” (p. 1). This one essential strategy could be adopted by school-age athletes into their training regimen for successful PERR. Additionally, Calder (2010) concurs that, for the LTDA, sleep is the major critical component for passive recovery, regeneration and the rest process of athletes. This means that athletes need to have the appropriate amount of sleep for their age (Samuels & Alexander, 2012). This is important for school-age athletes as a better understanding of sleep requirements can assist training performances. Ironically, only one parent identified sleep as a critical issue and yet it is the most under-valued aspect of recovery (Calder, 2007). Similarly, most athletes were unaware of the importance of sleep to enable them to cope with their school and training workloads and only one mentioned a ‘nap room’. Schools may be able to provide a ‘nap room’, which in the words of one of the youngest
athlete is ‘not a sick room where germs may manifest in but a safe room for athletes to have a power nap’ (Meg).

Furthermore, Samuels and Alexander (2012) recommend that, for the sleep quality, the length in school-age athletes should be between 8 to 10 hours, with a power nap of 20 minutes toward the end of the school day between the hours of 2-4pm (p. 11). Logically, this means that athletes who need to rest during the afternoon at school are revitalised before the next training session. The procedures of these rooms are that, foremost, they are not a convenience room for athletes to avoid school work.

Firstly, the implications for school-age athletes is that nap rooms could be allocated to athletes based on designated time slots, during the school day, which fit their subject lessons. Secondly, parents can use a simple monitoring tool to provide a quick analysis of their child’s physical and psychological condition. Additionally, information pertaining to nutritional tips directly related to the school-age athletes’ school daily dietary requirements could be made available to athletes, their parents and teachers. Thirdly, teachers need to alert parents to their observations concerning the exhausted athlete in the classroom. This is important as it could initiate the first warning signs of impending chronic tiredness and soreness symptoms in school-age athletes.

7.1.2 Social and family predicaments

Socialisation aspects that the athlete participants themselves identified, relating to the social and family predicaments of their lives, encapsulated school, friendships, siblings and family. The first two of these can be considered problems of school life and included aspects of appropriate levels of recognition, and also bullying. The second one is concerned with family and time and focuses on the athlete’s feeling of self-imposed guilt.

7.1.2.1 Problems of school life

The two important problem areas in relation to school life for school-age athletes were, firstly, those matters that athletes identified in school about the problem of appropriate levels of recognition. This area for athletes fell into two distinct categories of over and under recognition. The second issue, bullying, is a most significant finding as it raised concerns particularly by the 12 female athletes interviewed who emphasised disquiets about being marginalised in school.
7.1.2.1.1 Appropriate levels of recognition

A problematic area for athletes in school was appropriate levels of recognition of their accomplishments in high level sport. Many athletes spoke of two sets of recognition, one being under recognition where their teachers ignored their outside life or even made life difficult for them; the other being over recognition, which resulted in teachers being overly enthusiastic towards them after they had a major success in their sport, where previously they had not shown any interest in them.

Under-recognition of school-age athletes seems to occur before they achieve in sport. Athletes interviewed commented on how their teachers simply ignored the issue and often made life difficult for them. In some regard, this unfriendly treatment could be viewed as ‘structural blocks’ that Lumby (2011) and Palmer (2010) allude to in their research studies based on inequity. Athletes unanimously believed that they all undertake similar strenuous training sessions leading up to selection for higher representation in their various high performance sport. It is in the lead up time to achieving their higher representations in sport that athletes at school would require assistance and support such as one-on-one tutoring.

Similarly, it is important for schools to extend some acknowledgement of what athletes at school accomplish in extracurricular activities. Most athletes felt that their passion and determination to undertake sport was undervalued and not seen as a practical career option by such teachers. The revisiting of the misconception that sport was not an appropriate career pathway could be considered by schools in order to promote greater appreciation of school-age athletes. Additionally, career officers at school could reinforce the numerous career options in sport as worthwhile career pathways.

Conversely, the over recognition of achievements was considered by most athletes to be quite awkward, especially if they desired anonymity so they could separate school and sport life. Most athletes mentioned that the teachers who were less than helpful towards them were, on their return from a good success from a high level competition, often overly enthusiastic. For example, a recent school leaver vividly recalled the situation of being ignored by teachers prior to her making the 2010 Commonwealth Games in her high performance sport of swimming. She medalled at these Games and, on her return to the school she noticed the overly generous recognition and assistance that simply were not offered prior to her Commonwealth Games achievement. Schools have to balance the amount and degree of recognition
provided for the athletes. This means that the setting of clear cut boundaries between the school and athlete may need to be established.

### 7.1.2.1.2 Bullying

An unexpected issue highlighted in the analysis of the data was that female athletes often experienced being marginalised by bullying from their school peers. All 12 female athletes interviewed not only mentioned bullying, but spoke of it as having a detrimental impact on their lives.

The problem of bullying for school-age high performance athletes is as complex in this context, as it is in schools generally. Most discussion of being bullied predominantly focussed on the notions of jealousy and the taunting that all 12 female athletes experienced from other school peers. Notably, none of the boys interviewed talked about this issue, only the girls. A speculative explanation of the boys not mentioning it could be, as Harzing (2006) describes, as behaviour of acquiescence; that is, boys being “submissive in their response style to the interviewer” (p. 26). Harzing further reported, boys may feel embarrassed to talk about such issues preferring to keep such matters to themselves.

This would suggest that female athletes felt they were bullied or ostracised due to their high sport profile, as perceived by other school peers. Interestingly, half of the female athletes said in their own words that they felt they were bullied in school by other school peers because they were the ‘tall poppy’ (Fuller, 2012c). Each of these female athletes reported that they were bullied if they did not meet the expectations of others, by coming first all the time. For example, four female athletes noted how they were called a ‘loser’ or constantly told ‘you always win so why should we try!’. For school-age athletes, who may not get gold or come first all the time, the name calling may stem from being perceived by others as a failure. This may produce negative feelings for such athletes. Call (2008) suggests that this is an unrealistic expectation on athletes, where a failure to win a gold medal (to achieve a personal best at the championship) is repeatedly described as failure. Schools could provide tips for emotional strength for school-age athletes that may help them to overcome such situations (Fuller, 2012a). They could also introduce a better culture; the school where all students are realistic and prepared for these “hard effects” (Calder, personal communication, August 8, 2012). This may diffuse the ‘Tall Poppy’ culture.
The youngest female athlete felt that bullying was initiated towards her by other students, demonstrating an attitude of ‘bitchiness’. Carr-Gregg (2006) suggests that “Bitchface syndrome” may explain the unpleasant and nasty behaviours inflicted by girls on their female peers. This type of marginalised behaviour exhibited towards female athletes in this study may also be attributed to ‘girl culture’, which is “learned aggression by girls” (Volk & Lagzdins, 2009, p. 22). Interestingly, most of the female athletes reported that they were bullied not only by their own age school peers, but younger school students who mimicked the older school students name-calling and taunts.

A plausible explanation for this gender-specific problem may lie in the nature of bullying across the two sexes. Boys’ bullying tends to have a physical dimension to it and thus a high performance athlete is less of a target for such action (Nagel, 2006). However, it will be recalled from Chapter 2 that Atkinhead (2009) reported on the bullying experienced by Tom Daley, after he returned to his school as the 2008 European 10 metre diving champion. One striking element about the bullying suffered by Daley was that he was in the sport of diving, an artistic sport not really renowned for its physical character or even masculinity.

On the other hand, the mental dimension of female bullying makes all girls, irrespective of physique or reputation, a potential target (Carr-Gregg, 2006; Nagel, 2008). Inappropriate body language, taunts, teasing, ostracising, alienation, name-calling and mean and jealous behaviour were problems all 12 female athletes interviewed had suffered at school from other school peers. Volk and Lagzdins (2009) studied 69 school-age girls, who were all members of school competitive athletic clubs, and they concurred with the prevalence of bullying and victimisation of school-age female adults as reflected by all 12 girl athletes interviewed. Additionally, the study by Volk and Lagzdins indicated that bullying and victimisation for girl athletes were two to three times more prevalent at school than in a sports context.

Marginalisation is the social process of becoming or being made marginal or ostracised (Mullaly, 2007). Marginalised people are not considered to be a part of the norm in society; rather, atypical, and made to feel that way (Mullaly, 2007). Female athletes felt they were marginalised which seems to imply they may not have measured up to other school peers’ standards. This means that school-age athletes need to set their own standards and not accept the judgemental opinions and standards set by the bullies. As Fuller (2012a) reports, educating people not to accept the substandard values of the
bullies could be provided in a list of tips to be strong of character. Schools are unlikely to identify high performance school-age athletes as the targets for bullies, as they do not fit into the victim construct within schools.

Interestingly, all 12 female athletes interviewed mentioned they felt they were being judged by others’ standards and had to respond to others’ dictates. School-age female athletes, who may be bullied, need to become more self-empowered (Mullaly, 2007). In other words, there is a need for female athletes within schools, who are bullied, to set their own standards and stand up for themselves. As Mullaly argues, they may need to “be going and getting what they feel they need in schools rather than waiting for others to decide their needs and then give it to them” (p. 22).

Ramifications of bullying for the school-age female athletes by ‘girl culture’ may lead to negative consequences of social withdrawal and/or alienation (Volk & Lagzdins, 2009). A significant finding, stressed by two female athletes interviewed, was the sense of not fitting in or belonging. Both female athletes felt they did not belong in the school, and this eventually contributed to their withdrawal from school activities to try to escape the bullying. An adult female athlete interviewed recalled the tactics she had to resort to, to avoid being bullied, alienated and ostracised at her school by her peers and younger students, who mimicked the taunts of the older ones. Due to the severity of the victimisation she experienced from the bullies in the school, she decided to only go to school when her subject lessons were on. She would then feign being sick to the school office, so her mother could come and pick her up. Her withdrawal as Belk, Garcia-Falconi, Hernadez-Sanches and Snell (1988) report, was an avoidance strategy. These are the techniques that people use to deal with “unwelcome requests from other individuals” (p. 165). The female athlete interviewed used this technique to relieve the bullying she constantly endured in school.

The type of school attended may affect the degree of bullying experienced by female athletes in school. Interestingly, three female athletes, who were from government schools, made seven reports concerning the negative taunts, teasing, alienation, jealousy, name calling, ostracising and mean mannerisms experienced at school. Interestingly, one of these female athletes made it quite clear that the teachers and principal of the government school she attended were aware of her being bullied, but did nothing about it. A tentative explanation for this response to reported pattern of bullying may be similar to the teachers’ responses to athletes’ physical fatigue - others in the school hear about the bullying but choose to do nothing about it.
School-age female athletes could be encouraged to develop their self-empowerment by the use of an emotional skills program, which may provide a strategy for them to take onus for their own emotional responsibility (Segal & Smith, 2012). For example, one program that is currently being trialled for first year university students to promote First Year University emotional health and resilience is Mytern ™ (Foster, 2012). This is a 3-step program that includes emotions, personal emotional tools and taking control of your thoughts. SMS messages are regularly sent to the students about them taking ownership of their emotional responsibility (Foster, 2012). This strategy may help female school-age athletes to build personal strength to overcome bullying and/or ostracising that they may experience from other own age and younger school peers. Another strategy put forward by Fuller (2012a) has “ten tips” to promote resilience of character for people who feel they are being bullied (Fuller, 2012a, p. 1-5). These ten tips could be utilised to empower school-age athletes against bullying.

In a school there may be a need to monitor the female high performance athletes. It is likely a lot of schools do not realise these young female athletes get bullied. All schools are engaged in a diverse number of programs to prevent bullying. For example, current programs being run through many Australian schools include:

- Psychologists such as Carr-Gregg and Mazzerole, in conjunction with Education Queensland, have produced “Working Together Against Bullying”. Activities. Such activities emphasise that effective solutions to bullying and violence in schools can only be achieved through the collective action of schools, students, parents and the wider community.
- Sharp and Smith (1994) “Tackling Bullying in Your School” provides teachers and other educational professionals with an accessible, comprehensive and detailed guide to handling bullying in schools. Step-by-step advice is given on developing a school-wide policy to generate effective action against bullying. Various methods for tackling bullying through classroom and curriculum activities are explored.
- Fuller (2012a) resilience tips, from a program known as “The Heart Masters”, suggest to educate all students to “bungy jump through life” (p. 1). For the female school-age athletes, the significant tip to is to “bounce off” (p. 1) bullying, through schools encouraging, first and foremost, a sense of belonging for such students.
- Pastoral care programs that all students, their parents and teachers could participate in, might “bridge the gulf between intimacy and isolation” (Fuller, 2012b, p. 6). Schools may need to not just shelter the female athletes from feeling separate and different, but also to develop in them a sense of the great belonging that connects and embraces them in school activities (Fuller, 2012b).

The findings from this study concerning social and family predicaments revealed two important points. The first centres on the bullying of female high performance school-age athletes in school. Remarkable as it seems, these female
athletes are experiencing bullying and schools may not really be recognising this situation. This is partly confirmed by teachers interviewed as, although they were not asked directly about bullying, the researcher did ask them about the problems they perceive high performance school-age athletes face. The silences in the text confirmed this, as not one teacher interviewed mentioned the bullying of these students. Although all schools are addressing the issue of bullying, generally it is clear by this finding that schools need to pay particular attention to female athletes, who speak of the impact this unsavoury behaviour has on them. School pastoral carers’ of high performance school-age athletes need to monitor, check in with, and give female athletes strategies for bullying, in the form of developing resilience.

The second issue involves school life and encapsulates appropriate levels of recognition. ‘Under recognition’ was where athletes reported teachers simply ignoring their outside activities. The other is the ‘over recognition’ which often makes athletes feel uncomfortable. Schools in consultation with the athletes need to set boundaries to discern the level at which these young students are glorified. Once the appropriate level of recognition is agreed on, the school then needs to monitor and review such a system.

7.1.2.2.3 Family, time and guilt

The next two sections of this chapter focus on matters around family, time and guilt. The first of these concerns the issue of time, or in the words of the youngest athlete, ‘procrastination’. Interestingly, this somewhat unusual state of mind is one area that often can destabilise school-age athletes. The second matter is the internalised feeling of ‘guilt’ athletes harbour, from the issue of wasting the time of others and not living up to expectations, especially when others sacrifice so much to support the athlete.

Time wasting, or in the very strange and confusing word of the youngest athlete, ‘procrastination’, is a difficulty that athletes found challenging to balance in their life. This one major concern that half the athletes interviewed expressed as ‘time wasting’ may affect both physical and social and family facets of their lives. As emphasised by the athletes themselves, it can result often in destabilising their lives. This concept includes the difficulties of planning and prioritisation and using the term ‘time wasting’ is language the school-age athletes understand. Interestingly, it may be that school-age athletes themselves were attempting to gain control over an area of their life where they do not have to be organised or scheduled. The researcher even went back to the athletes’ interviews and found that four athletes admitted that they
intentionally wasted time by putting things aside and not completing activities they had to do. This disquieting condition is especially prevalent for athletes in attempting to prioritise, plan and complete their schoolwork, especially assignments and homework. One main strategy that athletes spoke of to assist them with organising and planning in their life, was intrinsic motivation. For example, athletes spoke of making the ‘to do lists’ of things they had to complete, as a mechanism to plan and strategise ‘juggling’ their life commitments.

Many athletes stressed the need to provide tactics to be more adaptable outside of their rigid time schedules of the commitments of high level sport and education, to ‘go-with-the-flow’. It would seem that this personal conviction may allow athletes to fit into spontaneous fun activities and to be a more holistic, well-rounded person. Fuller (2012a) suggests that the message for athletes may lie in planning time so there may be some ‘me time’ left over for them away from sport.

A common avenue stressed by athletes that allows them to time-waste was the use of social media sites such as Facebook™. Often athletes commented that they would log onto Facebook™ instead of using their time more productively to complete schoolwork. From the perspective of athletes, a most crucial element is that procrastination creates major stresses and hassles as they fail to complete their schoolwork commitments.

Interestingly, a dichotomy exists about time wasting. Athletes agreed that to procrastinate on social media sites such as Facebook™ is time-wasting but, in the same context, it permits the down time or switch-off time they all felt was important for their mental recovery time and well-being. It is possibly the only unstructured part of their lives that they have control over and can choose to waste time. In general ‘switch-off’ time was for most athletes accepted as the time they spent on social media. Price et al. (2010) revealed 133 participants on average spent four hours a week on social media sites such as Facebook™. However, there was no connection in Price et al. (2010) findings concerning the use of Facebook™, which can turn from the simple down time for the athlete to recuperate and recharge, to blatant wasting of precious time these students simply cannot afford. For example, Seebohm explained that she wasted time on Facebook™ and Twitter™ the night before her final 100m backstroke at the 2012 London Olympics as she stated “I was on Twitter and Facebook with my friends and
fans to one o’clock in the morning instead of having a good night sleep before my final 100 metre freestyle race” (Jeffrey, 2012).

Importantly school-age athletes may need to understand the notion of not wasting time. Speaking in terms such as time management communicates the wrong message to athletes. The teacher who instructs the student to time manage is not providing them with any direction of what to do with their time. This simple but effective message may be to ‘not waste time’, which alerts athletes to structure their allotted time to complete their activities particularly school work. A useful tool for school-age athletes who spend time on social media sites is to set alarms or self-controls to strictly adhere to time limits. In this way, they may enjoy their social chats on such websites with friends. This key mechanism for athletes to not waste time may provide the necessary switch-off or down-time they require for designated ‘me time’ (Fuller, 2012a).

Athletes internalise the feeling of ‘guilt’ about family, siblings, friends and coaches whom they feel give up so much for them to do well in their high performance sport. This was encapsulated in a moment of the 2012 London Olympics when Emily Seebohm, a 20 year-old high performance Australian swimmer, after receiving a silver medal in the final of the women’s 100 metre backstroke exclaimed “I have disappointed my parents, my family, my friends and my coach and let them all down…they have worked so hard and done so much to get me here” (Jeffrey, 2012). As Jeffrey (2012) describes this was a girl who was aware of the sacrifices her family had made (Seebohm, personal communication, August 25, 2012) and her distress was compounded by self-imposed guilt. Seebohm felt that by failing to attain a gold medal, she had let down her parents, siblings, friends and coach as they had given up so much for her to be in swimming. The fact that Seebohm and her mother had to live apart from her father and the other siblings so she could train under a specific swimming coach (Jeffrey, 2012), was just one of the many sacrifices this swimmer was constantly aware of, one that her family did for her to succeed.

It appears athletes conceal two types of self-imposed guilt that may permeate from first, not being with or socialising with school friends, family and siblings, as they have to train. The second is the guilt they feel from inflicting financial and social burdens on their family. To further understand the notion of self-imposed guilt felt by athletes interviewed, the researcher replayed all the audio recording bookmarks of what
the nineteen athlete participants said specifically about the notion of guilt. Eight athletes spoke of the intense guilt they felt over letting their friends down about social events such as blue light discos or parties and keeping connected, especially when they had to travel overseas for high level sport competitions. They felt their friends understood and accommodated their training commitments and this meant that it had to take precedence over their friendships. Additionally, two athletes spoke of the self-imposed guilt they felt over social and financial burdens imposed on their families. For example, athletes spoke of how they had to constantly disrupt the family life to do so many things for them such as driving them to training sessions.

Socialisation by all young people with their peers is an important social need (Harris, 2009). To achieve in their high level sport, athletes interviewed mentioned the guilt they felt when they did not go ‘partying’ to late hours with their school friends. Most athletes spoke of their school friends being very understanding about the reasons for them not partying to late hours as they had to be up so early to train. This then made the athletes feel guilty if they did not perform or attain good results, knowing that their friends so understand about them not socialising with them.

Athletes also spoke of their parents and siblings giving up so much for them to pursue their sport and this seemed to create considerable of guilt among them to make sure that they achieved. The athletes spoke of how they also felt guilty about taking time away from other siblings. For example, some athletes spoke of feeling so ‘bad’ about their younger siblings having to be in the car constantly in the drop off and pick up. In many instances, athletes interviewed shared how guilty they felt that their training sessions took precedence over the activities of the other siblings in the family. This may make school-age athletes suffer angst knowing other members of the family just had to fit into their schedule.

The financial impact on their families also made the athlete feel guilt, as they were aware of the burdens they endured to maintain high performance sport commitments. Huge costs of registration and playing fees are just some of the things parents are compelled to maintain and afford for high performance sport. For example, many athletes communicated how anxious they felt knowing their parents were leaving their jobs early to get their equipment and take them to their training session or competitions and, in many circumstances, going back to finish their work.
Ferris, Johnson, Rosen, Djurdjevic, Chang and Tan (2012) argue that approach motivation is simply taking action because you desire something ‘good’. Such self-imposed guilt school-age athletes felt towards their family could be equated to the psyche adapted from Ferris et al., who argues the function of guilt in a societal context is associated with approach motivation. It is the consequence of this approach that forms the guilt for many school-age athletes. These young athletes are very driven and focussed to achieve; but, at the same time, are very reliant on their family, friends and parents to make personal sacrifices for them to undertake their commitments. This knowledge of sacrifice by others formulates the self-imposed guilt in athletes. For example, Jade Hopper was a high performance Australian tennis player from the young age of 10 years old. She had an outstanding career, until at the age of 14 years old; she was not winning anymore, as other larger and more powerful female tennis players were out-playing her on the court. In an interview with Whateley (2011), Hopper revealed her self-imposed feeling of guilt as she said:

I was kind of brought up to believe, and I thought myself to believe I was going to be there, I was going to be a top 10, number one in the world, win Grand Slams. It was not even a question in my mind, because I had people telling me I would. But I think it was later on that I was playing the tournaments and I wasn't doing as well as I was expected to do and I was kind of like, well, maybe that wasn't all correct. Maybe everybody just expected a little bit too much of what... a little 10-year-old, that I was just having fun on court really, and then it changed into, well, why aren't I winning anymore? Why aren’t I winning nationals or being number one in my age group? And that hit me a little bit hard. When I didn’t win the tournament or didn’t fulfil people’s expectations there was disappointment and there was a lot of pressure and so now I don't enjoy any type of pressure (Whateley, 2011).

Guilt is derived from the effects of the athlete’s indelibly strong quest of success in their endeavors, in two dimensions. The first is where guilt emanates from school-age athletes who feel their high level of sport commitments impose sufferings on those that are dear to them, such as their family, parents and friends. In some respects, the well-publicised cases of Seebohm and Hopper, who harboured underlying feelings of guilt about their family, parents and friends and coach, believed they always had to achieve excellent accomplishments in their high performance sport. However, when they failed to do so, they felt they had let down the important people in their lives. For school-age athletes there may be an over emphasis on their driving force to achieve that is disproportional to the consequences imposed on their family, parents and friends, which generates guilt in these young people. The second area of guilt for school-age athletes is in relation to the circumstances they feel they impose on their friends and family, with
regard to social and financial burdens. This may be relieved by such important people communicating willingness to support them in this way.

Two very important points have been outlined in this section which gives a fascinating insight into the minds and lives of these young people. The first is that high performance school-age athletes have time management problems; not in the terms generally understood, but in the matter of procrastination or wasting time. This is significant as this is the only area of their lives in which they have some ‘down-time’. Hence, they waste time and this makes them feel guilty. These two issues are not unrelated as the athletes feel guilty about the time spent on them by others and wasting time. Time management is the positive side of athletes’ lives and the wasting of time creates the deficit. The dichotomy that arises is that, for some of these athletes, this area is the only part of their lives over which they have control. In a strange and somewhat twisted sense, their procrastination is one opportunity for them to control a part of the life which can be somewhat unplanned. Hence, the manner in which they demonstrate this is to waste time.

The second point that the athletes and well-publicised cases all disclosed was the power of self-imposed guilt that emanates simply from knowing how much their family, friends, parents and coaches give up for them to succeed. As Seebohm and Hopper revealed, if they do not win, they feel a deep sense of guilt for their loved ones as they recognise the time and effort they sacrifice for them.

7.1.3 Understanding the experiences of the athletes

Some meaning may be provided to the perspective of the high performance school-age athlete by considering how their experiences can be related to two theoretical concepts, which attempt to put these major themes into a broader perspective. One theme is based on theory with more negative connotations; the other is theory based on a more optimistic perspective. The first is that of Fine and Sirin (2007) the ‘hyphenated individual’ and the second being the “Element” adapted from Robinson and Aronica (2009).

7.1.3.1 The “hyphenated individual”

The quandary that high performance school-age athletes encounter can be juxtaposed to the Muslim-American youth in Fine and Sirin (2007) study of 200 Muslims in the USA “post 9 - 11 and post-war on terror” (p. 16). This study reported the presence of the theoretical term for these young Muslim-American students as the
‘hyphenated individual’. These students were from a ‘variety of origin, communities, school experiences, boys and girls, with hijab and quite modern, attending mosque schools and public schools, aged 12 - 25’ (p. 19). By drawing maps of their many selves, they depicted themselves as living on the hyphen. As Gulaiterie (2004) argues, such young youth and their standing in USA was ‘not-quite-white…not-quite-free…subject to “the hyphen that never ends”’ (p. 65). In the words of a 17-year old Syrian-American student: “I guess you could say I live on the hyphen” (Fine & Sirin, 2007, p. 19). Fine and Sirin named this framework ‘hyphenated selves’ to better understand youth identity ‘in and across contentious, political contexts’ (p. 16).

Equally, it could be argued that school-age athletes encounter the predicament of combining role and identity. Fine and Sirin’s theory provides a good understanding of the predicament of young people who are both a high performance athlete and school student. These young people experience pressures to combine physical and social and family life. The balancing of commitments in both areas of their lives may be construed as “living on the hyphen” (Fine & Sirin, 2007, p. 16). An adult athlete in this study stated ‘I felt I had to split myself constantly… I was an athlete and a school kid… and in the middle, I just had to be an expert juggler’ (Kylie). Such athletes are caught between each identity where the social constructs are not quite meeting. Outside of school, they are performing in the limelight; so, when they are back at school, they just want to be another school student. However, as Fine and Sirin highlight, the dilemma arises for them that they cannot be at school and just be anonymous.

Fine’s and Sirin’s theory has been helpful in making sense of the life of these young people. If this theme sounds negative the next theory by Robinson and Aronica (2009) views young people in a more optimistic light. Robinson and Aronica illuminate how lucky such young people may be as they have found their “Element”; but it comes at a cost.

7.1.3.2 The “Element”

Arising from the challenges that high performance school-age athletes may encounter from being the hyphenated individual, optimism exudes from the unique space these young people inhabit - their “Element” (Robinson & Aronica, 2009, p. 21). Robinson and Aronica (2009) describe how an individual acquires and compartmentalises their “Element”, that being “the meeting point between natural aptitude and personal passion of an individual” (p. 21). To achieve their “Element”, an
individual needs to “connect with something fundamental to their sense of identity, purpose and well-being” (p. 21).

However, to find oneself, it may involve an individual confronting certain constraints. Robinson’s and Aronica’s theoretical concept of the “circles of constraint being the barriers in finding the Element” (p. 133) is similar to the demands of the athlete’s life. The constraints equate to the “personal, social and cultural” (p. 133) parts of an individual’s life. Similarly, the constraints on high performance school-age athletes constraints were the physical and mental fatigue symptoms of tiredness and soreness, and social and family life issues involving the appropriate levels of recognition, bullying in school and feelings of self-imposed guilt and the concerns about procrastination or ‘time wasting’.

These young people have natural aptitude, combined with the personal passion, to keep doing what they love - high performance sport. However, the personal challenges to achieve this dream could be considered athletes’ third component, which is what Robinson and Aronica did not recognise. For such athletes, it is about the enormous workload they have to undertake to achieve excellence. For example, Colvon (2008) and Syed (2011) in their research studies elaborate on the question of whether talent is enough. It will be remembered in Chapter 1 that school-age athletes in this study were referred to as high performance as opposed to gifted or elite. This was primarily based on the notions of such authors who explain that these young people must undertake a huge amount of dedicated training to perfect their skills.

Although talent and passion help, it is not the only attribute athletes require to achieve excellence. There is the cost of hard and dedicated work that Ericsson (2006) elaborates upon and embodies the metaphor of “swimming against the tide” (Robinson and Aronica, 2009, p. 152). Perhaps this may indicate that athletes’ lives are like ‘Russian Dolls’ - one fits into the next in an attempt to nestle their identity and needs.

Similarities may also exist to Maslow’s (1954) ‘Hierarchy of Needs’ where athletes strive for the five levels of needs: security, social, physiological, esteem and self-actualizing. Of essence for school-age athletes is the top order need of self-actualization, which poses the greatest complications. Not one athlete spoke of remorse or regret about what they do. Athletes not only mentioned their dedication and passion for their high performance sport but additionally acknowledged the hard work in
achieving to achieve their dream. Notably, Bob, an adult high performance water polo player recalled:

To do this sport at the national level it was pretty much common sense that I did have some natural flair for it. I was more passionate about water polo than my peers and that essentially pushed me towards high performance status. But to tell you honestly it gave me much pain. The hardest yards for me were the hard work I had to do to keep at this level. I above all others on my national league team had to do so much dedicated practice to perfect my skills all the time... I had to constantly practice and train...that was the hard work and that was the hardest thing for me but I have no regrets because I achieved so much. I got to represent and play for my country in water polo at the 2004 Olympic Games (Bob- adult athlete).

Although there are prices to be paid, there are great rewards for these young people who are living on the extremes, in their so called third dimension. They appreciate the constraints and know the cost to attain excellence in their sport. Importantly, as Robinson and Aronica argue, the positive and dominant factor for high performance school-age athletes is that they may be luckier than most people. Amazingly, these young people may have found their “Element” and achieved an ‘epiphany’ at such a young age which some people never achieve in a life time. These young people are full-time athletes and full-time school students, with interconnected constraints, that fit with their physical, social and family, and stabilising parts of their lives.

These two theories together have explained the situation in which these high performance school-age athletes constantly live. Although one theory seems to evoke negative visions of overlapping role and identity, the other exudes positivity and admiration for school-age athletes who are in a unique space. They, above all others, have the opportunity to achieve their “Element” so early in life that others may strive for a life time to achieve.

7.2 Themes Surrounding the Athletes’ Support Networks

The second half of this chapter discusses the findings from the data given by the other two groups of participants. The findings of this study emphasised there are two pivotal sets of relationships for these young people. The parent/child bond is one of unconditional love and the primary need of dependency, evident in the fact that young athletes are not old enough to undertake many activities by themselves such as driving
themselves to training and competitions. In their home, they are surrounded by love where their basic needs, as Maslow’s (1954) hierarchical levels dictate, are one of travel, food, money and most definitively the parents’ time.

The second important relationship for these students is that of the teacher who is associated with the value, support and recognition such guides provide for these young people in the school environment. The care and empathy that surrounds the athlete in school can be linked to teachers who provide balance for these young people. Athletes spoke of the very selective nature of some teachers, due to varying levels of selective recognition and primarily associated with amounts of patience and understanding. In the words of Robinson and Aronica:

A parent, a teacher… inspires us and leads us to marvel at wonders of human potential. They open our eyes to new possibilities and fire our aspirations. They might even drive us to follow their examples in our lives, moving us to dedicate ourselves to public service, exploration, breaking barriers, or lessening injustice (p. 186).

More astutely, these authors contend that parents and teachers become ‘heroes’ to young people. Athletes contend that the role their parents and teachers play may determine how successful they are in meeting the commitments of high level sport and academic commitments. These significant adults above all can help inspire school-age athletes to achieve their element. The next section looks at the parents’ and teachers’ perspectives of athletes and the impact of their sporting demands in the family or at school.

7.2.1 Parents’ perspectives

The parents in this study unreservedly provided care and support to buffer and help their children to attain their dreams. All the athletes spoke with fondness, gratitude and appreciation for their parents’ undying support of their aspirations. Parents emphasised concerns in three main areas of siblings’ relationships, parental expectations and misconstrued notions of fun and winning.

7.2.1.1 Siblings’ relationships

On the home front, an interesting and unexpected issue raised by the parents themselves was the disputes surrounding siblings’ relationships. In several cases, feelings of resentment and anger emanated from the parents themselves, often inadvertently allowing their athletic child to be exempted from the same household chores as other siblings. Such household duties then become the responsibility of the
other siblings in the family. This simple parental action, deemed small, has impacts on
the other children in the household and the athlete themselves.

Nine mothers interviewed all said they exempted the high performance athlete
from household duties which other siblings were expected to do. These mothers to make
allowances, felt exemption or from household duties was because the athlete needed
“switch off” time from their very physical demanding day. Donna, a mother of a high
performance gymnast said:

I blame myself for the resentment of the child who is not our high performance
child as I simply assumed she would accept all the extra duties and not be
unhappy with this knowing her sister who is our high performance athlete can’t
possibly be expected to do chores after the physical draining day she
has.(Donna, mother of a high performance school-age athlete).

This same mother further admitted that this was because she had unleashed the
unpleasant resentment and anger, simply by granting the daughter who was a high
performance gymnast ‘favours’ or exemptions from household chores. She also
admitted to making the other sibling do most of the chores. Though the allocation of
chores may seem small, this mother’s revelations highlight the need for parents to have
much more communication and more equitable distribution within the home
environment for all the household members, regardless of their child’s high
performance sport status.

Ross and Milgrom (1982) contend the simple type of sibling rivalry involves
labelling of siblings. In this situation, the athletic child is perceived as “a rival with
greater strength” (p. 236). Furthermore, the level of sibling rivalry is affected by family
attitude toward “competition, the family's expectations for each child in the family, and
their method of applying ‘fairness’ in their relationships with their children” (Brazelton
& Sparrow, 2005, p. 6). Rivalry between siblings, based on the value given to the
‘athletic child’, can turn to resentment if the situation is not realised by the parents. Hart
(2001) contends that unchecked hostility can fester in the household. Such forms of
unpleasant resentment between siblings can be in the form of “physical or verbal
fighting, invading each other’s privacy, or destroying each other’s possessions”
(Goldenthal, 2000, p. 76).

Renowned psychologists Brazelton and Sparrow point out, “siblings are learning
from one another and deep, close relationships are forming that will last a lifetime” (p.
6). To help alleviate a degree of resentment between siblings, such psychologists
recommend that all children in the family should be encouraged by parents to begin to
carve out their own area in which to excel. For example, the athletic child could
concentrate on their high levels sport and the other siblings could concentrate on other pursuits such as music, art or schoolwork. As suggested by Brazelton and Sparrow (2005), this “differentiation can help reduce competition and sibling rivalry” (p. 87). Parents can reduce the level of sibling rivalry by supporting each child’s interest with an equal investment of enthusiasm and time.

7.2.1.2 Parental expectations

The second major insight afforded by the parents appears to be the problem of realistic expectations. Parents who may impose high expectations and seem to drive the child on their sport and academic talents could generate stress and pressure on athletes to constantly achieve. Interestingly, many of the parents interviewed mentioned the ‘over-the-top parents’ in high performance sport. Remarkably, it was mothers who were interviewed who mentioned the term ‘pushy’ sport parents; in particular, some mothers who exert pressure and apply influences for their child to achieve. A mother of a high performance school-age kayaker interviewed emphasised how it was ‘pushy mothers of other sport kids that just took over and got everything’. This may be explained by the nature of some of these sport mothers being authoritarian and officious (Belk et al., 1998; Rothschild, 1999).

Worryingly, some parents mentioned that they had witnessed some very ‘ugly parent’ incidents at high level sport events. In particular, the one father interviewed spoke of a very nasty incident he had witnessed of such badly behaved parents at a high performance sport event. He recalled an ugly incident at a national school boy’s rugby league football final in which his high performance rugby league son was playing. It commenced from some unsavoury barracking, boarding on verbal abuse, from some parents of players in the stands. This then ignited into a melee on the field between some of these parents and players. Another mother of a high performance iron woman recalled the ‘ugly parent’ emotional outburst of verbal abuse directed at her daughter, at a final event of a national surf lifesaving competition.

Notably, some ugly parents among elite/high performance athletes exist on the professional tennis circuit. An example is the much publicised case of the William sisters’ father, who was banned from the tennis arenas for very inappropriate behaviour and bad sportsmanship. Obsessive and overbearing parents are not a new phenomenon in tennis, nor are they uniquely American (Lewis, 2006). For example, Lewis (2006) details that the Frenchwoman Suzanne Lenglen was the product of a taskmaster father
who withheld jam from her bread if she practiced badly. Lenglen gave his talented tennis daughter cognac-soaked sugar pieces during matches. In 2000, Jelena Dokic’s father and coach, Damir, who admitted to hitting Jelena (“for her sake”), was ejected from the Australian Open, Wimbledon, and the U.S. Open. Since Jelena cut ties with him, he’s threatened to kidnap her and drop a nuclear bomb on Australia, where his daughter now lives. Maria Sharapova’s father, Yuri Sharapova, is currently so reviled for his cheating (blatant coaching during matches) and belligerence (making a throat-slitting gesture from the stands) that Anastasia Myskina refused to play in the Federation Cup if Sharapova’s father was present at courtside (Lewis, 2006).

Team sport such as rugby league also has a number of ugly parents of high performance players becoming involved in melee style behaviour. In one recent publicised incident in Brisbane, parents and players in four separate state grand final games of 15 to 18 years were involved in on field brawls. In these situations, parents and the players were very frustrated, their egos did not get the boost they wanted and they were just looking for a little bit of stimulation so they could take out their frustration. Carr-Gregg (2005) contends that such parents need to think hard about the messages they are sending their children.

Within Australian society, there is a very dominant sporting culture which, as Hemery (1991) argues, can certainly lead some parents expecting a lot from their children. Carr-Gregg (2005) highlights that people see qualities in others that they themselves possess, which is common in parents that set high expectations. Kanters, Bocarro, Casper, and Forrester (2008a) contend parents just strive to get the best for their children. However, such authors further postulate that there has been an “epidemic of ‘pushy’ sport parents” (p. 64). As Rothschild (1999) contends, such parents tend to “seek out information on how to help their children and get the most out of their involvements” (p.68). Such parents may place burdens on athletes by demanding stringent and high expectations on them.

The Western Australia [WA] Department of Sport and Recreation (2012) run programs to prevent the “ugly parent” in sport. One program is known as “Keep it Fun” that discourages the “ugly parent” who tends to adopt an aggressive, overbearing, or pushy approach to their child’s involvement in sport. However, parents do play a critical role in their child’s sport. Kanters et al. (2008b) argue such parents who behave badly should not be excluded from sport involvement but instead have school and sport
associations promote positive parenting seminars and programs encouraging the ‘pull’ strategies to enhance positive parenting in youth sports. Additionally, the ASC (2002) provides supplementary codes of behaviour to the school and sport associations and to athletes, their parents and coaches, that support of positive parenting.

7.2.1.3 Misconstrued notions of fun and winning

Many parents interviewed believed that, by encouraging and supporting their children, they should add the phrase “have fun” when they want them to win. In some respects, such parents may be misguided by the misapprehensions of what it takes to be a winner. For example, Kerry, a mother of a high performance iron woman stated:

I constantly hear these pushy parents yelling out to their kid just before their race “ have fun”. Are they for real? You certainly are not having fun when a 2 metre wave is crashing down on your ski! Fun for my daughter is mucking around playing footy with her brothers in the back yard ...these parents surely don’t mean that fun? Or do they mean to send a message to their kid who is just about to compete to make sure they use every bit of their practiced skills to not just come second but to win (Kerry, a mother).

The mixed message conveyed about parents’ support for their child in this mother’s quote, certainly reinforces the view of Griffin (2008) that some parents do not appreciate the nature of the sport in which their child is engaged.

Athletes could be beguiled into thinking that first place may be the only successful outcome, which in a distorted fashion, generates fun. Parents of high performance athletes seem as if they are supporting such good parenting policies, so they appear to advocate fun, not fully understanding what it is all about. This creates problems for athletes as they internalise guilt. They feel the parents do not quite understand the whole nature of training, competitions and some of the hard physical commitments.

Interestingly, a dichotomy exists where, on one level parents, want to be involved in their child’s life; and yet, on another level, they really cannot fathom the complexity that surrounds the nature of sport. This suggests that there is distance between the parent and athletes in terms of their physical life (Hemery, 1991). For example, a athlete participant commented: ‘The length of my athletic event is only one hour in duration, while the training for it may take many months of arduous work and continuous training’ (Will). This quotation encapsulates how deep the focus and physical dedication in their physical life must be developed by the athlete. Conversely, parents only have surface knowledge of the nature of the contest, commitment and competition the athlete must undertake in their physical life.
A number of parents tend to believe that it is not enough for their child to “achieve a personal best, but to win” (Griffin, Chandler, & Sariscsany, 1993, p. 21). Griffin et al. (1993) further contend that the notion of ‘fun’ in physical education is not the fun you have in an amusement park, but the misinterpreted notion of “playing to win” (p. 21). School and sport associations conduct many social parenting campaigns that attempt to reassure parents to allow fun for the child which always meaning going coming first all the time (Rothschild, 1999).

Three very significant points have been raised by the parents in this section that provide a thought-provoking understanding into the lives of high performance school-age athletes. The first is the home issue of siblings’ relationships. Resentment may emanate from inadvertent attention given to the athletic child of the household from the parents. The allocation of more balanced enthusiasm and time to all siblings can help alleviate this unsavoury family dilemma.

The second aspect concerns parental high expectations that can originate from parents who may have a need to drive their child’s sport and education. Unsavoury labels and incidents of the ‘pushy’, ‘over-the-top’ and ‘ugly parents’, as outlined in the much publicised cases of professional tennis players, may occur. Educating such parents about the pull strategies that can enhance sportsmanlike manners and behaviour may produce a happier experience of sport for themselves and their children in high level sport. Future research could investigate the prevalence of the Ugly Parent Syndrome in individual and team high performance sport in school-age athletes.

The third element emanates from the misconceived notions of fun and winning. This could be derived from the divergence of the parents’ unequivocal need to be involved in their child’s sport, yet oddly enough, they are not fully aware of the complexities the child has to undertake to perfect high level performances in their sport.

7.2.2 Teachers’ perspectives

The main purpose of interviewing teachers who were known to be associated with teaching high performance school-age athletes was to obtain an understanding of how these young people cope at school. As revealed by Hermery (1991) in Chapter 2, an important role played by school teachers lies in the initial introduction of the school child to playing sport, which may instil the desire for the child if showing talent to pursue high level sport. Alistair Brownlee, the 2012 Olympic Triathlon gold medallist contributed his initial involvement and inspiration to the enthusiasm of one of his school teacher. Brownlee explained his French teacher encouraged him and his brother to run.
and even went out on the school oval at lunchtimes to run with the brothers (Helming, 2012).

The ten teachers interviewed clearly highlighted two important meta-theories concerning high performance school-age athletes. The first point was that the teachers spoke of the deep seated positive empathy they exude to these young people. The second, while teachers all support the high performance school-age athletes, they detected that such students live in the ‘here and now’, and they need to gently guide such students to understand the importance and value of their education.

7.2.2.1 Empathy

An empathetic teacher accepts and understands the barriers to learning, for these athletes have when they are away due to sport commitments. Most teachers emphasised that they are there to help their students to overcome such barriers. Of significance, five teachers interviewed felt they showed empathy towards their student-athletes. They all said they were compassionate and listened to the students’ problems whether or not the problems were directly related to the subject matter. Such concerned teachers were able to help students handle their problems in the best way possible. Additionally, such teachers mentioned that they gained the respect of their students by giving respect. If the high performance school-age athletes are lucky to get such a teacher, particularly the ones interviewed, they were on more secure ground. The practical thing such teachers do is that they care, respect and champion such young people and, in a way, they exude empathetic understanding and become the pastoral carer.

Understanding, familiarity and interest in their student-athletes were just some of the attributes specifically mentioned, particularly by seven of the teachers interviewed, as they all dealt with school-age athletes. All teachers interviewed noted that they ‘cared’ and helped to nurture such young people. Of significance, Bella, a Principal of a government school that has many high performance athletes advised her teachers that ‘In order for a teacher to be respected by the students, a teacher must respect the students’. Furthermore, this Principal also advises that all her teachers at her school need to “walk in the athletes shoes” (Bella). Additionally, all teachers indicated that this unique caring meant an understanding of the students, respecting them for whom they are; and they, in turn, give reciprocal respect.
Ward (2012) argues that the empathetic teacher realises the need to deal with students’ feelings of frustration, disappointment, and anxieties. Furthermore, Cardoso (2010) contends when empathetic teachers are asked how they cope and motivate students, many say that they “try to talk and understand what causes the frustration or anxiety” (p. 1). Seven teachers interviewed spoke of wanting the athletes they taught to accept their feelings and willingness to help. As Glen, a coordinating teacher of many high performance students in a non-government school said: ‘We want our students to see that we accept their feelings and are willing to help’. From the empathetic teachers’ perspective, empathy resides in their good practice of teaching the student-athlete, while simultaneously engaging in the multiple roles of “counselor, adviser, entertainer, motivator and story teller” (Cardoso, 2010, p. 1). As Cardoso argues “she is able to step aside from where she stands and enter in the world of the learner… for a moment, in this relationship, she neglects her experience, values, opinions and puts herself in the other’s shoes” (p. 5). Cardoso’s quotation encapsulates the elements of empathetic understanding that such teachers demonstrate to their students. This earns such teachers deep respect from their students.

7.2.2.2 Short term goal setting

Interestingly, in contrast, all the teachers commented about how the athletes they teach only focus on the ‘here and now’. A significant finding was that six of the teachers spoke of such students being able to prioritise and set only short term goals; planning only for the ‘here and now’, as opposed to thinking about the longer term plans of their life after sport. All teachers interviewed supported the understanding that these students cannot avoid living in the ‘here and now’; but, at the same time, they try to gently guide such young people towards the value and importance of education following the short term goals that may lead to life after sport.

Most teachers commented that athletes set outcome goals which are primarily concerned with immediate results such as winning the race. However, they need to set process goals that span over their entire journey, such as what they have learnt from resilience. This supports the findings of Samuels and Alexander (2012) who contend that for the Long Term Development of Athletes (LTDA), there must be realistic goals set that are specific, measurable, achievable and timely (SMART) goals. The ASC (2012) reinforces what teachers in this study identified, as currently the ASC are supporting the returning Australian athletes from the 2012 Olympic Games concerning planning for the next phase of their lives.
Similarly, Duda (2007) claimed that goal-setting allows an individual to set short, medium, and long term goals for sport and career pathways. However, unlike the findings of Duda, it appears school-age athletes only focus on their short term attainment, and this often blocks the setting of medium and long term goals such as the transition from Year 12 and life after sport. Anderson (2009) further argues that the “challenge faced by most elite performers is how to manage this intense focus and still build a resilience and capacity to meet the many transitions and demands in both elite performance and life” (p. 203). Furthermore, most teachers felt many athletes simply were not able to contemplate the future due to their double commitments, while most other school students were only expected to complete the demands of school. In the view of the teachers interviewed in this study, athletes tend to give preference to their immediate priorities which may not be those that will necessarily prepare them for life after sport. This may mean schools need to encourage athletes from middle years of schooling to start considering aspirations for life after sport finishes.

The perspectives of parents and teachers shed light on the common demands school-age athletes confront on a daily basis, at home and in school. Athletes are surrounded by these pillars of support in their parents and teachers and, if lucky enough, they have an empathetic teacher who offers the reliability needed for such students in the school environment. As Peterson and Selifman (2004) suggest, parents assume the character strength role of the athletes in the home. Parents perceived that the main issues for these young people at home were siblings’ relationships, high expectations and misconstrued notions of fun and winning. On the other hand, teachers illuminated the essential character of caring by showing empathetic understanding and recognising that student-athletes live in the ‘here and now’. Although the teachers accept the predicament of the young athletes, they employ gentle guidance to advise such young people to plan goals for in their life after sport. The next section will now consider the collective matters about which athletes, their parents and teachers all spoke.

7.3 Common Themes

The common issues acknowledged by athletes, their parents and teachers were those revealed in the research studies of Fuller (1998, 2012), Call (2008), Fredrickson and Branigan (2005) and Radtke and Coalter (2007) in Chapter 2. Two common themes mentioned by athletes, parents and teachers were resilience and the problems of
connectedness with educational institutions in handling school and training commitments, in particular missed class time and use of technological aides.

7.3.1 Resilience

Resilience was collectively mentioned by athletes, their parents and teachers. Call (2008) revealed that resilience “is something that most people need to make it through the rougher times of life” (p. 11). To maintain resilience athletes need:

A loving support system, the ability to make plans and follow through with them, communication and problem-solving skills, having a positive view of yourself and your abilities, and the capability to manage your feelings and impulses (Call, 2008, p. 30).

Furthermore, Fuller (1998) outlined that to cope with adversity, children and young people need to be resilient which is the “happy knack of being able to ‘bungy’ jump through the pitfalls of life” (Fuller, 1998, p. 75).

Athletes, parents and teachers all noted the need for emotional strength or, in their terms, ‘resilience’ to overcome the disappointments and complications that may undoubtedly come with high level sport. Such resilience can also assist individuals to keep going in rough times of their life. On the other hand, younger athletes, who were not aware of the exact terminology in their interviews, did talk about how they were always positive and strong. An interesting aspect discussed by one mother interviewed was the suggestion that the entire family unit who supports such young people need also to be resilient. Fuller (2012b) concurs with this support of athletes from the entire family unit as he stated “if you want your children to succeed you need to provide the support for them so they can be successful” (p. 1).

Not one athlete interviewed said they did not want to be doing dual endeavours of high level sport and study. This means for school-age athletes there may be a need to encourage resilience building in a way that works for them. Athletes, their parents and teachers all concurred that school-age athletes require a motivation to perform their best; and this means that they need to maintain their efforts until they achieve their goals. As Taylor (2009) contends “Motivation, simply defined, is the ability to initiate and persist at a task” (p. 17). Motivation in sports is so important for the school-age athletes because they must be willing to work hard in the face of fatigue, boredom, pain, and the desire to do other things. In order for such young people to maintain the hard work, resilience is required.
Fuller (2012b) suggests values needs to be instilled into boys and girls so “good hearted compassionate people” (p. 9) develop. To respond to adversity and to achieve a resilient outcome, there may be a need to “flexibly call upon internal and external resources” (p. 9). Furthermore, Fuller (2012b) suggests that such young people need to acquire the ability of “androgeny”, which is the ability to “utilise and to call upon the masculine and feminine sides of yourself” (Fuller, 2012b, p. 9). This in turn may have a powerful role in encouraging resilience and the feeling of belonging in school-age athletes.

7.3.2 Connectedness with school

The second of these concerns, associated with connectedness to school, which athletes, parents and teachers mentioned was the amount of time these young people are absent from school due to sport commitments. The combination of daily commitments for both sport and schoolwork is extremely difficult for these students to manage even with the most supportive parents and teachers helping them. All the athletes, parents and teachers interviewed had concerns about the amount of work missed whilst travelling on sport commitments. Additionally, they struggled also to stay in touch with their classmates.

7.3.2.1 Missed class time

The worries raised by athletes, their parents and teachers about missed class work concerned the amount, type and support provided in order for these school-age athletes to catch up. Radtke & Coalter (2007), reported accept that athletes would have to miss class time due to high level sport travel commitments. However, it was this missed class time that some athletes mentioned had created difficulties for them on their return to school.

Some parents mentioned how they witnessed their child struggle with the volume that was needed to catch up on return to school. Teachers interviewed felt that with timely collaboration, they and the athlete could be more proactive and alleviate anxieties, by always working ahead. Notably, two athletes still at school mentioned how they would go to see the teacher and ensure work was handed in before they left to compete. In this way, these athletes had a reduced amount of schoolwork to catch up on their return; and this, in turn, reduced their anxieties about returning to school. For school-age athletes communication about competitive schedules could help organise schoolwork that needed to be completed before they travel to compete. One athlete
suggested that one-on-one tutoring on their return could be a feasible solution in helping them catch up missed school work. Extra individual help for such students may lessen any anxieties they experience about being away from school.

**7.3.2.2 Technological teaching aides**

Teachers, athletes and parents all indicated the benefits to athletes in using technological aides such as Skype™, Twitter™ and student intranets such as Blackboard™ and Schoology™. Sorcar (2011) suggests such technological aides can promote connectivity to the daily procedures of the class room for school-age athletes who travel due to sport commitments. A first year teacher suggested by twittering to the travelling athletes, during the class discussion, they would feel more connected to their class members.

Athletes thought that the uploading of teacher/class resources to student school intranets, such as blackboard, could be an effective method for them to view and keep up with class work when they were away due to sport commitments. A tool known as Live Scribe™ pen could effectively record crucial class discussion that is missed whilst the athletes are travelling.

For school-age athletes who must be away from the class room, these innovative methods allow them to touch base and keep updated with what their class mates are doing on a daily basis in the class room. This has been effectively trialled in a non-government school and, although still in its pilot stage, it seems to have helped travelling athletes feel more connected with daily class work and interactions with the teacher. This form of access to their classmates may lessen anxieties about returning to the classroom.

Resilience, missed class time and technological aides were seen as key factors in assisting school-age athletes in coping with dual commitments to sport and education. These demands combined are so great that the daily pressures on these athletes are difficult even for the most resilient. There is a need to promote programs to build strength of character for these young people.

**7.4 Athlete Friendly School**

In this section, developmental pastoral care school characteristics, which umbrella elements of personalised learning for high performance school-age athletes are
discussed. There are many examples of schools that purport to do this, such as Plymouth College, the school of the recent 2012 Olympic silver medallist in diving (Plymouth Preparatory School, 2012). Throughout Australia there are 38 universities categorised as ‘athlete friendly’ (Australian Education Network, 2012) such as the University of Sydney. This University has the ‘elite athlete friendly’ policy for high performance athletes studying at the university (The University of Sydney, 2012). But in a search of the Australian Education School websites containing over 10,000 Australian schools (Australian Curriculum, Assessment & Reporting Authority [ACARA], 2011), only one sport school, Maribyrnong Secondary College, has adopted the term ‘athlete friendly’ in the title of its sport program (Victorian Department of Education & Training, 2010).

Students require a school system that is designed to enhance every aspect of pastoral care that brings athletes own personal learning needs together. This is especially in regard to education, social, physical, psychological and economic matters. As Coates (2009) suggested, there is “a need for the individual to feel personal significance and in control of their situations for appropriate learning to take place” (p. 138). Additionally, within pastoral care, there is an element of personalised learning where the school-age athlete(s) derive their own specific personal needs.

The ‘athlete friendly school’ has the primary focus of developmental pastoral care (Lang et al., 1994). As revealed in the research studies outlined in the literature review of Chapter 2, and are focused on the concept of meeting the pastoral needs of the child. This approach enhances the notion of the child being able to flourish within this pastoral element of the school, with personalising learning to meet the individual needs of student-athlete(s).

Several authors such as Hodge and Cranachan (2003), Lines and Gallasch (2009) and Marland (2001) also acknowledged this same principle and support the idea that schools need a developmental approach and to take responsibility in developing the values, skills, and attitudes of all students. For school-age athletes, this may permit the embracing of both academics and sport.

Fuller (2012c) suggests that schools should be conscious that most high performance school-age athletes are adolescents. This means that their brains are in transition and differ “neuro-chemically and anatomically from an adult” (p. 17). The frontal lobes of their brains are therefore “closed off for construction” (Fuller, 2012c, p.
This suggests that such young people are not able to “plan, control impulses and forward think” (p. 20). One non-government school has taken the action of appointing a pastoral care co-ordinator for high performance students. This one teacher is responsible for all aspects of such students’ pastoral and academic progress, with the task of liaising between the athlete, their parents and classroom teachers and sporting bodies.

A feature of pastoral developmental care is the concept of personalising learning that caters for the individual student-athlete(s) needs. Broadfoot et al. (2005) argue such learning could assist the individual “gain a feeling of personal significance and become in control of their situation” (p. 159). As mentioned in Chapter 1, there was an increasing number of school-age athletes (ABS, 2009). This issue is becoming increasingly important as the number of high performance athletes at school are increasing in number (AOC, 2012).

The salient features of any school type that can provide a productive, caring and nurturing environment (Lackney, 2001; Lang et al., 1994; Radtke & Coalter, 2007) could be encapsulated in the following proposed school characteristics. The school is able to respond to the needs of the athlete(s) and their parents at any one time in the area of education, as well as social, physical, psychological needs, and, to a lesser extent, the issue of economic difficulties, when the need arises (see Appendix I).

The educational element incorporates suggestions of pastoral care and flexible school policies that could support and help student-athletes combine the commitments of high level sport and school work. It is developmental in approach and would tend to enhance social education that includes moral and emotional dilemmas important to the young people growing up in a modern world. Additionally, this element includes suggestions to develop a means to aid communication between the athletes, their parents, coaches and teachers.

Social aspects incorporate ideas to cater for such issues of procrastination or time wasting, and the marginalising of female athletes who may be bullied. Such complications apply to the sport and school socialisation aspects of the athlete’s life.

Tools to promote communication between home and school could be implemented. Possible tips based on positive parent education programs could be encouraged to help alleviate the ‘ugly parent syndrome’. In particular guidance to help parents deal with the physical and mental fatigue experienced by their children. Parents
need to be able to manage both chronic physical symptoms of tiredness and soreness as well as cognitive and emotional stress experienced by their children.

Psychological elements are intrinsically interwoven with physical and emotional and cognitive performances of athletes. Due to the intense volume of work the athlete undertakes, negative consequences such as burnout may occur. Coupled with this is the pressure placed upon the athlete to achieve. Young people are emotionally stressed and anxious at school and home concerning sport, school, social and home life (Segal & Smith, 2012). There are a number of resilience programs that provide a method to ‘bounce back’ and even beyond, to cope with challenges (Fuller, 2012a; Fredrickson, & Branigan, 2005). An example of resilience building intervention is suggested to assist the young person especially the female athlete with bullying.

Although the school is not necessarily responsible for the economic issues for athletes and their families, they have a few ways in which they can help alleviate financial hardship, caused by the extensive costs of high level sport. Some schools offer sport scholarships which subsidise the fees for families of high performance school-age athletes. Schools also offer financial instalments to help parents afford the school and sport fees. Additionally, many schools support the high aspirations of travelling nationally and internationally by allowing the high performance athletes to run fundraisers at the school.

7.5 Conclusion

To summarise this chapter, high performance school-age athletes have to cope with the demands of both high level sport and education. From the three sets of voices explored in this chapter, some major answers to the question of “how do these young people cope with their double life?” have been provided. It seems that athletes cope with considerable levels of physical and psychological fatigue in a way people do not really understand. Self-imposed guilt constantly surrounds these young people who are still dependent upon the significant adults in their lives, to undertake even the seemingly simple commitments of having to get to and from training or being directed to the next lesson. Of significance was the worrying issue of bullying that female athletes endured in school. Parents cope with huge demands and sacrifice so their child, who has chosen to stay at school can achieve in both areas of high level sport and education. One noticeable concern that occurred in the home environment, and detected by parents, was that of sibling rivalry. Teachers, on the other hand, observe and care for these young
people at school. If a student is lucky enough to find the empathetic teacher, one who is there for them and really cares and understands their mission, then their journey is made slightly easier.

High performance school-age athletes cope by having the strength and reliability of character from their parents and teachers. In fact they could be considered their “twin pillars” of support. Interestingly, the support of the parents is a given, but support of the teacher may not be as forthcoming.

These athletes can cope by having or being in an ‘athlete friendly school’ which has appropriate mechanisms in education, and social, physical, psychological and economic programs. At any one time, the student may need one or all of these features. But even this friendly model relies on the qualities of the teachers, particularly the empathetic one. The situation for these young people is that of Fine’s and Sirin’s hyphenated life; but, at the same time, they have a unique exhilaration from operating at the highest level by finding their “Element” (Robinson and Aronica, 2009).
Chapter 8 Conclusion

Conclusion

The purpose of this chapter is to reflect whether the problems identified in Chapter 1 have been addressed. Chapters 3 to 7 have reported on the empirical study, the findings and the higher level themes and relevant discussion. This chapter concludes the thesis by considering the limitations, possible future directions for research and implications of this study. It will be remembered that the study began by posing the major research questions:

*What are the needs and problems of high performance athletes who are still at school? What are the characteristics of successful schooling models that best meet the needs of these young people?*

The empirical research produced answers to that question, and the research-guiding questions, in terms of:

*What are the goals and expected outcomes that high performance school-age athletes have, and how might these different goals be in conflict?*

*What schooling models exist in Australia for high performance school-age athletes?*

*What are the experiences of the high performance athlete at school within different schooling models?*

*How do high performance athletes (who have left school) identify the strengths and weaknesses of the school model they experienced?*

The answers that were unearthed to these questions in the study have revealed the needs and problems of high performance school-age athletes from their own perspective. A number of factors can assist parents, coaches, teachers and sport administrators, who deal with these athletes. The first aim of the study was achieved, as it was established that high performance school-age athletes themselves have their own perspectives of the needs and problems they encountered in combining high level sport and academic endeavours. Schooling models that were included in this analysis, with the purpose of discerning the varying perspectives of athletes in the school types throughout Australia, included: government and non-government schools, in-school programs of excellence, scholarship, leadership and specialisation programs, sport high schools and colleges, specialist high schools and specific pathway high schools and external sport programs.
The second aim of proposing features of schooling that best supports the high performance athlete, still at school, was achieved by a list of characteristics being formulated termed the ‘athlete friendly school’. Such school characteristics could help create the conditions to support the high performance school-age athletes in pursuing their sporting ambitions concomitantly with other educational aims. Key characteristics in areas of education as well as, social, psychological, physical and economic issues formed the benchmarks for the requirements for successful curriculum, pastoral care, life balance and transition into life after sport for these young people.

8.1 Limitations

On reflection, the limitations of the study could be traced to two perceived areas. The first is the number and range of participants interviewed. For example, only purposive samples of teachers were interviewed as they were known to be supportive of school-age athletes. Also, for future research, a more even ratio of gender could be considered and more subjects then just in Queensland and New South Wales.

Another perceived limitation was that coaches not affiliated with schools such as coach/teachers were not interviewed in this study, as the emphasis was on the athletes at school. The combination of sport and school for school-age athletes was the focus, not the coach. Anecdotally, it appears that some coaches may be inflexible when it comes to training, preferring a fixed training regimen - viewed as the best way athletes can aspire to win at the highest levels, such as the Olympic Games. A separate study on how coaches deal with athletes who are still at school should be explored. This definitely would be a major study, probably involving similar methods.

8.2 Future Research Possibilities

After presenting at the 2nd ASEAN Universities’ Conference at the Universiti Putra Kuala Lumpur, Malaysia in July 2012, a delegate posed a question concerning if this study had found any differences in the perceptions of athletes in teams as opposed to individual sports. In considering the future research possibilities, some thought could be given to including an even representation of athletes in individual and team sport. Specifically, future research concerning sport type could explore differences between athletes, with more subjects.
Research on how the coach deals with school-age athletes in their squads could be a possible future topic. This would be very different - a study that could focus on the perspectives of the coach. Furthermore, this future study could specifically examine how coaches cope with school-age athletes in their training squads. The issues for athletes from a range of ages, where adult athletes are included in their training squads could be examined.

One of the athletes interviewed had the unique situation of having her father as her high performance coach. During the interview, she referred to the ‘coach ‘and her ‘dad’. Not only did her father coach her to numerous club and school national championships, but also to the 2010 Commonwealth Games and recently to the 2012 London Olympic Games. Due to this one special case, it made the researcher consider that future research could explore the experiences of how the school-age athletes cope with school, when their parent is the coach.

Two areas of future research arise from the unexpected finding that female athletes are bullied at school. Firstly, a broader study to determine the widespread problem of female bullying in school, and how female athletes cope with this unsavoury, behaviour could be explored. It may require a greater number of athlete participants. Secondly, future research could be focussed on an in-depth study into young male athletes being bullied: Tom Daley, the European Champion and Olympic medallist was bullied to such an extent that he had to move schools. Such a study could investigate the issues of whether this male athlete’s bullying was just chance. Additionally, this same study could look at why none of the male athletes in this study spoke of bullying.

From the research of Ankersen (2012), who postulated the concept of “the gold mining effect”, future research on high performance school-age athletes may lie in how some schools ‘harvest’ or create ‘nurseries’ for many school-age high performance athletes. Ankersen spoke of how over 90% of the Jamaican 2012 Olympic sprint athletic team came from the one athletic club in Kingston. In a similar manner, another area for future research is to look at schools with high proportions of high performance school-age athletes, and explore how such schools may be considered nurseries for such high performance sport talented children. Such schools could be “capitalising on the plethora of high performance talent” (Ankersen, 2012, p. 40), to their own benefit.
Further, this study could explore case studies of schools with many high performance athletes attending, which the researcher came across in completing this study. For example, such schools which could be included are the government schools in Australia such as Dickson High, and Lake Ginninderra (located near the AIS Campus) the non-government school of Matthew Flinders Anglican College and the overseas school of Plymouth College in the UK, which recently had four school-age athletes win medals at the 2012 Olympic Games in London.

8.3. Implications

To the best of the researcher’s knowledge, this is a unique study of high performance school-age athletes. The dissemination of findings should inform policy and practice, in relation to school-age athletes coping with high level sport and schooling, assisting these people who deal with these athletes. One of the major and unexpected findings was the bullying directed toward female athletes at school. Importantly, the implication is that any school with female high performance school-age athletes needs to be aware, monitor and ask if bullying is occurring. Furthermore, communicating the imperative findings such as physical and psychological fatigue, inappropriate levels of recognition, guilt, bullying of female athletes, parents’ and teachers’ perspectives will hopefully impact on policy.

To help these young athletes cope, coaches, sport administrators, media sport commentators, psychologists, parents and teachers need to be aware of such factors with which these young people are dealing. Conference papers, journal articles, workshops, eSeminars and a possible book publication are just some of the avenues for the distribution of findings of this study. Such information, relayed in these avenues, could address these problems high performance school-age athletes confront in their double life.

The information from this study could provide better understanding of what is happening in the lives and minds of these young people. Finally, it may offer insights to educational stakeholders of schools, curricula and assessment concerning high performance school-age athletes. Tailoring courses and schedules to meet the needs of these young people can provide flexibility, pastoral care, health and wellbeing of the student-athlete, to enable the enjoyment of school and sport.
Finale

It is fitting to close the thesis in the words of one of the participants. Will was a young adult at the time of interview, but towards the end of the interview he reflected on his time as school-age high performance athlete, and these words encapsulated many of the themes that have been explored in this study. He said:

_The real value of sport for me was not the game I played in the limelight of applause, but the hours of dogged determination and self-discipline carried out alone imposed and supervised by my exacting conscience. The applause died away... my many medals and trophies were left behind.... But the character I built through all my school years of high level sport is mine forever_ (Will).
References


Gurkan, G. (2009). Perceived opinions of the sports high school students, teachers and managers towards the sports high schools in Turkey. Unpublished Masters, Middle East Technical University, Turkey.


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Sorcar, P. (2011). Software can be localized to teach various topics. Young Innovators, 35, 7-16.


## APPENDIX A: Sport schools throughout Australia (Chapter 2: Sport Schools)

<table>
<thead>
<tr>
<th>NSW</th>
<th>QLD</th>
<th>WA</th>
<th>VIC</th>
<th>SA</th>
<th>TAS</th>
<th>NT</th>
<th>ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westfields Sports High</td>
<td>Brisbane State High</td>
<td>Forrestfield Sport High</td>
<td>Maribyrnong College</td>
<td>Wirrenda State High</td>
<td>Cosgrove High School</td>
<td>Palmerston High School</td>
<td>Lake Ginninderra College</td>
</tr>
<tr>
<td>Endeavour Sport High</td>
<td>Palm Beach Currambin State High</td>
<td>Clontarf Aboriginal College</td>
<td>Mildura Senior College</td>
<td>Henley Beach High</td>
<td></td>
<td>Katherine High</td>
<td>Farrer Primary School</td>
</tr>
<tr>
<td>Hills Sport High</td>
<td>St. Margaret’s Anglican College</td>
<td></td>
<td>Ascot Primary School</td>
<td></td>
<td></td>
<td>Centralian Middle School and Senior College</td>
<td>St. Clare’s College</td>
</tr>
<tr>
<td>Hunter Sport High</td>
<td>St. Aidan’s Anglican Girls School</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dickson College</td>
<td></td>
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<tr>
<td>Matraville Sport High</td>
<td>Keebra Park State High</td>
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<tr>
<td>Narrabeen Sport High</td>
<td>Marsden State High</td>
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<tr>
<td>Illawarra Sport High</td>
<td>Harristown State High</td>
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# APPENDIX B: Interview schedules

<table>
<thead>
<tr>
<th>Research question</th>
<th>Interview questions : Athletes 15 – 17 year olds</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the needs and problems of high performance athletes who are still at school, and what are the characteristics of successful schooling models that best meet the needs of these young people?</td>
<td>Introducing:</td>
</tr>
<tr>
<td>Guiding questions:</td>
<td>Can you tell me about your experiences of being a high performance athlete at your school?</td>
</tr>
<tr>
<td>What are the goals and expected outcomes that high performance school-age athletes have, and how might these different goals be in conflict?</td>
<td>Do you remember a time when you having these experiences?</td>
</tr>
<tr>
<td>What are the experiences of the high performance athlete at school within different schooling models?</td>
<td>Could you describe in as much detail as you can an experience you think or thought was one in which you faced problems in combing school and sport commitments at your school?</td>
</tr>
<tr>
<td>What schooling models exist in Australia for the high performance athletes?</td>
<td>Follow up: Key on initial responses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Same question-different contexts for three groups of participants: 15-17 year athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete situations better than hypothetical or theoretical questions</td>
</tr>
<tr>
<td>Why &amp; what before how</td>
</tr>
<tr>
<td>Mix difficult and easy questions</td>
</tr>
</tbody>
</table>

| Probing:                                                                            |
| Could you say something more about (support)....?                                    |
| Can you give a more detailed description of...........................................? |
| Can you think or any times when........?                                             |

| Specifying:                                                                         |
| What are your views of the school you attend?                                       |
| What do you see as problems in young people that combine both the commitments of full-time sport and full-time schooling? |
| What problems do these young people encounter?                                       |
| What are these young people needs?                                                  |
| What are your views of the competing demands of school and sport?                   |

| Indirect:                                                                          |
| How do you think young athletes balance between sport and education commitments?    |
| How do you think other high performance school-age athletes cope with this combination of sport and education commitments? |
| How does your school support and address the problems and needs of high performance school-age athletes? |
| How would you describe an athlete friendly experience?                             |
| How would you describe an athlete unfriendly experience?                           |
| Towards end of interview if necessary:                                             |
| Direct:                                                                           |
| Have you ever.....                                                               |
| When you mention.....                                                              |
| Do you then think...........?                                                      |

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### Research question

What are the needs and problems of high performance athletes who are still at school, and what are the characteristics of successful schooling models that best meet the needs of these young people?

Guiding questions:
- What are the goals and expected outcomes that high performance school-age athletes have, and how might these different goals be in conflict?
- What are the experiences of the high performance athlete at school within different schooling models?
- What schooling models exist in Australia for the high performance athletes?

### Interview questions: Athletes over 18 year olds

#### Introducing:
- Can you tell me about experiences of being a high performance athlete whilst you were at school?
- Do you remember a time when you were having such experience(s)?
- Could you describe in as much detail as you can an experience you think or thought was one in which school-age athletes faced problems in combining school and sport commitments?

#### Follow up:
- Key on initial responses

#### Same question-different contexts for three groups of participants: over 18 years athletes

Concrete situations better than hypothetical or theoretical questions
- Why & what before how
- Mix difficult and easy questions

#### Probing:
- Could you say something more about (support)....??
- Can you give a more detailed description of.................................??
- Can you think or any times when.......?

#### Indirect:
- Whilst at school, how did you balance between your sport and education commitments?
- How did you as a high performance school-age athlete cope with this combination of sport and education commitments?
- How could it of been made easier for you?
- How would you describe an athlete friendly experience?
- How would you describe an athlete unfriendly experience?

#### Specifying:
- What problems did you encounter?
- What were your needs?

Towards end of interview if necessary:
- Direct:
  - Have you ever.....
  - When you mention.....
  - Do you then think.........?

#### Extra:

Concrete situations better than hypothetical or theoretical questions
- Why & what before how
- Mix difficult and easy questions
<table>
<thead>
<tr>
<th>Research question</th>
<th>Interview questions for Parents</th>
</tr>
</thead>
</table>
| What are the needs and problems of high performance athletes who are still at school, and what are the characteristics of successful schooling models that best meet the needs of these young people? | Introducing: 
Can you tell me about the relationship you have with your school? 
Could you describe in as much detail as you the relationship you think or thought was one in which school-age athletes faced problems in the school your child attends/attended? |
| Guiding questions: 
What are the goals and expected outcomes that high performance school-age athletes have, and how might these different goals be in conflict? 
What are the experiences of the high performance athlete at school within different schooling models? 
What schooling models exist in Australia for the high performance athletes? | Follow up: 
Key on initial responses |
| Same question-different contexts for three groups of participants 
Concrete situations better than hypothetical or theoretical questions: Parents 
Why & what before how 
Mix difficult and easy questions | Probing: 
Could you say something more about (support)...? 
Can you give a more detailed description of.................................? 
Can you think or any times when.......? |
| Specifying: 
What do you look for in schools and the support they offer high performance school-age athletes? 
What are the advantages/disadvantages of the school your child attends? 
What problems do these young people encounter? 
What are these young people needs? | Indirect: 
How do you work with the school your child attends to meet the needs and demands of your young athlete? 
How does the young athlete balance between sport and education commitments? 
How would you describe an athlete friendly experience? 
How would you describe an athlete unfriendly experience? |
| Towards end of interview if necessary: 
Direct: 
Have you ever..... 
When you mention..... 
Do you then think.........? |
<table>
<thead>
<tr>
<th>Research question</th>
<th>Interview questions for Teachers</th>
</tr>
</thead>
</table>
| What are the needs and problems of high performance athletes who are still at school, and what are the characteristics of successful schooling models that best meet the needs of these young people? | Introducing:  
Can you tell me about experiences of high performance athletes at your school?  
Do you remember a time when high performance school-age athletes were having these experiences?  
Could you describe in as much detail as you can an experience you think or thought was one in which school-age athletes faced problems in combining school and sport commitments at your school? |
| Guiding questions:  
What are the goals and expected outcomes that high performance school-age athletes have, and how might these different goals be in conflict?  
What are the experiences of the high performance athlete at school within different schooling models?  
What schooling models exist in Australia for the high performance athletes? | Follow up:  
Key on initial responses |
| Same question-different contexts for three groups of participants:  
teachers  
Concrete situations better than hypothetical or theoretical questions  
Why & what before how  
Mix difficult and easy questions | Probing:  
Could you say something more about (support)....?  
Can you give a more detailed description of.............................................?  
Can you think or any times when.......? |
| Specifying:  
What do you see as problems in young people that combine both the commitments of full-time sport and full-time schooling?  
What problems do these young people encounter?  
What are these young people needs? | Indirect:  
How do you think these young athletes balance between sport and education commitments?  
How do you think other high performance school-age athletes cope with this combination of sport and education commitments?  
How does your school support and address the problems and needs of high performance school-age athletes?  
How would you describe an athlete friendly experience?  
How would you describe an athlete unfriendly experience? |
| Towards end of interview if necessary:  
Direct:  
Have you ever.....  
When you mention.....  
Do you then think........? |
APPENDIX D: Celia’s transcript

What are your experiences of being a high performance athlete and being at school?

It’s really hard sometimes to get my homework done. When I come home at night at 7.30pm I get into a shower, then eat my dinner then it’s about 8.15pm. I don’t want to do homework then. It’s hard to motivate to do my homework at 8.30pm at night and so I have to put in extra hours to do my homework, especially on the weekends. But the weekends are when I really would like to socialise… but I have to do my homework.

At school I have two double spares a week. So that really helps with getting my homework done. I don’t have to do it at night now as I have got these two double spares in the school week. Now I can just relax or do whatever I want, like face book. It definitely helps the spares as I have 90 minutes of just doing schoolwork sitting in the library. It’s quiet and I can just focus and do all my homework and assignments and whatever I need to do for my day, read a book or whatever. It just really, really helps me.

You mentioned spares?

✓ Our school is really helpful, so if you do a lot of sport, as our school has a lot of high performance athletes, the school is really helpful on providing extra hours to go to school early to see the teachers and after school. Everyone is just so willing to help you and everyone makes it good.
✓ If you miss out on work you can email the teacher and they will email you back. You can go and see them at lunchtime; you can pretty much see them anytime you want. They care. They don’t mind if you are taking up their lunchtime or morning tea time. They will even come in earlier in the morning or later in the afternoon to talk to you or help you to get your work done or if you are not understanding. They just help you to get your work done or go through the assignments. They are really good for me and I find I go at lunchtime to talk to teachers then as I don’t have the time after school to go see them.

As a high performance school-age athlete what do you see as the problems of doing school and high performance sport at the same time?

✓ Probably for me it is handing in assignments on time. As I mentioned before, it’s hard for me to motivate myself to do my homework when I get home late. I put things off. I push it aside to the end of the week as before I know if I’m cramming it all in. I often leave it to the last night and then it is really hard for me to get my homework done on time. This is just me… some other older high performance athletes I know and see at my school do their homework and assignments way before or they get on top of it and they are not like me as I’m a bit slack on that. I think it helps if you have organisational skills and are organised with your school work. This definitely would be good for me to balance my sport and school work. Pretty much my life is school and gymnastics. I go to school, go straight to
the gym in the afternoon from school and then come home, go
to sleep, wake up and start it all over again...not much social
life really. I think I cope very well but I'm not as high up in
gymnastics like I haven't made the Commonwealth team or
Olympic team yet. But my mum and dad are so helpful so that
makes it easier for me to get my schoolwork done and train

The school is really helpful as I have already mentioned at our
school there are a lot of high performance athletes so they are
really aware of the needs of high performance athletes. So I
think they are really good.

You mentioned about a lot of high performance athletes at your
school?

Oh yes, there is so many of us. Maybe one thing our school
could do to help us more is to decrease the amount of
homework, as this may benefit the athlete student. If you are
going to focus on sport like my high performance swimmer
friend, to do the basics would be good. Just to get a good mark
to get you into say our local university would be good. So then
you could focus on your sport and know you have the
opportunity to get into a degree with your okay mark after Year
12. But for someone like me, I won't be doing gym for too
much longer because of my age in this sport. So I need to be
able to do a bit of everything so I can finish school with a good
mark to further my studies after school. I've done gym my
whole life so I don't know what I will do without it...so
knowing some options after I finish in 2 years time would be
pretty worthwhile.

Coming to the end of our interview, is there anything else you
would like to mention?

It just helps if you have supportive people around you who are
willing to help you. A willing school that you can tell them
Only sometimes some mean girls do bully me...Like calling me mean names... but they are just jealous.

Mostly the girls I go to the school with are my friends. I just learnt who surround myself with.
18 July 2011

Mrs Maureen O'Neill
Dr Bill Allen
Ms Angela Cadar
Faculty of Science, Health and Education

Dear Maureen, Bill and Angela

**Expeditied ethics approval for research project: High performance athletes at school: A study of conflicting demands (S/11/347)**

This letter is to confirm that on 18 July 2011, following review of the application for ethics approval of the research project, *High performance athletes at school: A study of conflicting demands (A/11/347)*, the Acting Chairperson of the Human Research Ethics Committee of the University of the Sunshine Coast granted expedited ethics approval for the project.

The Human Research Ethics Committee will review the Chairperson’s grant of approval and the conditions of approval at its next meeting and, should there be any variation of the conditions of approval, you will be informed as soon as practicable.

The period of ethics approval is from 18 July 2011 to 15 November 2012.

Could you please note that the ethics approval number for the project is HREC: (S/11/347). This number should be quoted in your Research Project Information Sheet and in any written communication when you are recruiting participants.

The standard conditions of approval for this project are that you:

1. conduct the research project strictly in accordance with the research proposal submitted and granted ethics approval, including any amendments required to be made to the proposal by the Human Research Ethics Committee (except as subsequently amended and approved by the Committee or approved by delegated authority exercised by the Chairperson or a Sub-committee)

2. inform the Human Research Ethics Committee immediately of anything which may warrant review of ethics approval of the research project, including: serious or unexpected adverse effects on participants; proposed changes in the protocol; unforeseen events that might affect continued ethical acceptability of the project; and a written report of any adverse occurrence or unforeseen event that might affect the continued ethical acceptability of the project.
research project must be submitted to the Chairperson of the Human Research Ethics Committee by no later than the next working day after recognition of an adverse occurrence/event

3. provide the Committee with a written Annual Report on the research project by 18 July 2012 and on completion of the project on 15 November 2012 using the proforma "Annual Report on Approved Research Project Involving Humans"

4. if the research project is discontinued, advise the Committee in writing within 24 hours of the discontinuation

5. make no change to the project as approved in its entirety by the Committee, including any wording in any document approved as part of the project, without prior written approval of the Committee for any change

6. comply with each and all of the above conditions of approval and any additional conditions or any modification of conditions which may be made subsequently by the Human Research Ethics Committee

You are advised that failure to comply with the conditions of approval and the National Statement on Ethical Conduct in Research Involving Humans may result in withdrawal of approval for the project.

You are required to advise the Committee in writing within 24 hours if this project does not proceed for any reason.

Should you require an extension of ethics approval, please submit a written request for this purpose using the proforma 'Annual Report on Approved Research Project Involving Humans' (see Section 9). An Annual Report on this activity will be due by no later than 18 July 2012.

An electronic version of 'Annual Report on Approved Research Project Involving Humans' may be accessed on the University of the Sunshine Coast portal at: Research and Research Training>Research Ethics> Human Research Ethics>Forms>Annual Report Form.

If you have any queries in relation to this ethics approval or if you require further information please contact the Research Ethics Office by email at humane@usc.edu.au or by telephone on +61 7 5459 4574.

I wish you well with the success of your project.

Yours sincerely,

[Signature]

Barbara Palmer
Manager, Office of Research
APPENDIX F: Participant information sheets

Letter for potential participants – Athletes who have left school and over 18 years, athletes still at school aged 15-18 years, parents and teachers.

Dear

After being confirmed in my candidature for the award of PhD, I am about to commence the research stage of a project entitled ‘High Performance athletes at school: A study of conflicting demands.’ The chief investigator is Ms Maureen O’Neill and I am being supervised in this work by Dr Bill Allen and Ms Angela Calder, both lecturers at the University of the Sunshine Coast.

There are two major, related aims of the project. The first is to find out what needs and problems the high performance school-age athletes themselves identify when they combine high level sport and academic endeavours. The second is to examine and propose some models of schooling in Australia that may best support the high performance athlete who is still at school. This research seeks to explore the competing demands on young people who are both high performance athletes yet still at school.

As part of the project I am proposing to conduct interviews of approximately 45 minutes to one hour’s length with the relevant participant groups of: athletes who have left school and over 18 years who were high performance athletes whilst at school, young athletes still at school who are all aged 15-18 years old and who are high performance athletes and currently still at school, parents who have high performance school-age athletes and school officials such as teachers who have experience with high performance school-age athletes. Questions asked during the interview will focus on the perspectives of high performance school-age athletes’ experiences of the needs and problems in attempting to combine both sport and education at the same time. Further,
questions about what are the characteristics of successful schooling models that best meet the needs of these young people will be explored. Responses will be based on the following research guiding questions:

- What are the goals and expected outcomes that high performance school-age athletes have, and how might these different goals be in conflict?
- What schooling models exist in Australia for high performance school-age athletes?
- What are the experiences of the high performance athlete at school within different schooling models?
- How do high performance athletes (who have left school) identify the strengths and weaknesses of the school model they were in?

I am asking you to participate in this research project by agreeing to take part in an interview at a site of your choice, and at a time convenient to you. I will contact you shortly by telephone or by e-mail to ask if you are willing to participate further and, if so, to find out where and when you may want to be interviewed. There is absolutely no problem if you choose not to participate from the outset, or if you decide to withdraw from the project at any time later.

If you have any further questions regarding the research design or methods, please contact Dr. Bill Allen (07 5430 1282).

Thank you for your assistance,

Ms. Maureen O’Neill

PhD Candidate

University of the Sunshine Coast
Please note: Participation in this research project is entirely voluntary. There will be no penalty or loss of benefits to the participant if they choose not to partake in the researcher project. Participants are entitled to withdraw from the study at any stage, again without penalties or loss of benefit and without providing a reason for doing so.

**Project Title: High performance athletes at school: A study of conflicting demands**

This is a research project being self-funded by Ms Maureen O’Neill who has currently been confirmed as a PhD candidate at the University of the Sunshine Coast. Maureen is supervised by Dr Bill Allen and Ms Angela Calder, both lecturers at the University of the Sunshine Coast. In 2004, Dr Allen completed his Doctoral thesis on upper secondary History curricula in Western Australia and won a prize for the best piece of Research in Education in that year. Ms Angela Calder is recognised as a reputable science editor, coach educator, and high performance consultant. Further, Angela has over 90 publications mostly designed to inform coaches, athletes and officials, about sports science applications to their training and coaching practices.

Currently in Australia there are increasing numbers of athletes (Australian Bureau of Statistics, 2009) who are competing at a very high level of sport but are still of school-age. For such young international competitors who must still be at school, the question arises as to how they cope with the demands of being both a high level sport competitor and with meeting the social and educational demands of being a full-time student at school. This research seeks to explore these issues by allowing the ‘voice’ of such young people to express their perspective of their needs and problems when attempting to combine both sport and education commitments at the same time. The research will be guided by the following questions:

What are the goals and expected outcomes that high performance school-age athletes have, and how might these different goals be in conflict?
What schooling models exist in Australia for high performance school-age athletes?
What are the experiences of the high performance athletes at school within different schooling models?
How do high performance athletes (who have left school) identify the strengths and weaknesses of the school model they were in?

The aim of this particular part of the project will be to explore the needs and problems of young people at school who combine both sport and education. Guidelines will be identified that may become the requirements for successful curriculum, pastoral care, life balance and transition into life after sport for these young people, as well as a refereed journal publication. To achieve this it is my intention to conduct interviews with the participants of athletes who have left school and over 18 years, still at school athletes between the ages of 15 to 18 years, parents of high performance school-age athletes and school officials or teachers who have been involved with such young athletes still at school.

Interviews will be of 45 minutes to one hour in duration, conducted in a location of the participant’s choice. Immediately afterwards, interviews will then be transcribed, and the total body of comments will be analysed and general themes will be identified. In particular, the researcher is interested in comparing the general themes that emerge from the interviews. Both the audio files and transcripts will be labelled with a reference code devised by the participant.

Participants’ names will not be included or used in publications resulting from the research. Furthermore, no participant will be identifiable through inference. Schools also will not be identified in any publications. Personal details will not be passed on to any other organisation and the data and details will only be available to the researchers listed. Information collected from the research may be used for further research.

It is possible that some participants could feel some discomfort when talking about the pressures of combining sport and educational commitments and in this case the following support agency could be helpful if required:
A participant will be sent a copy of the interview transcript to review the content, and to make changes. It provides an opportunity for contacting the chief investigator again and it also allows the participant to withdraw any comments or the entire transcript at a later stage. Participants on request will be provided with access to this conference paper and the refereed journal article. Additionally, the information may be used for further research.

Researcher:

Ms Maureen O’Neill e-mail: moneill@usc.edu.au

Supervisors:

Principal supervisor: Dr Bill Allen, Faculty of Science, Health and Education
Ph.: 5430 1282 e-mail: ballen@usc.edu.au

Secondary supervisor: Ms Angela Calder, Faculty of Health Sciences
Ph.: 5456 5152 e-mail: acalder@usc.edu.au

Please take your time if necessary to consider whether you would like to proceed with this research project. If after having read this information package and upon reflection you wish to proceed, please sign the attached Consent Form.

The researcher and the University of the Sunshine Coast would like to thank you for considering this research project.

If you have any complaints about the way this research project is being conducted you can either raise them with the Chief Investigator or, if you prefer an independent person, contact the Chairperson of the Human Research Ethics Committee at the University of the Sunshine Coast: (c/- The Academic Administration Officer, Teaching and Research Services, University of the Sunshine Coast, Maroochydore DC 4558; telephone (07) 5430 4574; facsimile (07) 5459 4727; e-mail humanethics@usc.edu.au)
APPENDIX G: Consent forms

Consent to participate in research for adults and young people

Project title: High performance athletes at school: A study of conflicting demands

I understand the contents of the Research Project Information Sheet for the research study/project “High performance athletes at school: A study of conflicting demands” and this Consent to Participate in Research form. I agree to participate in research project and give my consent freely. I understand that the study/project will be carried out as described on the Research Project Information Sheet, a copy of which I have kept. I realise that whether or not I decide to participate is my decision and will not affect me in any way. I also realise that I can withdraw from the study/project at any time and that I do not have to give any reasons for withdrawing. Any questions I had about this research project and my participation in it have been answered to my satisfaction.

Participant’s signature_____________________________________________

Participant’s printed name__________________________________________

Principal researcher’s name_________________________________________

Principal researcher’s signature_______________________________________

Date      /        /
Appendix D: Athletes still at school and aged 15 years

Consent to participate in research for young person still at school and aged 15 years

Project title: High performance athletes at school: A study of conflicting demands

I understand the contents of the Research Project Information Sheet for the research study/project “High performance athletes at school: A study of conflicting demands” and this Consent to Participate in Research form which my parent/guardian and myself will sign. Further, my parent/guardian may be invited to be present during the interview. I agree to participate in research project and give my consent freely. I understand that the study/project will be carried out as described on the Research Project Information Sheet, a copy of which I have kept. I realise that whether or not I decide to participate is my decision and will not affect me in any way. I also realise that I can withdraw from the study/project at any time and that I do not have to give any reasons for withdrawing. Any questions I had about this research project and my participation in it have been answered to my satisfaction.

Participant’s parent/guardian
signature____________________________________________

Participant’s parent/guardian printed name____________________________________________

Young person’s signature
________________________________________________________

Young person’s printed name___________________________________________

Principal researcher’s name___________________________________________

Principal researcher’s signature___________________________________________

Date………../        /
APPENDIX I: Template- ‘Athlete friendly School’

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Suggestions</th>
<th>Practical application examples</th>
</tr>
</thead>
</table>
| Educational     | • A tutor/mentor is responsible for academic progress, discipline and personal development of the student-athlete. For example, a pastoral care program similar to Lines and Gallasch (2009) ‘Rite of passage’
• Resources that provide practical knowledge and advice on specific issues of sport that can be easily downloaded and made available to athletes, their parents, teachers, sporting associations and coaches. For example, Calder (2010) Applied Sport knowledge Pty. Ltd website
• Tutor/mentor (pastoral care) could be appointed to co-ordinate student-athletes in the school
• One-on-one tutoring.
• The athletes, their parents, teachers and schools are educated about the available flexible schooling options for student-athletes.
• Constant contact from the school with parents and the recognition of compulsory meetings and continual communication. For example provide information and tips for athletes, their parents, teachers and coaches similar to those used by “Canadian Sport for life” as a tool for the long development of high performance athletes.
• Use of technological aides such as Skype, Live Scribe™ pens and student intranet for the recording of missed class time. | ![Image](http://www.ask.net.au/resources.html) |
| Social          | • Communicate with athletes in empathetic language athlete(s) understand
• Encourage athletes in association with their school mentor to complete personal awareness
• Logs outlining the time spent on social media sites
• Positive parenting skills to encourage constructive support from parents to the achievements of athletes.
• Encourage school and sporting associations to develop and promote a sport parents education program.
• Family relationship programs to encourage and support siblings of high performance athletes. | ![Image](http://www.ask.net.au/resources.html) |

<table>
<thead>
<tr>
<th>Day</th>
<th>How many hours/minutes were I logged onto Facebook/Twitter?</th>
<th>How many hours/minutes did I devote to my schoolwork?</th>
<th>Was all my school work completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td><img src="http://www.ask.net.au/resources.html" alt="Image" /></td>
<td><img src="http://www.ask.net.au/resources.html" alt="Image" /></td>
<td><img src="http://www.ask.net.au/resources.html" alt="Image" /></td>
</tr>
<tr>
<td>Tue</td>
<td><img src="http://www.ask.net.au/resources.html" alt="Image" /></td>
<td><img src="http://www.ask.net.au/resources.html" alt="Image" /></td>
<td><img src="http://www.ask.net.au/resources.html" alt="Image" /></td>
</tr>
</tbody>
</table>
Wednesday
Thurs
day
Frida
y
Satur
day
Sunda
y

‘Do your best and have fun doing so’.

The sport friendly way” parenting education tool

<table>
<thead>
<tr>
<th>Step</th>
<th>Question</th>
<th>Green light</th>
<th>Red light</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Have you encouraged your child to play by the rules?</td>
<td>Description:</td>
<td>Description:</td>
</tr>
<tr>
<td>S</td>
<td>Have you settled any disagreements without yelling or being hostile?</td>
<td>(Settle)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Have you avoided ridiculing or yelling at athletes for making a mistake or losing a competition?</td>
<td>(Non- Ridicule or yelling)</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>Have you supported the non-use of verbal or physical abuse at your sporting event?</td>
<td>(Suppor t)</td>
<td></td>
</tr>
</tbody>
</table>

Physical and psychological fatigue issues
- An ‘athlete friendly’ weekly monitoring tool is implemented by schools so the athlete, their parents, teachers and coaches could use to detect physical and mental fatigues
- Nap rooms that athletes may use at specific designated times.

<table>
<thead>
<tr>
<th>Days of the week</th>
<th>How tired are you?</th>
<th>How sore are you?</th>
<th>Have you had enough to drink?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>😊 I was up and ready before my alarm</td>
<td>😊 I woke up with no pain</td>
<td>😞 I had lots to drink today</td>
</tr>
</tbody>
</table>
I woke with my alarm and felt good
My muscles hurt a little
Only had a little

I woke with my alarm but I’m tired
I have pain all over my body
I didn’t drink at all

I slept through my alarm and didn’t train

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
</table>

Psychological and cognitive issues
- Tutors/mentors of pastoral care programs for students provide understanding and education for the parents and coaches concerning the amount of pressure that the young athletes may be under
- For female athletes: checks and monitors concerning bullying issues.
- Female athletes’ resources. e.g. CD Rom “Growing up with Lycra” www.growingupinlycra.com
- Engage athletes in emotional intelligence strategies

Mytern™

www.inyahead.com.au
- Supply resources to schools, teachers, athletes and their parents to access information on bullying and resilience intervention programs and tools. For example, Fuller (2012) “The Heart Masters” program and Foster (2012), Mytern™ and websites such as [www.deewr.gov.au](http://www.deewr.gov.au) and [www.inyahead.com.au](http://www.inyahead.com.au)

<table>
<thead>
<tr>
<th>Economic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide guidance on the offer of any available: sport scholarships, subsidies and school fee instalment plans</td>
</tr>
</tbody>
</table>