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LIFESKILL INTERVENTION AND ELITE ATHLETIC PERFORMANCE

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Abstract

The purpose of this study was to examine the impact of a lifeskills education program on the perceived performance, mood, self-concept, and well being of elite, scholarship athletes. Thirty VIS scholarship athletes were provided with individualised career and education support, which was based on assessment and counselling. They completed the Profile of Mood States (POMS), and a measure of perceived performance, every two weeks, the Self-Description Questionnaire III (SDQIII), to measure self-concept and a measure of psychological well being, every month for 12 months. Their coaches also completed the performance rating every month. The eight athletes who were involved in the Athlete Career & Education (ACE) Program, and completed all the tests for the whole year, had a higher perception of their performance both in training and competition, maintained consistently lower levels of anger, confusion, and tension, and consistently higher levels of vigour than seven athletes, who completed the tests for the year, but dropped out of the ACE Program. Those who did not stay in the ACE Program shared no consistent mood states, with anger typically remaining high throughout the research period. The study demonstrated that performance, at least as perceived, and mood were enhanced, while changes in self-concept and well-being were less obvious. The results supported the proposal that the holistic development of the elite athlete can contribute to their perceived performance. The study also reinforced the

need to offer lifeskills education programs in the context of providing services to elite athletes.

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Chapter 1 Introduction

It is widely recognised that many elite athletes face substantial difficulties in making the transition from full-time sport to other careers (Blann, 1992; Broom, 1982; Curtis, 1988; Gordon, 1994; Blann & Hawkins, 1993; Petitpas, Danish, McKelvain, & Murphy, 1992). While programs are currently being developed to facilitate this transition, there are still many athletes who face mid-career problems that are directly related to a range of conflicts that stem from developing career and education concurrently with intensive training and competition. It is no great surprise that for many elite athletes there are recurring doubts raised because no alternate career development plans are in place.

Blann and Zaichkowsky (1986) proposed that organisations that are responsible for athletes should be encouraging their athletes to set goals outside sport, to ensure that they will not be left with feelings of insecurity and uncertainty concerning their future lives. They argued that people associated with athletes (coaches, peers, and family), as well as the athletes themselves need to be aware of the potential consequences if they become overly focussed on the present. According to Kleiber and Brock (1992), and Brewer, Van Raalte, & Linder (1993) the focussed attention needed for high level performances can discourage athletes from giving attention to matters of life after sport and even to other aspects of personal development. They suggested that when an athlete makes the transition into retirement, sport has to become a peripheral aspect of self-identity. For those athletes who have maintained a sense of balance, alternative role identities should be more easily established, that in turn would assist in achieving a successful integration into adult society. According to Kleiber and Brock (1992), athletes who can discover the fundamental values they have developed through their sport will be able to identify more easily with a new commitment following their sporting career.

Athletes are often "blind" to the possibility that a sports career can be brief or unexpectedly terminated due to a range of mitigating circumstances (Fortunato, 1997). As a result, it is important that an early intervention plan be implemented, which may then result in a less stressful time, both emotionally and financially, whilst they are pursuing sport, and during the transition from sport. A program that aims to increase the breadth of athletic and personal skills and knowledge may encourage a wider acceptance of the need to think outside sport, thereby helping talented sports performers to take a more balanced approach to life, and possibly even assist them to maximise their sporting potential. Blann (1992) argued that elite sport is now entering an era where it will be increasingly challenged to take a more socially responsible attitude towards athletes. Sporting organisations need, therefore, to be encouraged to "do the right thing" by promoting an environment where a holistic approach to development of athletes is achieved.

At the time of commencing this research in 1991, Australia had no wellestablished and proven athlete programs that encouraged the enhancement of the lifeskills needed for the future. It has only been since 1990 that lifeskills programs for athletes have been introduced and these programs have been found wanting in terms of meeting and addressing the real issues (Gordon, 1995). In fact, there exists much controversy and concern about what constitutes an appropriate athlete program. The Victorian Institute of Sport (VIS) has attempted to address some of these concerns, by introducing a program that aims to assist athletes to develop an array of skills both within and outside sport.

The Athlete Career and Education Program, which is also known as "ACE", took a long-term developmental perspective, rather than a crisis intervention view, in encouraging a balanced approach to sporting excellence. The program aimed to address potential concerns expressed by young elite athletes, as well as addressing the need to prepare them for the transition from sport in the future. Until 1995, it was the only program of its kind both within Australia and internationally, and although Olympic Councils and Colleges, internationally, had a record of offering various types of assistance to athletes, they were not providing opportunities for ongoing developmental lifeskills as part of an integrated sports development program (Blann, 1992). Whereas sport in Australia is now viewed in a more professional manner, many sports people are finding themselves under increasing pressure to spend more of their time training and preparing for competition. It is now recognised that a full-time commitment to athletic endeavour is often necessary in order to reach the top, and in more recent times the network of sport institutes and academies, and the AOC, through its Olympic Athlete Program, have been actively encouraging this view. At the same time the professional leagues of basketball, baseball, and all codes of football appear to have accepted the concept of the "full time athlete".

With the announcement of Sydney hosting the Year 2000 Olympic Games and the selection of Melbourne as Australia's nominated entry for the 2006 Commonwealth Games, thousands of young Australians will be striving for international sport selection and dedicating themselves to intensive preparation. They will, however, need to face the challenge of how to balance their career and educational aspirations with their sporting objectives. Therefore, elite athletes can be forgiven for often forgetting about other aspects of their lives, although this lack of planning and preparing for life, in the wholistic sense, can often lead to adjustment problems at retirement from elite sport, as well as reducing the true potential of elite athletes. A lifeskills program can help create a balanced plan that provides athletes with a more positive feeling about their present lives and their long-term futures.

To explore the impact of lifeskills education on present life, this thesis examined the immediate effects of a lifeskills program called the Athlete Career and Education (ACE) Program on a number of short-term and longer-term aspects of athletes' lives, including the mood states, self-rated performance, psychological well-being, and self-concept of elite scholarship athletes at the Victorian Institute of Sport.

Chapter 2 Review of literature and related programs

In reviewing literature on elite athlete retirement and programs of support, it has become increasingly evident that there has been extensive research into the retirement phenomenon of elite athletes, especially in the USA (Baillie & Danish, 1992, 1990; Ballie & Lampron, 1992; Blann, 1992; Crook & Robertson, 1991; Danish, Petitpas, & Hale, 1993; Kane, 1991; Lavallee, Gordon, & Grove, 1996; Murphy, 1995; Pearson & Petitpas, 1990) and more recently in Australia (Blann & Hawkins, 1993; Fortunato, Anderson, Morris & Seedsman, 1995; Gordon, 1995; Jackson, 1996; Ogilvie & Taylor, 1993).

This chapter provides an insight into the proposal by researchers that elite athletes do face a major life crisis when they retire from sport, and discusses retirement from elite sport as a traumatic career transition, utilising gerontological concepts to explain why this may occur. The need for lifeskills programs to be introduced during the athletes' competitive years is strongly supported, as well as a program during the transition from past elite sport. The review provides an insight into why many athletes struggle to adjust to life without sport, and, more particularly why their identity becomes measured by their sporting performance. The review takes into account an overview of current career and education programs internationally, in particular within Australia, USA, France, and Canada.

Elite sport provides many forms of reinforcement, including fan acclamation, financial rewards, social status, media attention, and other intrinsic and extrinsic rewards, many of which are withdrawn upon retirement (Crook & Robertson, 1992; Sheedy, 1990; Sinclair & Orlick, 1993). Hill and Lowe (1974) pointed out that it is often when athletes retire that they are first deprived of the satisfaction that sport has always offered them and it is obvious that the "sport self" is the only aspect with which many individuals can identify. Brewer, Van Raalte, and Linder (1993) stated that athletic identity, which is the degree to which an individual identifies with the sporting role, "is a construct of potential importance for both theory and application" (p. 237). This supports the notion that retirement from sport involves physical, psychological, and social changes, as a result of the individual shifting from the sport-self to some other self-concept of greater or lesser identity (Pearson & Petitpas, 1990; Stronach, 1993).

Danish, Petitpas, and Hale (1993) propose that elite athletes could face "critical life events" throughout their sporting careers, for example, adjusting to higher level competition, coping with injuries, and, of course, the retirement transition. This can mean that the athletes may have to come to terms with themselves to be able to cope with critical events in such a way that they do not experience a total upheaval in their psychological well-being. In some cases, when an athlete retires from high level competition an adjustment is required to their whole "ecosystem" including their social, financial, and physical environments. Baillie and Danish (1992) proposed that, perhaps because sport allows for creative expression of values and abilities, the termination of these activities is the real issue of retirement.

Monsanson (1992) stated that there is a general agreement that many elite athletes experience an increase in skills and knowledge as a consequence of their involvement in sport, but it is often difficult for them to find a point of reference in terms of their sports experiences, and to see how those experiences relate to the world outside sport. She proposed that by implementing a program to identify future life plans, whilst still actively involved in sport, the transition from sport will be more harmonious. She also stated that those athletes who adopt such a plan, whilst they are still competing, will have peace of mind about their future plans outside sport.

Brewer et al. (1993) observed that there are obvious benefits for individuals committed to the athlete role, including enhanced skill level and confidence. Pearson and Petitpas (1990), however, called attention to the personal costs when an athlete derives his or her identity solely from the athletic role. In fact, they claimed that there is an increased risk for emotional disturbance when the athlete encounters career transitions, such as expected retirement or the traumatic consequences of a career ending prematurely through chronic injury or changed life circumstances. In fact, for many athletes, the transition from sport is rife with trauma, the source of which can often be traced back to inadequate preparation for life after sport.

Retirement as a Traumatic Career Transition

The use of gerontological concepts and Coakley's (1983) "rebirth" phenomenon are of value in the development of appropriate support programs, as they demonstrate the need to develop new challenges upon retirement and a more mindful approach to dealing with athletes who are still competing. Werthner and Orlick (1986) reported that there has been much interest but very little research into the retirement experiences of successful international athletes, including very little investigation into the process that often takes place when they attempt to make the transition into a non-sporting life. Although reviews indicate that empirical work in this area has increased in recent years, it is still relatively limited. Much can be learnt from what has been documented, in relation to past and present research within support programs for elite athletes (Gordon, 1995; Murphy, 1995; Ogilvie & Taylor, 1993).

One of the first attempts to study the phenomenon of sports retirement was in Yugoslavia in the 1960's, where Mihovilovic (1968) studied 40 soccer players using a questionnaire method. The results highlighted that those having no planned career path experienced greater personal conflict, frustration, and social upheaval during the retirement process. More recently, researchers have used gerontological concepts to try to explain the retirement phenomenon that elite athletes experience (Fortunato, 1995; Hill & Lowe, 1974; Lerch, 1981; McPherson, 1980; Rosenberg, 1981). Rosenberg (1981) discussed six such approaches: activity, disengagement, subculture, continuity, social breakdown, and exchange theories.

Activity Theory, or Substitution Theory (Albrecht & Havinghurst, 1953) maintains that as various activities are lost, the individual establishes new roles, and the maintenance of these contributes positively to self-concept and life satisfaction. Activity Theory however, fails to explain why some ageing people decrease their existing activity level without a corresponding investment in new patterns of role/activity development. Disengagement Theory (Cumming & Henry, 1961), which was developed as a response to Activity Theory, suggests that the ageing process sees individuals mutually agreeing to withdraw from society and thereby making way for them to enjoy life away from paid employment, and, at the same time, allowing younger, more energetic people to take their place in the workforce. Thus, rather than replacing lost roles, retirees reduce their societal involvement. Disengagement Theory proposes that the process of reducing social roles is a function o both the individual and society. Subculture Theory attempts to provide an explanation for why disengagement may occur, that is, it could be a behaviour that we are socialised to act-out when becoming older and consequently, less active.

Continuity Theory represents a refinement of Activity Theory (Atchley, 1977) and posits that although activities and habits might alter or be replaced by others, these may not always provide the same meaningful experience. It is believed that, by retaining the continuity of meaning in their activities through retirement transitions, individuals experience less traumatic life changes. In other words it is the meaning of the activity that provides the fulfilment not the activity, or the amount of activity, itself.

Additional theories worthy of consideration in the present context are Social Breakdown Theory (Kuypers & Bergston, 1973) and Exchange Theory (Dowd, 1975). Kuypers and Bergston proposed that with any role loss, such as retirement, the individual might become the recipient of negative external labels, leading to a breakdown in their social framework. Kuypers and Bergston believed that any major role loss frequently results in a decrease in self-image, and, in order to limit the downward spiral that often occurs, they argued that a social reconstruction is typically needed through the use of counselling, reestablishing, or re-defining, other activities to enhance oneself. Exchange Theory illustrated the idea that retirement can be a positive experience, that is, if social activities and networks are considered and possibly even re-defined, then the individual can build-up a social framework that provides a more positive environment in which they could continue to maintain valued social networks as well as capitalise on available opportunities.

When considering adoption of these theories as they relate to sport, Rosenberg (1981) argued that their application to sport has not been very successful, because they are not particularly relevant. He did state that Social Breakdown and Exchange Theories may offer a useful base from which to draw parallels and that further work in assisting athletes to deal with retirement from sport may be better resolved through a more thorough understanding of the social reconstruction process often required by the athlete upon retirement. In his review, Rosenberg appears to exaggerate or unintentionally misrepresent the theories in ways that make them easy to criticise, thereby endangering their application to retirement from sport. On the other hand, Continuity, Activity, and Disengagement Theories can all be seen to have some relevance to retirement from sport.

Coakley (1983) further challenged the use of gerontological concepts and the assumption that retirement from sport is an inevitable source of stress, identity crisis, and adjustment problems. He indicated that the problem is not retirement per se, but the personal and social characteristics of the individual that affect the ability to adjust to changed circumstances. The same can be said for older people facing retirement from full-time employment. For example, race, gender, socioeconomic status, and support networks would seem to be important factors in explaining successful adaptation to retirement. Coakley referred to retirement as "rebirth" and argued that future studies should give more consideration to the positive aspects of retirement from sport. In light of Coakley's comments, retirement should be referred to as a transition rather than a withdrawal and, given the availability of appropriate support, retirement from elite sport could be viewed as an opportunity for engagement rather than This is well exemplified by the recent examination of disengagement. voluntary and involuntary retirement in elite Australian footballers (Fortunato & Morris, 1995). Those whose retirement was voluntary looked back on their careers in a positive way, but most of their thoughts were focussed on exciting future challenges. Many retired to devote more time and energy to a range of new areas requiring differential levels of engagement. Involuntary retirees, those who had been seriously injured or deselected, seemed hardly able to contemplate the future, instead focusing on their regrets about their lost football careers. Thus, voluntary retirees reflected Coakley's rebirth and opportunity for new engagement proposals, whereas those whose retirement was not by their own choice, largely did not.

The proposal reflected in Coakley's (1983) remarks suggests that retirement from sport may be viewed as an adjustment to a new beginning rather than an end to active life. Whether the decision to retire is voluntary or involuntary, qualitative analysis reveals that athletes are frequently disadvantaged by a failure to plan for their retirement (McPherson, 1980). In the research on elite Australian footballers it was also found that neither the voluntary nor the involuntary retirees had carried out long-term planning for retirement. Involuntary retirees were hit by retirement in early or mid-career (that is, in terms of typical span of football careers), when they had no expectation of imminent termination of their elite athletic involvement. Voluntary retirees generally admitted that they had done little planning prior to making the decision to retire, but once that decision was made, they had the opportunity to spend up to several months planning before they officially retired (Fortunato & Morris, 1997). Future research should explore the manner in which sport retirement patterns and adaptations vary amongst socioeconomic levels and other social variables. If young athletes, through appropriate education, can be socialised to perceive the value of retirement planning during their sporting careers, they might avoid the trauma that is currently widely experienced by retiring athletes, as cited in research and anecdotal reports (Danish, Petitpas & Hale, 1991). Dealing effectively with retirement from sport depends upon how much athletes value their future lives and lifestyles outside sport. Coakley's description of retirement as "rebirth" does not accurately reflect the findings of many researchers who have presented empirical evidence that retirement is a traumatic experience for many elite athletes (Baillie, 1992; Fortunato & Morris, 1995; Lavallee, Gordon & Grove, 1995; Lerch, 1981; McPherson, 1980; Rosenberg, 1982; Schlossberg, 1981; Sinclair & Orlick, 1993; Werthner & Orlick, 1986). The focus by Coaly on the notion of the potential for retirement to be seen as a new challenge ignores the well-documented, commonly occurring, negative consequences of retirement from sport for many (Danish, Petitpas, & Hale, 1993; Fortunato, Anderson, Morris & Seedsman, 1995; Hawkins & Blann, 1993). While Coakley's view of rebirth receives only partial support from current research, it does provide a promising perspective for the type of athlete

program that is required to provide the preparation that could relieve the trauma often associated with the retirement process. It supports the thoughts of a number of writers who have proposed how preparation and planning can help athletes to cope (Danish, 1993; Fortunato & Morris, 1994; Petitpas, McKelvain, & Murphy, 1992), providing some support for the continuity perspective.

Kleiber and Brock (1992) inferred that voluntary or involuntary exit from a sporting career, will influence adjustment to the transition. The athlete retiring by choice may be in a better strategic position to control the exit process from sport. Fortunato & Morris (1995) found empirical support for this claim. Kleiber and Brock (1992) argued that any adjustment difficulties to retirement might well be explained by how athletes perceive the level to which sport has constricted their development. What the athlete believes, could be reflected in several ways. The athlete, for example, might believe that engagement in a sporting career prevented serious orientation toward a career and life beyond sport. It is also possible that sport promoted degrees of self-detachment from and desensitisation to the wider world, thereby leaving the athlete with heightened feelings of vulnerability as retirement approaches, and ultimately becomes a real life event. To summarise, there is now considerable empirical support for the proposition that retirement from elite sport is a traumatic transition for most. In addition, many athletes worry about their future careers during their playing days, often leading to lowered performance achievements. There is a need for a range of innovative and practical strategies that prepare athletes for retirement by reducing the potential for negative impact, while

emphasising and encouraging actions to prepare for the future as another positive challenge to be met.

The Need for Lifeskills Programs

As far back as 1980, it was proposed that intervention programs could assist with the retirement transition of athletes. Schlossberg (1981) suggested that those athletes who exclusively base their identity on athletic performance would ultimately face a difficult transition process upon retirement. McPherson (1980) argued that any intervention program must first analyse the athlete's career pattern as well as their potential for social, occupational, and psychological adjustment to retirement. He also noted that there have been very few empirical studies in the area of retirement from sport and that this could possibly be due to difficulties in trying to locate an adequate sample of elite athletes involved in retirement, as well as a lack of interest from coaches and administrators once the athlete retires. This situation has changed markedly in the last 10 years, as reported in the previous section.

Hawkins and Blann (1993), in their study of Australian athlete/coach development and transition, found that athletes and coaches preferred that career transition programs be provided both during and after the completion of their sporting careers.

McPherson (1980) also emphasised the fact that most coaches do not normally encourage their athletes to seek concurrent career and education pathways, because they feel this might interfere with their scheduled sporttraining regimen. As a consequence, many elite athletes lack social and vocational skills, making adjustment to a lifestyle outside sport potentially traumatic. Thomas and Ermler (1988) proposed that one of the major reasons for this is that the coach has traditionally remained the dominant autocratic centre of the athlete's world. The same researchers call attention to the fact that coaches tend to retain the knowledge, control, and ultimate responsibility for their athletes, without realising the effect this may have on the self-concept, psychological well-being, and overall performance of their respective athletes. Danish et al. (1993) noted that athletes must believe they have the skills and qualities that are of value in other settings long before they need to be utilised. These authors offer the view that "athletes need to identify the skills they have acquired to excel in sport that are transferable to other life areas" (p. 368). In fact, when athletes learn to recognise that the mental skills they possess as an athlete may be transferable to non-sporting areas, their sports performance may be enhanced (Petitpas et al., 1992).

Programs aimed at assisting athletes to develop work and social skills should enable many to deal more effectively with the pressures of being an elite athlete (Brewer et al. 1993; Danish et al. 1993). At the same time, welldesigned career and education programs offer the potential for the athlete to achieve a more balanced perspective on life (Hawkins et al. 1993). An emphasis should also be given to the provision of appropriate networks and resources necessary for making a more streamlined transition from sport. There are various career and education programs presently in existence that aim to develop occupational and personal skills (Gordon, 1995). It is pertinent at this point to review some of these support initiatives, including the different

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philosophical perspectives they represent, as well as their respective structures, content, and mode of delivery.

Development of Career Assistance for Athletes in the United States and Canada

Werthner and Orlick (1986) determined that certain variables impacted on an athlete's adjustment, believing that for some the transition was a positive one. They came to this conclusion following a study which involved administering questionnaires to 199 Canadian retired elite level athletes. Their findings indicated that a positive adjustment to retirement from high performance sport was related to either achieving one's sport-related goals and/or retiring voluntarily. A smoother transition was made when the athlete felt a sense of accomplishment. In comparison, those athletes who suffered a difficult transition were those whose performance had declined. These athletes experienced more difficult adjustments due to a lack of self-confidence and loss of status. The study also highlighted the fact those athletes who had established alternative lifestyle plans, involving actual or proposed employment, leisure, and meaningful relationships, were better equipped to deal with the retirement transition. This finding provides some support for the Continuity Theory of retirement.

The view that a continuity of interests can smooth the sport retirement transition, has also been expressed by a number of researchers (Blann, 1985, 1986, 1987, 1988, 1989; Danish, McKelvain, Petitpas, & Murphy, 1992), who have been involved in the development of programs offered by the United States Olympic Foundation (USOF). In 1988, a grant was approved by the USOF to create the Career Assistance Program for Athletes (CAPA), a program designed

for elite athletes as part of the Olympic Job Opportunities Program (OJOP), however, due to funding cut backs the program ceased in 1993. The design of the CAPA program followed a survey that was sent to some 1,800 Olympic and Pan-American Games team members. With a return rate of 29 per cent, the response indicated that many athletes felt unprepared and needed assistance to develop a post-sporting career. A small group of counsellors, sport psychologists, sociologists, elite athletes, Olympic Training Centre personnel, and career development specialists met to design a career assistance program. The program was closely linked to the life-span development model established by Danish and D'Angelli (1980). The program provided the opportunity for athletes to increase their self-confidence through understanding and identifying the range of transferable skills gained through sports participation. This program initiative helped athletes to recognise what lifeskills were necessary to cope with the transition out of active sporting competition. The workshops focussed on three main topics: (a) managing the emotional and social impact of the transition. (b) increasing the understanding and awareness of personal qualities relevant to coping with transitions and developing a post-sport career, and (c) introducing information about options available in the world of work. The feedback from workshop participants was consistently positive and followup resources were developed, including an Employment Counselling Handbook for Athletes, aimed at promoting a self-search program that enabled the athlete to develop a personal profile, job search tools, and strategies for finding suitable employment. According to Petitpas, Danish, McKelvain, and Murphy (1992), the CAPA initiative appeared to have a bright future. Due to funding cutbacks,

the program ceased to operate in 1993, although the initial researchers continue to work in the field.

Blann and Zaichkowsky (1986, 1987, 1988, 1989, 1992) examined existing operational careers programs that were offered through the major USA professional league baseball, hockey, and basketball associations. They concluded that there was a need to provide seminars and individual counselling to help athletes identify their personal strengths, interests, and skills, that would assist them to carry out action plans in the areas of future career planning and life education. As part of their studies, Blann and Zaichowsky (1987) conducted a survey on professional athletes to establish what career plans if any had been formulated. The group represented 214 players from American and national league baseball associations. The study concluded that the overall career awareness was not high, with 70 per cent of the participants stating that they had delayed planning for post-sport careers, whereas 84 per cent had not planned financially for retirement. The majority of surveyed athletes believed post-sport career planning assistance should be provided during and after the completion of their playing careers. Blann and Zaichkowsky (1984) found that programs providing individual counselling, further education, and training, had assisted athletes to consider and follow through with post-sport career/life plans, while they were still actively playing sport.

Blann (1984), developed the Professional Athletes Career Transition Inventory (PACTI), an assessment instrument for use by those currently involved in professional sports. The PACTI comprises four components: the Career Planning Scale (CPS), the Career Needs Scale (CNS), the Life Satisfaction Scale (LSS) and the Career Awareness Scale (CAS). Each scale requires quick answers (True/False) to a series of categorised statements. The CAS establishes the level of the athletes' career awareness, CPS indicates the extent to which athletes are involved in career planning, whereas CNS assesses their financial needs and the role of spouses in the planning process. The LSS measures how satisfied athletes are with their present life situation.

The main aim of PACTI was to assist individuals and organisations to obtain information on career transition needs. Administration of the inventory and support in developing appropriate programs based on analysis of the results was offered to the professional sporting bodies in the USA. Blann (1992) stated that, despite the obvious need to support athletes in this way, he felt that the systems necessary to implement the support needed are still in their early developmental stages. Blann's observation appears to be confirmed when it is considered that despite the research that has now been carried out in the USA on athlete retirement (e.g., Alison & Meyer, 1988, Baillie, 1990; Blann & Zaichkowsky, 1987, 1989; Blinde & Greendorfer, 1985; Coakley, 1983; Crook, 1986; Danish, Hale, & Petitpas, 1993) it would appear that few programs, if any, are in place that fully integrate the current needs of professional or elite amateur athletes in their coaching, competition, and sport science, with concurrent education and career development support. In summary, it would appear that the excellent research undertaken in the USA has not been adequately utilised throughout even American elite sports programs. This seems to be particularly the case, as it relates to the professional sporting bodies. It could be assumed that the American culture, which reflects and upholds the big

business approach to professional sport in the USA, might not allow for the personal needs of the athlete to be given adequate consideration or priority rating. This point will be discussed further in Chapter Three.

Development of Career Assistance for Athletes in France

Since 1981, the French National Olympic Committee (INOSF) together with the state Department of Youth and Sport, and the French Institute of Management (IFG) has been assisting a number of elite athletes to develop their future career plans. After eleven years, Monsanson (1992) wrote a paper on behalf of the Sports Directorate of the Ministry of Youth and Sport and the French National Olympic and Sports Committee that emphasised the importance of career counselling programs for high performance athletes. Monsanson proposed that, when counselling elite level athletes on their career pathway, the athletes' situation or environment is what makes them a unique group, rather than the individuals themselves. For example, she felt that it is the unusual situation of high performance sport that leads athletes to think of themselves as exceptional and once retired from sport, they realise that they are just ordinary people. She identified education as an important link that assists athletes to have a smooth changeover into retirement. She argued in the same vein as Petitpas (1993), that athletes need to be assisted by people who are not necessarily involved in the sporting world, because such people may offer a fresh point of view.

Monsanson (1992) noted that "It is sometimes especially hard for athletes to develop a career plan and to find out what they'd like, because they already know what they want to do, and they do it ... they are high performance competitors!" (p. 73). She stated that often athletes adopt a "waiting" strategy, that is, worry about it "when the time comes" (p.75). By then, Monsanson proposed, it would be too late. She also strongly argued that high performance athletes are located within a complete "Ecosystem" including their coach, peers, administrators, and federation. Thus, these people must be involved in any proposed career plans involving their athletes. Elite athletes are often criticised for their shortsightedness when considering their future lives and Monsanson (1992) argued that athletes must be introduced into a "planning culture", whereby they are encouraged to make plans for their future lives outside sport. In this paper, Monsanson did not identify what programs need to be introduced. She did, however, show quite clearly that a career plan needs to be part of the athlete's thinking, whilst still competing. Integrating the two, that is, career planning and competing, is the challenge which must be faced by athletes and those bodies which represent them.

Development of Career Assistance for Athletes in Australia

The views of Monsanson (1992) could also be directed at the Australian sporting system, as it was not until June 1990 that the Victorian Institute of Sport (VIS) introduced an Athlete Career and Education (ACE) Program. In fact, it was the first comprehensive career program offered to elite/professional athletes. The ACE program was established to help athletes develop some of the skills necessary to satisfactorily prepare for, and deal with, retirement from sport (Anderson, 1990). This particular program provides all VIS scholarship athletes with counselling and ongoing workshops that focus on career and education planning, communication, and personal development. The ACE program essentially ensures that individual athletes determine and clarify their goals, both within and outside of sport. The athlete is required to work closely with the program manager and to take part in selected workshops. In addition to its primary aim of preparing elite athletes for the transition from full-time sport to other careers, it was felt that this type of approach should have some impact upon the current and future performance, mood states, self-concept, and psychological well-being of athletes.

In May 1991, the Australian Institute of Sport (AIS) launched the Lifeskills for Elite Athletes Program (LEAP), which aimed to encourage the Australian business sector to provide employment for AIS athletes. By 1993, LEAP had introduced a national focus by employing state coordinators who acted as consultants in conjunction with state-based programs and state sporting organisations. The focus of the program continued to alter from its original aim and began to offer a series of workshops to enhance the ability of athletes to deal with the media, and specific workshops on personal development were also offered. Some of the criticism directed at this program included its lack of specific focus and that the success of the program was largely measured in terms of perceived outcomes, such as, the number of athletes placed with companies.

In March 1992, the Australian Olympic Committee introduced the Olympic Job Opportunities Program (OJOP). The scheme, sponsored by Ernst and Young, involved critical testing and interviewing of athletes to ascertain their skills, interests, and abilities (Olympic Job Opportunities Program, 1990). Companies such as Australian Overseas Telecommunications, Australia Post, and Southern Pacific Hotel Corps have become associated with the program by offering jobs which allow athletes to continue with their sporting commitments (Davis, 1992).

In May 1995, the LEAP and the Victorian Institute of Sport's ACE Programs merged to form the National Athlete Career and Education Program. The National ACE Program's mission statement is, "to enhance the personal development and performance of Australia's elite athletes through the provision of nationally consistent career and education services" (ACE Program 1995, p. 2). As athletes have become increasingly mobile, it has become even more important to have a nationally consistent program. Managers, coordinators, advisers, and administrators have been involved in national training and inservice sessions and have been supplied with a procedure manual to ensure quality and consistency of services. The National ACE Program has adopted strategies summarised in Table 2.1 in order to achieve its mission.

Table 2.1: Strategies of the National ACE Program

Strategy 1	Provide a structured process in which the
Athlete Individualised Assessment	individual athlete's educational, vocational,
	financial and personal development needs are
	appropriately assessed.
Strategy 2	Provide elite athletes with nationally accredited
Personal Development Training	competency based education programs.
Courses	
Strategy 3	Utilise a nationally consistent career-planning
Nationally Consistent Career	model that will enable elite athletes to manage
Planning	their own individual vocational requirements.

Table 2.1 continued

Strategy 4	Foster a wide range of career networks and
Business Referrals	options for elite athletes.
Strategy 5	Utilise a nationally consistent educational
Nationally Consistent Educational	planning model, which will enable elite athletes
Guidance	to manage their chosen education/career
	pathways.

Strategy 6Promote community recognition andCommunity Recognitionappreciation of the program and its ideals.

Strategy 7Provide career and education guidance for eliteTransition Programathletes who are undergoing a transition process
to a post-sport career.

Strategy 8Ensure ACE personnel are appropriately trainedProgram Developmentto deliver the Program services.

 Strategy 9
 Foster the integration of National ACE Program

 Program Integration
 personnel and services within the ongoing

 programs offered by State Institutes and
 Academies.

Research in Australia into the career transition of elite athletes has only recently become an issue of interest and concern. Gordon (1995) in his review of the Australian scene utilises selected sociological models to show causal and interacting factors that impact on an athlete's ability to adapt to retirement from sport. He also offers the view that adjustment to retirement from sport can be facilitated more effectively by undertaking more Australian-based research to determine the culturally identified factors which limit an athlete's ability to successfully deal with retirement from sport. Gordon further recommends the coordination of existing Australian Programs, (ACE, OJOP, LEAP) as well as advocating the need for promoting a balanced perspective no matter how intense the sporting involvement may be.

Another major research project undertaken in Australia was by Blann and Hawkins (1993), who surveyed the career transition needs of over 100 athletes and coaches, utilising an Australian Athlete's Career Transition Inventory (AACTI), which was modified for the Australian context from the PACTI, which had been used widely by Blann and Zaichkowsky (1986, 1987, 1988, 1989, 1992), in their work in America. Two key findings from the Blann and Hawkins (1993) study were that: (a) counselling could be highly valuable both during and after the athlete's sporting career, and (b) athletes generally had a higher awareness of the need for career development than their coaches. The coaches themselves were found to have a low level of awareness of the need to prepare for their own non-coaching roles, because they felt that their profession allowed little time to consider personal development needs. The researchers made a number of key recommendations, which may have relevance to this

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thesis, including further avenues for research on the career transitions of former elite athletes and coaches. Overall, the results suggested that athletes had a higher awareness of the need for career development than the coaches who were also surveyed, which may provide one reason why some coaches inadvertently discourage athletes from actively seeking career and education support.

Given the above strategies, it would appear that Australian sport is beginning to recognise the need for a more coordinated approach to the support of elite athletes. The hosting of the Olympics Games in Sydney in the year 2000 and the potential for the Commonwealth Games to be held in Melbourne in the year 2006 may provide further impetus for such integration to occur. Despite these developments in Australia and overseas, there has been little or no empirical research on the efficacy of career education and lifeskills programs for elite athletes in terms of short-term or long-term personal development or performance.

The Present Research

There is a common element that can be drawn from the research literature: the transition from sport is often made harder due to the athlete's concept of lifespan reality, which can be distorted because of an absence of preparation during their sporting career. It is obvious that some athletes make this transition smoothly, while others become totally absorbed in a struggle with themselves and others.

In the review of the literature published to date, much attention has been focused on this transition to "Life after Sport". Conversely, reference to development programs whilst the athlete is still competing is almost non-existent in the literature, with the exception of some descriptive work on the National ACE Program, CAPA, and possibly the PACTI (USA). Athletes in Australia are facing many issues of concern, such as the conflict arising from their sporting commitments and their career and education pursuits. It is argued that innovative and flexible programs are necessary to ensure that athletes have appropriate opportunities in which to develop their skills outside sport to the fullest, whilst they are still training and competing. There presently exists a gap in Australian sport in the provision of opportunities to enhance the emotional and educational support to deal with these issues. Further questions are also raised as to whether or not athletes can perform at their optimal level when their long-term education and career prospects are uncertain. At present there is little or no research on this issue. What still needs to be ascertained is the extent to which athletes' performance and personal factors, such as mood state levels, self-concept, and psychological well-being are affected when elite athlete support programs address a broader mandate, which includes education and career issues.

The first aim of this thesis was to assess and compare a range of athlete support programs with the existing (1992/93) VIS ACE Program, offered by the Victorian Institute of Sport. The second aim of the thesis was to determine the impact of the ACE Program on the mood states, perceived athletic performance, self-concept, and psychological well-being of elite Victorian athletes involved in the ACE Program.

Chapter 3 International Athlete

Lifeskill Programs

While published materials on career transitions and athlete education programs were beginning to appear in 1991/92 when this research thesis was developed, detailed descriptions of the programs around the world were not available, in fact even in 1998 this is still generally the case. Contact was made with the major figures working in this field, but correspondence with them did not give a full picture of the programs. Visits to some of these internationally recognised centres were therefore undertaken to examine their programs first hand. This chapter presents a description and analysis of the information collected during the visits to facilities and colleagues in the United Kingdom, United States, and Canada. These countries were selected on the basis of the level of research that had been undertaken and the fact that a support program had been in place or was being developed. The United Kingdom was chosen due to the fact that athlete support personnel had identified a need for programs, although they had not taken steps to commence any programs. Although it would have been useful, the researcher was unable to visit France due to budget and time constraints. As reported in Chapter 2, Monsanson (1992) has documented the French experience in a substantial published paper. To facilitate comparison, discussions with leading researchers are considered first, then national organisations and programs are presented and assessed.

The Researchers

The main international researchers in the area of athlete support services were chosen and, as a result, discussions were held with Dr Steve Danish, Professor Al Petitpas, and Dr Wayne Blann, all based in the USA.

Professor Steve Danish

Professor Steve Danish (Virginia Commonwealth University, Richmond, Virginia) has written extensively on the need for lifeskill programs for elite athletes and has developed numerous support programs that have been utilised within the USA College system. One of the more recent publications written by Professor Danish was 'Going for Goal' (1993), which has been adopted for use by High School and college students around the USA. This program, based on a handbook, was designed to assist young people achieve their sporting dreams by providing them with role models who facilitate the use of the handbook in a series of workshops. By 1995, some 3,000 students had been involved in the program. It was interesting to see that Professor Danish, who has advocated lifeskills programs for elite athletes for many years now, has turned his attention to the general population. The issue has become so important that a Lifeskill Centre has been established at Virginia Commonwealth University.

Professor Danish described the Centre as a multi-disciplinary operation that assists students to develop "lifeskills". He defined lifeskills as those skills that enable us to master the tasks necessary to succeed in our social environment, for example, learning to transfer skills from one domain of life to another, in particular those skills learned in sport that can be applicable at home, at school, or in the workplace. Sport is used as a key component in the learning process and Professor Danish explained that the Centre focused on sport because of the major role it plays in American society and its pervasiveness in that society. He felt that sport is a major influence in the development of identity and competence across the lifespan of many individuals.

The Centre's mission statement is as follows: -

- to develop, implement, and evaluate lifeskills programs for children, adolescents and adults;
- to collaborate with other organisations seeking to develop and/or implement lifeskills programs;
- to conduct research on the effect of sport on the mental and physical fitness of participants;
- to advocate for programs emphasising the value of both the mental and physical aspects of participation in sport (Danish, 1993, p. 20).

In 1992/93 the program was piloted in Atlanta, Boston, Los Angeles, and New York under the auspices of the Athletic Footwear Association. The Goal Program has already been conducted at the United States Olympic Training Centre in Colorado Springs and at diving centres throughout the United States of America in conjunction with the United States Diving Federation. The program's financial support amounted to over two million dollars for 1992-1993, with a fifteen thousand-dollar grant from the USA Olympic Training Centre in 1992.

It is not surprising that Professor Danish diverted most of his energy away from elite sport. He was quite critical of the system of elite sport, particularly the non-acceptance of the need to support lifeskill programs. Despite his extensive research over the years he still believed that there was limited acceptance in sport, particularly in the USA, of the need for ongoing commitment to a lifeskill program for elite athletes. Professor Danish believed that if a lifeskills program was to continually operate within sport it would need clear policies and should be integrated with other athlete support programs. He also felt that within the USA nothing of any depth was happening in the area despite the evidence from research that supported the need for introducing lifeskills programs for elite athletes (e.g., Baillie & Danish, 1992; Danish, Petitpas, & Hale, 1993). He stated that this was because people in sports administration focus on the profile of the game; the coaches are concerned about their personal survival; the college prioritises the performance of the team; but "no one really cares about the athlete"(transcript from interview, 1992). Also, if a program was to be introduced, especially at the Olympic level, criticism and questions may be directed at the coaches and administrators for failing to address such issues earlier.

With respect to lifeskills programs directed specifically at Olympic athletes, Professor Danish was one of the original researchers who assisted in setting up the Career Assistance Program for Athletes (CAPA; Petitpas, Danish, McKelvain, & Murphy, 1992). This program was developed for the United States Olympic Committee, to prepare athletes for the transition from elite competition. In an important and direct way CAPA provided a forum where athletes could share concerns about disengaging from sport and learn the basics of the career development process. Professor Danish and his colleagues quickly realised just how much the athletes valued the social support from other athletes involved in the forum. This was particularly noticeable for many athletes who expressed a sense of relief when they realised that others felt anger, confusion, and fear about disengaging from competition.

Despite the enormous success of the program, CAPA is not presently operating, as a result of funding cuts. Professor Danish pointed out that it is no wonder that researchers have become frustrated with the system of sport, when on a day to day basis they see the enormous need for such programs. He believed that those who hold the purse strings do not perceive career preparation as an important area to fund. Professor Danish was, not surprisingly, now directing his energy more to young people in the general population, who, he believed would appreciate the value-added assistance emanating from lifeskill type programs.

Professor Danish stated that part of the reason for CAPA not continuing was that it was not promoted enough to the athletes, and that coaches generally were ignorant of the important role of such a program. At the time of the interview, he was basically convinced that many elite athletes were not interested and that earlier educational intervention efforts should be directed at talented athletes during mid-junior high school. There was also a need to educate coaches that athletes are people who have lives outside and beyond sport.

In summary, although Professor Danish's work has been the cornerstone for the development of the Australian ACE Program, the difficulties he faced in implementing the findings and recommendations of his research in his own country are an indication of the lack of integration presently taking place between sports administrators, coaches, support staff, and the athletes themselves.

Associate Professor Al Petitpas

Like Professor Danish, Professor Petitpas has become one of the most prolific writers on intervention programs for elite athletes (e.g., Danish, Hale, & Petitpas, 1990; Danish, Petitpas, & Hale, 1993; Good, Brewer, Petitpas, Van Raalte, & Maha, 1993; Petitpas & Champagne, 1988; Petitpas, Danish, McKelvain, & Murphy, 1992). More recently, Professor Petitpas and other colleagues from Springfield, have been conducting research on athletic identity and sports participation. The research has established the level of importance that athletes assign to their overall involvement in sport. The researchers felt that the findings may provide further insight into the career transition issues of elite athletes. Professor Petitpas was also involved, on a daily basis, in counselling college-based athletes in the areas of education and career issues. The Sport Psychology Centre, at Springfield, in which Professor Petitpas was the Director, offered counselling to both college and Olympic athletes and Professor Petitpas believed that the provision of lifeskill programs for elite athletes was an essential part of the services offered at the Centre. Professor Petitpas had gone through a torrid time trying to convince USA Sport that lifeskill programs for elite athletes were necessary. He argued that although research supported the need, sport in general saw such areas as an adjunct to other services for athletes, for example, sports science and medicine, rather than recognising that they were essential to enhance both the current performance and the long-term psychological development of athletes.

Professor Petitpas' research is continuing and is aimed at athletes, coaches, and organisations that see the need for lifeskills programs.

At the time of the interview, Professor Petitpas felt that the USA was still a long way from introducing an integrated program. In the meantime, Professor Petitpas, together with Professor Danish, was publishing a book titled <u>Athlete</u> <u>Career Transition: A Guide to Career and Life Planning</u>, which would be used in any future education program for elite athletes. This book has now been published by Petitpas, Champagne, Chartrand, Danish, and Murphy (1997).

In summary, Professor Petitpas' research has resulted in the development of a program focus that is based on one-to-one counselling of athletes. His major focus is to assist athletes to establish their own identity and not just their athletic identity. His work is demonstrating the identity shift required for athletes upon retirement and the need to encourage the athlete to have a balanced view of their identity whilst competing.

Associate Professor Wayne Blann

Although a visit to Ithaca College was not possible, Professor Blann met me in New York to enable an introduction to be made to professional sporting bodies and to discuss his personal views of athlete lifeskill programs. The findings from the professional sporting bodies are discussed later in this chapter of the thesis.

Professor Blann and Professor Len Zaichkowsky have together researched career transition issues of professional athletes. They have undertaken research in major league football, baseball, ice hockey and basketball, and observed the post-sporting career transition of professional athletes in general. Once again, despite the extensive research, Professor Blann stated that some professional sports have totally ignored his findings, whereas others have introduced programs that still require ongoing development. When asked why this is the case, he described a system so tied up in billions of dollars that those involved found it hard to see the basic needs of athletes. Despite this environment, Professor Blann was pleased with the introduction of some aspects of the program by the professional basketball and football organisations. In the college system, Professor Blann noted that Ithaca offered a subject to its sports studies students that looked at the importance of ensuring that lifeskill education was encouraged.

Blann's approach to his work appeared to be a little different from that of Professor Petitpas and Professor Danish, that is, he seemed to be spending more time on promoting the needs for support programs within professional sporting bodies, rather than with Olympic or college athletes. When asked whether this was the case, Dr Blann said that professional sport played an enormous role in the USA and the models that were often promoted to young people were not the most appropriate. If professional sport took a more responsible approach to developing athletes as people, young aspiring athletes might be more receptive to reconsider the need to maintain a well-balanced approach to their sport.

More recently, Professor Blann and associate Professor Ken Hawkins, have been looking at transitions in the career development of athletes and coaches. From their research undertakings in Australia, an interesting finding, not previously documented, was that coaches generally were reluctant to consider new careers outside of coaching, hence their awareness of non-coaching occupations tended to be vague and general (Blann & Hawkins, 1993). What this indicated from Professor Blann's point of view was that coaches cannot, and will not, encourage athletes to consider alternative career paths, as long as they do not understand the need to do so for themselves. Professor Blann believed that the limited success of programs in the USA was due in part to the reluctance of administrators and coaches to understand, or fully appreciate, the need to assist athletes with lifeskill programs. He also argued that this problem would remain as long as administrators and coaches perceived lifeskill programs to be a peripheral need in developing athletic performance.

In summary, Professor Blann's major focus has been to convince professional sporting bodies to develop support programs for athletes. Professor Blann believes that as a consequence of the high profile of these sports in the USA, his challenge is to teach professional sport performers how they can combine their business needs with the individual needs of the athlete, a challenge he is yet to see become a reality.

Summary of the USA Researchers

The majority of research that has been undertaken on lifeskill programs for elite athletes has been carried out in the USA. Despite this extensive research, which has clearly indicated the need for such programs, the leading researchers all believed that the system of sport within the USA had not fully grasped the concept. Although it appeared that the college system of sport had developed successful programs, the researchers argued that they still had a long way to go before lifeskill programs for elite athletes were entrenched in the system of sport in both amateur and professional elite sport. It is also ironic that Professors Danish and Petitpas are now working mainly in non-elite sport, because their work in elite Olympic sport has been stifled by the lack of financial support. Professor Blann argued that the large amount of money involved in professional sport is a key factor in explaining the lack of development of lifeskills programs.

The Programs

The impact of USA research is currently being felt in the national sports organisations of the United Kingdom, Canada, and the United States. This section highlights the information gathered from interviews about what existed in 1993, what organisational attitudes prevailed at that time, and what was being planned for the future. The scale of sport is greater in the USA than in Canada and the United Kingdom, as well as in Australia, because of a much larger population. In addition, the vast college system and the scale of professional football, baseball, basketball, and ice hockey means that there is a greater need to consider a range of issues that affect highly committed athletes, including the impact of retirement from professional sport. The following section examines lifeskills education in the United Kingdom and Canada, and then includes a substantial review of the programs existing in the USA in 1993.

United Kingdom

The structure of elite sport is first discussed to provide a framework/context to consider the development of lifeskills programs for elite athletes.

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The structure of sport in the United Kingdom. The structure of sport in the United Kingdom was not too dissimilar to Australia, that is, professional sports existed, but not to the same diverse and/or large scale as in the USA. Thus, elite amateur or Olympic sport is the major context for nurturing full-time elite athletes. The state/regional sporting organisations were the main bodies representing sport and they administered programs to encourage participation as well as elite performance. The coaching education program and accreditation procedures were also in line with the Australian (National) Coaching Council procedures where coaches must participate and pass courses before being eligible to coach at club, state, and national levels. The United Kingdom, like Australia, had an excellent infrastructure of sport, but without the geographic difficulties that inevitably influence a country the size of Australia.

The United Kingdom had 16 coaching centres, which were similar to Australian Regional Sports Assemblies. The coaching centres were the responsibility of the National Coaching Foundation. The United Kingdom Sports Council, which was similar to the Australian Sports Commission, was moving quickly to encourage the introduction of a lifeskills program for elite athletes. The idea was being driven by Ms Sue Campbell, the Executive Director of the UK National Coaching Foundation, who visited Australia in 1994 to see, first hand, the Victorian Institute of Sport's ACE Program. In 1997 the initial framework for the introduction of a British Sports Institute was developed, with plans to have a formal opening in 1998.

The key organisations involved in developing such a program are likely to be: the National Coaching Foundation, the Sports Council, and the British Olympic Committee. It was obvious that the structure of sport in the UK would allow an easy introduction of a lifeskills program, but the discussions in late 1993 involved funding and management of such facilities. Should the Sports Institute go ahead, Ms Campbell believed that the timing was perfect for the United Kingdom to introduce lifeskills programs, as British sports administrators were re-assessing all aspects of sport, particularly as a result of poor performances at recent Olympics. In fact, a report titled <u>Putting the Great Back</u> <u>into Britain</u> was investigating all matters relating to sport and Ms Campbell believed that lifeskills programs would be part of the review and discussion process.

Existing services for assisting elite athletes with lifeskills. The United Kingdom did not offer a lifeskills program for elite athletes in 1993, although the Football Association (FA) offered a basic program, where a very small number of players who had been identified as having the potential to play professionally were invited to attend. This was a residential program where education and welfare issues of the players were monitored. The Football Association program was an effort to produce outstanding professional players. To do this, it provided a rescheduled education and training program for 14-15 year olds. Although the program had been operating since 1985, very few players have come through from it to the professional game. There were criticisms that this residential program did not produce excellence in sport and that there was a general lack of support given to young players who left as a result of not meeting the performance standards. In addition, while some time was given to education and lifeskills, the emphasis of this program was on intensive soccer training, not usually available to this age group. Another program in progress was the Goldstart Program, introduced by the British Olympic Association in 1989. It was designed to assist Olympic athletes with education, career, and personal concerns, which had arisen as a result of competing at an elite level. Ms Campbell felt that this program was not systematic in its approach and was problematic in its programming, that is, it introduced support to athletes in a reactive way rather than intervening in a proactive way.

<u>Analysis of the situation in late 1993.</u> The career, education, and lifeskill needs of elite athletes in the UK were not very different to those in Australia. Most athletes needed to work or establish a solid education base to enable them to make career choices. Ms Campbell and her colleagues had a vision, one that included the introduction of a similar program to that which was operating at the Victorian Institute of Sport. There was little to be learned from the UK system, which was itself learning from what existed in Australia. Perhaps this provided some confirmation that the ACE program was being seen as an innovative strategy aimed at fostering the overall welfare of the athlete.

<u>Canada</u>

<u>The structure of sport in Canada</u>. The following review of the Canadian sporting structure during 1993 provides context for understanding the developments that have taken place in lifeskill education.

The structure of sport in Canada and Australia were similar, in that the Canadian system was made up of the Olympic Council and Sports Federation, and incorporated provincial or regional sporting associations. Sporting clubs

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were the major feeder group to sport rather than the college system, as in the USA, although Canadian colleges do offer sporting scholarships for major sports such as baseball and ice hockey. Volunteers played an integral role in administering sport at club level.

Canada created its first lifeskills program for elite athletes in 1985, as part of its program for Olympic athletes. The program operated as part of the Canadian Olympic Association, and was organised as part of the Canadian Olympic Athlete Career Centre (COACC). Its main focus was to assist athletes with their career and educational needs. The services were available to all "carded" athletes, that is, athletes who had achieved approved rankings by way of their performances at Olympic, Commonwealth, and Pan Pacific Games.

The services of the COACC included: resume preparation, letters of support, job referrals, developing business cards, retirement assistance, career counselling, interview preparation, aptitude testing, and job searching techniques. The Centre's Headquarters located in Ottawa was managed by Ms Sue Holloway. Since the approval by the Canadian Olympic Association Executive Committee for the COACC in 1988, several centres had been planned throughout Canada. The first, in Calgary, had been operating with a great deal of success, according to Ms Holloway. By 1993, there were five centres operating at Toronto, Calgary, Montreal, Vancouver, and Ottawa, each one employing a consultant on a part-time basis, who became the contact for athletes living in or around that location. Ottawa was the exception, as Ms Holloway was employed on a full-time basis. Budget constraints had delayed the

development of further centres that were expected to commence operations in 1994/95.

In 1990, the COACC introduced a new program called the Shadow Program, which was designed to give national team athletes the opportunity to explore career options in the field of their choice by "shadowing" professionals in that area for two to five days. At the time of the study more than 70 national seminars had been organised around the country. The COACC also coordinated countrywide sport specific seminars for national teams every two years. Athletes were subsidised to attend the program by their respective sporting body. The total budget for 1990 - 1993 was in the vicinity of \$800,000. Ms Holloway believed the regionalisation of athlete career and education services would provide a much-needed local resource for athletes.

<u>Analysis</u>. The COACC was attempting to move towards an intervention program aimed at Olympic, Commonwealth, and Pan Pacific athletes. The introduction of the centres in Montreal and Vancouver, would lead to the service taking on a decentralised approach. The only obvious criticism was the lack of service integration. Despite this, Canada had an athlete-driven program, based on a sound philosophy, which was seen as important to maintain. This was made evident in a report published in 1993, <u>The Status of High Performance</u> <u>Athletes - Canada: Fitness & Amateur Sport</u> (Ekos, 1993). It was suggested that an integration of athlete career and education programs with other support systems would be most beneficial.

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United States of America

Lifeskills education and the structure of sport in the United States. The structure of sport in the USA in 1993 represented a fundamentally different system to that in Australia, as most elite athletes came through college-based sports scholarship programs. Research has shown quite clearly that elite athletes in the USA face career transition problems when they attempt to combine elite sport with alternative education/career paths (Blann, 1989, 1992; Broom, 1982; Curtis, 1988; Hawkins & Blann, 1993; Petitpas, Danish, McKelvain, & Murphy, 1992), yet there had been little attempt to address the issues. The USA research tour involved the Women's Sports Foundation, the National Football League (NFL), the National Basketball League (NBL) and the United States Olympic Education Centre (USOEC). These organisations were selected on the advice of researchers in the USA who felt they would provide evidence valuable for this research.

(i) <u>The Women's Sports Foundation</u>. The Women's Sports Foundation (WSF) is a non-profit educational organisation that is dedicated to promoting and enhancing the sport and fitness experience for all girls and women. One of its founding members was Billie Jean King, who in 1974, together with four other women, created the Foundation. Its main programs at the time of the review were Educational Opportunities and the Advocacy and Recognition Program for Women in Sport. An Advisory Branch provided expertise in areas of Sport Psychology, Sociology, Administration, Sports Marketing, Exercise Physiology, and Sports Medicine.

The Director of Athlete Services, Ms Yolanda Jackson, was investigating the introduction of an Athlete Career and Education Program as part of a trust that was set up in honour of the late Arthur Ashe. The philosophy behind this program was to promote the importance of education in the lives of African-American female athletes. One major area of consideration was how it would be received by the athletes' agents and coaches, who, it was thought, might not perceive the need for a lifeskills training program. One of the main motives behind wanting to introduce a program was that African-American female athletes, like all other athletes, need support to assist them with life as an elite athlete and with their transition from elite competition. The program operated by utilising workshops and social functions; it did not offer individually designed support programs. According to Ms Jackson, this weakness in program delivery was expected to be addressed in the future to gauge success of the program because there was no opportunity to speak with athletes. There was also great difficulty in accessing formal evaluation records and written material on programs held to date.

(ii) <u>The National Football League (NFL)</u>. The Director of Player Programs for the National Football League (NFL), Dr Len Burnham, believed the appointment of a Visionary Commissioner had resulted in a productive re-think of player education/career programs within the NFL. In particular, he believed that this appointment was improving opportunities for retired players and assisting them with the transition from professional football. Since 1990, the NFL had introduced four new programs related to athlete career preparation including: A Continuing Education Program, a Career Transition Program, a Financial Education Program, and a Family Assistance Program. The programs were facilitated by consultants and are briefly described.

The Continuing Education Program (CEP) was designed to assist athletes who were about to retire from the NFL, or who were trying to re-enter educational institutions. It provided the financial and counselling support necessary for returning to study, by establishing the needs of each athlete.

The Career Transition Program (CTP) provided a pre-retirement seminar, career planning, and a work experience program within selected business organisations. The aim of the program was to provide practical seminars that would assist the players to deal more effectively with their retirement from the NFL.

The Financial Education Program (FEP) provided information to players on investment, insurance, and taxation, that were important issues as the average player's earnings were between \$400,000 and \$500,000 a season and, according to Dr Burnham, some players did not always understand the responsibility associated with earning this amount of money. Despite some initial teething problems, the NFL had a successful workshop, which all players attended.

The Family Assistance Program (FAP) was designed to provide services for players and their families in non-football matters such as marriage counselling, parental care, alcohol, and drug counselling. More than 140 psychologists and social workers operated throughout the USA to assist in this area. According to Dr Burnham, it was one of the most utilised services and indicated that many players had difficulties filling the role of a professional footballer or the combination of that role with the responsibilities to a partner and family. Although the NFL should be commended for introducing such services, it can be criticised for only offering the programs in a workshop format, with the exception of the FAP. It must be recognised that some athletes deal totally with the present and pay little attention to needs other than those deemed to be immediate concerns, so they are unlikely to attend voluntary workshops. It is suggested that a more effective approach would be individual assessment of players before accessing workshop programs to sensitise them to future career and education issues. This approach should then be followed-up with some form of action plan when the workshops have been completed. Most of the services offered by the NFL appeared to be reactive by nature.

Despite this criticism, the NFL had given a commitment to its Players Association to provide an improved level of support and although it would not be compulsory, Dr Burnham was certain that promoting the findings of a recent unpublished research report to players would assist in educating them in the importance of career development. Dr Burnham stated that the report found that players with a college degree, on average, played 50 percent longer than those who did not have a college degree. It was expected that these results would be used to "sell" career and education programs to coaches, as well as to athletes.

(iii) <u>The United States Olympic Education Center (USOEC)</u>. The United States Olympic Education Center (USOEC) was established in 1985 to assist elite athletes to combine a college degree and elite sport. Located at North Michigan University, the Center was the only Olympic residential program in the USA where athletes were able to combine college with training for top national and international competitions. The USOEC also offered the only national Olympic-bridging program in which 'retired' Olympic athletes were able to finish their education with the same benefits as resident athletes. The USOEC was the home of Olympic badminton, boxing, cross-country skiing, ski jumping, speed skating, and luge. In 1992, the Centre employed an Education Officer on a 20 hours per week basis. Her responsibilities included assisting the athletes with tutoring and other educational support programs as they arose. The number of athletes at the Centre was 80; however, it had a capacity to take up to 300. Besides the USOEC in Michigan, there were three other Olympic-training centres that were located at Colorado Springs, Colorado; Lake Placid, New York; and San Diego, California. These centres did not offer educational programs.

To be eligible for the USOEC, athletes had to be qualified in the top 20 in the USA. Each resident was then provided with free room, board, and tutoring. The United States Olympic Committee supported the Education Centre by providing \$79,000 per year in funding. They also provided \$27,750 to support tuition scholarships each year. The State Government of Michigan provided an annual amount of \$600,000 that funded the athletes' room, board, tutoring, transportation, and USOEC administration staff salaries. The remaining financial support came from governing bodies of sport which had residential programs located at the Centre. This financial assistance provided coaches' salaries, athlete tuition fees, and competition costs.

The Education Officer spent a considerable amount of time attempting to deal with the day to day problems that student athletes face, such as time scheduling and tutoring. The position did not appear to have a framework to enable athletes to be given counselling and education programs for their career/education and personal development.

(iv) <u>National Basketball League (NBL</u>). The National Basketball League (NBL), in conjunction with the National Basketball Players Association, introduced a Career and Education Program in 1987. With a budget of \$5 million, it provided services to some 320 athletes. The Program included the following three areas: Internship, Degree Completion/Education Training, and Professional Athlete Career Education (PACE).

The Internship Program provided opportunities for athletes to gain firsthand experience working in the business of their choice. It was an off-season program for players with clearer ideas about a post-basketball career. It was a work experience program that exposed them to areas of career interest.

The Degree Completion/Education Training Program was developed to meet and support the needs of players studying at university, or who needed assistance with external study options. Assistance was provided in: completion of college degrees, enrolling in accredited home-study courses, participating in certificate programs, preparing for college entrance examinations, and remedial preparation for re-entry into college programs. This support was provided by a private education consultant from the Professional Athlete Career and Education (PACE) organisation.

PACE Sports Inc. was an organisation specifically designed to provide career counselling and planning assistance to athletes. PACE offered services to athletes on a national basis and included: career testing, counselling, education planning, and corporate internship programs. PACE acted as a consultant to the NBL players in the above areas and also provided seminars for players and their wives. The seminars featured entrepreneurial opportunities, presentation skills, resume development, and financial services.

Other programs the NBL had developed included: The Rookie Transition Program (RTP), which provided the opportunity for new recruits to attend two half-day lectures, designed to assist players to prepare for the professional league. Also, the Legends Foundation provided past NBL players with financial grants to assist them when they experienced financial difficulties.

Observation and discussions revealed that, although a lot of money was being spent by the NBL, there was very little evidence of its effectiveness. No documentation was available on assessment procedures or, in fact, on the nature of the services at all; the information was gleaned from discussions only.

Summary of the USA Program

A common statement made by most of the people I spoke to, was that with less than one percent of college athletes making professional sports teams, lifeskills programs were urgently needed at the college level. This, of course, supported the viewpoints of Professor Danish and Professor Petitpas, who were consistently advocating the need for college athletes to have access to an intervention program. Considering the intensive research, which has been undertaken in the USA, the professional bodies had only chosen to initiate a limited number of programs that addressed some of the existing problems. Not one sporting body had asked the question: Where should such a program head in the future? It was all about "patching-up" problems that existed rather than creating an environment to alleviate future problems. In that regard, such programs may be seen as a "panacea" by the sporting organisations.

Impact on the Future Development of the ACE Program

There is no doubt that, as Australia continues to be internationally recognised as a successful sporting nation, there will need to be a fully integrated athlete lifeskill program. The research tour clearly highlighted the importance of ensuring that the introduction of lifeskills programs should be holistic, innovative, as well as being appropriately integrated with sport science and sports medicine, competition opportunities, and elite coaching. This step will ensure that as the programs continue to develop, Australian sport will view such programs as an integral part of the development of the athlete and not just as an adjunct to elite performance.

An important point highlighted by the research tour was the need for Australia to undertake its own research into lifeskill programs. To date, Blann and Hawkins (1993), Gordon (1994), and Fortunato (1997) have completed the only empirical studies. These focussed on the needs and experiences of elite athletes and coaches. More research is urgently needed, particularly in the area of the evaluation of programs for elite athletes.

Summary of the Victorian Institute of Sport's ACE Program

The VIS has been in operation since mid-1990 and employs a Career and Education Manager, one part-time and two full-time advisers, who are responsible for servicing the career and education needs of some 700 athletes across 38 different sports. As athletes are often at different stages of development, a case management concept, that is, individual athlete assessment, and training courses, has become the most useful process for providing assistance. The extensive workshop program is designed to enable the athletes to deal more effectively with the various environments that confront them, during their career in sport. It is the stated philosophy of the ACE Program that by developing both the sporting and personal abilities of each athlete, the best performance will be achieved in all areas of life, including sport itself.

Conclusion

The research tour highlighted the need to ensure that the ACE Program became a fully recognised training program, that utilised the sporting skills and attributes of the athlete as well as aiming to develop recognised job competencies and skills. The Department of Education, Employment and Training (DEET) funded a feasibility study to investigate the possibility of the ACE Program becoming a recognised sport training qualification. This feasibility study was completed in August 1994 and a summary of the recommendations is presented in Appendix A. The development of a competency based curriculum for each of the workshop areas was completed in mid-May, 1996, (see Appendix B).

As a consequence of information gained from elite athlete programs offered in the UK, the USA, and Canada, the existing ACE program was further enhanced in a number of ways. The research tour provided a sound basis for ensuring that the program continued individualising its athlete support, utilising a case management model, that is, completing a full assessment of each athlete to ascertain what level of support could be applied in respect to educational, vocational, sporting, and financial areas. As a result of viewing the consequences of a lack of integration within the athlete career and education, sports science and medicine, and coaching fields, a provider network was established, and the ACE objectives were modified to measure the level of integration presently occurring. The provider network included establishing an annual sports program review which identified the need for sharing information more effectively. It involves all providers and coaches reviewing the requirements of the athlete, and possibly the sport that they represent.

The analysis of the tour information demonstrated the need for more research to be undertaken within the Australian context, and as such, recommendations were made to the Australian Sports Commission to also fund research in the future that can demonstrate direct application to the existing ACE program. The need to standardise the existing ACE training courses to ensure quality control has resulted in the ACE program now delivering accredited courses with generic competency standards. This will enable athletes to receive the same level of training irrespective of the state in Australia in which they reside. The motivation for moving in this direction came from what was occurring internationally, where it was found that there was a general lack of continuity in delivering training courses across sports and regions. The international findings also provided information to support the existing ACE program, and suggested ways in which a very good program might continue to evolve in the future.

Chapter 4 Methods

At the time of conducting this research, the VIS ACE program was unique in its conception and operation. It was a continuing program of career education support for elite level athletes, covering a wide range of career preparation issues. The aim of this study was to examine the influence of the program on four aspects of the athletes' lives that are central to their current personal and sport development, namely, performance, mood states, psychological wellbeing, and self-concept. The specific measures of the mood, well-being, and self-concept variables were selected on the basis of their established reliability and validity. This was not the case for the performance scale, which was created for the purpose of the study, as there was no established measure, which examined performance across a range of sports.

Participants

Thirty newly appointed Victorian Institute of Sport (VIS) scholarship holders, from over 400 VIS athletes on scholarship, volunteered to participate in the study. It was decided to study new scholarship holders because established VIS athletes were likely to have had some contact with the ACE program, whereas the new athletes were naive to the program. The sample originally involved 30 participants, two (one male, one female) from each of 15 sports. Fifteen sports were representative of the full programs operating at the VIS. Therefore, it was appropriate to randomly select one male and one female athlete from each. As I was employed by the VIS, I was able to seek out the participants by requesting a list of volunteers from each sport, from whom the one male and one female per sport were randomly selected. There were 15 withdrawals throughout the research period due to a number of factors including injury, retirement, and relocating interstate. As a result, a total of 15 athletes is being utilised in the final analysis. These included seven males and eight females from the following sports: athletics, badminton, canoeing, cycling, hockey, squash, waterpolo, diving, swimming, table tennis, weightlifting, and yachting. The average age of the final sample was 20 years.

The 15 withdrawals occurred as a result of athletes taking-up scholarships in other states (6), incurring injuries (3), or choosing not to continue their scholarships or their study for personal reasons (6). Of the 15 athletes who completed all the data requirements, eight participated in all aspects of the treatment (ACE program), whereas a further seven withdrew within the first three months of the program. This was due to a perceived lack of time, withdrawal of their scholarship, and other, unknown reasons. Thus, eight participants were involved in the full program, while the remaining seven continued to complete the psychological tests for the whole year but did not participate in most of the ACE Program. Their data was examined for the purposes of comparison.

Design

The study adopted a single-case design, that is, the participants' results were analysed on a case by case basis (Kazdin, 1982), but some modifications were necessary because of the practical demands on the athletes. The single-case design was preferred because of the added flexibility it offers in a situation like the present one, where scholarship athletes received the ACE program following the same framework, but were presented with individualised support, based on assessment and on the course of counselling. Testing was carried out over a twelve-month period commencing in November 1992. The participants were representatives from 15 sports and were introduced to the treatment after a fourweek baseline period, during which the four dependent variables were monitored. It was not necessary to adopt a multiple-baseline approach because the athletes were from a range of different sports, so there was no common influence there, whereas most of their experiences with the ACE Program were individual, again reflecting little or no common experiences at the same time. On the other hand, the commitments of the VIS scholarship program necessitated commencement of the ACE Program early in the year. Kazdin (1982) recommends a three-point minimum baseline, so a four-week baseline was adopted for all athletes.

Psychological tests were completed by the athletes at the start of the baseline period, and then on a regular basis throughout the baseline and treatment phases, as were the self-rating of performance measures completed by the athlete and the coach. The tests measured mood, perceived performance, psychological well-being, and self-concept. It was felt that the amount of testing could become excessive, possibly having a negative effect on participants' cooperation. Because self-concept and well-being were considered to be more stable variables, it was decided that it would be more meaningful to measure them monthly. Performance rating was reported every 14 days by the athletes and monthly by coaches. Mood states were measured on a weekly basis. The practical need to start the program after four weeks meant that only mood states

provided an adequate baseline for the single-case design. The other measures were treated in a case study mode. In the circumstances that prevailed, it was decided that this was the ethical approach to adopt, permitting a very large amount of information to be collected without imposing excessively on athletes who had many other commitments.

Measures

Athlete and Coach Performance Rating

A measure was developed specifically for this study, as there was no established measure of performance as perceived by the athlete that could be used across sports of very different nature, as those represented in this study. The perceived performance ratings of all participants were assessed by a generic scale that was designed to be equivalent across sports, and could be completed by both the coach and the athlete. In pilot work, a range of performance-related criteria were identified by coaches. These included training variables, such as effort, skill development, and conscientiousness, along with various competition criteria, such as effort, skill, tactics, performance outcome, and response to outcome, and were taken into account overall rather than individually. The scale was piloted and assessed for clarity, comprehensibility, relevance and discriminability, by six VIS coaches and ten VIS athletes, not involved in the study. In the main study, and in the pilot work, the athletes' coaches were not privy to athletes' ratings, so the athletes' ratings were not influenced by any need to satisfy the expectations of their coaches. Similarly, coaches' ratings were not accessible to athletes, so athletes too were not influenced by the reports of their coach. The athletes completed the scale on a fortnightly basis whilst the

coaches assessed athletes on a monthly basis due to different involvement of coaches with each athlete.

Because of the time scale of the study, that is, it had to start at the beginning of the scholarship year, it was not possible to carry out detailed reliability and validity tests. Performance in training and competition would be expected to fluctuate from occasion to occasion, so assessment of test-retest reliability would not be appropriate. Similarly, while it is claimed that the total rating from training or competition items reflects overall perception of performance in that mode, it would not be expected that aspects like effort, skill, outcome, and response to outcome, would necessarily vary together, so that internal consistency reliability would not be a meaningful measure. The mode of construction, based on VIS athletes' and coaches' comments about important aspects of performance in training and competition and the responses of different VIS athletes and coaches to the scales, as well as their informal comments following formal administration of the scales, provided some degree of face and content validity. The final version of the test is presented in Appendix D for athletes, and Appendix E for coaches.

Profile of Mood States

McNair, Lorr, and Droppleman (1971) published the Profile of Mood States (POMS) as a means of measuring "right now" types of mood states, particularly for use with counselling of psychiatric patients. Morgan (1978) began to utilise the POMS in sport research, and since then the POMS has been cited in over 50 sports related published papers (e.g., Craighead, 1986; Durtschi & Weiss, 1986; Miller, 1985; Morgan, 1980; Riddick, 1984). With this in mind, and the fact that 15 different sports were involved in the present research, the POMS was chosen as the most appropriate measure of mood states.

The POMS measures six mood states represented by sub-scales, for which scores are derived by response to 65 items. The states identified are: tension, anger, depression, fatigue, vigour, and confusion. Participants responded to the 65 items by marking a number corresponding to the phrase, which most closely related to how they felt at the time of completing the proforma. The five phrases were "Not at all", "A little", "Moderately", "Quite a bit", or "Extremely". Each item was scored on a 0 to 4 scale with 0 = "Not at all" and 4 = "Extremely". Raw scores on the sub-scales were converted to percentile scales using a standard profile sheet. The Profile of Mood States questions and Profile Sheet is shown in Appendix E.

Through the use of graphic representation, a phenomenon termed by Morgan (1977) as the "iceberg profile" provides a description of a profile typically associated with successful performances in elite athletes. It portrays high vigour and lower levels of tension, depression, anger, fatigue, and confusion, compared to the 50th percentile. Using the POMS, the patterns of six mood states were monitored throughout the baseline and treatment phases. <u>Self-Description Questionnaire III (SDQIII)</u>

Marsh (1989) developed the Self-Description Questionnaire (SDQ) to measure multi-dimensional self-concept. The SDQ examines four areas of academic self-concept that are considered to combine and reflect "academic selfconcept", while the other eight areas are non-academic self-concept, and a general self scale. Combining these scales provides an overall general selfconcept score.

Participants responded to each of the 136 questions by describing how they felt about themselves in relation to the questions. Each sub-scale column was added utilising a reverse scoring system, that is, items marked with an asterisk were subtracted from the score. Using an eight point response scale, with scale ratings from 1 = "definitely false", to 8 = "definitely true", participants indicate how true or false each item was as a description of themselves (see Appendix F). The sum of these responses then provided a total description of the self. The SDQ has well-established reliability and validity (Marsh, Richards, & Barnes, 1986). The SDQIII, the adult version, was used in this study. The coefficient alpha estimates of internal consistency reliability, for the SDQIII subscales, based on a series of studies (2,436 sets of responses), represent coefficients from 0.76 to 0.95, with a median alpha of 0.89, which is high. Psychological Well-being

Many concepts relate to psychological well-being. These include psychological well-being itself, quality of life, life satisfaction, happiness, morale, and positive and negative affect. Measures have been developed to assess all of these related variables. Herbert and Milsum (1990) carried out a substantial review and analysis of the most commonly used scales. They demonstrated the lack of clarity in this area by finding in their analysis that experts frequently assigned an item from one scale measuring positive affect, for example, to another scale, such as happiness. They reported the clarity and stability of items from the analysis of these widely used scales.

For a study on recreation and well-being in older adults, Morris, Fortunato, and Spittle (1995) selected from Herbert and Milsum's analysis, four of the most clear, simply stated, and stable items relating to each of morale, positive affect, and life satisfaction, the concepts of well-being most widely used in previous research; thus, creating a simple and brief measure of psychological well-being. Response to each item was made on a 5-point Likert scale with verbal anchors/descriptors, 1 = "Strongly Agree" to 5 = "Strongly Disagree". Correlations between scores on the three sub-scales and between sub-scale scores and the overall well-being score were, life satisfaction with morale, .74, Ls with positive affect, .68, and morale with positive affect, .80, Ls with overall well-being, .89, affect with well-being, .90, and morale with well-being, .90. A confirmatory factor analysis identified three factors that were clearly aligned with the proposed sub-scales, but also indicated that these were closely associated in a second order factor, identified as psychological well-being. The scale was used effectively in the study of recreation and well-being in older adults (Morris et.al., 1995), where each sub-scale was considered separately, and overall well-being was also employed as a variable.

This measure of psychological well-being was selected because of its breadth in measuring subjective well-being, combined with its simplicity and brevity for multiple administrations to each participant in the present study. The scale is shown in Appendix G.

Treatment

The treatment used in the study was the 1992/93 VIS ACE program. This program followed a systematic plan, which identified the needs of individual athletes through athlete assessment, involving both questionnaires and interviews to evaluate career, education, financial, and personal development. The ACE Program then facilitated skill development in these areas through a series of workshops. The ACE Program also included investigation of the goals of each athlete in their sport, their resources - including financial and social - along with the educational and career strategies they needed to consider.

Each athlete met with the researcher for an initial session of about one-hour. This first contact was to investigate the level of support required for the athlete in the following areas: sporting, educational, career, personal development, and financial needs (see ACE Assessment, Appendix H). This assessment provided an overview of how effectively the athlete was integrating the demands imposed on them and provided the necessary framework for developing an individualised plan.

The plan first included the establishment of an annual competition calendar that was then integrated with scheduled educational/career commitments. Second, what the objectives were in each area were identified, along with an overview of the personal skills needed to effectively meet each commitment, (e.g., time management). Finally, the financial implications of the athlete's plan were considered and options were discussed. Each athlete then met the researcher on a monthly basis to monitor the planned process. Also, each athlete attended the relevant personal development workshops co-ordinated by the Victorian Institute of Sport. The workshops were selected from the modules in Table 4.1.

Table 4.1.

Topics and Modules in Personal Development Workshops

Module 1	Module 2
PRESENTATION	CAREER PLANNING
Public Speaking	Maximising the Resume
Television Training	Making the Right Career Choice
Understanding the Print Media	Getting the Job You Want
Radio Training	"The Job Interview"
Effective Vocal Skills	Developing a Sponsorship Resume
Deportment and Grooming	
Effective Listening Skills	

Module 3	Module 4
PERSONAL DEVELOPMENT	EDUCATION
Effective Time Management	VCE Study Skills
Goal Setting	Tertiary Study Skills
Financial Planning	Returning to Study
Leisure: How to Balance Your Time	Selecting Courses
Being An Elite Athlete	Career Planning for Graduates
Increasing Your Confidence through	English as a Second Language
Assertiveness	

Overseas Travel

Injury PreventionModule 5The Role of Parents in Elite SportSPORT SCIENCENutrition in Sport & Healthy EatingHeart Rate & Lactate MonitoringRelaxation TechniquesDrugs In SportNegotiation SkillsBasic Self MassageWomen's HealthHeart Rate & Lactate Monitoring

Issues that appeared to be most warranted were integrated planning skills, goal setting, time management, and assertiveness.

Following the introduction to the study and the initial testing session, testing continued at the frequency prescribed for each measure, but the ACE program was not introduced for four weeks. This was the baseline period for the single-case study of mood states. After four weeks all participants were introduced to the ACE program, including interviews, workshops, and counselling sessions, which then continued for the rest of the year on a regular basis. Detail of this is described earlier in the treatment section.

Procedure

Athletes are awarded a scholarship on the basis of their ranking, both nationally and internationally. Initial support for the research was gained from the VIS Executive Director, Dr Frank Pyke, and as the ACE Co-ordinator, I was able to work with the scholarship holders as part of my assigned role. Thirty athletes participated from 430 VIS scholarship holders. They were new VIS scholarship holders from 15 sports, reflecting a range of activities. There was a male and a female from each sport. They were invited to take part in the research, then the research was explained, they were told that they were free to withdraw at any time, that their results would be confidential, and informed consent proformas were completed (See Appendix I). In the first session, in November 1993, the psychological tests were administered to ensure that athletes clearly understood the requirements for each and these tests were repeated at regular intervals. The POMS was administered weekly, the athlete performance self-evaluation fortnightly, the coach evaluation of athletes performance, the SDQIII, and the psychological well-being scale were administered monthly. The completion of the questionnaires was carried out by each athlete at either the VIS administration office or at their respective training venues. This was often determined by the availability of the athlete. There were 15 withdrawals from the study during the research, due to injury, relocation, and early retirement. Following the introduction of the study and the initial testing session, testing continued at the frequency prescribed for each measure, but the ACE Program was not introduced for four weeks. This was the baseline period for the single-case study of mood states. After four weeks all participants were introduced to the ACE Program, following which interviews, workshop, and counselling sessions continued for the rest of the year on a regular basis as described in the Treatment section. Of the remaining 15 participants, seven left the ACE Program within the first three months, but continued to complete all the psychological tests for the duration of the study, leaving eight participants who completed tests for the whole study and remained in the Program for the year. Test scoring was carried out by a collaborator, as I was also the program presenter. Thus, no data was viewed or analysed by me, as the presenter, until after completion of the study, minimising the possibility

that in my presentation capacity, I might unconsciously influence the results by my treatment of different participants, based on their test results. Similarly, the collaborator was blind to the specific design and propositions of the research.

Research Propositions

Based on the literature reviewed in Chapter 2, which indicated that not only was retirement from elite sport a difficult transition to make, but also worries about the future during their careers could negatively affect athletes' mood, well-being, personal development, and performance, a number of propositions were generated. Because there was no research on the effects of career education and lifeskills programs in the literature, nor any related work on the proposed dependent variables, it was decided to locate these propositions at the end of the Methods Chapter when the design, treatment, and variables measured had all been described. This decision was reinforced by the feeling that had they been located at the end of the Literature Review as is conventional, the flow of propositions to results would be disrupted by the interpolation of Chapter 3 reporting the results of the international tour. The following proposed that: -

- 1. A year-long athlete career and education program (ACE) will produce positive mood changes in each of the six mood states on the POMS.
- 2. The ACE Program would produce positive changes and greater stability in performance ratings of athletes for training and competition.

- 3. The ACE Program will produce positive changes and then greater stability in performance ratings of coaches for training and competition.
- 4. The performance ratings of athletes and coaches will show a high degree of agreement.
- 5. The ACE Program will produce a positive change in psychological wellbeing.
- The ACE Program will produce a positive shift in self-concept, especially evident on sub-scales related to areas of ACE Program skill development for that individual.

CHAPTER 5 RESULTS

The Results section first discusses the sub-scales of the Profile of Mood States for the 12-month treatment period. Then performance ratings in training and competition are considered, comparing the ratings of coaches, as well as athletes. Results of the self-concept assessment and the well-being measurement complete the section. Profile of mood states and performance scales are considered in terms of each participant, whereas self-concept and well-being are grouped, because results are less variable. Participants who were involved in the program for the full twelve months are considered first for each variable, then non-participants, that is, those who did not complete the program.

Profile of Mood States (POMS)

Visual analysis is the main method used to interpret data, because all the baselines had to be four weeks in duration for logistical reasons. As many participants were also new to the VIS and to scholarships, there were many changes in the athletes' lives at the start of the year, so their baseline scores were not typical of the levels of those variables for these athletes. They produced some inappropriate celeration lines, so the Split Middle technique was not appropriate to use. The letter 'N' can be seen throughout the POMS graphs and indicates a zero reading. The vertical axis indicates raw scores. In all the POMS figures that follow the vertical axis refers to percentile scores.

Participants in the ACE Program

Participant 1

<u>Background</u>. The participant was a 19-year-old female squash player who had recently increased her level of overseas competition and commenced the first year of a university course. Her inability to combine study and an increasing competition schedule were major issues addressed during counselling sessions. Assistance was provided in the area of developing an annual plan, time management, and assessment.

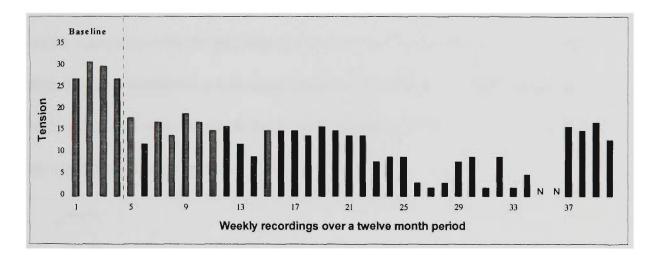


Figure 5.1. Participant 1 tension scores incorporating baseline and treatment periods.

Figure 5.1 shows quite clearly that tension steadily declined throughout the year. In the final four weeks of testing there was an increase, which might have been associated with concerns about adequate examination preparation. The participant competed in major competitions and selection trials throughout the year, and small fluctuations reflect this.

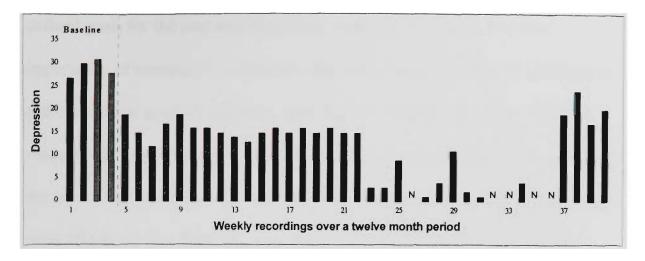


Figure 5.2. Participant 1 depression scores incorporating baseline and treatment periods.

Figure 5.2 demonstrates a gradual decline in the level of depression during the first 22 weeks. A further decline in the twenty-fourth week is also demonstrated which correlates with the participant's first international competition. The last four weeks demonstrate a substantial increase in depression, which might have been associated with the participant's poor preparation for University exams as a result of competing overseas.

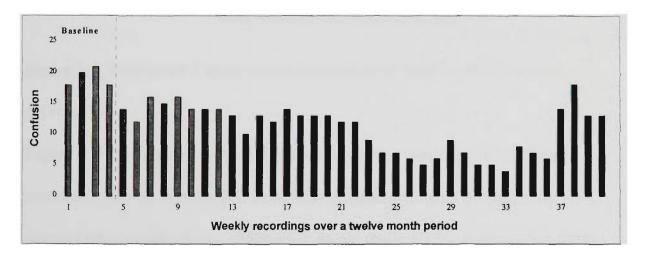
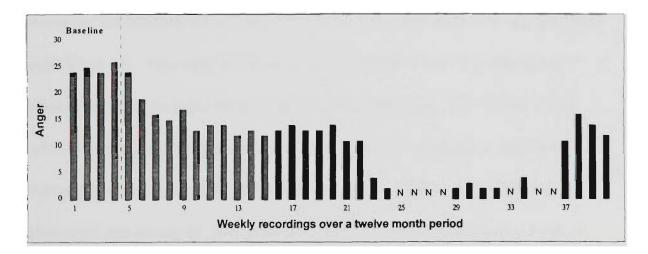


Figure 5.3. Participant 1 confusion scores incorporating baseline and treatment periods.

Figure 5.3 depicts a steady decline in confusion throughout the treatment period. The initial decrease might have been due to the participant establishing clearly defined goals for the year and identifying support to ensure she had every opportunity of meeting her competitive demands. She achieved both competitive and educational goals successfully, however, towards the end of the treatment slipped back slightly due to uncertainty about his examination preparation. At the twenty-second week, the participant dealt with her examination commitments more effectively and following a review of the year it was identified that her absence from University had contributed to the participant's feelings of being unprepared for the final examinations. This was reflected in Weeks 38, 39, and 40, where confusion levels were high.



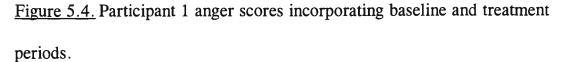


Figure 5.4 demonstrates a gradual decline in anger, which might have been associated with an improved level of time management, goal setting, and ongoing educational advice. Figure 5.4 shows that for a 14-week period, from Week 23 to Week 36, anger was below the six, a very low level. It also shows a substantial increase during the final weeks of study which correlates with tension, confusion, and depression levels, and may have been associated with the participant's self-perceived poor preparation for examinations.

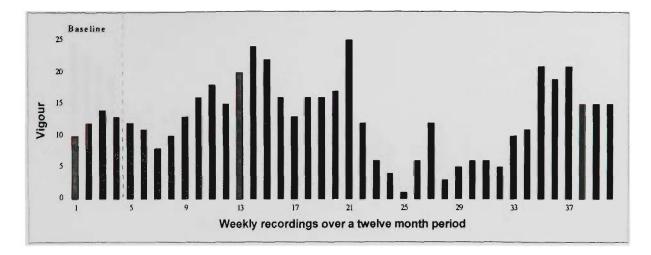


Figure 5.5. Participant 1 vigour scores incorporating baseline and treatment periods.

Figure 5.5 demonstrates that the participant had a rapid increase in vigour following the baseline period until Week 14. The graph then indicates a decline until Week 16. Two high points at Week 13-15 and Week 21 reflect direct correlation with the participant's competition preparation. Her vigour levels were at their highest just prior to competition and dropped again between competitions due to tapering or reduced training. At Week 25, vigour was almost nil and during the four preceding weeks the steepest downward trend is apparent. There was no competition or training issue, nor any concern raised in counselling sessions to explain this decline. Vigour increases again towards the end of the program.

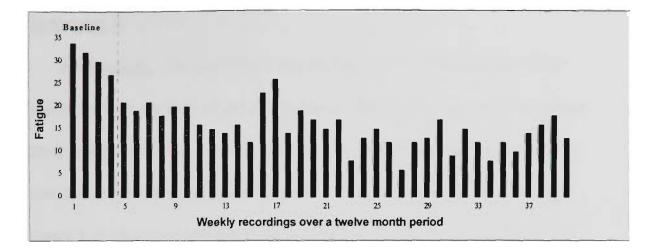


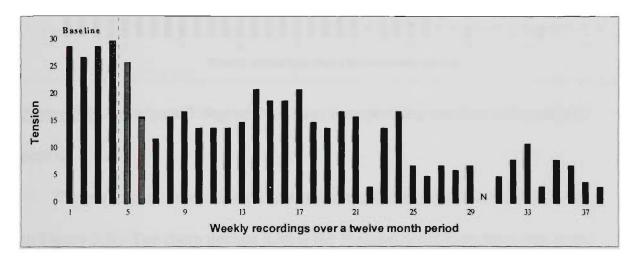
Figure 5.6. Participant 1 fatigue scores incorporating baseline and treatment periods.

Figure 5.6 indicates a substantial decline in fatigue throughout the treatment phase. Fluctuations during the year were in line with the training program that was designed to meet the participant's competition commitments. The most obvious increase in fatigue was seen during Weeks 16 and 17, which can possibly be explained by her training peaking index, as this was the time when training intensity was at its height.

<u>Conclusion</u>. The graphs for Participant 1 show quite clearly that all negative emotional levels, including confusion, tension, anger, fatigue, and depression, decreased throughout the treatment, while the positive mood, vigour, increased. The fluctuations in vigour, in the middle of the year especially, may have been due to the intensive training commitments, and the participant's first overseas international competition. Whereas the brief reversal of most sub-scales in the final three or four weeks appeared to be linked to perceived poor preparation for university examinations, related to the participant's competition schedule.

Participant 2

<u>Background.</u> The participant was an 18-year-old male track and field athlete who, at the time of the study, had commenced his first year of tertiary study and by mid-way through semester one realised that the course he had selected was not his chosen career path. Through the individual participant career and education assessment he was helped to totally reassess his future vocational program. This involved assessments, time management, goal setting, and a study skills program.



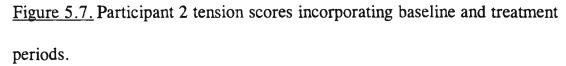
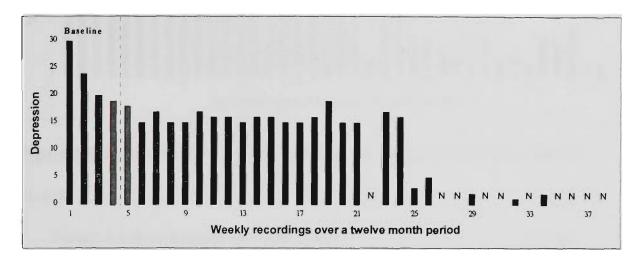
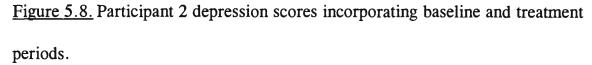


Figure 5.7 demonstrates an overall decline in tension levels. The hightension levels during the baseline period may have been associated with the problems the participant was having in adjusting to his new university program. This problem in the educational sphere may also account for the decrease, particularly for Week 7, where the participant, through the ACE program, had become more aware of his options and had developed strategies that would enable him to transfer to a more appropriate course. At Week 22, a substantial decline was demonstrated. There was no obvious reason for this occurring; however, it may have been associated with the participant's improved academic results, which were important, if he was to transfer to another course. The consistent lower levels demonstrated from Week 25 to Week 38 may have arisen as a direct consequence of the approval for the participant to transfer courses.





The participant experienced a substantial decline in depression levels as seen in Figure 5.8. The sharp decline during the baseline could have been due to the participant confronting the reasons for the feeling of depression. For 14 weeks of the treatment period, a stable pattern emerged which was consistent with the treatment provided in his vocational counselling. At the twenty-fifth week, Figure 5.8 indicates a sharp decline, which was at the time of the participant being accepted into an alternative tertiary course; the only proviso being he had to pass his first semester subjects, which at that stage were still in doubt. A study/skills time management program contributed to his successful completion of the semester, which resulted in his transfer. From Week 27, when his examination results were known, his depression levels declined to nil (N) and remained negligible for the duration of the treatment.

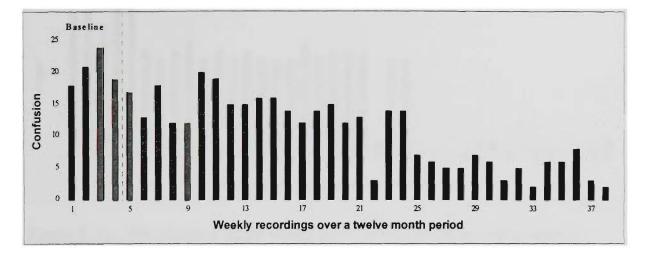


Figure 5.9. Participant 2 confusion scores incorporating baseline and treatment periods.

Figure 5.9 demonstrates an overall decline in confusion levels. Although the pattern shows some fluctuations, it does give an impression of a trend that declines across the study period, along with an exceptional decline at the twentysecond week. This rather sharp decline occurred at the same time as those in tension and depression and reflects the point when the participant was personally accepted into the new tertiary course. The overall decline may also have been associated with the participant's vocational counselling, which assisted him to identify the more suitable tertiary program.

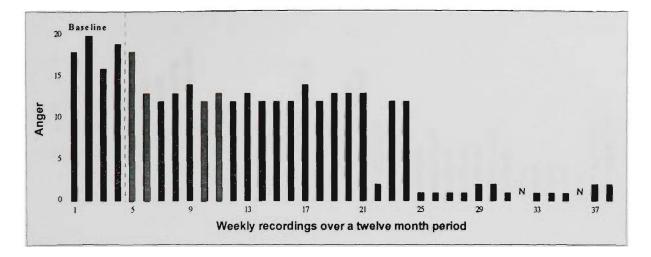


Figure 5.10. Participant 2 anger scores incorporating baseline and treatment periods.

Figure 5.10 indicates a decline in anger levels. The dramatic decline at the twenty-second week may be due to the participant's acceptance into an alternative tertiary program. The substantial rise in Weeks 23 and 24, however, may have been associated with the participant's concern about his pending results for semester one, in which he needed to do well in order for his transfer to be accepted. After his results were known, the graph indicates a consistent lower level of anger. Figure 5.10 shows a pattern more like Figure 5.8, that for depression, where an early drop is followed by a long stable period, then another sharp drop is again, followed by a thirteen-week period with little variation.

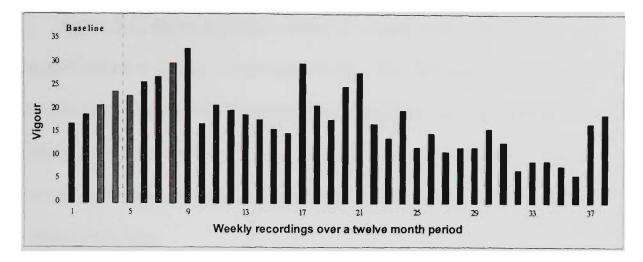


Figure 5.11. Participant 2 vigour scores incorporating baseline and treatment periods.

Participant 2 showed substantial fluctuations in patterns of vigour throughout the treatment phase, but general trends are present. Vigour is seen to be increasing during the baseline period and this trend continued for several weeks into the treatment. Following a sharp drop, gradual reductions in vigour occurred. After a period of more dramatic fluctuations around Weeks 17 to 21, the gradual decline in vigour continued. The peaks and troughs were due to the participant's tapering and periodisation of training, whereas the increase during the last two weeks was during his rest period.

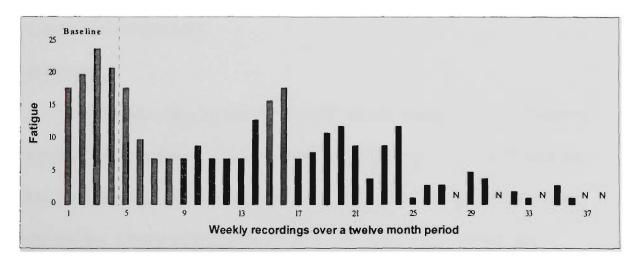


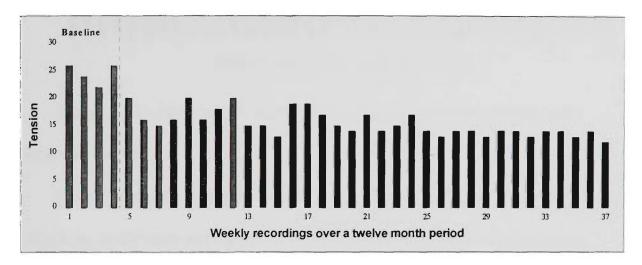
Figure 5.12. Participant 2 fatigue scores incorporating baseline and treatment periods.

Figure 5.12 shows substantial declines in fatigue with two main steps, first from Weeks 6 to 24 and then from Weeks 25 to 38. The fluctuation between Weeks 14 and 24 may have been due to the difficulties the participant faced in his study, combined with an intense training program. The noticeable peak in Weeks 14 to 16 is not consistent with other mood states, and does not relate to known life events.

<u>Conclusion.</u> Participant 2 had a particularly high baseline period for all emotional states. This can be accounted for by the fact that the participant had undertaken a university degree program that was on the bottom of his preference list. As a consequence of the treatment, which included a vocational assessment, and strategies to transfer to a more suitable degree program, a dramatic improvement in all emotional states was achieved. Vigour continued to fluctuate throughout the study period due to competition and training demands, and showed an overall decline during the study, although it was picking up at the end. Fatigue reached higher levels during post-competition periods. This may have been due to the combined demands of sport and study, resulting in no time to recover mentally.

Participant 3

Background. The participant was a 24-year-old female badminton player, who had been competing internationally for a number of years. Although she had been involved with the Victorian Institute of Sport for the last two years, she had not taken part in any of the treatment programs utilised for this research, due to residential location. The participant competed internationally, winning a number of major tournaments. During Weeks 10 to 15, the participant was preparing for her wedding. The treatment for this participant included an extensive personal development program, which involved more effectively identifying a career path within her existing organisation and clarifying both her immediate and her future goals.



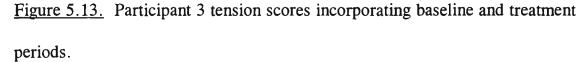


Figure 5.13 indicates a decline in tension during the first seven weeks, followed by a relatively stable tension level throughout the treatment period. The gradual decline in the first seven weeks may have occurred as the participant recognised the need to develop a plan of action, to more effectively combine her badminton and career aspirations. The advisory sessions within the initial weeks were focused on the development of a more systematic way of dealing with a rather unique and exceptionally demanding year, which involved marriage, international competition, and intense work commitments.

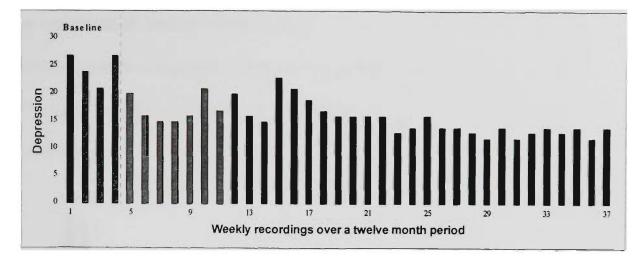


Figure 5.14. Participant 3 depression scores incorporating baseline and treatment periods.

Overall, depression declined consistently, as seen in Figure 5.14. The increases, at the tenth and fifteenth week were perhaps due to the participant's application for leave to compete internationally. Following the fifteenth week, Figure 5.14 shows a consistent, if small, decline.

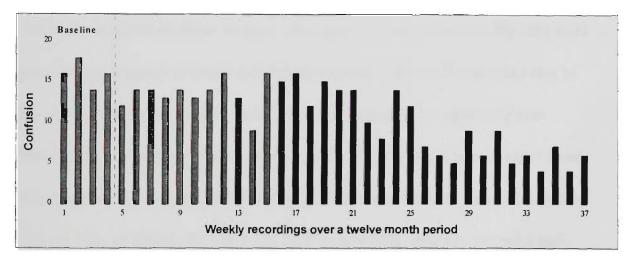
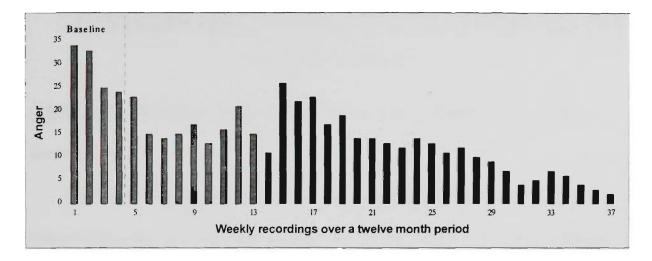


Figure 5.15. Participant 3 confusion scores incorporating baseline and treatment periods.

Figure 5.15 shows confusion declining throughout the treatment phase. At the beginning of the program, the participant was confused about whether or not to continue her present employment, whether or not to compete overseas, and how much both these areas would impact on her pending marriage. From around Week 22, a more substantial decline occurred. This coincided with the implementation of the plan to cope with exceptional personal demands, which was developed through discussion in the personal advising component of the ACE Program.



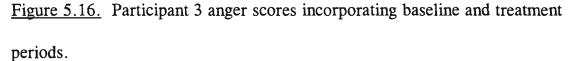
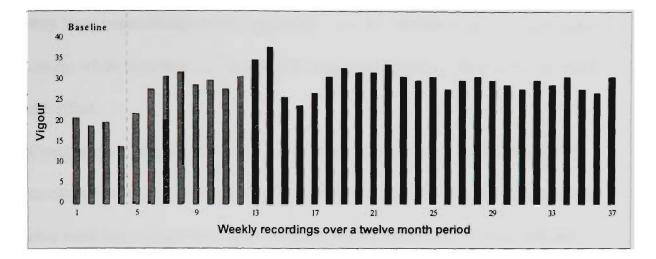
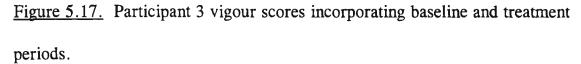


Figure 5.16 shows declines in anger throughout the year. At the fifteenth week there was an increase in anger and depression and it is felt that this was due in part to the difficulties the participant faced in concurrently organising preinternational competition and wedding plans. The steady decline in anger from then to the end of the year, when it was close to zero, reflects successful coping with multiple demands, in which the ACE counselling certainly played a part.





The vigour of the participant increased dramatically early in the year, as shown in Figure 5.17. This was in line with the systematic approach introduced by the participant's coach in order for the participant to prepare effectively for international competition. The initial rise from Week 1 to 8 occurred just prior to the participant's departure for international competition. Following the eighteenth week, vigour remained consistent and relatively high.

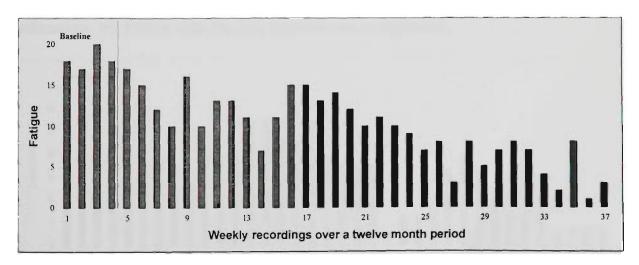


Figure 5.18. Participant 3 fatigue scores incorporating baseline and treatment periods.

Figure 5.18 shows that fatigue fell throughout the treatment, with brief fluctuations at Weeks 9, 11 to 12, and 16 to 17. Once again, this physical state

may have been affected by the systematic training introduced by the participant's coach, while reduction of life stress following her wedding may have enhanced the effect.

<u>Conclusion</u>. The profile of mood states results show a decrease in all negative emotional states. The sharp increase in anger and depression at the fifteenth week may have been related to a range of demands and stresses, associated with her impending wedding. The immediate post-wedding period show that the participant proceeded to healthier level of mood states by the end of the year long program.

Participant 4

<u>Background.</u> Participant 4 was a 16 year-old male canoe slalom paddler, who had been awarded a scholarship with the Victorian Institute of Sport as a result of exceptional performances in the Junior National Championships. The participant was having difficulties in meeting the demands of secondary education, his family, and his first international competition.

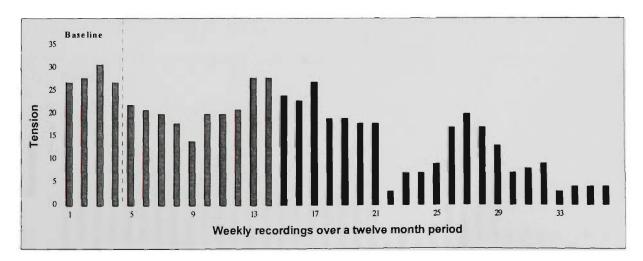


Figure 5.19. Participant 4 tension scores incorporating baseline and treatment

periods.

This participant showed a high level of tension during the baseline period, with no signs of reduction. Early in the treatment period, Weeks 5 to 9, a sharp decrease in tension occurred. Figure 5.19 shows two difficult periods during which tension rose. The first was from Week 10 to Week 17, and the second occurred during Weeks 26 to 28, which returned the participant to pre Week 22 levels. The treatment at Week 21 included myself as the ACE Coordinator, intervening and holding discussions with the teachers and the principal of the school in order to try to overcome some of the issues that were creating problems. After this period, the graph shows a decline and, in particular, a noteworthy decline at Week 18, when the school had praised the participant for his outstanding sporting performances. The second increase at Week 28 may have arisen as a result of two factors. Firstly, some of the teachers were still not cooperating, and secondly, this was the period leading up to his first international competition. Following the competition, tension declined again and appeared to be stabilising at a very low level, toward the end of the year.

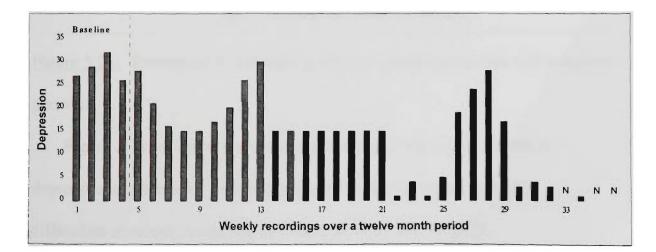


Figure 5.20. Participant 4 depression scores incorporating baseline and treatment periods.

Figure 5.20 shows a similar pattern to Figure 5.19 for tension, that is, a gradual incline in depression is demonstrated from Week 1 to 9 and may have been associated with some decrease in the difficulties the participant was facing at school. An increase occurred from Week 10 to 13, the peak perhaps relating to school and international competition pressures. From Week 14 to 21, depression stabilised and then it dropped to a very low level from Week 22 to 25. A sharp increase in the depression scale at Week 26 was exacerbated in the next two weeks, declining sharply in Weeks 29 and 30. This may once again be associated with school difficulties. The depression results during Weeks 30 to 36 suggest stabilisation of this variable at a low level. This may, once again, have been associated with the resolution of school difficulties.

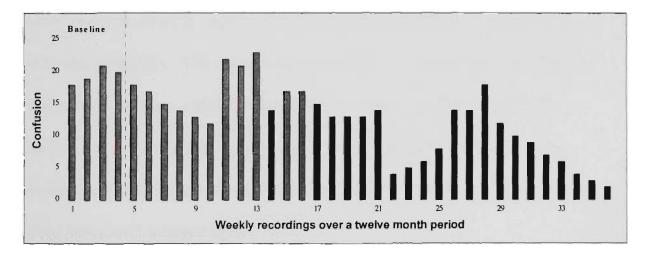


Figure 5.21. Participant 4 confusion scores incorporating baseline and treatment periods.

Figure 5.21 indicates that confusion fluctuated with similar trends to depression and tension. This was probably related to the participant's difficulties at school, occurring in Weeks 11 to 13 and 26 to 28.

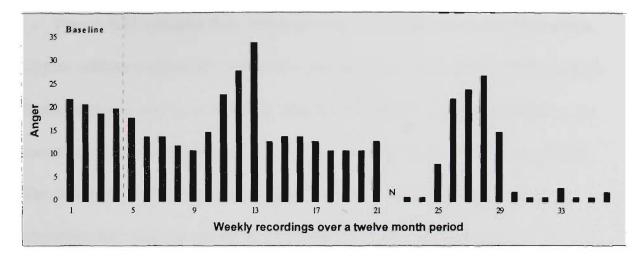


Figure 5.22. Participant 4 anger scores incorporating baseline and treatment periods.

Figure 5.22 indicates an overall decline in anger. At two points during the treatment phase, at Weeks 11 to 13 and Weeks 26 to 29, there were high levels of anger. The causes were identified in ACE counselling namely lack of co-operation from or on the part of the school and the participant's relationship with schoolteachers, which then began to improve. The treatment involved an intervention strategy within the participant's school. Overall, Figure 5.22 indicates a downward trend, with very low anger during the last part of the treatment period, except during Weeks 26 to 29 when the lack of co-operation from the school emerged again.

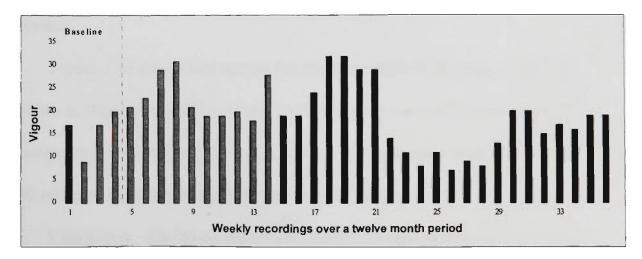


Figure 5.23. Participant 4 vigour scores incorporating baseline and treatment

periods.

Figure 5.23 indicates that vigour fluctuated throughout the treatment phase. Vigour reflects a physical, as well as a psychological, state and the low and high levels of vigour appear to correlate with the training program established by the coach to enable the participant to be at peak level performance for competition. The first peak at the seventh and eighth weeks is just prior to the national championships and the second at the fourteenth week is just prior to international competition that occurred in Weeks 18 to 21. There are two major troughs in vigour, that appear to coincide with the periods reflected by increases in negative mood states when school difficulties were at their height, that is, a psychological aspect of vigour.

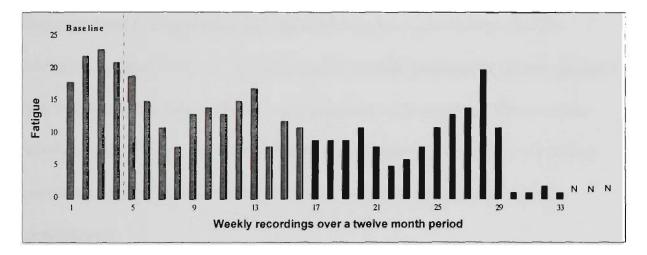


Figure 5.24. Participant 4 fatigue scores incorporating baseline and treatment periods.

Figure 5.24 shows that fatigue fluctuated throughout the year. Two low points at Week 8 and Week 22 may have been associated with either poor competition preparation or school conflicts. The last seven weeks from Week 30 reflected stabilisation at a very low level of fatigue.

<u>Conclusion.</u> The mood states reflected a consistent picture for Participant 4. The trends for all five negative mood states were downwards. By the end of the year, stabilisation was reached at a very low level. The positive mood state, vigour, fluctuated more, but lowered from Week 21 to the end of the year, and increased in the last few weeks. All six scales reflected the personal, especially school-related, difficulties experienced by this participant, around Weeks 8 to 13 and 22 to 28. The ACE program appeared to help the participant through these difficult periods, first, by identifying through counselling problems that the participant was shouldering the stress alone, and second, by helping him to implement a problem-solving strategy.

Participant 5

<u>Background</u>. Participant 5 was a 24-year-old male cyclist, who won the National Road Championship and had been awarded a scholarship with the Victorian Institute of Sport. The participant had just completed a tertiary degree and had decided to take a year off to concentrate on his cycling. The treatment involved goal setting, time management, assertiveness training, and counselling sessions to ensure that his daily routine incorporated both training and selfdevelopment.

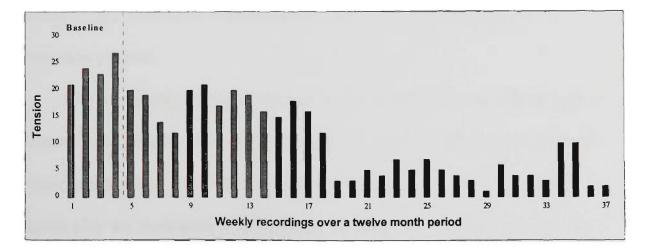


Figure 5.25. Participant 5 tension scores incorporating baseline and treatment periods.

Figure 5.25 shows an overall trend reflecting a decline in tension levels with three phases demonstrated. There is a steady decline in tension from Weeks 5 to 8, an increase in Week 9, no reason for which was identified, with this level only declining slightly by Week 18, after which there is a sudden decline in tension to a low level. With minor fluctuations, the low level is maintained throughout the treatment period, except for Weeks 34 and 35, where there is a small increase in tension. No reason for this temporary, moderate increase was identified.

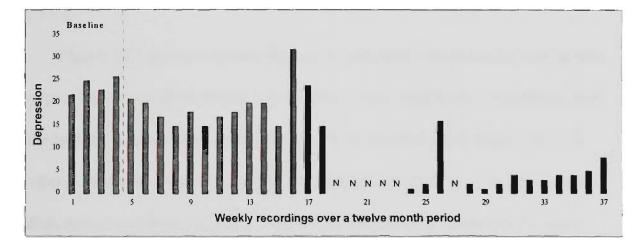


Figure 5.26. Participant 5 depression scores incorporating baseline and treatment periods.

After a relatively high start for four weeks, depression decreased as seen in Figure 5.26, with the exception of the sixteenth week, which was just prior to a major competition. The following weeks saw a severe decline in depression levels after the participant won the event. A substantial increase was seen at the twenty-sixth Week, but depression declined straight after to zero for several weeks. For the remainder of the treatment, the absolute level remained low with some fluctuations, especially toward the end. The major increase at the twentysixth week once again may have been associated with the impending decision on selection for a major competition.

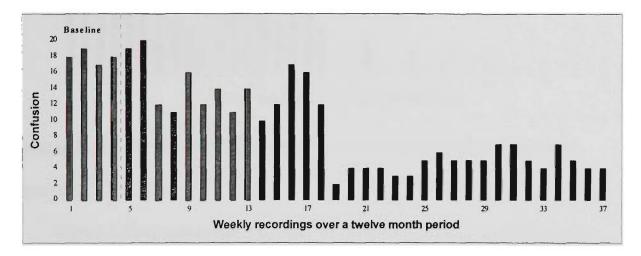


Figure 5.27. Participant 5 confusion scores incorporating baseline and treatment periods.

Figure 5.27 shows a general decline in confusion, which can be seen in two steps. The first is from Weeks 6 to 7, when a very high level of confusion over the first six weeks dropped substantially. The second is from Weeks 16 to 19, when a moderate level, with upward fluctuations, dropped to a very low level. Both trends may have been due to the player successfully competing in major competitions. This would also account for the relatively consistent pattern of low levels of confusion with some small upward fluctuations, from the twentyfifth week through to the completion of the study, where the participant had been selected to compete internationally.

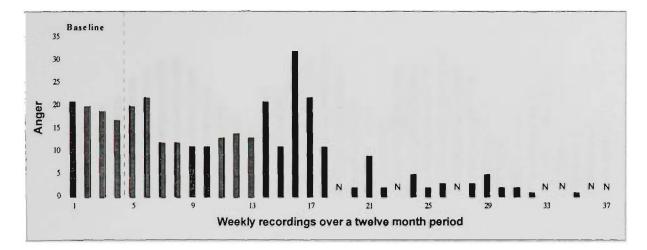
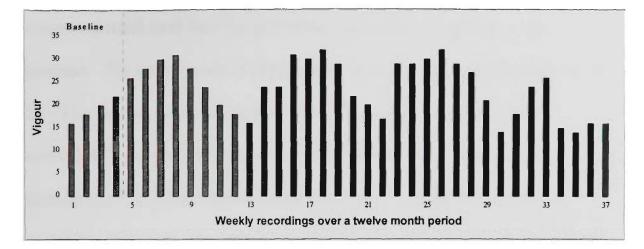


Figure 5.28. Participant 5 anger scores incorporating baseline and treatment periods.

Figure 5.28 demonstrates a general decline similar to that of confusion in Figure 5.27. It also shows similar declines to that of Figures 5.25 and 5.26, that is, between the sixth and seventh week, when a stable moderate level dropped to a lower level that remained stable for some time, and between the sixteenth and nineteenth weeks, when anger dropped away to zero in three similar sized steps. These substantial declines may be linked to successful performance. An additional element of the anger pattern is a peak in Week 16 at a much higher level of anger than at any other time. There is no known reason for this; that is, there was nothing in the counselling interactions of the ACE program to suggest that the participant had a problem that was associated with anger. In any event, the anger quickly subsided and, from Week 19, levels were extremely low with a few small single week increases.



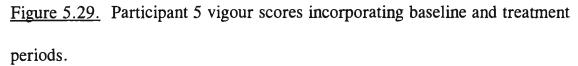


Figure 5.29 demonstrates large regular fluctuations in vigour, the positive mood state. Throughout the year, vigour reflects periods of steady increase followed by steady decline. There is four of each, the first three lasting ten to twelve weeks each. The fourth peak is smaller and suggests a lower level of vigour in the later weeks of the program. These fluctuations are in line with the training schedule developed to prepare the participant for competition, reflecting a largely physical interpretation of the vigour scale.

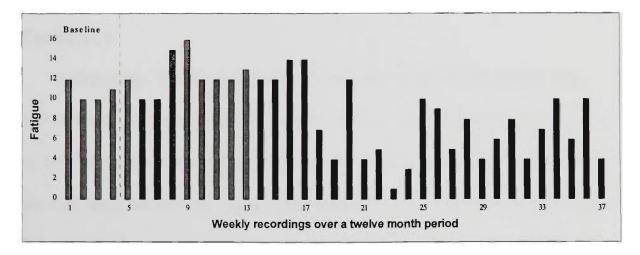


Figure 5.30. Participant 5 fatigue scores incorporating baseline and treatment periods.

Figure 5.30 demonstrates fluctuations in fatigue throughout the treatment after a relatively stable period from the start to Week 18. Even so, there is a downward trend from the early part of the year to the second half of the program. The lowest levels of fatigue occurred in mid-year around Weeks 21 to 24. This may be once again linked with the tapering and periodisation developed by the coach to enhance the participant's competition program. <u>Conclusion</u>. The graphs indicate an overall decrease in tension, depression, confusion, and anger. At times, those mood states did fluctuate and this may be linked with the participant's competition program, as the emotional levels appeared to rise prior to important events particularly those that he needed to win to go on to the next level. Vigour and fatigue fluctuated throughout the treatment, although a downward trend was identified for fatigue. These patterns probably reflect the combination of physical with psychological states for vigour and fatigue. Fluctuations may be associated with the participant's tapering program in preparation for competition. Thus, for this participant, who was focusing full-time on his sport, fluctuations in mood state seemed to reflect quite clearly the patterns of training and competition during the year.

Participant 6

<u>Background.</u> Participant 6 was a 19-year-old female hockey player, who had shifted to Melbourne from the country to undertake a scholarship that was offered by the Victorian Institute of Sport. It was the participant's first year in the state team and the first year of being selected in the under-21 national squad. The participant was assisted with programs relating to relocation, with respect to shifting from the country to Melbourne. She was provided assistance with education, time management, goal setting, financial planning, and support counselling.

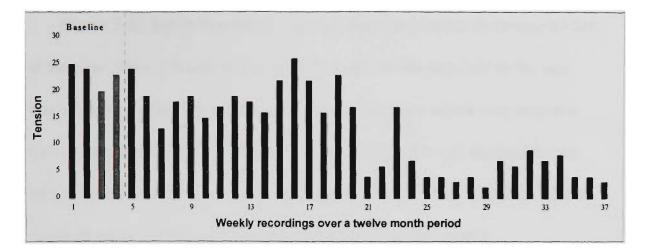


Figure 5.31. Participant 6 Tension scores incorporating baseline and treatment periods.

Figure 5.31 shows, overall, a decline in tension levels. This appears to constitute two steps. The first is a small drop from baseline to a fairly stable period at a moderate level from Week 6 to Week 20, with one peak at Week 15 to 17. This is followed by a very large decrease in Week 21 and aside from a higher score in Week 23, a lower level is retained. At the twenty-third week, the graph indicates a sharp incline for one week only. This may be associated with the participant having trials for selection into the state team, which occurred at that time. Tension appeared to stabilise from Week 25 and remained at a low level for the remainder of the treatment period.

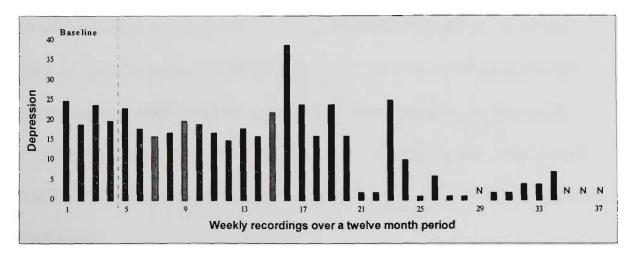


Figure 5.32. Participant 6 depression scores incorporating baseline and

treatment periods.

Figure 5.32 indicates a decline in the level of depression in the second half of the year, after it maintained a moderate level for the first half of the year. The sharp rise at the sixteenth week may have been associated with selection trials at that time. As with Figure 5.31 (Tension), the levels declined for the remainder of the treatment period and stayed very low. The selection trials at Week 23 again represented a notable digression from the pattern.

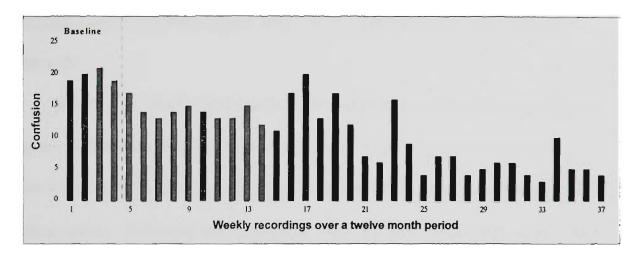


Figure 5.33. Participant 6 confusion scores incorporating baseline and treatment periods.

Figure 5.33 shows that the level of confusion decreased gradually throughout the treatment phase. Two peaks, at the seventeenth week and the twenty-third week correlate with the high levels of tension and depression, which may be a result of the participant having to deal with various selection processes. A smaller peak in Week 36 may also reflect this pattern. The treatment during the high points included reaffirming the participant's goals and putting in place a more realistic time frame in which to achieve them. The reduction in confusion to a stable low level from about Week 24 suggests that the program helped to resolve confusion.

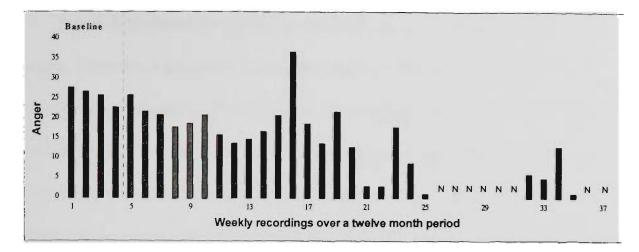


Figure 5.34. Participant 6 anger scores incorporating baseline and treatment periods.

Figure 5.34 clearly shows a decline in anger levels throughout the treatment phase with the exception of the sixteenth week where a major problem was identified with the participant's ability to deal with selection procedures for the state squads. Following that high point, anger declined consistently with a slight increase for one week only at the twenty-third week, where a minor problem occurred with national selection and the participant needed to make decisions about whether or not to relocate again. Once more, anger was very low from Week 26, excluding the specific reaction in Week 34. Bearing in mind that very low base, the level of anger in Week 34 is still low in absolute terms.

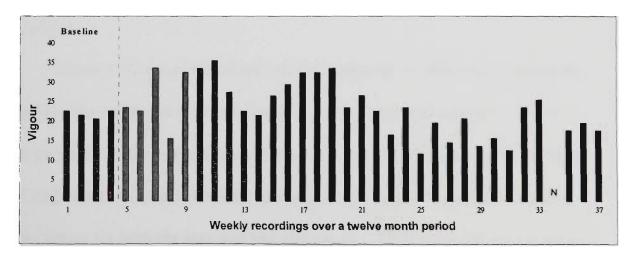


Figure 5.35. Participant 6 vigour scores incorporating baseline and treatment periods.

Figure 5.35 shows that, although vigour fluctuated throughout the treatment phase, there was a downward trend, particularly in the second half of the year. There were no apparent reasons for the two particularly low points at the eighth and thirty-fourth weeks, although the latter did correspond with increased anger and confusion associated with selection processes. This picture of reduced vigour in the second half of the season appears to be associated with a general feeling of deflation, as expectations, perhaps unrealistically high, were not met. There could also be an element of the influence of heavy training in the first half of the year.

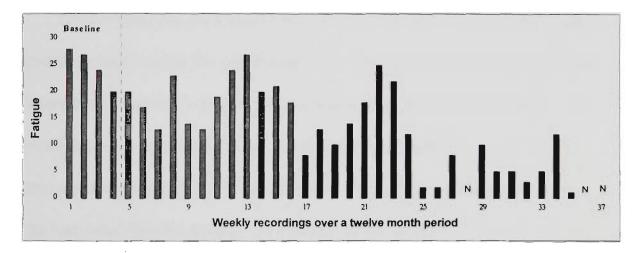


Figure 5.36. Participant 6 fatigue scores incorporating baseline and treatment periods.

Figure 5.36 shows that fatigue levels fluctuated throughout the treatment period but did also decline substantially as the program progressed. The two high points at the thirteenth and twenty-second weeks, and the rise at the thirtyfourth week occurred when the participant was going through the selection processes for both the state and national squads. There were also two dramatic reductions in fatigue from Week 13 to 17 and from Week 22 to 25. The final second semester. The participant's first international competition, later in the year, resulted in some excellent performances.

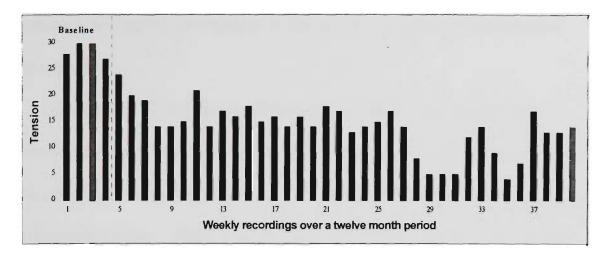


Figure 5.37. Participant 7 tension scores incorporating baseline and treatment periods.

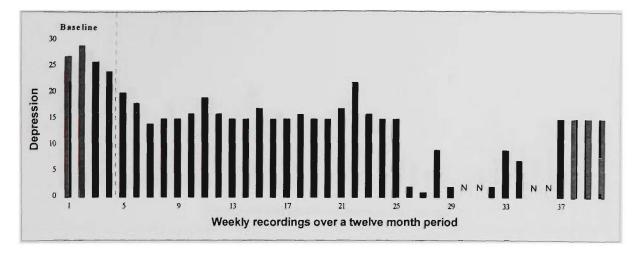
The baseline four-week period was clearly followed by a substantial, rapid decline in tension from the initial high level, over the next four weeks. A stable lower level of tension was then sustained throughout the treatment period. The small increase in tension in Week 11 may be a result of the participant's first international competition. Although tension rose slightly, it stayed well below the four-week baseline period. Two further decreases occurred later in the year. From Week 27 to 31 tension dropped to a very low level, briefly returned to a position just below the previous, stable level, dropped again from Week 33 to 35, and then rose once more to be a little lower than the stable, mid year level. The treatment employed during competition periods was to reassess and refocus the participant's objectives with respect to her long-term plans. Once this was established, at the end of the year, tension remained at a stable level for the last three weeks.

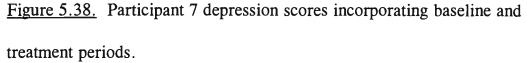
level of fatigue was very low and levels from Week 25 are not consistent with the lack of vigour reported. This might provide support for the claim that fatigue is not merely the converse of vigour, but represents an independent mood state.

<u>Conclusion</u>. The graphs for Participant 6 indicate that although her emotional states fluctuated, negative mood states generally declined throughout the treatment. Moods appeared to be affected by selection periods for the state and national teams. While negative mood states were reduced to low levels during the year, vigour, the positive mood state, showed a downward trend in the second half of the year. It could be that the flattening profile which this represents, partly reflects the greater sensitivity of vigour to the continuing lack of energy and motivation associated with selection disappointments, that is, the psychological aspect of vigour, and partly relates to the heavy training schedule, the physical component of vigour. The emotional states may be linked with the fact that the participant had relocated to Melbourne in order to enhance selection possibilities and at times appeared to be concerned about this.

Participant 7

<u>Background.</u> Participant 7 was a 19-year-old female squash player. She was a second year physical education student, who had relocated to Melbourne in order to meet the demands of both tertiary study and international squash. The treatment included study techniques, a tutoring program, a reassessment of both training and competition schedules throughout the year and a discussion with the coach, outlining the tertiary program. The results saw the participant limit her competition and training in the first semester and defer from her studies for the





The pattern in Figure 5.38 indicates a decline in depression. It shows a trend that depicts two different levels of depression. The first occurred during Weeks 7 to 25, when a stable, moderate level was established, following a substantial decrease over Weeks 3 to 6. Two small peaks at Weeks 11 and 22 may be linked to the participant's first and second international competitions. The early reduction and following stability may be due to the fact that in light of ACE program counselling the participant developed a more appropriate program to meet the demands of both her academic and sporting environments. The second and much lower level of depression from Week 26 to 36 followed a dramatic decline from Week 25 to 26. Although there were two raised peaks, the period from Week 26 to 36 was generally very low on the mood state of depression. During these periods, confusion and tension levels rose slightly and depression fluctuated at the lower levels. During the final four weeks stable states were seen which were similar to the first half of the year.

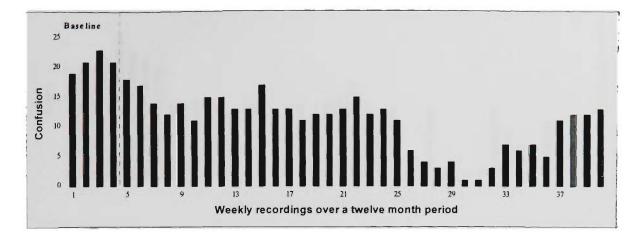
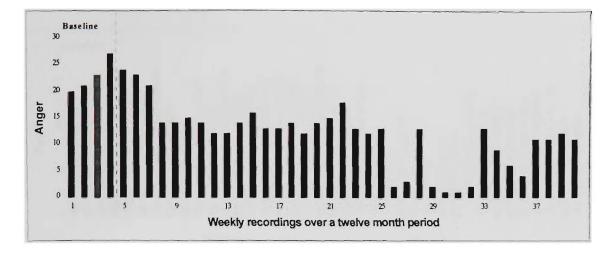


Figure 5.39. Participant 7 confusion scores incorporating baseline and treatment periods.

Figure 5.39 showed a similar trend for confusion to those found for depression and tension. The baseline period depicted a small rise in confusion. Then there was a noteworthy decline from Weeks 3 and 4 to Week 8. This was followed by a relatively stable period from Week 8 to 25 and a decline from Week 25 to 31. All of these variations may be linked to the competition program that involved the participant's first international competition, including tours to England and Europe throughout the year. From Week 31 to 39, the levels of confusion climbed back almost to the moderate, stable level of the first half of the year.



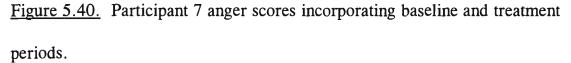


Figure 5.40 shows similar patterns to the other negative mood states but with more fluctuations in the latter part of the year. An increase during baseline was followed by a rapid decrease from Week 4 to 8, from which a stable period of moderate anger extended until Week 25. The fluctuations during Weeks 26 to 36 saw very low levels of anger most of the time, but two peaks rising back to the moderate levels. Finally, there was a rise again, but the last four weeks appeared to stabilise at a level rather lower than that of the early weeks of the year. By establishing a more balanced program, the participant was able to defer studies and concentrate on her first international competition. This trend for anger consistently matches depression, confusion, and tension and it is believed that this was due in part to the participant having a well-prepared plan from which to work towards her first international competition.

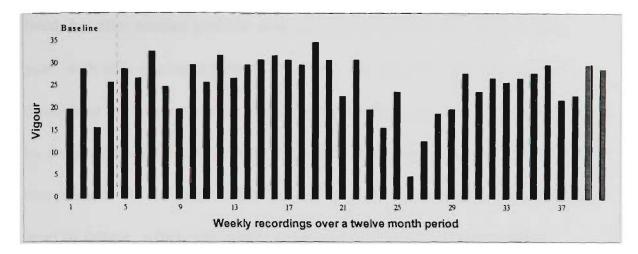


Figure 5.41. Participant 7 vigour scores incorporating baseline and treatment periods.

Figure 5.41 shows that vigour increased slightly for the first nineteen weeks. Then there was a decline to an atypical low level at the twenty-sixth week. There was a rapid increase from Week 26 to 30, and then for the remainder of the year a relatively stable and quite high level. This correlates with the pre-competition program and intense training that the participant undertook in order to prepare for international competition.

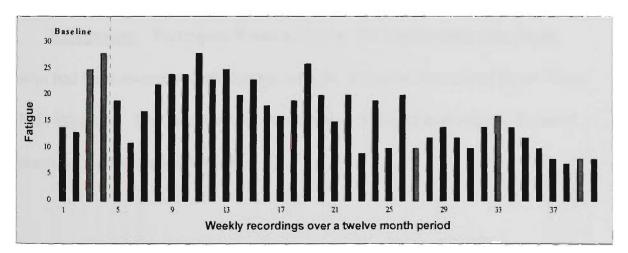


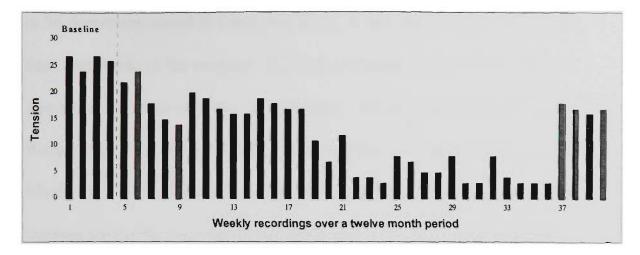
Figure 5.42. Participant 7 fatigue scores incorporating baseline and treatment periods.

Figure 5.42 indicates that fatigue fluctuated dramatically for the first half of the year. The treatment and consultation with the coach and University facilitated a decrease in fatigue levels after the first four weeks. This was short lived, but after another peak the level gradually declined over the rest of the year, with only one more peak in Week 19. The increases and fluctuations throughout the treatment were related to the training program, which was set out by the participant's coach in order to assist with the preparation for international competition. As the graph indicates, the last eight weeks showed a much lower level of fatigue, which was at the completion of the competition program.

<u>Conclusion</u>. For this participant, a decrease was seen in tension, and to a lesser degree, in confusion, anger, and depression, whilst fatigue remained at a level less than baseline Weeks 3 and 4 throughout the experimental period, and gradually declined to an acceptable level later in the year. Vigour was generally high. These results suggest that various factors, including the ACE Program helped the participant cope with the heavy demands of international competition and tertiary study.

Participant 8

<u>Background.</u> Participant 8 was a 27-year-old female water polo player, who had been awarded a scholarship with the Victorian Institute of Sport Water Polo Program. The treatment for Participant 8 included goal setting, financial planning, and negotiation skills.



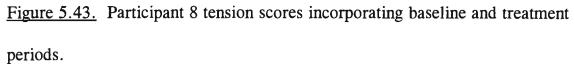


Figure 5.43 shows a decline in tension throughout the treatment phase. There are two clear steps; during Weeks 4 to 9 the level of tension went down, and in Weeks 10 to 18 it was stable, then from Weeks 18 to 22 it again went down, before becoming stable again, but at a low level, in Weeks 22 to 36. The dramatic increase in the last four weeks of the treatment was a result of the participant being omitted from the national team. Even this did not result in a return to the high baseline levels.

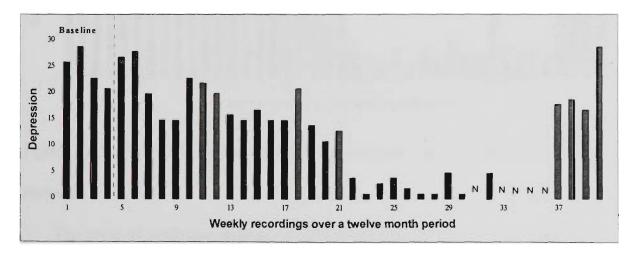


Figure 5.44. Participant 8 depression scores incorporating baseline and treatment periods.

Figure 5.44 shows depression declining throughout the treatment phase,

gradually at first and then more strongly from Week 21 to 22. From Week 22

to 36 depression stayed at a very low level. It increased dramatically for the final four weeks of the program. Weeks 6 to 9 show a drop; Weeks 10 to 21 then show a gradual reduction in depression, with occasional fluctuations. Weeks 21 to 23 reflect a substantial drop to a very low level, maintained during Weeks 23 to 36, and Weeks 36 to 40 reveal a large rise in depression. The increase during the last four weeks was largely as a result of the participant being omitted from national competition. After appearing like depression would stabilise at a moderate level that was lower than the baseline, the final reading which returns to the highest levels for this participant for the year, raises cause for concern. Only measurement over the next weeks, that is after the study finished, would have resolved whether this was a short-term reaction to non-selection or the direction of a major, negative change in mood.

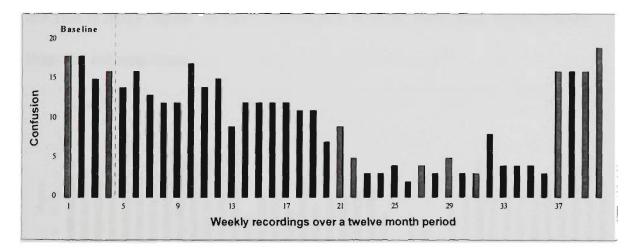


Figure 5.45. Participant 8 confusion scores incorporating baseline and treatment periods.

The level of confusion declined gradually throughout the treatment phase, as seen in Figure 5.45. From the twenty-third week, confusion stabilised at a low level, until the final four weeks. The last four weeks depict a dramatic increase in confusion as a result of the participant being omitted from the national team.

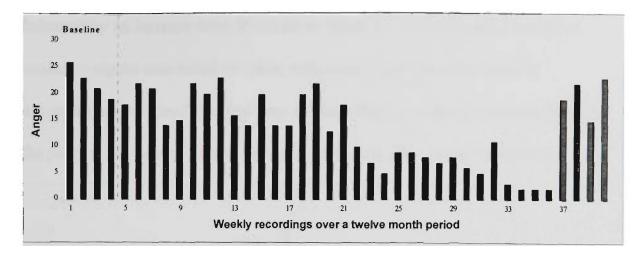


Figure 5.46. Participant 8 anger scores incorporating baseline and treatment periods.

Figure 5.46 shows that anger levels had a downward trend with some fluctuations throughout the treatment phase. The second half of the graph shows two trends, firstly, a drop from Week 19 to Week 36 to a level well below the first half of the treatment and then a sharp rise during the last four weeks. This late rise is likely, again, to have a direct link with the participant being omitted from the national team.

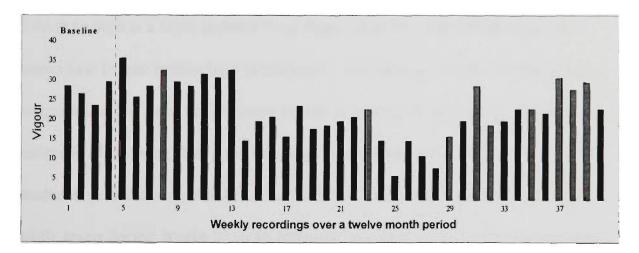
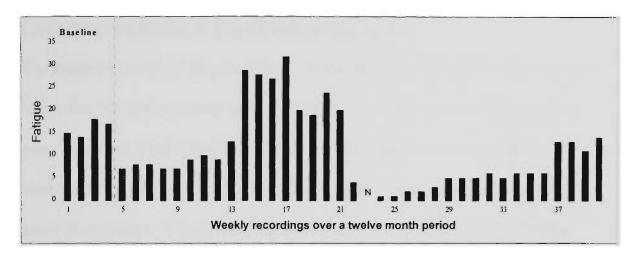
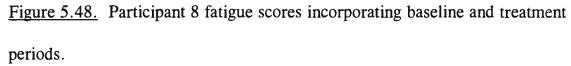


Figure 5.47. Participant 8 vigour scores incorporating baseline and treatment periods.

Figure 5.47 indicates that vigour remained at a high level for the first 13 weeks. There was then a dramatic decline and another stable period at moderate vigour from Week 14 to 23. Another rapid decline to Week 25 was soon

followed by an increase from Week 26 to Week 31. A fairly stable period of moderate vigour concluded the year, with some suggestion of a trend of increasing vigour, until the final four weeks. The lower level, mid-way through the year, at the twenty-fifth week was immediately after major competition.





During the first nine weeks of treatment, that is Weeks 5 to 13 on the graph, fatigue was low following a moderate level during the baseline period. Figure 5.48 then depicts a rapid increase from Week 13 to 14. The following seven weeks saw fatigue remain high to moderate. This was due to the intense training program that had been implemented for the participant in preparation for the nationals. Following this increase, a high period from Week 14 to 17, a moderate period during Weeks 18 to 21, then a low period from Week 22 to 36, while levels during Weeks 37 to 40 remained moderate to low. The period from Week 23 to 36 was relatively stable with low fatigue. The slight rise during the last four weeks was after completion of the National Championships.

<u>Conclusion.</u> Although the graphs show a gradual decline in confusion, anger, tension, and depression, it is worth noting that the high points during the

last three to four weeks for confusion, tension, anger, and depression may be a reflection of disappointment at not being selected for the national team. The strong effects on all the negative mood states over the season reflect well on the ACE program.

Conclusions for Profile of Mood States in Participants

The emotional states of all participants who remained in the ACE Program for the whole year showed a general pattern of decline in negative mood throughout the year. There were individual fluctuations, but these tended to be related to identifiable events, such as, omission from a national team or preparation for major competition. Vigour and fatigue showed more varying levels of change, which may be attributed more directly to the participants' competition and training patterns and therefore have little direct bearing to the ACE Program. The effects may well reflect the physical aspect of vigour and fatigue more than the psychological component. The confusion, depression, tension, and anger levels may have been more directly influenced by the ACE Program, which provided ongoing counselling and workshop assistance to participants. It can, thus, be concluded that the ACE program certainly did not have a negative effect in participants, rather it might be argued that the improvement in emotional states for most participants could be, at least partially attributed to the influence of the ACE program intervention.

Non-participants in the ACE Program

As all original participants were volunteers, a number chose, or were forced, to exit the treatment due to relocation, injury, and other unknown factors. A number of those who left the ACE program continued to complete the psychological tests for the whole year. This data is summarised here, as it provides an unplanned comparison with the participants who were involved in the ACE program for the whole year. The results for these "Non ACE program participants" is presented more succinctly than that for the participants, as less is known about the details of their activities. The six sub-scales of the profile of mood states (POMS) are presented together for each individual, followed by comments. To aid comparisons, the four-week baseline period and the ensuing treatment period for the ACE participants are marked on the figures, although these athletes did not start the treatment.

Participant 9

<u>Background.</u> Participant 9 was a 22-year-old male track and field participant who sustained an injury at a time corresponding to the sixteenth week and again at the time corresponding to the final four weeks. He did not take part in any of the ACE program workshops or counselling sessions, but continued to complete the POMS.

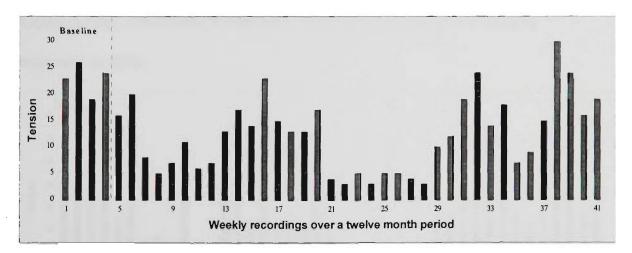


Figure 5.49a. Participant 9 tension scores incorporating baseline and treatment periods.

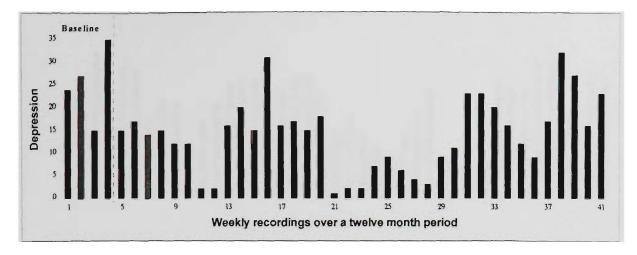
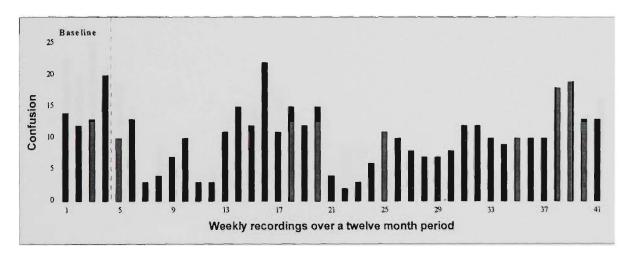
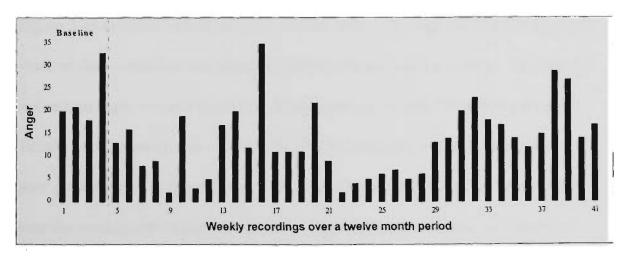


Figure 5.49b. Participant 9 depression scores incorporating baseline and



treatment periods.

Figure 5.49c. Participant 9 confusion scores incorporating baseline and



treatment periods.

Figure 5.49d. Participant 9 anger scores incorporating baseline and treatment

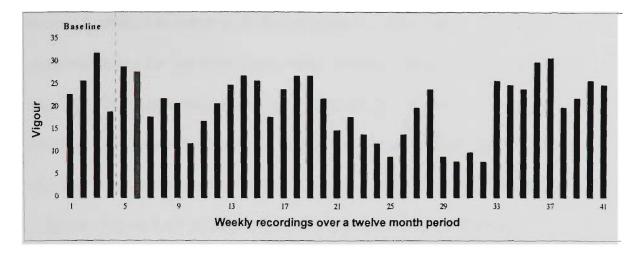
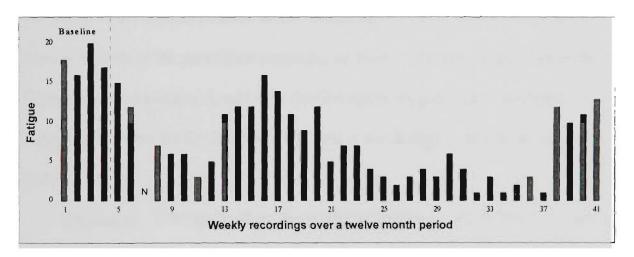


Figure 5.49e. Participant 9 vigour scores incorporating baseline and treatment



periods.

Figure 5.49f. Participant 9 fatigue scores incorporating baseline and treatment periods.

Figure 5.49 (a) shows no trend in the tension level. The high point at the sixteenth week of data collection was when the participant sustained an injury. Tension did not remain high, nor was the injury chronic enough to limit his training program. Tension did, however, rise at Week 30, which correlated with the participant's poor performance in competition. Four weeks before the end of the scholarship year the participant's injury re-occurred. Depression as indicated on Figure 5.49 (b) showed no trend; in fact it fluctuated from high to low throughout the year. Confusion consistently went above and below the baseline period throughout the program, as seen in Figure 5.49 (c). There were two high points. The first, at the

sixteenth week, was just prior to the participant's initial injury. The second occurred during the last four weeks, where tension, depression, and anger were also high. It is interesting to note that, whilst those mood states were high, vigour fluctuated just below the baseline. Figure 5.49 (d) shows that anger fluctuated above and below the baseline level, showing no consistency throughout the program. Figure 5.49 (e) shows that weekly levels of vigour fluctuated throughout the program. This may have correlated with the participant's training schedule. Fatigue, as profiled in Figure 5.49 (f), gradually declined throughout the year to more consistent levels in the second half of the year, which may have been as a result of the participant sustaining an injury. The other high point at the fifteenth week correlates closely with the first injury the participant sustained. Fatigue is elevated for the last few weeks, but is not as high as during the baseline period.

<u>Conclusion</u>. The figures show no consistent patterns in any of the emotional states. Vigour fluctuated throughout the program, while the negative mood states, depression, tension, anger, confusion, and fatigue also seemed to fluctuate randomly.

Participant 10

<u>Background.</u> Participant 10 was a 23-year-old female cyclist who had been awarded a scholarship with the Victorian Institute of Sport as a result of performing well at the National Championships. She had not been riding a bike for very long and had no understanding of the integrated approach to high performance training. Shortly into the program she had an accident and suffered severe injury that resulted in her being out of competition for the remainder of the season.

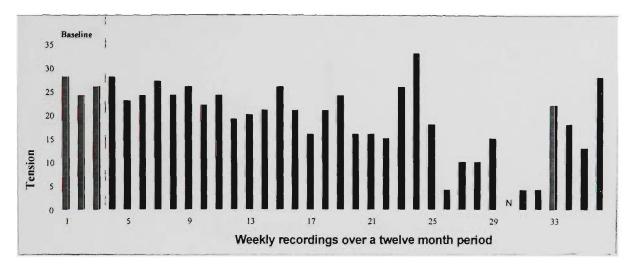


Figure 5.50a. Participant 10 tension scores incorporating baseline and treatment



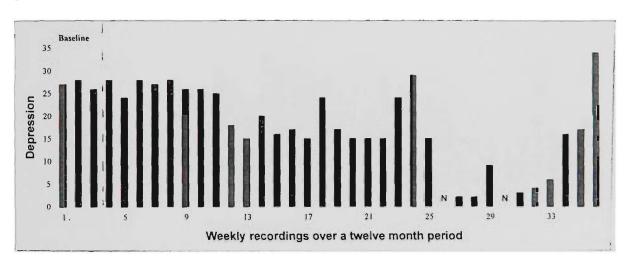
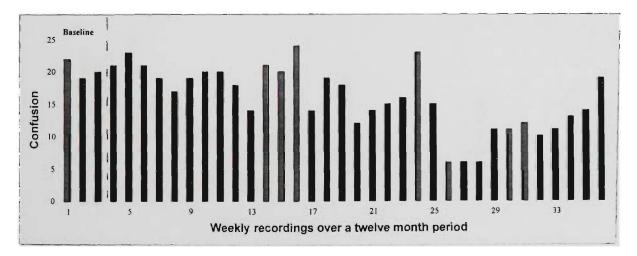


Figure 5.50b. Participant 10 depression scores incorporating baseline and



treatment periods.

Figure 5.50c. Participant 10 confusion scores incorporating baseline and

treatment periods.

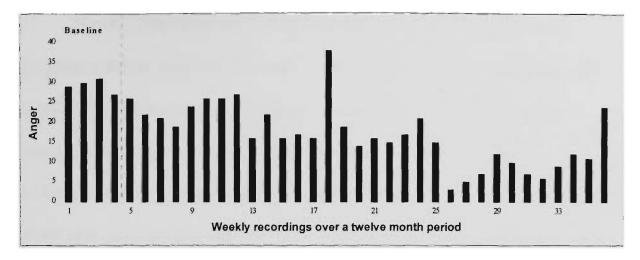
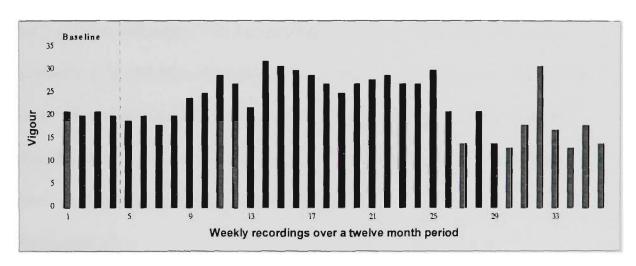


Figure 5.50d. Participant 10 anger scores incorporating baseline and treatment



periods.

Figure 5.50e. Participant 10 vigour scores incorporating baseline and treatment

periods.

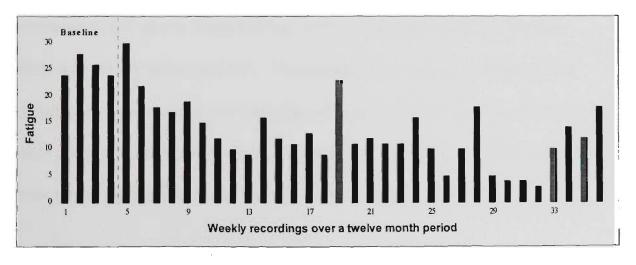


Figure 5.50f. Participant 10 fatigue scores incorporating baseline and treatment periods.

Figure 5.50a shows that tension remained quite stable throughout the program, until the twenty-fourth week, when the participant was struggling with a decision of whether or not to continue with this sport. Tension levels then dropped, stayed low for some time and rose again in the last few weeks. Depression was consistent for the first half of program, and during the last half of the year remained at a very low level. In the last four weeks, depression increased and once again it is believed that it was during this time that the participant was contemplating her future in this sport. Similar patterns emerged for confusion and anger. Vigour and fatigue shared a different trend, which primarily reflected their physical aspects, including not training for much of the time. As well as vigour increasing as the first training load was removed and then declined as fitness was lost. Fatigue, however declined for much of the year, as there was no heavy training commitments.

Participant 11

<u>Background.</u> Participant 11 was an eighteen-year-old cricket player who was relocated to an interstate high performance centre at the fourth week of the treatment period, that is Week 8 of the study, and as such could not involve himself in the workshop program. Counselling was, however, carried on in a reactive way on two occasions when the participant returned to Melbourne for short periods. The program put in place involved counselling on living away from home, dealing effectively with a new coach, and establishing goals.

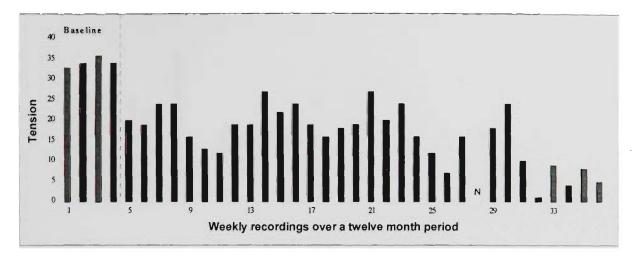


Figure 5.51a. Participant 11 tension scores incorporating baseline and treatment



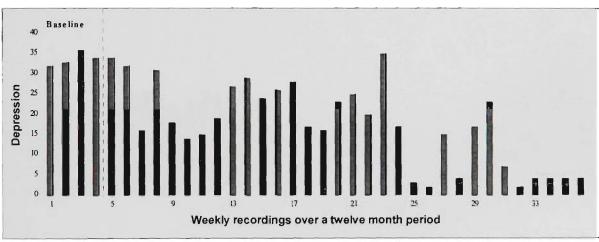
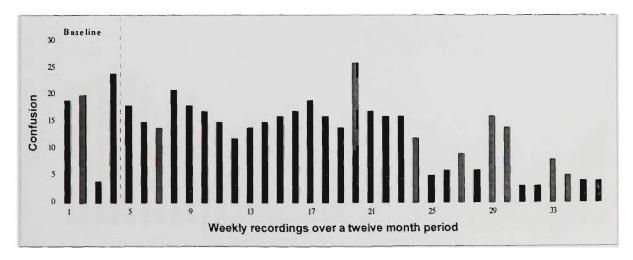


Figure 5.51b. Participant 11 depression scores incorporating baseline and



treatment periods.

Figure 5.51c. Participant 11 confusion scores incorporating baseline and

treatment periods.

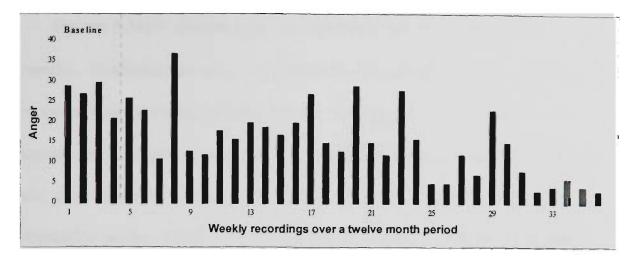
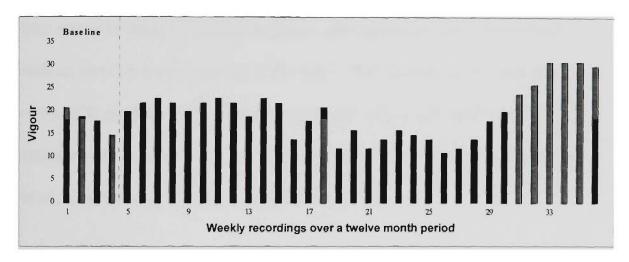


Figure 5.51d. Participant 11 anger scores incorporating baseline and treatment



periods.

Figure 5.51e. Participant 11 vigour scores incorporating baseline and treatment periods.

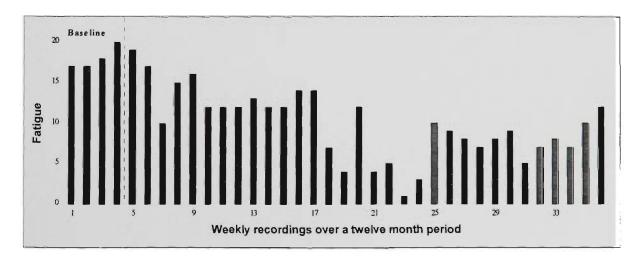


Figure 5.51f. Participant 11 fatigue scores incorporating baseline and treatment

Figures 5.51a-f indicate a gradual adjustment period over the twelve months. Confusion reached a high point mid-way through the year, as a result of the participant waiting for selection into the national team. Once this was known, the participant's confusion levels decreased quite dramatically. Tension and anger fluctuated continuously but with an overall downward trend, while depression reached a high level at about the same time as confusion, that may have been associated with the selection process. There is some suggestion of downward trends in the negative mood states, although with more fluctuations than shown by most ACE program participants, whereas vigour is moderate, with an increase toward the end of the year. This participant was receiving some ACE program support, which might have helped adjustment to the new situation, that is reflected in lower levels of negative mood states and a higher level of vigour near the end of the program period.

Participant 12

<u>Background.</u> This participant who was a 19-year-old track field athlete, moved interstate to be part of a national program. He did not participate in any of the ACE program interviews or training courses.

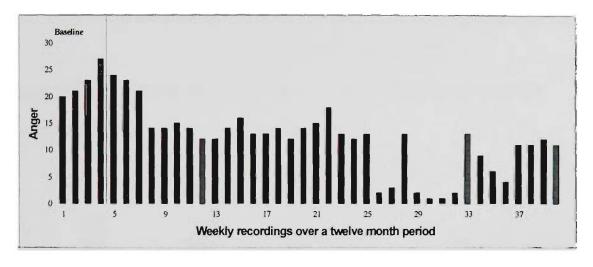


Figure 5.52a. Participant 12 tension scores incorporating baseline and treatment

periods.

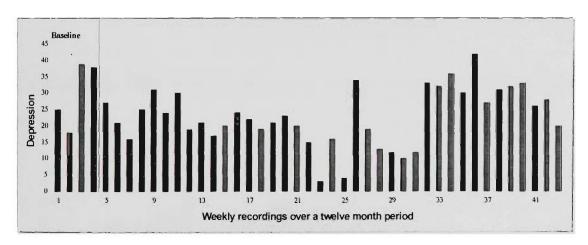


Figure 5.52b. Participant 12 depression scores incorporating baseline and

treatment periods.

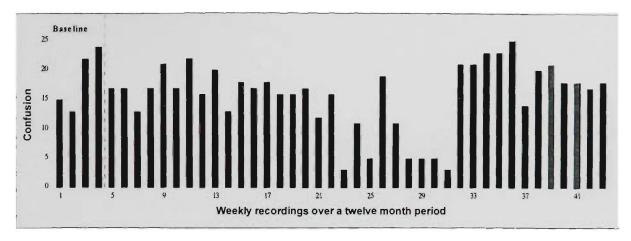
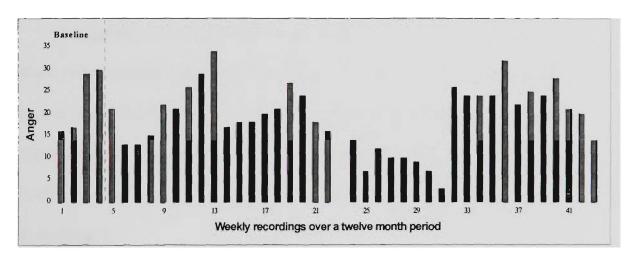


Figure 5.52c. Participant 12 confusion scores incorporating baseline and



treatment periods.

Figure 5.52d. Participant 12 anger scores incorporating baseline and treatment

periods.

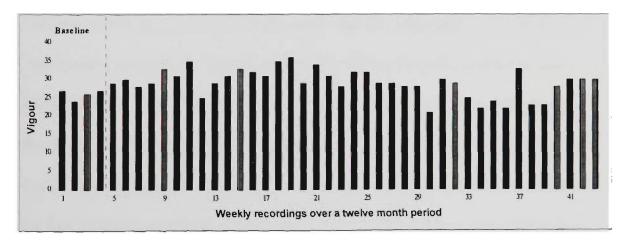


Figure 5.52e. Participant 12 vigour scores incorporating baseline and treatment

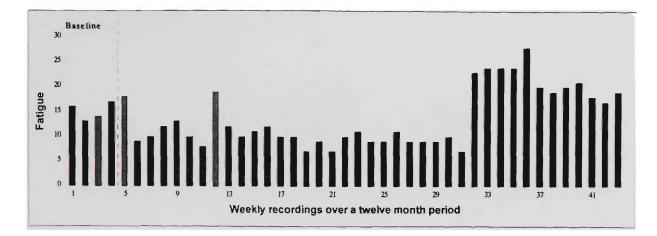


Figure 5.52f. Participant 12 fatigue scores incorporating baseline and treatment periods.

<u>Conclusion</u>. Accepting that some fluctuations were shown, the negative mood states were generally high for most of the season. They all shared a low period during the third quarter of the year. Surprisingly, vigour stayed high for the whole year. Fatigue increased in the last 10 weeks or so from a relatively low level.

Participant 13

Background. Participant 13 was a 21-year-old hockey player, who decided to have a reduced training and competition load throughout the treatment phase. This was a decision made by both the coach and the participant, as a result of the participant's uncertainty regarding whether to continue performing at the elite level. Figure 5.53 (a) indicates that tension remained high with the exception of Weeks 22 to 26, when tension was much lower. This also seems to be the case in Figure 5.53 (b) and 5.53 (c). It would appear that the participant was successful in his first extensive overseas competition. Figure 5.53 (e) shows consistent vigour patterns and 5.53 (f) displays lower fatigue levels, until Week 32 and after. Reasons for this are not known.

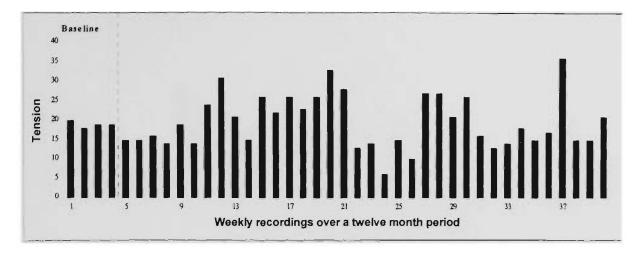
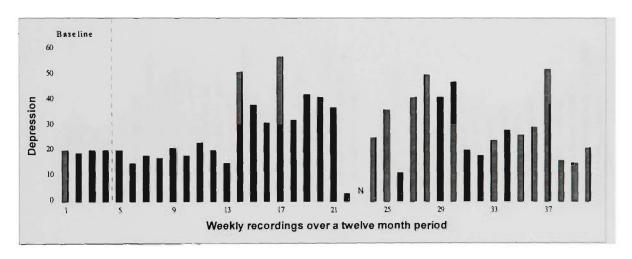
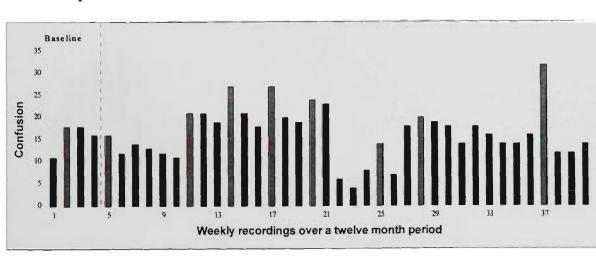


Figure 5.53a. Participant 13 tension scores incorporating baseline and treatment



periods.

Figure 5.53b. Participant 13 depression scores incorporating baseline and



treatment periods.

Figure 5.53c. Participant 13 confusion scores incorporating baseline and

treatment periods.

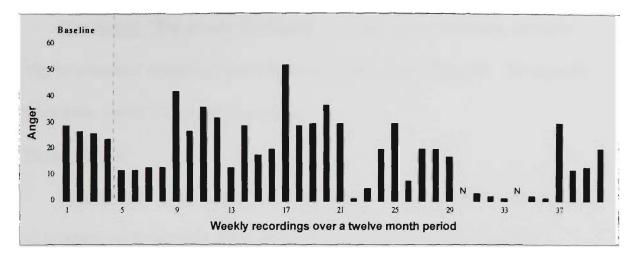
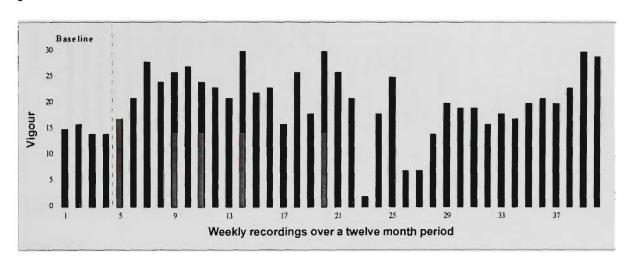


Figure 5.53d. Participant 13 anger scores incorporating baseline and treatment



periods.

Figure 5.53e. Participant 13 vigour scores incorporating baseline and treatment

periods.

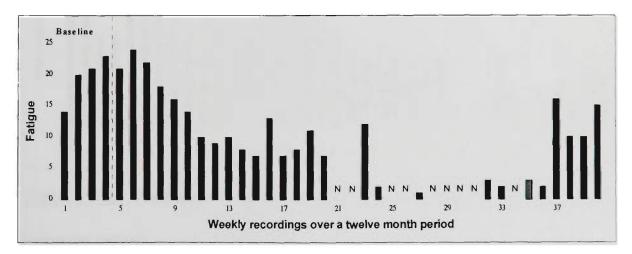
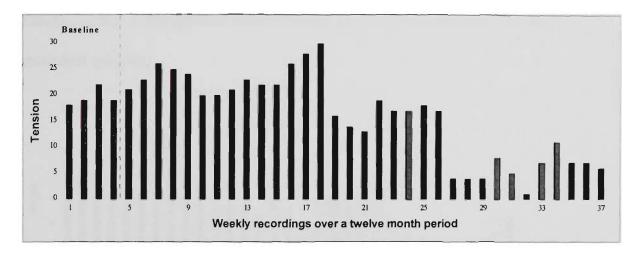


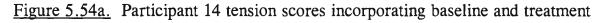
Figure 5.53f. Participant 13 fatigue scores incorporating baseline and treatment

<u>Conclusion.</u> The graphs for Figure 5.53 show no consistency, however vigour remained consistent and fatigue was lower from Week 23. No reasons have been identified for these patterns.

Participant 14

<u>Background</u>. Participant 14, a 23-year-old cyclist who relocated overseas to compete professionally, but continued to complete the questionnaires.





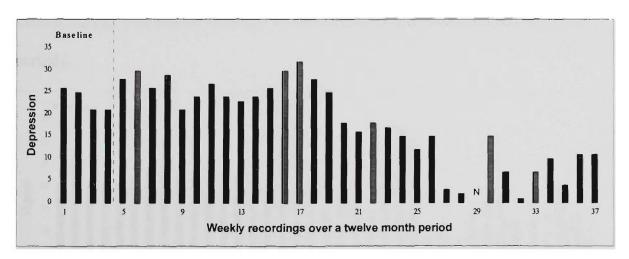


Figure 5.54b. Participant 14 depression scores incorporating baseline and treatment periods.

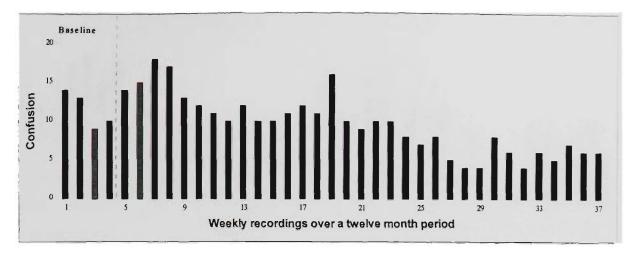
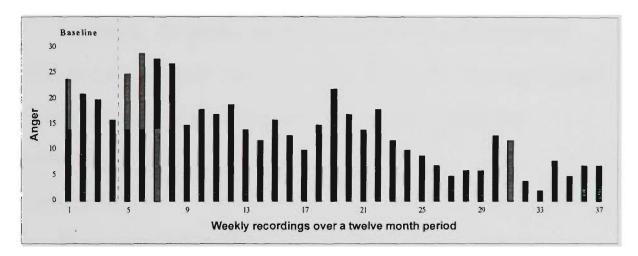


Figure 5.54c. Participant 14 confusion scores incorporating baseline and



treatment periods.

Figure 5.54d. Participant 14 anger scores incorporating baseline and treatment

periods.

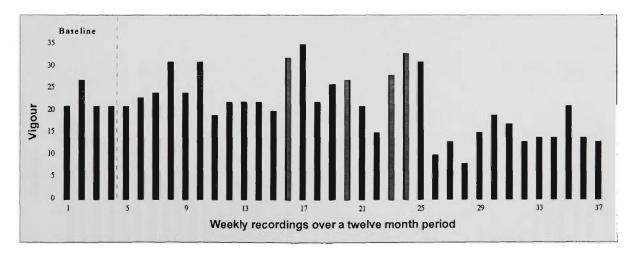


Figure 5.54e. Participant 14 vigour scores incorporating baseline and treatment

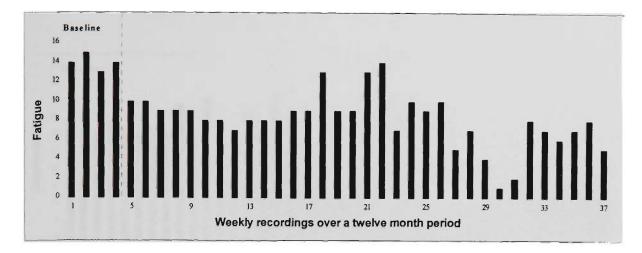


Figure 5.54f. Participant 14 fatigue scores incorporating baseline and treatment periods.

<u>Conclusion.</u> The graphs depicted by Figures 5.54a - 5.54f display less tension, depression, anger, and vigour for Weeks 27 to 37. This may be related to the participant returning from overseas after extended training and competition.

Participant 15

<u>Background.</u> Participant 15, a 19-year-old tennis player elected to withdraw from the treatment, due to relocating interstate. There was no further counselling with this athlete, but he continued to complete the measures.

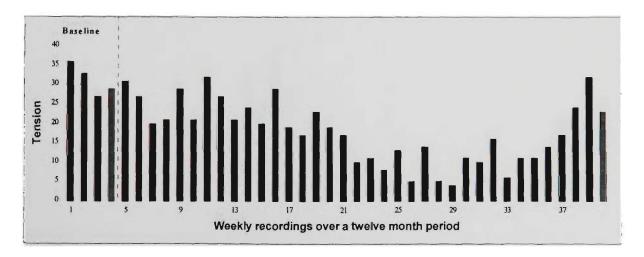


Figure 5.55a. Participant 15 tension scores incorporating baseline and treatment

periods.

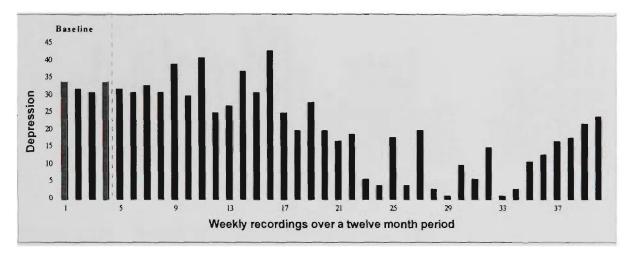
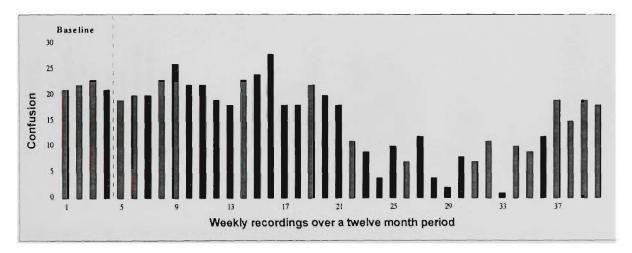
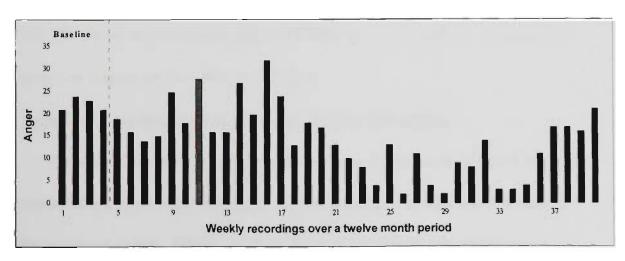


Figure 5.55b. Participant 15 depression scores incorporating baseline and



treatment periods.

Figure 5.55c. Participant 15 confusion scores incorporating baseline and



treatment periods.

Figure 5.55d. Participant 15 anger scores incorporating baseline and treatment

periods.

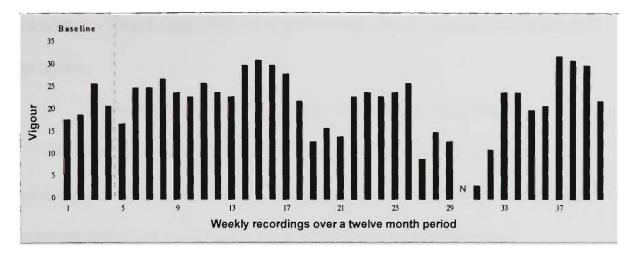
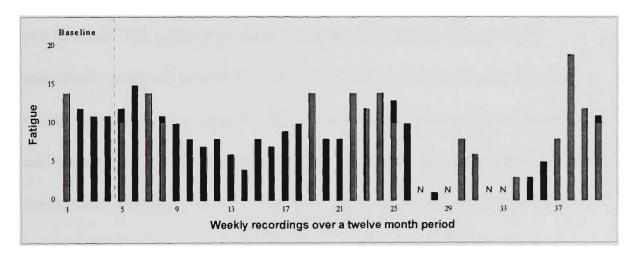


Figure 5.55e. Participant 15 vigour scores incorporating baseline and treatment



periods.

Figure 5.55f. Participant 15 fatigue scores incorporating baseline and treatment periods.

<u>Conclusion.</u> The graphs in Figure 5.55 show no consistent pattern. Figure 5.55 (d) shows an increase in anger at Weeks 9, 11, 14, and 16. This did not appear to impact on the other mood states.

Conclusions on Profile of Mood States for Non-Participants

Although there were individual fluctuations, the patterns of mood states for non-participants showed much greater variation than the equivalent results for the treatment group. Often, negative mood states simply fluctuated over a period of several weeks, from low, to high, and back to low, this cycle repeating, but not over regular periods. These results strengthen the claim that consistent changes seen in the ACE participants' group, were related to the ACE program.

Perceived Level of Competition and Training Performance In order to establish the perceived level of competition and training performance of the participants, a scale from zero to one hundred was utilised, whereby individual participants rated their training and competition performance, on a fortnightly basis. Therefore the vertical axis on the graphs depict the athletes as coach-responses to the scale scores, which were zero to one hundred. The respective coaches completed equivalent ratings of the individual participant in both training and competition effectiveness, but their ratings were made on a monthly basis as squad coaches were only prepared to undertake the exercise under this condition. It was felt that although short-term fluctuations might be missed, the monthly responses would still reflect the general pattern, which could be compared to participants' ratings. Thus, fluctuations in participant ratings appear in the figures for every fortnight, whereas coaches' ratings are presented on a monthly basis. The data is presented utilising two graphs; the first represents coach and participant perceived performance in competition and the second illustrates coach and participant perceived performance in training. The vertical axis is the perceived competition and training levels. The ratings of the participant and the coach for the corresponding times are presented in the same figure to facilitate their comparison. Although measures were taken fortnightly and monthly, the accompanying text and the figures refer to the time-scale by weeks to facilitate comparison with POMS data. The less frequent measurements meant that there

were not enough baseline points, to permit the single-case approach. Instead a case study approach was employed, where data from individuals was discussed, comparisons were then made with non-ACE participants, and some overall conclusions were drawn.

Participants in The ACE Program

Participant 1

The perceived performance ratings of Participant 1 generally correlated quite closely with those of her coach, both in training and competition, as shown in Figures 5.56 (a) and (b).

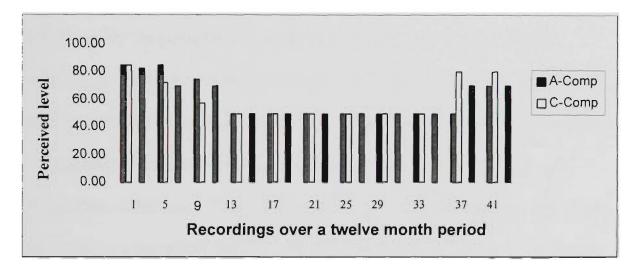


Figure 5.56a. Participant 1 and coach perception of participant's competition performance.

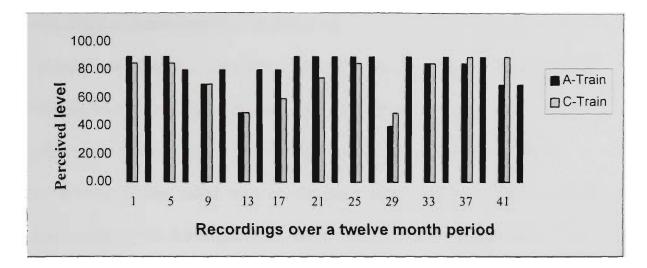


Figure 5.56b. Participant 1 and coach perception of participant's training performance.

Training intensity for Participant 1 fluctuated throughout the experimental period, as did the participant's competition performance, which included winning the National Championship in Sydney in Week 6, and a personal best result in her first overseas competition in Europe during Weeks 19 to 21. The consistent fifty percent line from the 13th to 35th week in Figure 5.56a was during non-competition. There were two low points perceived in training which was otherwise around 90 percent. The low points occurred in Week 13, and in Week 29, for which there is no obvious explanation, but both the athlete and the coach noted the temporary declines in training performance.

Participant 2

Participant 2 showed a noteworthy increase in perceived performance both in training and competition from the first seven fortnightly tests for the rest of the year, as illustrated in Figures 5.57(a) and (b). Discrepancies between the participant and coach ratings are seen in training levels at the twenty-first week, where the participant rated himself at 50 percent and the coach rated the performer at 80 percent. It was at this time that the participant was having difficulties with university and it would appear that this influenced his general perception in relation to his effectiveness both in training and competition. The relationship between the coach and participant was quite poor at times. The participant was not a good communicator, and did have personal problems throughout the year, which were not discussed with the coach. This also might have accounted for the fluctuations, which continued at Weeks 29 and 33, for fortnightly competition and Week 39 for training. At Week 39 for competition the participant's rating dropped dramatically to match the coaches' 50 percent. The participant's major competition achievements included a national title in Week 19 and Australian selection for a major overseas competition from Week 25 to 29.

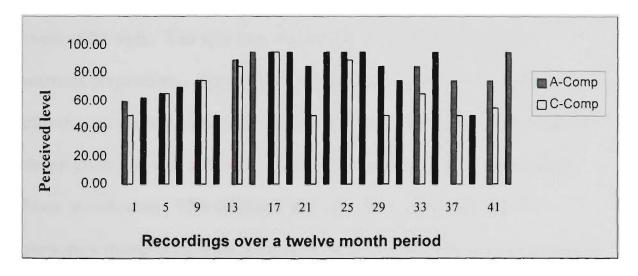


Figure 5.57a. Participant 2 and coach perception of participant's competition ratings.

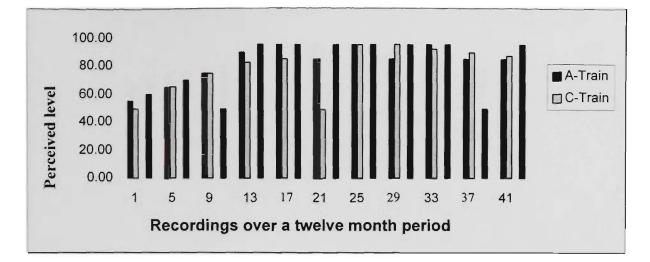
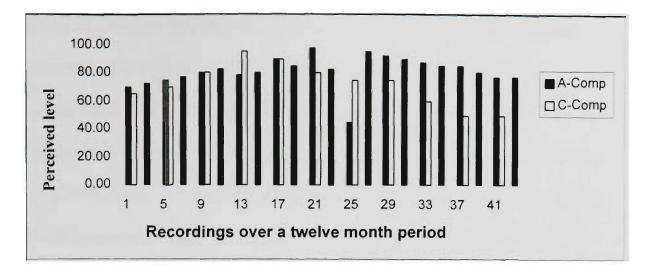
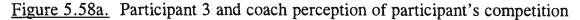


Figure 5.57b. Participant 2 and coach perception of participant's training performance.

After a low start and build up, Participant 3 showed consistently high levels of perceived performance in both competition and training throughout the experimental period, as shown in Figures 5.58 (a) and (b), except during the twenty-fifth week. This may have been associated with the participant's marriage preparations. The participant scored performance and training effectiveness slightly higher than the coach's ratings during the initial weeks of the program, although at Weeks 12 and 14 the participant rated herself much lower in both areas. This difference may have been associated with the participant rescheduling work hours to ensure more rest periods and, as such, at times felt that she was not training as often. The participant was selected in the Commonwealth Games Team, after successfully winning the national title in Week 22.





ratings.

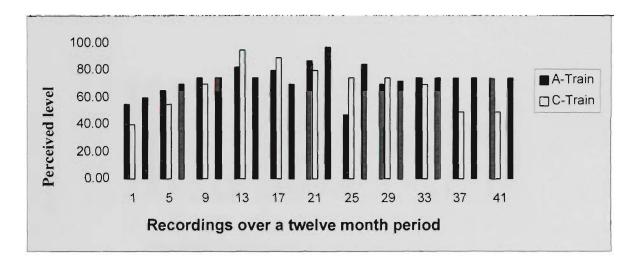


Figure 5.58b. Participant 3 and coach perception of participant's training performance.

Participant 4

Participant 4 rated perceived training and competition performance on average at 75 to 80 percent, as indicated by Figures 5.59 (a) and 5.59 (b). The first lower point in competition at the twenty-eighth week observation was during selection trials, whereas in the training figure, the 50 percent rating for five observations from Week 26 to 34 was during the participant's overseas training, and during preparation for his first international competition. The participant's coach scored the participant high during these weeks, as he was satisfied with how well the participant had prepared and adjusted to training overseas. The pattern was also evident in the perceived performance in competition graph, where the coach and participant regularly showed discrepancies in perceived competition performance. Discussion with the coach suggested that he perceived that the participant's parents were undermining the coach's program, which at times created conflict between the coach and the participant. The final measurement for both coach and athlete perceived performance were not completed due to access to both the athlete and coach during this period.

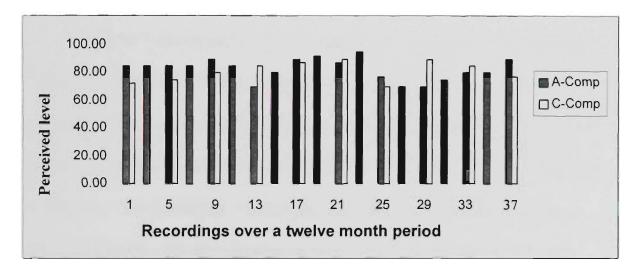


Figure 5.59a. Participant 4 and coach perceived performance of competition ratings.

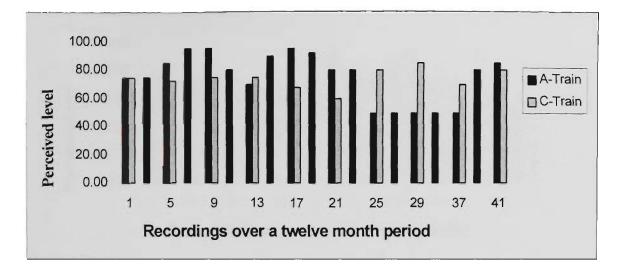
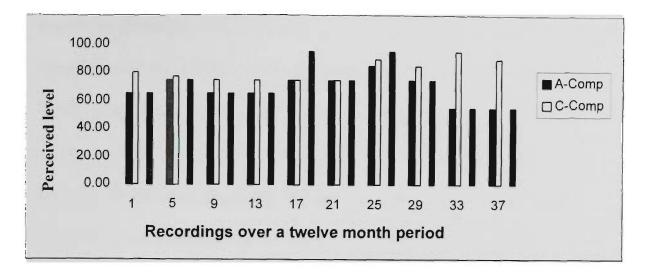
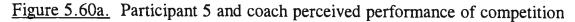


Figure 5.59b. Participant 4 and coach's perception of participant's training performance.

Participant 5

Participant 5 has similar competition and training perceived effectiveness (Figure 5.60 (a) and 5.60 (b)) to those of the coach throughout the year. Although several small discrepancies occurred and there was one large, but fairly brief one on the competition ratings from the thirty-third week to the end of the year. The participant's perceived competition performance rating was above 65 percent with the exception of Weeks 33, 36 and 37, which was the period following the participant's national championship title win, after Week 14. The coach scored the participant above 85 percent during this period. The participant consistently rated training effectiveness above 60 percent and regularly reached 70 percent. The final two measurements for both the coach and athlete perceived performance and training were not completed due to access to both the coach and athlete during this period.





ratings.

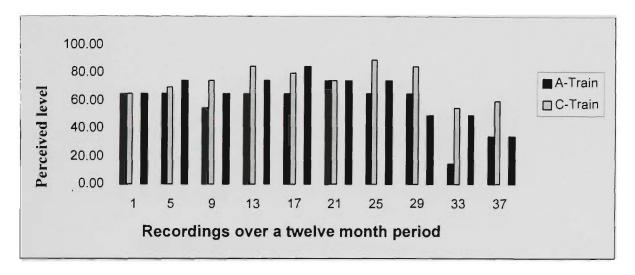


Figure 5.60b. Participant 5 and coach perception of participant's training performance.

Participant 6

The perceived performance effectiveness ratings of Participant 6 fluctuated throughout the experimental period. The coach ratings given by the coach did not deviate too much from 50 percent. Competing every week, the participant's perceived performance ranged from 50 to 75 percent. At training, the pattern suggests a steady start and then a big boost in training ratings by the participant, but not by the coach, from Weeks 9 to 27. The decline from Weeks 29 to 39 was during the tertiary examination period at which time the participant required assistance with study skills. The coach consistently rated the participant at 50 percent in training. While the differences for competition may be due to the participant competing regularly in club matches, which are outside the VIS program, but this does not explain the higher level of training effectiveness perceived by the participant in the middle of the program. The final two measurements for both the coach and athlete perceived performance and training were not completed due to access to both the coach and athlete during this period.

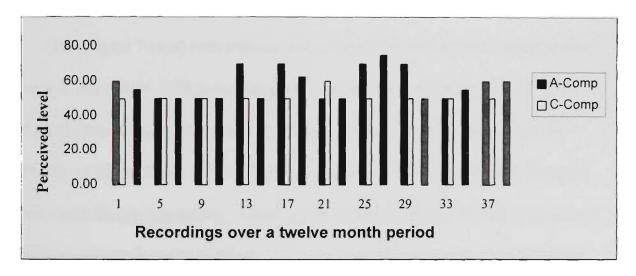
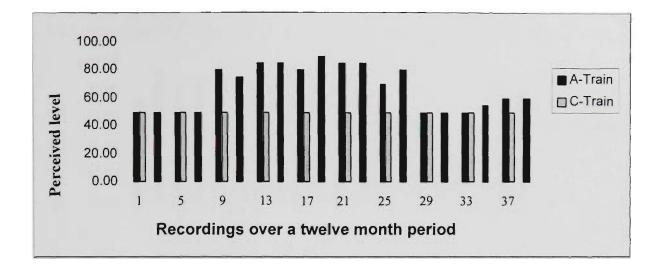
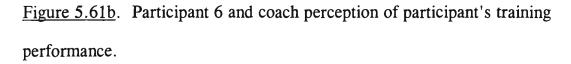


Figure 5.61a. Participant 6 and coach perceived performance of competition ratings.





Participant 7 rated both training and competition performance along similar lines to her coach. The lower ratings toward the end of Figure 5.62 (a) and 5.62 (b) are in line with the high levels of confusion and tension seen in the Profile of Mood States. This might be associated with the participant changing her coach during this period. There appears to be a general decline in perceived training effectiveness from Week 23 to 33. During this period, the participant was not working well with her present coach. However, following advice from the VIS program coordinator, the participant changed coaches at Week 34. This immediately affected the participant's self-report of training and competition performance in a positive manner. This was particularly evident from Week 33 to 39. The final two measurements for both the coach and athlete perceived performance and training were not completed due to access to both the coach and athlete during this period.

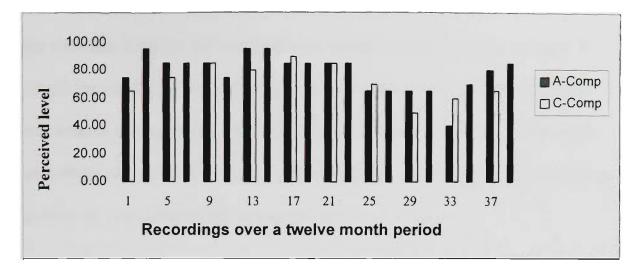
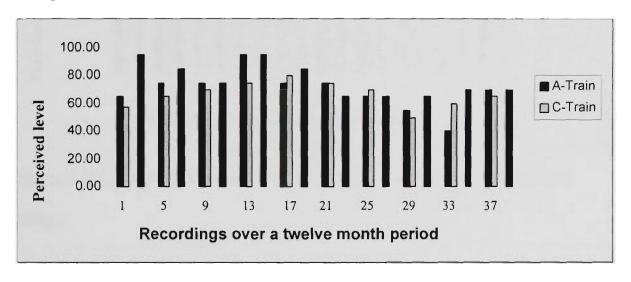


Figure 5. 62a. Participant 7 and coach perceived performance of competition



ratings.

Figure 5.62b. Participant 7 and coach perception of participant's training performance.

higher perception than the other. During this time, the participant's selection for the national squad, after ten years of continuous inclusion, was in doubt. It would appear that the relationship between the squad coach and the participant was tenuous during this period. The final two measurements for both the coach and athlete perceived performance and training were not completed due to access to both the coach and athlete during this period.

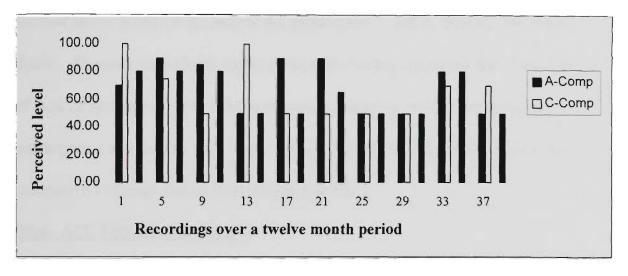
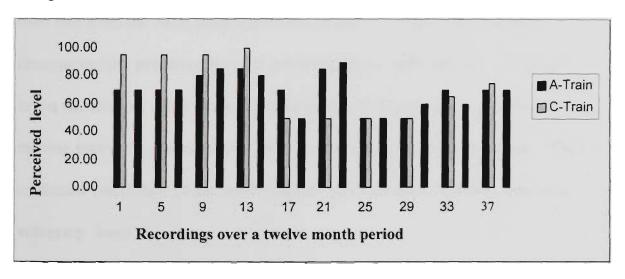


Figure 5.63a. Participant 8 and coach perception of participant's competition



ratings.

Figure 5.63b. Participant 8 and coach perception of participant's training

performance.

Summary of Performance Ratings for ACE Program Group

Amongst the participants who were involved in the ACE program for the whole year, three national titles were won, as well as a world junior championship, and the remaining four participants in the program were selected in national teams. The participants' and coaches' ratings showed very similar patterns in all but two participant-coach dyads. The coach and participant showed lower levels of agreement for participants 2 and 4, than for the other dyads. Discussions with the participants and coaches suggested that these cases of lack of agreement were associated with an ongoing conflict between the participant and coach in each case, or even lack of communication, however, no conclusive evidence can be drawn from the data.

Non- ACE Program Participants

An analysis of the non-ACE program participants can only provide a cursory view, because association with these athletes was minimal following their exit from the ACE program. It was, at times, unclear what preceded changes in their perceived training and competition performance. A total of seven participants chose not to continue in the ACE program as a result of moving interstate, chronic injury, and non-selection in the VIS program. Their continued completion of the psychological tests throughout the year was on a voluntary basis.

Participant 9

Participant 9 showed no significant change in their level of perceived performance in competition for the whole year, as shown in Figure 5.64(a). Although the coach/participant difference at the beginning showed a 20 percent discrepancy, by Week 25 the coach's ratings had dropped to the same level as the participant's ratings. It appears that the participant had changed coaches during this period and this may account for the initial difference. The coach/participant training effectiveness ratings in Figure 5.64 (b) generally show agreement between the participant and coach, except during Weeks 9, 13 and 37. No reason evident, except coach dissatisfaction early in the study. However, this does not explain week 37.

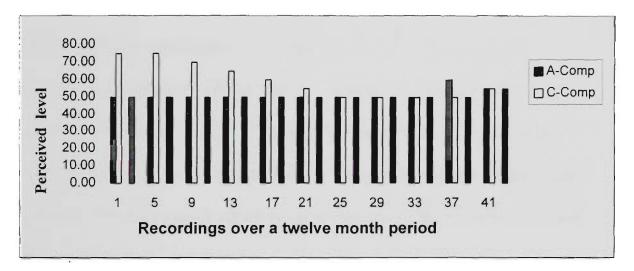


Figure 5.64a. Participant 9 and coach perception of participant's competition

ratings.

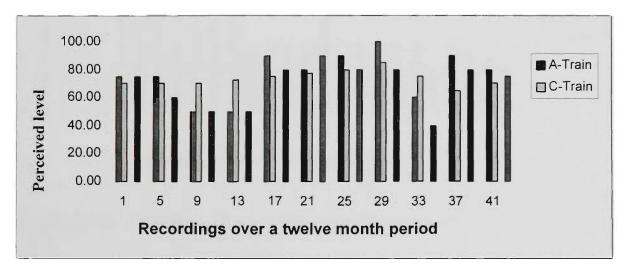


Figure 5.64b. Participant 9 and coach perception of participant's training performance.

Participant 10 showed no consistent pattern but perceived her performance in competition and training to be generally higher than the coach, as shown in Figures 5.65 (a) and 5.65 (b). The coach did not rate the participant's competition performance above 50 percent. The coach stated that during this period the competition program included only domestic competition and that the participant was in off-season training and, therefore, the coach felt it appropriate to only rate their performance at around fifty percent. For perceived performance in training, Figure 5.65 (b), indicates the coach/participant assessment was closely aligned, although in Week 13 the participant rated herself 40 percent lower than the coach in competition, and 20 percent lower in training. This discrepancy cannot be accounted for, as the participant was not monitored throughout this period.

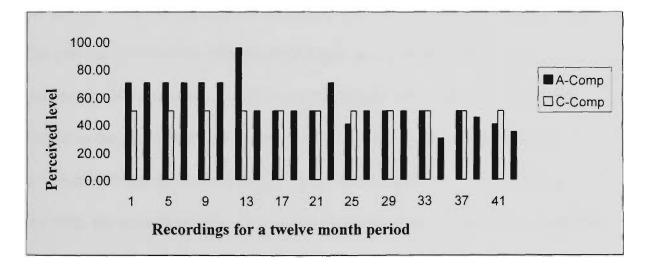


Figure 5.65a. Participant 10 and coach perception of participant's competition ratings.

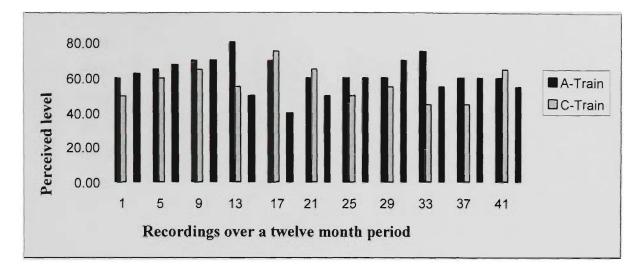
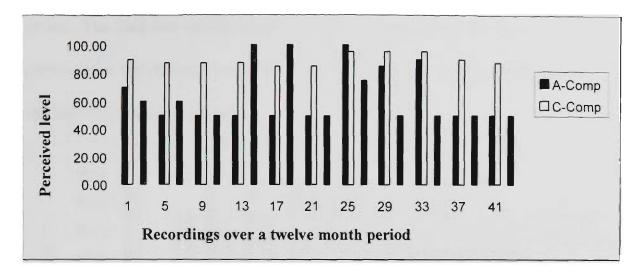
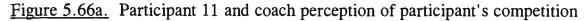


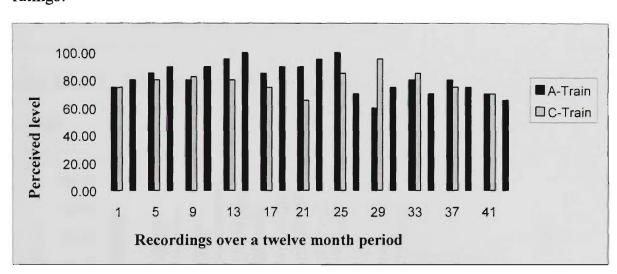
Figure 5.65b. Participant 10 and coach perception of participant's training performance.

Participant 11

The perceived competition effectiveness of Participant 11 shown in Figure 5.66(a), fluctuated from 100 to 50 percent on a regular basis throughout the year, whilst training performance, in Figure 5.66(b), decreased during the last half of the year. The participant's coach did not rate the participant lower that 85 percent on competition performance throughout the program, but did mark the participant's training effectiveness lower on a consistent basis. The enormous differences in perceptions of participant and coach may have been linked to the fact that the participant had shifted into a residential national program and communication links may not have been effectively maintained. As well, the participant was 15 years of age at the time, and may have had other adjustment issues to deal with. It could also be that the participant was no competition.







ratings.

Figure 5.66b. Participant 11 and coach perception of participant's training performance.

Participant 12

Participant 12 rated competition performance from nil in Week 5, to 100 percent in Week 9. The reasons for this are not known. The coach rated the participant high on competition and training performance throughout the year, as shown in Figure 5.67(a). The participant rated training effectiveness along a generally consistent line with the coach, as shown in Figure 5.67(b), except over the last few weeks. On Weeks 33 and 37 the participant rated himself lower than the coach did, as was the case with competition rating by the participant during this period. The final two measurements for both the coach and athlete perceived performance and training were not completed due to access to both the coach and athlete during this period.

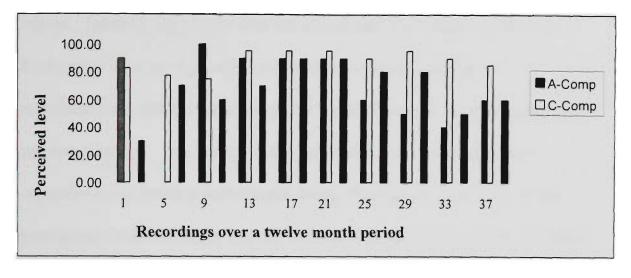


Figure 5.67a. Participant 12 and coach's perception of participant's competition

ratings.

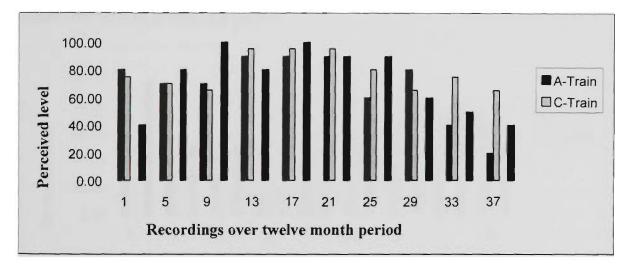


Figure 5.67b. Participant 12 and coach perception of participant's training

performance.

Participant 13 showed competition and training perceived performance ratings in Figure 5.68(a) and 5.68(b), that reflected very little similarity to the coach's ratings. Informal discussions with the athlete and coach suggested that the relationship between them was not conducive to encouraging good communication and this may account for the discrepancies between participant and coach ratings. The decline in the participant's ratings for perceived competition and training performance during Week 15 was just prior to the participant's non-acceptance into the national training program at the Australian Institute of Sport. The final four measurements for both the coach and athlete perceived performance and training were not completed due to access to both the coach and athlete during this period

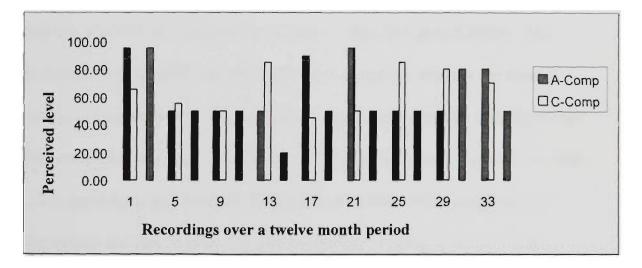


Figure 5.68a. Participant 13 and coach perception of participant's competition ratings.

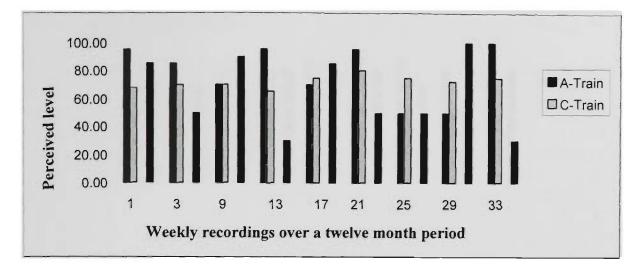


Figure 5.68b. Participant 13 and coach perception of participant's training performance.

Participant 14

The data for Participant 14 showed little agreement with the coach's perceived performance ratings in competition in Figure 5.6(a). In fact, from Week 25 there was a substantial discrepancy, reaching 40 percent in that week, and this was also the case with perceived training in Figure 5.69(b). The participant's perceived level of competition increased, whereas the coach's ratings dramatically decreased; the same can be said about the training ratings. The reason for this may be related to the fact that the coach was also the father of the participant and informal discussions with the athletes suggested that throughout the year as peak competition periods arose the communication between the two was minimal. The final four measurements for both the coach and athlete perceived performance and training were not completed due to access to both the coach and athlete during this period.

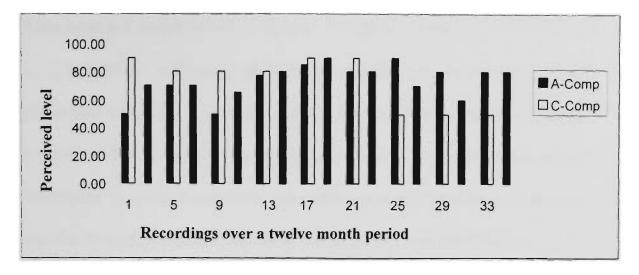
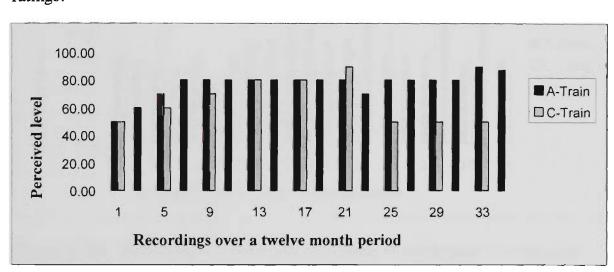


Figure 5.69a. Participant 14 and coach perception of participant's competition



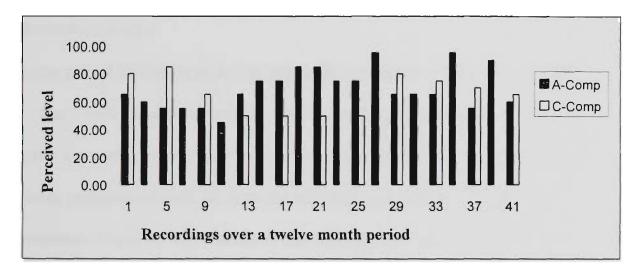
ratings.

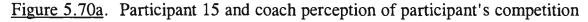
Figure 5.69b. Participant 14 and coach perception of participant's training performance.

Participant 15

Participant 15 showed a gradual increase in his perceived level of competition and training effectiveness from the eleventh week until the twenty-first, while the coach's competition rating dropped from Weeks 1 and 5 to a stable 50 percent in Weeks 13, 17, 21, and 25. Participant/coach competition discrepancies are seen in Figure 5.70 (a), again the participant ratings themselves considerably higher than the coach. In competition and training on Weeks, 1, 5, and 9 the coach rates the athlete a lot higher than the athlete does.

Then there is a switch around in Weeks 13 to 25 in competition, and Weeks 13 to 41 in training. Although training stays with athlete rating higher for the rest of the year and athlete's training ratings are low, athlete's competition ratings rise from Week 29 to 41 to match or exceed those of coach. The relationship of Participant 15 with his coach was not conducive to high performance training and the on-going problems with the coach resulted in the participant's withdrawal from the program.





ratings.

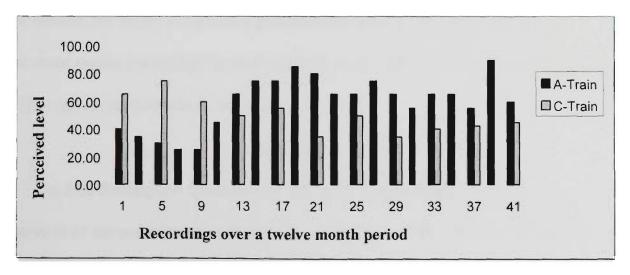


Figure 5.70b. Participant 15 and coach perception of participant's training performance.

Summary of Performance Ratings for Non Participants

Participants who did not participate in the program showed no systematic changes in their perceived training or performance effectiveness. In fact, there was no consistent trend in relation to either their training or competition program, nor was there a trend for the ratings from their respective coaches. The perceptions of performance of non-ACE program participants also showed limited agreement with their coaches' perceived competition and training effectiveness ratings.

Comparison of Performance Ratings for ACE Participants and Non Participants

The results for athletes within the ACE program participant group showed a greater level of agreement with the coaches' perception of their competition and training performance than did those for non-ACE program participants. The perceptions of athletes and coaches in the ACE program participants group also showed a more consistent pattern of perceived sound training and successful performance than their non-ACE program counterparts. VIS records indicated that overall, the actual competition performance of ACE program participants was more successful during the twelve-month period than that of the seven non-ACE program participants in this study.

Self-Concept

The Self-Description Questionnaire III (SDQ III), provided a cursory overview of the participants' self-concepts. The focus of the analysis will be on the ACE related self-concept changes, that is, the subscales relevant to sport, primarily the general, emotional, problem solving, and physical ability selfconcept subscales. Where relevant, subscales related to particular ACE interventions for single individuals will be highlighted. Although thirteen subscales make up SDQ III, the graphs will display only those that are relevant. The vertical line depicts the source for each Self Descriptor, while the horizontal line indicates the monthly recordings. For the purposes of clarity, few changes were observed in the other subscales over the 12-month period. The first questionnaire was not distributed until the third month of the treatment, which resulted in only 10 questionnaires being completed rather than 12. The reason for this was to slowly introduce the participants into the requirements of the questionnaire, and to minimise the time required to complete all the questionnaires used in this study.

Participant 1

The ACE Program provided assistance in the area of time management, planning, and problem solving. Figure 5.71 shows general and emotional wellbeing to be quite stable despite the participant's lack of confidence in combining first year university and an increasing level of overseas competition. Problem solving and physical ability self-concept indicate a gradual incline during the treatment.

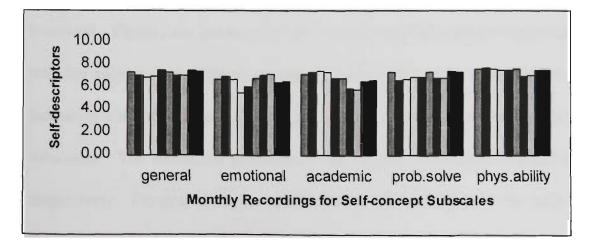
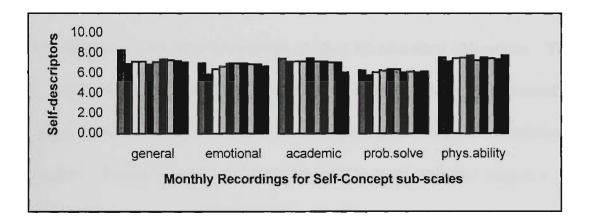
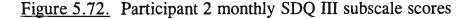


Figure 5.71. Participant 1 monthly SDQ III subscale scores

Early in the semester of his first year academic program, Participant 2 wanted to change his area of study. The ACE Program assisted by ensuring his present academic program was not affected, until a transfer to another course was arranged, as it was important that his marks remained satisfactory.

Figure 5.72 reflects a consistent pattern in general, problem-solving and physical ability subscales during the treatment, while academic and emotional self-concepts dropped after the first three to four months, but remained consistent for the remainder of the treatment.





Participant 3

Participant 3 experienced a number of critical life events throughout the treatment. Firstly, she got married, and was having difficulties communicating with her parents over religious matters. Figure 5.73 reflects these difficulties, indicating a slight decline in the religion, and general self-concepts and the parent subs-scale. The verbal and problem-solving subscales fluctuated and declined respectively. Physical ability rated high during the whole year. The ACE Program provided support by referring the participant to family counselling.

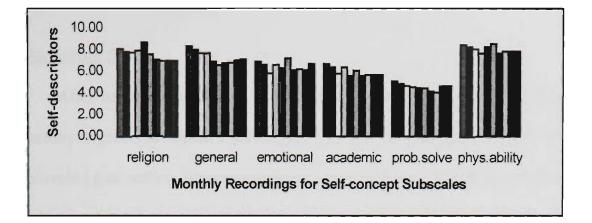


Figure 5.73. Participant 3 monthly SDQ III subscale scores

Participant 4

Participant 4 was experiencing difficulties in combining secondary school with an increasing commitment to his sport. He also expressed a concern regarding pressures from his parents to meet his education obligations. The ACE Program provided a study skills program, and assisted in the development of an annual plan, which the participant then distributed to his coach and relevant teachers. Figure 5.74 shows a general stability in all subscales despite a challenging year for this young athlete. Academic and problem-solving selfconcept did remain relatively low, however.

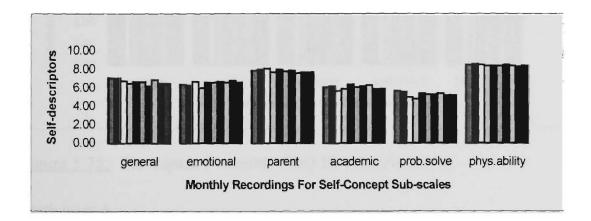


Figure 5.74. Participant 4 monthly SDQ III subscale scores

After winning the National Road Cycling Championships and completing a tertiary degree, Participant 5 took a year off working/studying. The ACE Program provided goal setting, time-management, and assertiveness training to assist the athlete to improve in areas highlighted from the initial ACE Assessment. Figure 5.75 depicts a slight improvement in physical ability, while problem-solving remained relatively stable. The emotional and general self-concept scales fluctuated and stabilised respectively, depicting a gradual decline with the emotional scale improving in the last two monthly recordings. The academic scale declined throughout the year. No reason is known for this. Although during informal discussion with the athlete he as concerned about not studying during the year, and this may have been defined by him as a decline in his academic development.

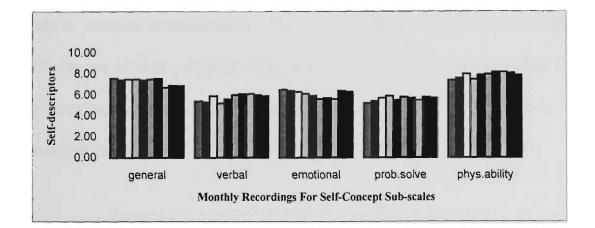


Figure 5.75. Participant 5 monthly SDQ III subscale scores

Participant 6

Participant 6 relocated from country Victoria to Melbourne, and was provided with financial assistance from the ACE Program, as well as support counselling in finding accommodation and employment. She took part in a number of workshops including: time-management, career planing, goal setting, and financial planing. Figure 5.6 shows all subscales demonstrating little change at all throughout the treatment.

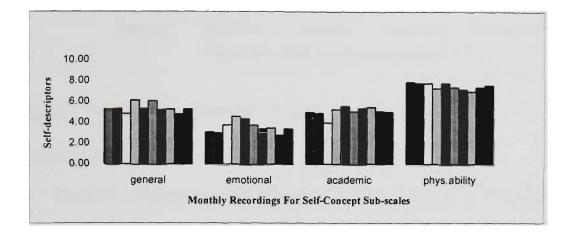


Figure 5.76. Participant 6 monthly SDQ III subscale scores

Participant 7

The ACE Program provided counselling and workshops to Participant 7 in the following areas: educational tutoring, study techniques, and annual planning. As a result of developing an annual plan, she deferred the second semester of study to compete internationally. Figure 5.77 reflects a decline on the academic self-concept subscale, with all other subscales remaining relatively stable. Except for emotional levels, which appeared to fluctuate, however no reason was identified for this.

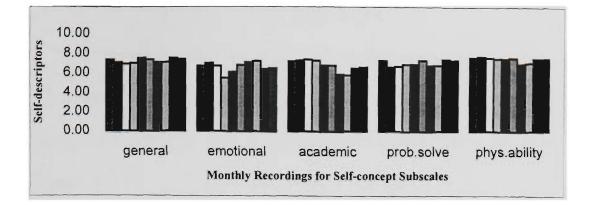


Fig. 5.77. Participant 7 monthly SDQ III subscales scores

Participant 8

The ACE Program assisted Participant 8 with workshops in financial planning, goal setting, annual planning, and negotiation skills. Figure 5.78 reflects relative stability in all subscales.

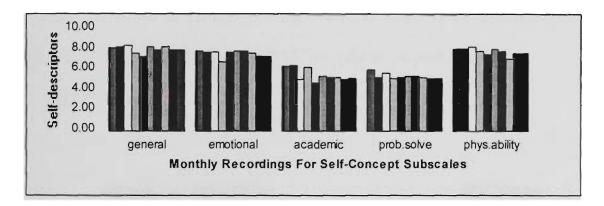


Figure 5.78. Participant 8 monthly SDQ III subscales scores

Summary of Self-Concept for ACE Program Participants

The most obvious point is that even on the subscales that bear some relation to the ACE program, there was little reflection of changes in self-concept that related to the treatment. This was reinforced for the other SDQ subscales, which are not presented here.

Non Participants

No intervention from the ACE Program was implemented for participants 9,

10, 11, 12, 13, 14 and 15. Individual interpretation was not appropriate, as no monitoring of the participants took place, and therefore there could be no explanations for any changes observed to the subscales.

Participant 9

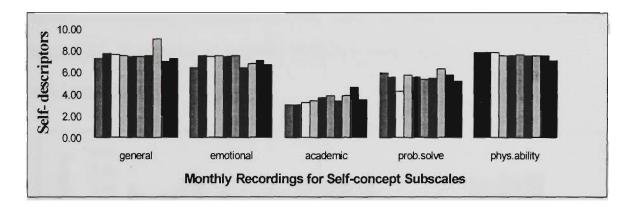
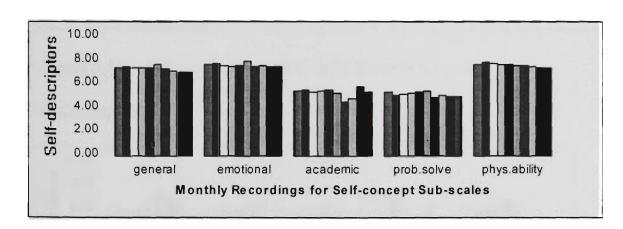


Figure 5.79. Participant 9 monthly SDQ III subscale scores



Participant 10

Figure 5.80. Participant 10 monthly SDQ III subscale scores

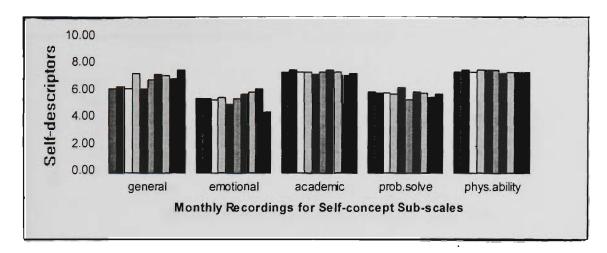
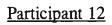


Figure 5.81. Participant 11 monthly SDQ III subscale scores



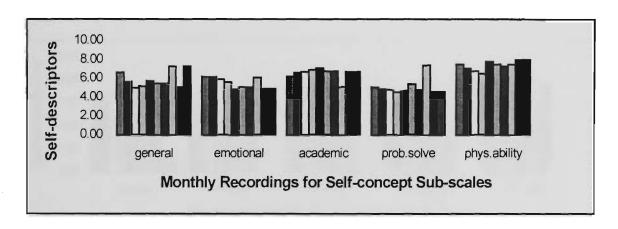
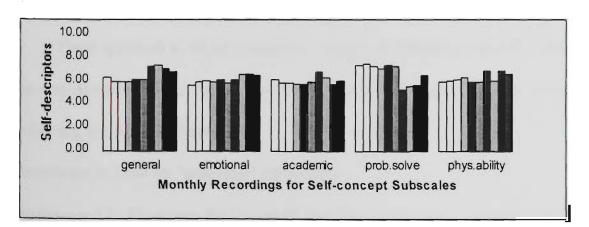


Figure 5.82. Participant 12 monthly SDQ III subscale scores



Participant 13

Figure 5.83. Participant 13 monthly SDQ III subscale scores

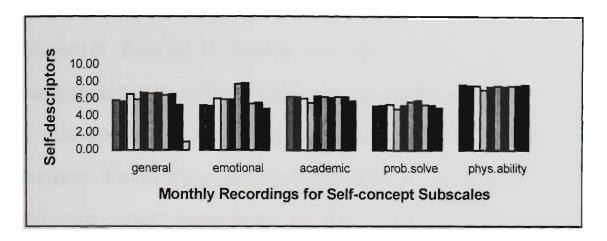
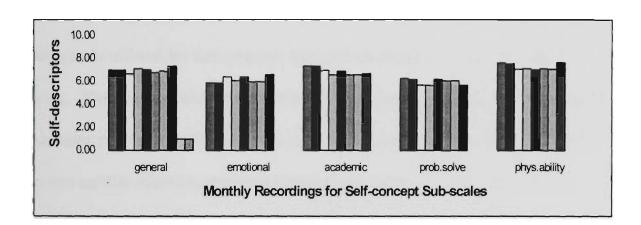


Figure 5.84. Participant 14 monthly SDQ III subscale scores



Participant 15

Figure 5.85. Participant 15 monthly SDQ III subscale scores

Summary of Self-Concept for Non-ACE-Participants

There appeared to be no systematic changes in relation to the self-concept of the non-Ace paticipants. Again, few changes were observed in general, although the following are worthy of note:

Participant 9: Low on "academic" throughout.

Participant 12: Fluctuates for "general" and "problem-solve", going up especially on the eighth month.

Participant 14: Very low "general" in month 10 and high "emotional" in months 6 and 7.

Participant 15: Extremely low "general" in months 9 and 10.

Comparison of Self-Concept for ACE participants and non-participants

No obvious difference can be seen between the ACE and non-ACE participants. It is not clear whether this is a reflection of SDQ III lack of effectiveness or simply due to the fact that self-concept is relatively stable over time and no major life changes occurred for most participants.

Psychological Well-Being

Well-being measures may express how well an individual is coping. The wellbeing scale utilised for this research focussed on positively oriented, subjective wellbeing. The questionnaire was divided into two sections. Section one contained four questions pertaining to life satisfaction, with responses on 5-point Likert scales. The second section related to present feelings about morale and positive affect, and contained eight questions with responses on 5-point Likert scales. Participants were asked to circle the response that was closest to how they were feeling at the time of completing the questionnaire. The scores on all three subscales were combined to derive an overall well-being measure. The results are presented as totals for each scale: life satisfaction, morale, and positive effect, and for overall well-being. Individual participants are not discussed, as no real significant effect was identified, but the data are presented in two groups: participants in the ACE program and nonparticipants in the ACE program. Usual inspection of the graphs suggests that participants with the ACE program scored higher as a group on all scales, compared with non-participants.

The well-being graphs provide a useful illustration of the total data on life satisfaction, positive affect, moral level, and overall well-being. The bars indicate monthly measures of a twelve-month period. Utilising the statistical package for social science SPSS an analysis of variance (ANOVA) was performed on each of the following subscales: well-being, positive affect, morale, and life in general. The first analysis summed all the subscales to establish if there was a significant effect of ACE program participation on well-being, whereas the second analysis looked at each individual subscale to test for a significant difference for participation on life satisfaction, or morale, or positive affect. No significant effects were found for total well-being, $\underline{F}(1,13) = 0.54$, p > .05, or any of the three separate scales of morale, positive affect or life in general, $\underline{F}(1,13) =$

1.97, p > .05, F(1,13) = 0.58, p > 0.5, F(1,13) = 0.39, p > .05.

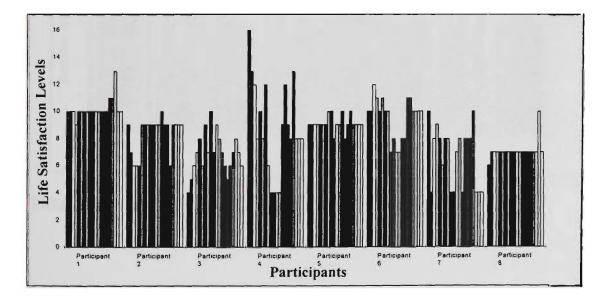


Figure 5.86a. Life Satisfaction of Participants in the ACE Program

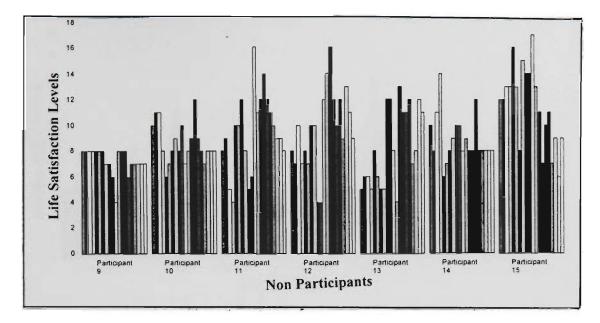


Figure 5.86b. Life Satisfaction of those who did not participate in the ACE

Program

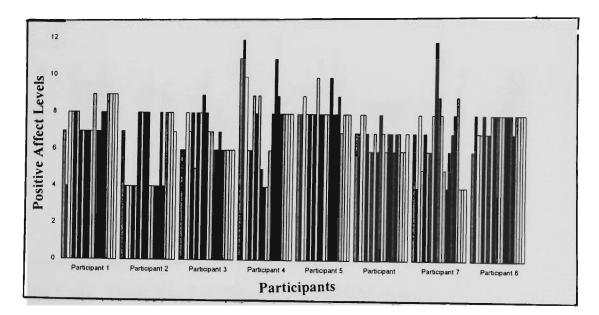


Figure 5.87a. Positive Affect of Participants in the ACE Program

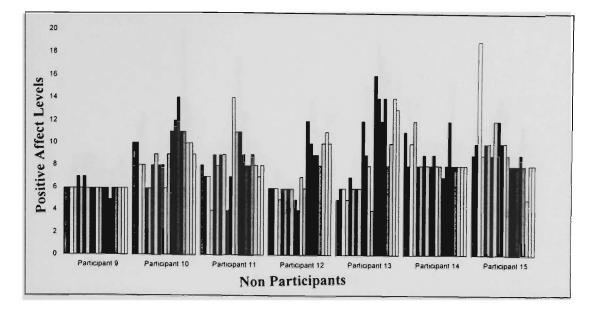


Figure 5.87b. Positive Affect of those who did not participate in the ACE

Program.

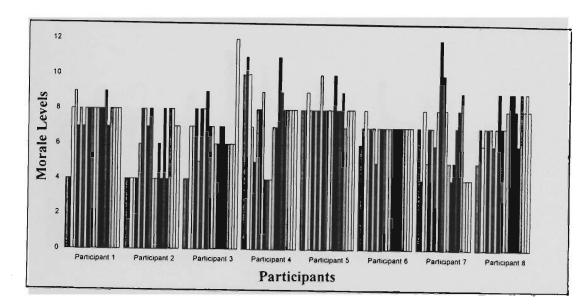


Figure 5.88a. Morale Level of Participants in the ACE Program

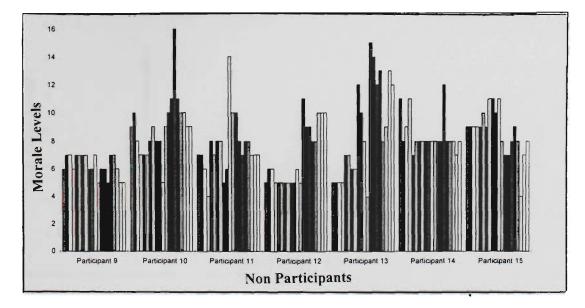


Figure 5.88b. Morale Level of those who did not participate in the ACE

Program

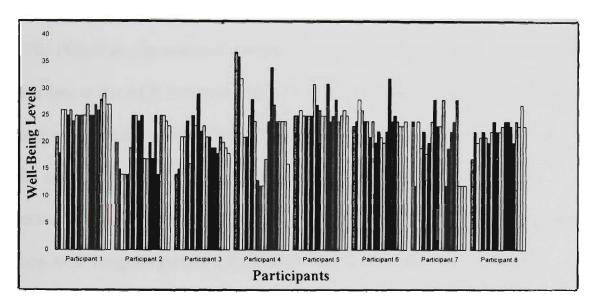


Figure 5.89a. Overall Well-Being of Participants in the ACE Program

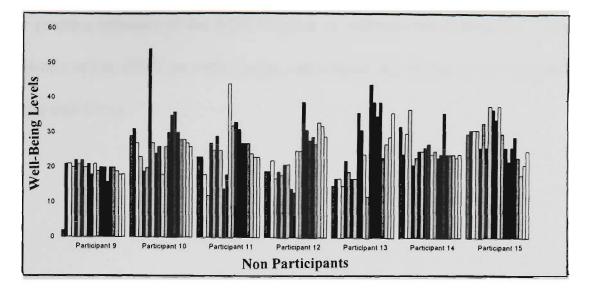


Figure 5.89b. Overall Well-Being of those who did not participate in the ACE Program

Summary of Results Section

The POMS results indicated a decrease in overall negative mood states for all participants in the ACE Program. Non-ACE Program participants POMS data showed no consistent trends. Perceived competition and training Performance results demonstrated a closer association for the reports of athletes and their respective coaches overall for the ACE Program participants than was observed for the non-ACE Program participants. On the other hand differences in patterns between athletes and their coaches were more obvious for the non-ACE Program participants group. ACE Program participants demonstrated more successful competition results in the 12-month period. The Self-Description Questionnaire (SDQ III) showed no obvious changes in self-concept subscales for ACE and non-ACE participant groups. Well-being data overall showed no significant effects that supported the influence of the ACE Program on well-being, although there was a trend on all well-being measures for the ACE Program participants to report higher levels of well-being than the non-ACE Program participants. Thus, there was clearcut support for a positive effect of the ACE Program on mood states, some support

for the positive influence of the ACE Program on self-reported performance ratings, no evidence of any effect on self-concept, and a trend only for an ACE Program effect on well-being.

CHAPTER 6: DISCUSSION AND CONCLUSIONS

This thesis examined a support program for elite athletes with particular emphasis on achieving a combination of sporting and career educational success. The program involved a collaborative approach, whereby the Athlete Career and Education Adviser developed an annual plan with the athlete, the coach, and significant others in the athlete's life. The structure of the research included discussion on how retirement from sport can affect elite level athletes. The thesis provided an international perspective on lifeskills programs available to elite-level athletes, with a detailed description of the Victorian Institute of Sport (VIS) Athlete Career and Education (ACE) Program, which for the purpose of the research, was used as the treatment. To consolidate awareness of support programs available to elite athletes, a synopsis of a research tour involving the United States and Canada was presented. Investigative research involving the United Kingdom and France provided an international perspective that was compared with the Australian scene. To assess the contribution of the Athlete Career and Education (ACE) Program, quantitative measurements were used to evaluate athlete/coach perceptions of the athletes' performance, and athlete self- reports of their mood states, self-concept, and psychological well-being. These measures were employed to determine what influence the ACE Program had on the perceived performance and general wellbeing of a selected group of elite scholarship athletes associated with the Victorian Institute of Sport. Each athlete was monitored for a ten-month period.

Formal Conclusions

The benefits of an Athlete Career and Education (ACE) Program for elite athletes can best be seen through the patterns observed for the measure of mood states. It is here where there was clear evidence of improvements, primarily in terms of reduction in negative mood states, with the strongest effects typically seen for tension. In contrast to the systematic patterns of reduced negative mood states over the 10 months observation for the eight athletes who took part in the ACE program for the whole year. The results of the seven athletes who did not participate in the ACE program were much more variable, showing a range of fluctuations with no clear and consistent positive change. Scores on the performance rating instruments, which measured perception of training and competition performance, appeared to improve for the ACE group more than for non-participants. There was also a higher correlation between coach and athlete perceptions of competition and training performance than was shown by the ratings of non-ACE athletes and coaches. Self-concept as measured by the Self-Description Questionnaire III, showed no significant change over the 10-month period, that was related to the ACE program. The measure of psychological well-being indicated that there was no significant difference between the ACE Program participants and non-participants, although a trend for higher well-being in ACE Program athletes was observed.

Relationship of Results to Theory and Research

Existing research in the area of lifeskills education and elite performance is not extensive; in fact there are no parallel studies to this one, which makes it difficult to conduct any comparisons between this study and other research. For a number of years, academic theory and research have clearly stated the need for such programs (Anderson & Morris, 1994; Blann & Zaichkowsky, 1988; Danish, Petitpas, & Hale, 1993; Fortunato & Morris, 1997; Gordon, 1995; Hawkins & Blann, 1993), which, to date, the organisations around the world that are responsible for elite athlete wellbeing, have been slow to implement (Fortunato, Anderson, & Morris, 1995). The Australian system of sport has been showing strong worldwide leadership in transforming theory into practical-based programs through initiatives such as the ACE Program (Hawkins & Blann, 1993). The need for elite athlete retirement programs has become evident as a result of extensive research (Baillie & Danish, 1992; Fortunato, Anderson, Morris, & Seedsman, 1995; Gordon, 1995) and, as a result of this research, the focus has been to encourage a pro-active approach, whilst the athlete is still competing (Danish, Petitpas, & Hale, 1993). The need for such programs has focused on more than planning for retirement. It has aimed at encouraging support that would broadly help athletes to balance their career in sport with alternative vocational plans and personal development, thereby making the transition from elite sport less traumatic (Blann & Zaichkowsky, 1986; Fortunato & Morris, 1997). Danish, Petitpas, and Hale (1993) proposed that when athletes retire from sport their whole "ecosystem" requires adjustment. The results found in this thesis support that claim, after reviewing the international athlete career and education programs, which, for example, in the USA cost millions of dollars a year to support athletes during their retirement. Brewer et al. (1993) observed that this sporting identity, which athletes assume during their competitive years, is one of the major factors that, makes it difficult for athletes to consider life after sport. The ACE Program attempts to challenge the athlete to develop an identity that is much broader without moving their focus away from their sport. Since the 1980's researchers have been professing the importance of athlete career and education programs, whilst the athlete is still competing (McPherson, 1980; Schlossberg, 1981). While more recently writers such as Brewer et al. (1993), Gordon (1995),

Hawkins & Blann (1993), and Jackson (1996) have promoted the need for more intervention programs during the active careers of athletes. The research supports the notion that transition from elite sport is made much harder when an athlete's concept of reality is distorted as a result of measuring their self-worth too extensively based upon their sporting ability (Brewer etal.,1993). The ACE Program introduces an opportunity for athletes to successfully integrate their often competing demands in and outside sport by providing a framework for self-education, which in turn may assist them to achieve a great deal, both within their sport and in their life beyond sport. The present study supports the application of athlete career and education programs, show positive changes to mood state and to perceptions of performance, that might also have a longer-term impact on the lives of athletes as their experiences are widened by the educational process.

Methodological Considerations

In discussing the findings of this research, the four variables did provide an opportunity to make some comparisons between the participants and the non-participants. The profile of mood states results for all the participants who remained in the ACE program showed a general pattern of decline in negative mood. Despite some individual fluctuations the emotional state in most participants improved and this change can at least be partially attributed to the ACE program. In comparison, the non-participants showed greater variations in negative mood states, which often simply fluctuated over a period of several weeks, repeating this cycle throughout the year. Thus, it can be concluded that the measurement of mood states was an effective way to monitor the fluctuations in emotions of athletes over a longer period of time.

When comparing the perception of training and competition performance between the two groups, a key observation was that there was no consistent agreement between each athlete and their respective coach, within the non-ACE participants in this study. As well, no obvious change in the athletes' perceived training or performance effectiveness was seen. For the ACE program participants and coaches', ratings showed very similar patterns for an athlete and their coach, any differences between the coach and athlete appearing to be associated with ongoing communication issues. The major difference noted between the participants' and non-participants' performance, in addition to the more consistent and higher ratings of the ACE program participants, was the overall competition result over the 10-month period. The participants won three national titles and one world junior championship, and the remaining four participants were selected in national teams. In comparison, the non-participants displayed no success at major international or national competitions, and of those eligible for national selection only one participant was selected to compete in a national team. Although it must be acknowledged that more meaningful results would be derived if actual performance had been measured, this was not possible because of the wide variety of sports involved in the study. Nonetheless, the correspondence between athlete and coach ratings for the ACE participants and the agreement between the self-reports of performance and actual performance, suggest that the approach adopted here did work effectively.

The third variable, self-concept, showed very little if any differences between the participants and non-participants. This may be a result of self-concept being relatively stable over time and, thus, the ACE Program did not typically affect this

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measure. Use of general self-concept scales should perhaps be restricted to studies where some aspect of the intervention is intended to change self-concept. In relation to the well-being scales, no significant differences were found between the participants and non-participants, although there was a trend for ACE program participants to reveal higher levels of well-being. The higher levels of well-being observed for the ACE Program participants in all the figures concerned with these variables might not have attained significance because of large within group variation in well-being, both for the ACE participants and non-participants. Tighter control of well-being of participants on entry might reduce such problems in future research. Such screening was not appropriate in the present context.

The intention in the overall design was to utilise a single-case approach, but due to ethical considerations and practicalities, the treatment of the ACE Program needed to start. Therefore only the POMS baseline included sufficient measures to provide the basis for a single-case approach, as SDQ III and Well-being were measured monthly, whereas athlete perceived performance and competition was fortnightly and coach ratings were monthly. The four-week baseline did not provide an adequate pattern for mood states, so the split-middle technique or similar statistics could not be carried out. Because many athletes experienced substantial changes in their lives on entry to the VIS Scholarship Program, their mood states on the first few occasions that they were measured appeared to be atypically high for many athletes. Although the visual analysis, focusing on the treatment period, provided a useful interpretation, utilising the split-middle technique would have provided more definite determination of changes from baseline to treatment phase, had the baseline been stable for most athletes. Using a case study approach, for

perceived performance, self-concept, and well-being, although not ideal, did allow an overall interpretation of the variables experienced by participants. As well, the case study approach permitted general ACE treatment influences to be related to changes observed in these measures, including influences of individual counselling, support, and actions.

Overall, the treatment was individualised through counselling and appropriate workshops. Of the 30 initial participants, 15 dropped out of the study completely, some retiring from elite sport as a result of personal choice, others moving to alternative high performance training centres and others quitting the study for reasons, which the researcher was, not privy to. Of the 15 who continued to complete the questionaries, seven did not avail themselves of the ACE treatment due to relocation, injury, or being deleted from squads and teams. The results reported by these participants were useful for comparison, but it must be acknowledged that these ACE program non-participants, did not constitute a planned control group. Also, lack of knowledge about them meant changes in their scores on various scales could not be interpreted. Thus, there was variable success in the use of measures. The POMS was found to be useful and quite sensitive and weekly completion was appropriate. The performance and training perception Likert scales lacked reliability and validity, although they did show interesting differences in level of agreement between the coach and athlete. The use of the SDQ was of limited effectiveness, unless a major life change occurred. No significant effect was reflected in the use of the well-being scale, although there was a trend for ACE Participants who scored higher than Non-ACE participants. Overall, in a real world setting, the design and execution of this study were effective enough to produce some interesting results,

but compromises were needed, and flexibility in handling treatment and measures was required. Lessons have been learned that could help researchers in this area to produce tighter studies in the future.

Implications for Future Research

This thesis has introduced the notion of providing intervention programs to athletes whilst they are still competing, and challenges the concept of athletes focusing purely on their sport to the detriment of their holistic development. The results of the study of such a program were positive in terms of state-like variables, but not conclusive for more stable personal dispositions. More evidence is needed, however, that such programs enhance current performance and psychological state. Research directions may include studies involving an experimental versus a control group, where intervention programs could be utilised and interviews could supplement or replace quantitative measures. Also, studies should compare different types of delivery mechanism to assist athletes, such as counselling, workshops, mentoring from senior or retired athletes, programs at local educational institutions, and workplace training. Further research that provides an opportunity to investigate career and education needs of athletes may challenge the world of sport to re-think the concept of the single-minded/single-focused athlete.

The view that a holistic approach to athlete development can lead to enhanced performance has been demonstrated on a small scale in this research. Results are tentative, however, and further research to support the present study is required. The results of the present study are strongest for the mood state variables. It was indicated that ACE program participants became consistently more positive in their moods during the treatment period, whereas the moods of the non-ACE participants fluctuated with no pattern over the study period. This was supported by a trend toward more positive well-being in the ACE group than for the non-ACE Program participants. At the same time, performance of ACE participants was perceived to be stable and relatively strong compared to non-ACE Program participants. These results should be tested further in a range of athlete career education environments, using a combination of research methods. Now that the ACE program has been extended nationally, it is possible to involve participants from different environments and to examine the program delivered by a range of career consultants. This would provide a test of whether the program is effective, as opposed to the presenter's personal characteristics, such a commitment and belief in the program, influencing the participants. To circumvent the problem stated earlier, that scholarship athletes could not be assigned to a control group for practical and ethical reasons, it might be possible to identify matched non-program athletes through the ACE Program participants. These athletes could be offered a program that provided the same amount of personal attention, but focused on issues not concerned with careers or further education, in order to control for the effects of attention. This type of study could provide more substantial quantitative tests of the effectiveness of the ACE program, or other athlete career education programs. It would also be useful to explore the experiences of ACE participants in more detail, utilising a rating or evaluation questionnaire or in-depth interviews, repeated at various points during the program. Using such methods, it would be possible to explore a range of issues including such matters as participants' evaluation of specific and general elements of the program and changes in thoughts and feelings about sport, work, and social activity. There is also no doubt that to survive the

high attrition rate associated with competition at an elite level, athletes require planning and personal skills that enable them to cope with the demands of their present life, while not becoming anxious about the uncertainty of the future. Athlete education and career planning, communication, and personal development programs can stabilise athletes in the present, as well as prepare them for the future. These attributes are required because the experience of competing at a high level is a unique one, in that there are few human endeavours, that can match the intensity of the stress associated with the Olympics, World Championships, grand finals, and other major sport events. In fact, an athlete often must face, in a matter of a few hours or days, the kind of pressure that occurs in the whole lifespan of many people. There is a need for full recognition of the intensity of the life experience of elite athletes, if they are going to effectively meet the demands often associated with elite sport. It is also important, to support the notion of a balance with regard to life outside sport. The present study showed how resolving specific problems in the personal lives of several athletes and providing them with generic skills for life and sport lead to more stable, positive moods. It is important to build on this foundation by studying critical elements of lifeskills programs for athletes, factors that affect the efficacy of the delivery of such programs, and the phenomenology of the experience of lifeskill education programs by elite athletes.

There have been claims that elite-level competition builds character and toughness, and prepares the young for life in the real world (Coakley, 1983; Kleiber & Brock, 1992; Murphy, 1995). There is little empirical evidence to support this statement, in fact, there is evidence that elite-level performance limits growth in some areas. In fact athletes are frequently finding that they incur a range of personal, social, and psychological costs when they devote time and effort to compete at an elite level (Brewer et al., 1993). Ongoing research is needed into the implications for performance when both athletes and coaches become to narrow in their focus and foreclose on their total development. The belief systems of many elite athletes come out of the culture that sometimes exists in sport, one that often demonstrates a ruthless selection process, poor communication and decision-making that places the non-performance needs of athletes as the lowest priority. Programs like the ACE Program studied here can help athletes to view their world in a way that is more balanced and holds greater promise for their long-term future, as well as their present sport success. The present study showed that athletes and their coaches typically perceived the athlete's ACE involvement to enhance training and competition performance overall, despite taking time away from sport specific preparation. Research into the debriefing of athletes is highly recommended. More applied research is needed to support the ongoing development of programs that can educate the athlete, coach, and administrator to avoid those negative habitual ways of behaving or thinking that obstruct many athletes from reaching their potential. Athletes must be viewed as more than just single-minded physical machines that, by sheer dedication and persistence, achieve success in sport. A collaboration between athlete, coach, and their significant others is needed in order to develop a systematic approach whereby the athlete's sporting, vocational/educational, and personal development needs are addressed. Applied research that examines the total development of athletes is likely to provide evidence that will assist coaches and athletes to have compatible and achievable objectives.

Athlete career and education programs have two main purposes. One is to help elite athletes to lead a more balanced life in the present. This includes teaching athletes skills to allow them to cope with stressful situations in their sport, occupation, and personal life. It also involves reducing stress to enhance Mood State and well-being, so that athletes can maximise performance. The second purpose is to prepare athletes for the future, providing them with specific and general skills that will help them throughout their athletic careers, during the transition from elite sports performance to other careers and lifestyles, and for the rest of their lives. It is important that longitudinal studies be conducted to examine the long-term efficacy of life-skills programs that are introduced early in the elite-level career of athletes. It is recognised that the logistics associated with such research makes longitudinal studies onerous, but it is only by following elite athletes throughout their athletic careers and for some time after that the natural history of athletes with lifeskill education will emerge. Thereby gaining a greater understanding of the full impact of lifeskills education programs for elite athletes. Accepting the problems and the expense associated with tracking individuals over such long periods of time, an alternative approach is to examine cohorts. In this type of research, longitudinal implications are drawn, with attendant qualifications, based on examining different groups moving through time, but for shorter periods. Thus, comparing elite athletes, who have not been exposed to lifeskills programs, during the period leading up to and following their retirement, with a cohort of athletes who are now receiving lifeskills education, when they go through the same transition, could highlight the benefits of such programs. A similar cohort study could be conducted for mid-career experiences, comparing athletes currently in mid-career with no lifeskills programs

with the present early career recipients of lifeskills education, when they reach midcareer. The implications of lifeskills education are far-reaching and such flexible research methods need to be considered, if the claims made for such programs are to be properly examined.

Although the focus of the present research was on competing athletes, it was interesting to observe how the evaluation by coaches of their athlete's performance appeared to be more consistent for ACE program participants than for non-ACE participants. Research into what factors associated with lifeskills education programs positively influence the relationships between the coach and athlete would be beneficial. Given that there was a difference between the ACE and Non-ACE Program participants, it would be extremely useful to examine how closely the athletes and coaches perceived performance and training ranking to be related to actual performance. This has obvious implications for sport psychologists. Implications for Practice

The present results for performance indicated that, typically, athletes and coaches perceived the athlete's performance in quite similar ways. For ACE participants, exceptions to this occurred when there was known to be disharmony between the athlete and the coach on issues of training and competition strategy. This suggests that periodic assessment of self-perceived performance by athletes and their coaches might provide early warning of impending or existing problems of an interpersonal nature that may need to be addressed. It might be that divergence of athlete and coach perceptions of athlete performance can arise from other sources. This is worthy of further empirical examination.

The results reported in this thesis, despite highlighting the need for more research to replicate the present findings, have acted as a catalyst for the development of a national athlete career and education program. This was established during the writing of the thesis, based to a noteworthy extent on the findings of this study. Managed by the Australian Institute of Sport and coordinated by the State Institutes/Academies throughout Australia, the National ACE Program provides career and education support to 3,000 elite level Australian athletes, and is already well-established in all states and territories. Evaluation of the progress of the national program should provide further evidence on the practical effectiveness of the type of lifeskills education program that is fully integrated into the preparation programs of developing and establishing elite athletes.

The evidence that the POMS is an effective indicator of readiness for performance is well established (LeUnes,Hayward & Daiss1988). Results of the present study suggest that POMS could be used effectively as a means of monitoring overall mood, during all phases of training. Several sub-scales were shown to be sensitive to stressful situations experienced by the athletes or disturbances in the lives of the athletes. Regular monitoring of mood state, using POMS, could alert those who provide that individual with support, that there is an issue that needs to be addressed.

A further working consideration is the need for elite athletes to have a well understood, integrated twelve-month plan, which is developed, monitored, and modified in conjunction with their coach. It is essential that this plan highlights all competition, training camps, and peak times in sport, as well as education commitments or work- related periods where the intensity of that activity is expected to increase, such as the end of the financial year, stock- takes, strategic planning times, or examinations. In the case of young athletes, parents need to be clear about the coach's expectations for the athlete. Maintaining a good understanding with the parents should be an ongoing part of the coach's communication strategies. A collaboration between athlete, coach, and the athlete's significant others is needed in order to develop a systematic approach whereby the athlete's sporting, vocational/educational, and personal development needs are all addressed in a balanced way.

To summarise, the present study has provided support for the value of the type of lifeskills education program for elite athletes that is integrated into their overall preparation. The value of such integration has been recognised by the national development of the ACE program.

Concluding Remarks

The thesis aimed to examine whether athlete intervention education, career, and personal development programs, influenced the Mood State, self-concept, general well- being and athlete's perceived training/competition performance of elite level scholarship athletes. The findings indicated that positive influence occurred in mood states, perceived performance in competition and training, and there was a positive trend for well-being. The thesis has made a contribution in a number of areas. Firstly, it has assisted in the implementation of a national athlete career and education delivery framework. Secondly, it has educated participating athletes in their career planning and development. Finally, the study has supported the need for future research in the area, and the feasibility of conducting such research in a relatively sensitive and unobtrusive way. The challenge of conducting research in real world settings with elite athletes, includes the timing of the studies, the availability of participants, and the needs of the athletes have been identified and were addressed in the study. In the present study, the tightest control and the most stringent experimental design could not be followed in every way, but the value of the outcomes of this study is great in understanding what happens to real athletes in real situations.

The main results of the study have indicated that positive mood state was enhanced by involvement in the ACE program, whereas negative mood state decreased, communication between athlete and coach was more consistent, and perceived athlete performance and training effectiveness was more positive for ACE program participants. The value of these results was largely seen in broad terms for ACE program participants, who typically experienced a more successful year in terms of their performance than did the non-ACE participants. As well, the participants were given strategies to deal with issues and problems affecting their career and education, which, together with enhanced current well-being, contributed to the holistic development of the participants and their long term needs. It is hoped that this research will stimulate others to study aspects of the important process of elite athlete career and education provision.

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APPENDIX "A"

- 1. That the VIS proceed with the development of a nationally accredited, competency based, professional development program for athletes and former athletes.
- 2. That athletes and/or their representative organisations be actively involved in the development of this program.
- 3. That a combination of coaches, sportspeople, teachers and other professionals be used as facilitators of the program.
- 4. That a variety of teaching strategies including guest speakers, discussions and small group work be used in the program.
- 5. That individual case management strategies be developed for participants undertaking the program and that the application of these strategies to other target groups be investigated, eg. long term unemployed.
- 6. That the delivery of the program be organised through the Institutes of Sport on a fee for service basis in accordance with quality control procedures established by the National Elite Sports Council.
- 7. That the time devoted to participating in this program be, on average, three to four hours a week and that the curriculum design take into account the training and competition commitments of athletes.
- 8. That flexible delivery strategies be developed to support the delivery of the program, which take into account time, location and mode of delivery. Such strategies will facilitate delivery of the program to elite athletes, athletes from non-English speaking backgrounds, Aboriginal and Torres Strait Islander athletes and athletes living in geographically isolated areas.
- 9. That a strategy be developed to further enhance the participation of females in the proposed program.
- That the program include studies in the following priority areas: Media Skills, Career Planning, Personal Development, Education, Stress Management, Motivation and Sport and the Law.
- 11. That a promotional strategy for the program be developed.

APPENDIX "B"

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This Stream may be taken as an Elective by all trainees, providing the trainee is currently actively involved in sports competition.

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SRT501 Self-awareness for Sportspeople (AFL501)

MODULE DETAILS

Module Name	Self-awareness for Sportspeople.
Nominal Duration	10 hours (5 Hours on the job, 5 Hours off the job).
Module Code	SRT501 - (AFL501).
Discipline Code	1301110.
Module Purpose	To provide sportspeople with an understanding of the role of the self-concept in enhancing sporting and personal performance.
Pre-requisites	
Concourser	Nil.
Co-requisites	Nil.
Relationship to Competency Standards	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
Summary of Learning Outcomes	 Outline the role of self-awareness in achieving personal goals. Outline the impact that positive and negative self-concept has on
Assessment Strategy	performance.
Assessment Method	Small group discussion, role plays. Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency in all learning outcomes. For specific assessment refer to the individual learning outcomes.

Conditions of Assessment

Assessment will take place in a suitably equipped theory space.

RECOGNITION OF PRIOR LEARNING

Acknowledges the skills and knowledge obtained through:

- formal training (conducted by industry or educational institutions in Australia or overseas)
- work experience (informal training)
- life experience.

The main focus is on the learning outcomes of these experiences, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one or more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

States with existing RPL policy guidelines should refer to these policies until the national policy is available.

Learning Outcome 1	Outline the role of self-awareness in achieving personal goals.
Assessment Criteria	o dame die fole of self-awateness in achieving personal goals.
Assessment Criteria	 Define the terms: self-awareness, self-concept, personal goals and self- esteem. Identify the factors influencing the development of self-concept. Identify the behaviours associated with positive and negative self-concept. Identify personal strengths and weaknesses. Identify strategies for establishing personal goals. List strategies based on the identification of personal strengths to build self-esteem.
Assessment Task(s)	It is recommended that this task be performed off the job.
	Identify and list three critical personal incidents which involved receiving messages (spoken/unspoken) from significant others and through small group discussion analyse the impact these have had on the development of self-esteem.
Conditions	
	The trainee will have access to: . suitably equipped theory space.
	. class handouts.
Content	This learning outcome may include but is not restricted to the following:
	Definitions:
	. self-awareness
	. self-concept . personal goals
	self esteem.
	Factors affecting self-esteem:
	. family:
	- number of children
	- type
	- place in family
	. gender . religion
	. culture
	. peer group
	. environment
	. social class
	. education . significant others.
	Behaviours associated with self-concept:
	assertive/aggressive withdrawn/outgoing
	positive/negative
	. Co-operative/unco-operative
	respectful/disrespectful
	individual/team
	selfish/considerate
	. responsiveness to feedback

- secure/insecure
- risk taking

.

responsiveness to new ideas.

Strategies for identifying personal strengths and weaknesses:

- . personal profiling
- . self-analysis
- . feedback from others
- psychological/personality tests
- professional counselling/coaching.

Personal goals:

- . short term
- . medium term
- . long term
- . attainable goals
- . types of goals.

Strategies to build self-esteem:

- examine mistakes
- give and receive compliments
- . analysis of feedback
- . setting and monitoring personal goals
- . reflection.

Learning Outcome 2	Outline the impact that positive and negative self-concept has on sporting performance.
Assessment Criteria	2.1 Identify the ways in which self-concept may influence a sports person's off and on-field behaviour.
	2.2 Identify the ways in which self-concept may influence a sports person's attitude and response feedback.
	2.3 Identify the ways in which self-concept may contribute to a sports person's performance in individual/team sports.
Assessment Task(s)	It is recommended that this task be completed off the job. Plan and participate in a role-play depicting the way in which positive and negative feedback can impact on a sports person's self-concept.
Conditions	The trainee should have access to: . a suitably equipped theory space . class handouts.
Content	This learning outcome may include but is not restricted to the following:
	Behaviour: assertive/aggressive withdrawn/outgoing positive/negative Co-operative/unco-operative respectful/disrespectful individual/team selfish/considerate response to feedback secure/insecure risk taking responsiveness to new ideas.
·	 spectators team members opponents officials family/friends peers

. supporters.

Attitude and response to feedback:

- receptive/defensive
- . ignore/take action
- question/accept

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- verbalise/remain silent
- argue/discuss.

Performance in team and individual sports:

- goals:
 - team
 - personal
- motivation
- dealing with success/failure.

Delivery of the Module

Delivery Strategy	
	This module provides for delivery in a variety of modes including workshops, self-paced and on and off the job delivery. Strategies should reflect the nature of the learning outcomes and the needs of the trainee. Some areas of content may be common to more than one learning outcome and therefore integration may be appropriate.
	On job activities
	It is recommended that all trainces participate in the following activities:
	discussion with a coach regarding the strategies used to cater for sportspeople with positive and negative self-concepts.
	discussion with a successful sportsperson regarding a critical incident which has had either a positive or negative effect on their sporting career.
Resource Requirements	
-	Specialised facilities and equipment
	The training provider should have access to: a suitably equipped theory space.
X	Training staff and assessors Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise in the program content.
	Learning resources The references listed below should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own reference/resources.
	Anderson, T. Sociology, The Study of Human Relationships.
	Johnson, D.W. Reaching Out, Prentice Hall Inc. USA, 1981.
	Maslow, A. The Further Reaches of Human Nature, Penguin, 1977.
	Napolic, V. Adjustment and Growth in a Changing World, Sant Paul Minnesota, 1982.
	Pease, A. Body Language.
Occupational Health and Safety Requirements	Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

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SRT502 Assertiveness for Sportspeople (AFL502)

MODULE DETAILS

Module Name	Assertiveness for Sportspeople.
Nominal Duration	10 Hours (5 Hours on the job, 5 Hours off the job)
Module Code	SRT502 - (AFL502).
Discipline Code	1301105
MODULE PURPOSE	
	To provide sportspeople with an understanding of the role of assertiveness in enhancing their sporting, educational training, and personal performances.
Pre-requisites	
	Nil.
Co-requisites	
	Nil.
Relationship to Standards Competency	
	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
Summary of Learning Outcomes	
	 Describe the importance of effective interpersonal communication in both on and off the field situations. Outline the characteristics of assertive behaviour and the factors that influence a person's capacity to be assertive both on and off the field.

ASSESSMENT	
STRATEGY	

Assessment Method	Flow chart, group discussions and role play. Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency in all learning outcomes. For specific assessment refer to individual learning outcomes.
Conditions of Assessment	Assessment will take place in a suitably equipped theory space.
RECOGNITION OF Prior Learning	
	 Acknowledges the skills and knowledge obtained through: formal training (conducted by industry or educational institutions in Australia or overseas) work experience (informal training) life experience The main focus is on the learning outcomes of these experiences, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one or more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

States with existing RPL policy guidelines should refer to these policies until the national policy is available.

Learning Outcome 1	
-	Describe the importance of effective interpersonal communication in both on and
	off the field situations.
Assessment Criteria	
	1.1 Describe the communication process both on and off the field.
	1.2 Outline the factors that influence successful communication both on and
	off the field.
	1.3 Outline the common causes and consequences of ineffective
	communication both on and off the field.
Assessment Task(s)	
	It is recommended that this task be performed off the job.
	Draw a diagram/flow chart to describe the communication process in a sporting
	context. Use labels/colour scheme to highlight positive and negative factors
	influencing effective communication.
Conditions	
	The trainee will have access to:
	a suitably equipped theory space
	appropriate handouts.
Content	
	This learning outcome may include but is not restricted to the following:
	Communication process on and off the field:
	. sending messages
	receiving messages
	. verbal/non verbal.
	Factors that influence successful communication:
	. General
	- clarity of message
	- listening/hearing
	- reflecting
	- negotiation
	- assertiveness
	- appropriate choice of vocabulary/language
	- appropriate body language
	- empathy
	- rapport
	- perception/interpretation
	 respect for others
	Sporting situation:
	- contact/non-contact sport
	- speed of the game
	- purpose and goals of the individual/team
	- type of sport:
	- individual
	- team
	- personalities:
	- umpire
	- opponents
	- team members

- pressure:
 - degree of competitiveness
- nature of game

Causes of ineffective communication:

- mixed messages
- aggression
- single mindedness
- inappropriate choice of vocabulary/language
- inappropriate body language
- bias
- tone and pitch of voice
- . lack of rapport
- lack of empathy
- . disrespect
- . lack of courtesy.

Consequence of ineffective communication:

On the field:

- disrupts game tactics
- verbal/physical conflict:
 - team mates
 - opponents
 - umpire
 - officials/assistants
- consequences of conflict:
 - report
 - loss of:
 - reputation
 - awards
 - sponsorship
 - opportunities
 - injuries.
- Off the field:

.

- poor relationships:
 - loss of friends
 - disintegration of personal relationships
 - needs not being met.
- During education and training
 - consequences of conflict:
 - loss of:
 - respect
 - progress through the course
 - employment opportunities

Learning Outcome 2	Outline the characteristics of assertive behaviour and the factors that influence a
	person's capacity to be assertive in both on and off the field situations.
Assessment Criteria	
	2.1 Define the terms: behaviour, assertive behaviour, non-assertive behaviour,
	and aggressive behaviour.
	2.2 List the characteristics of assertive behaviour.
	2.3 Identify the factors that influence a person's capacity to be assertive.
	2.4 Identify the advantages of assertive behaviour in both on and off the field
	situations.
	2.5 Describe a range of strategies for developing assertive behaviour in both
	on and off the field situations.
Assessment Task(s)	
Азусээшсиг гази(э)	It is recommended that these tasks be completed off the job.
	Devise and participate in role-play situations, in a sporting context, highlighting
	non-assertive, assertive and aggressive behaviour.
	Devise and participate in role-play situations, in a sporting context, depicting
	scenes on and off the field where assertive behaviour is required or advantageous.
Conditions	The mines will have seen to
	The trainee will have access to:
	. a suitably equipped theory space
	. nandout matemats.
Content	
	This learning outcome may include but is not restricted to the following:
	Definitions:
	behaviour
	non-assertive behaviour
	assertive behaviour
	aggressive behaviour.
	Characteristics of assertive behaviour:
	. effective verbal skills
	effective non-verbal skills
	statements of personal needs
	. confidence
	. self esteem
	. objectivity/fairness
	. directness
	. respect for others
	empathy
	. support of personal values.

Factors affecting assertiveness:

- self-confidence
- determination
- . risk-taking
- personal values
- knowledge of rights and responsibilities
- personality
- . gender issues
- . communication skills.

Advantages of assertive behaviour:

- general:
 - clarification of personal needs/requirements
 - avoidance of mixed messages/misunderstandings
 - reduction of stress/airs problems
 - promotion of more efficient use of time/energies.
 - on field:
 - avoidance of:
 - misunderstandings
 - grudges
 - violence
 - reports
 - efficient use of time/energy
 - greater focus on game/purpose
 - development of better rapport and relationships with:
 - team members
 - opponents
 - umpires
 - enhancements of team performance
 - increase of:

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- self confidence
 - self esteem
- respect from others.

Strategies for developing assertive behaviour:

- "I" messages
- values clarification
- . knowledge of:
 - rules and regulations
 - etiquette/ethics
 - identification of individual role and team responsibilities
 - assertiveness techniques:
 - emphatic assertion
 - selective ignoring.

Delivery of the Module

Delivery Strategy	This module provides for delivery in a variety of modes including workshops, self-paced and on and off the job delivery. Strategies should reflect the nature of the learning outcomes and the needs of the trainee. Some areas of content may be common to more than on learning outcome and therefore integration may be appropriate.
	On job activities It is recommended that all trainees participate in the following activities:
	observe and record incidents of non-assertive, assertive and aggressive behaviour. Outline alternative strategies for the non-assertive and aggressive behaviour if the situation could be re-enacted. Use this information to complete the task for Learning Outcome 2.
Resource Requirements	
	Specialised facilities and equipment The training provider should have access to: . a suitably equipped theory space.
	Training staff and assessors Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise in the program content.
	Learning Resources The references listed below should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own reference/resources.
	Alberti R.E. and Emmos M.L. Stand Up, Speak Out, Talk Back.
	Decker, B. The Art of Communicating, Crisp Publications, California, 1989.
	Ellis A. and Harper R. A New Guide to Rational Living.
	Gillespie, Christine. Life Skills for Women, Pitman, Melbourne, 1987.
	Hathaway P. Giving and Receiving Criticism: Practical Techniques for Interpersonal Effectiveness, Crisp Publications, California, 1990.
	Hawkins, L. and Hudson, M. Effective Negotiation: A Step By Step Guide, Effective Negotiation Services, Sydney, 1989.
	Honey, P. Improve Your People Skills, Institute of Personnel Management, London, 1988.
	Lange and Jakubowski. Responsible Assertive Behaviour. Malouf, D. Confidence Through Public Speaking, Information Australia, Melbourne, 1987.

Videos

Assertiveness Training, Educational Video Tapes, Box Hill College of TAFE, (30 mins).

When I Say No I Feel Guilty, Cally Curtis Co, Video Channel, Richmond.

Occupational Health and Safety Requirements

Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

SRT503 Leadership for Sportspeople (AFL503)

MODULE DETAILS

Module Name	Leadership for Sportspeople.
Nominal Duration	10 Hours (5 Hours off the job, 5 hours on the job.)
Module Code	SRT503 - (AFL503).
Discipline Code	1301105
Module Purpose	
	To provide athletes with the interpersonal skills and knowledge in leadership which will in turn improve their capacity to manage others.
Pre-requisites	
	Nil.
Co-requisites	
	Nil.
Relationship to Competency Standards	
	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
Summary of Learning Outcomes	
	 Identify the role of the leader in the context of the sporting industry. Outline the role of the leader in facilitating the functioning of a sporting group. Out line the principles of effective interviewing skills. Outline the role and function of visionary leadership.

ASSESSMENT	
STRATEGY	

Assessment Method

Role-plays, interviews and written reports. Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency all learning outcomes. For specific assessment refer to the individual learning outcomes.

Conditions of Assessment

Assessment will take place in a suitably equipped theory space.

RECOGNITION OF PRIOR LEARNING

Acknowledges the skills and knowledge obtained through:

- formal training (conducted by industry or educational institutions in Australia or overseas)
- . work experience (informal training)
- . life experience.

The main focus is on the learning outcomes of these experiences, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one or more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

States with existing RPL policy guidelines should refer to these policies until the national policy is available.

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Learning Outcome 1	Identify the role of the leader in the context of the sporting industry.
Assessment Criteria	 Define the term: leadership. Describe the role of the leader in the different sporting situations. Identify a range of leadership styles and their appropriateness in different situations. Identify the characteristics of effective leadership in a sporting context.
Assessment Task(s)	It is recommended that these tasks be performed off the job.
	Devise and present a role-play situation which highlights two different leadership styles.
	Analyse your own leadership qualities, identifying strengths and areas needing further development and present this as a written report.
Conditions	The trainee will have access to suitably equipped theory space handout materials.
Content	This learning outcome may include but is not restricted to the following:
	Definition: . leadership.
	Role of leader:.motivator.demonstrator.facilitator.instructor.counsellor.
	Leadership styles: authoritarian casual personable task-oriented relationship-oriented democratic laissez-faire formal informal.

Characteristics of effective leadership

- confidence
- enthusiasm
- physical appearance/image
- motivation skills
- patience
- tolerance
- understanding
- empathy
- responsibility
- humour
- approachability
- trust
- . sincerity
- . knowledge
- . honesty
- . organisational skills
- . influences with integrity
- . setting goals and standards
- . evaluating performance/problems
- . task-oriented
- . team-building
- . taking initiative
- . developing rapport.

Learning Outcome 2	Outline the role of the leader in facilitating the functioning of a sporting group.
Assessment Criteria	2.1 Define the term: sporting group.
	2.2 Describe the structure and function of sporting groups.
	2.3 Describe the characteristics of an effective sporting group.
	2.4 Investigate and identify the needs of a sporting group.
	2.5 Plan and direct a group decision-making exercise related to sport.
Assessment Task(s)	•••
	It is recommended that this task be completed off the job.
	Plan and direct a group decision-making exercise in a sporting context.
Conditions	
	The trainee will have access to:
	a suitably equipped theory space handout materials.
Content	
	This learning outcome may include but is not restricted to the following:
	Definitions:
	. group.
	sporting group.
	Structure and function of sporting groups:
	different types of groups
	functions of groups
	. goals of groups
	. membership of groups
	. group organisation.
	Characteristics of an effective sporting group:
	group purpose/commitment
	group cohesion
	. group dynamics . effective group communication
	. group organisation.
	Sporting-group needs:
	. methods of needs assessment
	. group motivation
	interpersonal relationships.
	Sporting-group decision-making:
	leader as facilitator
	importance of participative involvement
	group decision making processes
	reporting of group decisions
	evaluation.

 Plan an interview related to sport. Observe an interview or counselling sessions related to sport. Prepare and apply a follow up procedure to an interview or counselling session related to sport.
is recommended that this task be completed on the job. lan, an interview with a member of a group for which the trainee has esponsibility. This interview should be in a sporting context.
rainee will have access to: a suitably equipped theory space
This learning outcome may include but is not restricted to the following: Plan an interview related to sport: questioning technique: - closed - open - follow up time location privacy key information records of interview: - decisions made - agreements reached - facts - follow-up action. Dbserve an interview related to sport: selection of appropriate style active listening note taking coaching techniques duration responses: - content - style - assertive - passive support rapport with interviewee determining follow-up action. Follow-up procedure: - records of interview - evaluation follow-up action.

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Learning Outcome 4	Outline the role and function of visionary leadership.
Assessment Criteria	
Assessment Criteria	4.1 Explain the term: visionary leadership.
	4.2 Explain the importance of a leader developing a vision.
	4.3 Outline the steps involved in forming a vision.
	4.4 Identify procedures for achieving goals and involving the
	team/organisation.
	4.5 Identify strategies needed to progress from the ideas stage to action.
Assessment Task(s)	
	It is recommended that these tasks be completed off the job.
	Co-operate with team members to plan and prepare a vision for a particular sports
	team or organisation. Use real or hypothetical examples.
	List and set achievable short term goals for a particular team or organisation and outline strategies required to implement these. Use real or hypothetical examples.
Conditions	
Conditions	The trainee will have access to:
	a suitable equipped theory space
	. case studies - real or hypothetical.
	. case succes - reat of hypothetical.
Content	
	This learning outcome may include but is not restricted to the following:
	Definition:
	. visionary leadership.
	Devilente i i
	Developing a vision:
	. requirements and directions for team/organisation
	identification of opportunities
	. visual image of team/organisation
	. group involvement and process.
	Procedures for developing a vision:
	setting achievable goals
	refining the vision with others
	managing reactions and negotiate change
	. maintaining enthusiasm.
	Strategies for implementation:
	. developing consensus to pursue the vision
	promoting action
	rewarding initiate
	. developing independence with parameters.

Delivery of the Module

Delivery Strategy

This module provides for delivery in a variety of modes including workshops, self-paced and on and off the job delivery. Strategies should reflect the nature of the learning outcomes and the needs of the trainee. Some areas of content may be common to more than one learning outcome and therefore integration may be appropriate.

On job activities

It is recommended that all trainees participate in the following activities:

- identify and observe two people who hold leadership roles in the workplace
- analyse their leadership features and style.

Resource Requirements

Specialised facilities and equipment

The training provider should have access to:

a suitably equipped theory space.

Training staff and assessors

Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise in the program content.

Learning Resources

The references listed below should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own reference/resources.

Block, P. The Empowered Manager: Positive Political Skills At Work, Jossey -Bass, San Francisco, 1990.

Bolton, W. Supervisory Management, Heinemann, London, 1986.

Covey, S. Principle Centred Leadership, Simon and Schuster, London, 1992.

Evans, A. Managing People, Information Australian Group, Sydney, 1990.

Evens, R. and Russel, P. The Creative Manager, Unwin, Sydney, 1990.

Flamhlz, E.G. and Randle, Y. The Inner Game of Management, Business Books, London, 1989.

Kaufman, R.A. Planning for Organisational Success: A Practical Guide, 2nd Edition, Social Impact Publications, Sydney, 1989.

Kotter, J.P. How Leadership Differs from Management, Free Press, New York, 1990.

La Rouche, J. and Ryan, R. Working Women: Strategies for Survival and Success, Unwin, London, 1984.

Maddux Robert B. Team Building - An Exercise in Leadership, Revised Edition, Crisp Publications Inc., California, 1988.

Management Support and Training Unit, Victorian Council of Social Services (VCOSS), Community Employing Handbook, Victoria, 1993.

Management Support and Training Unit, Victorian Council of Social Services (VCOSS), Policy and Procedures Manual, Victoria, 1993.

Manning, M. and Haddock, P. Leadership Skills for Women, Crisp Publications, California, 1989.

New Directions for Teaching Communication - Staff Development Kit ACT Institute of TAFE in conjunction with ACTC, Canberra, 1990.

Saville, J. Supervision In Australia, McMillian, Melbourne, 1985.

Still, L.V. Becoming A Top Women Manager, Allen and Unwin, Sydney, 1986.

Stone, R.J. Human Resources Management, Wiley and Son, 1991.

Training and Development Unit, Moorabbin College of TAFE Supervision Resource Material Team Building. TAFE Board of Victoria. (undated).

Team Building Communication NCSP module.

Tregoe, B.B. Vision In Action, Simon and Schuster, Sydney, 1992.

Viljoen, J. Strategic Management, Longman Professional Series, 1991.

Welbourn, M. Supervising People, North Ryde, Australia, 1988.

Woodcock, M. and Dave, F. The Unblocked Manager: A Practical Guide for Self Development, Aldershot: Wildwood House, 1985.

Work Team Communication NSCSP module.

Videos

Leadership, Box Hill College of TAFE, (44 min), Video.

Roles People Play in Groups, (20 min).

Styles of Leadership, The Corporation for Community Television, The Business of Management Program 16 (29 min).

Think or Sink, The Video Training Company, 111 Queensbridge Street, South Melbourne, 3025. Telephone: (03) 686-9122.

Occupational Health and Safety Requirements

Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

SRT504 Dealing With Conflict (AFL504)

MODULE DETAILS

Module Name	Dealing With Conflict.
Nominal Duration	10 Hours (5 Hours on the job, 5 hours off the job)
Module Code	SRT504 - (AFL504).
Discipline Code	1301105.
MODULE PURPOSE	
	To provide sportspeople with an understanding of how to deal with conflict in both personal and sporting situations.
PRE-REQUISITES	
	Nil.
Co-requisites	
	Nil.
Relationship to Competency Standards	
	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
SUMMARY OF LEARNING OUTCOMES	
	 Identify the signs, stages and possible causes of conflict in an on and off field situation. Propose strategies to deal with conflicts in an on and off the field situation. Demonstrate effective negotiation skills in both on and off the field situations.

ASSESSMENT STRATEGY	
Assessment Method	Observations, case studies and role-play. Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency in all learning outcomes. For specific assessment refer to the individual learning outcomes.
Conditions of Assessment	Assessment will take place in a suitably equipped theory space.
RECOGNITION OF Prior Learning	
	 Acknowledges the skills and knowledge obtained through: formal training (conducted by industry or educational institutions in Australia or overseas) work experience (informal training) life experience.
	The main focus is on the learning outcomes of these experiences, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one or more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.
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States with the existing RPL policy guidelines should refer to these policies until the national policy is available.

Learning Outcome 1	Identify the signs stages and possible causes of conflict in an on and off field situation.
Assessment Criteria	 1.1 Define the term: conflict. 1.2 List the types of conflict that may arise in an on and off the field situation. 1.3 Identify the causes of conflict. 1.4 Identify the signs that a conflict may develop. 1.5 Describe the stages in the development of a conflict. 1.6 Identify the consequences of conflict in both on and off the field situations.
Assessment Task(s)	It is recommended that this task be completed off the job.
	Analyse conflict in a sporting context in terms of its particular signs, stages and possible causes. Where possible, use an actual conflict which was observed. Alternatively, participants can use a case study provided by the teacher.
Conditions	The trainee will have access to: . suitably equipped theory space . case studies (real or hypothetical).
Content	This learning outcome may include but is not restricted to the following:
	Definition: . conflict.
	Types of conflict: group family classroom workplace sporting organisational emotional covert/overt. Causes of conflict: needs - personal lack of information as a strategy ineffective communication frustration pressure/stress conflicting aims provocation sledging. Signs of conflict: verbal non-verbal body language positioning.

Stages of conflict:

- . beginning
- . progression
- escalation
- . resolution.

Consequences of conflict:

- on the field:
 - disruption of game tactics
 - loss of:
 - reputation
 - awards
 - sponsorships
 - opportunities
 - injuries
 - public image of sport.
 - general:
 - relationships
 - economic
 - social.

Learning Outcome 2	Propose strategies to deal with conflict in an on and off the field situation.
Assessment Criteria	 2.1 Define the term: conflict resolution. 2.2 Identify procedures for dealing with different types of conflict situations. 2.3 List the key stages involved in conflict resolution. 2.4 Evaluate the effectiveness of different approaches to resolving conflicts in on and off the field situations.
Assessment Task(s)	It is recommended that this task be completed off the job.
	Outline strategies to deal with specific conflict in a sporting context. Provide complete background details of the situation, the participants and the stakeholders.
	The specific conflict would preferably be from the participant's own sporting experience. Alternatively, the participants can use a case study provided by the teacher.
Conditions	The trainee will have access to: . suitably equipped theory space . case studies (real or hypothetical).
Content	This learning outcome may include but is not restricted to the following:
	Definition: . conflict resolution.
·	Procedures for dealing with conflict: . withdrawal . avoidance . smoothing . compromising . confronting . collaboration . accommodation . task-centred approaches . people-centred approaches.
	Strategies in conflict resolution:.definition of conflict.identification of conflict resolution stages.implementation of conflict resolution strategies.evaluation of conflict resolution strategies.
	Criteria for evaluating effectiveness of conflict resolution strategies: outcomes: task relationships solutions: short medium long term degree of satisfaction with key stakeholders.

Learning Outcome 3	Demonstrate effective negotiation skills in both on and off the field situations.
Assessment Criteria	 3.1 Define the term: negotiation. 3.2 Describe the stages, tactics and styles used in a negotiation. 3.3 Apply negotiation skills to resolve a conflict in a sporting context.
Assessment Task(s)	It is recommended that this task be completed off the job.
	Plan, prepare and implement a negotiation process/exercise in a group situation. (Where possible videotape this exercise for later analysis).
	Identify and discuss what you have learned from your participation in this task.
Conditions	The trainee will have access to: . suitably equipped theory space . appropriate handouts . video equipment.
Content	This learning outcome may include, but is not restricted to the following:
	Definition:
	. negotiation.
	Stages in negotiation: . preparation . establishment of needs . proposal/bidding . bargaining . summary of process . follow up.
	Tactics of negotiation: . soft . hard . principled.
	Styles of negotiation: . people-centred . task-centred . formal . informal.

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Delivery of the Module

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Delivery Strategy	This module provides for delivery in a variety of modes including workshops, self-paced and on and off the job delivery. Strategies should reflect the nature of the learning outcomes and the needs of the trainee. Some areas content may be common to more than one learning outcome and therefore integration may be appropriate.
	On job activities
	It is recommended that all trainees participate in the following activities: observe incidents and collect and record information to assist in the completion of assessment tasks in learning outcomes 1 and 2. attend a meeting where an agenda item is to be negotiated. Record the:
	opening strategies used by the chairperson needs/wants of each party
	the outcome
	 mood/degree of satisfaction at the outcome observe an informal negotiation situation in the workplace and where possible discuss the outcome and strategies used with one or both or all parties involved.
Resource Requirements	
	Specialised facilities and equipment
	 The training provider should have access to: a suitably equipped theory space case studies/role-play scenarios video equipment and TV.
	Training staff and assessors Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise on the program content.
	Learning resources The following references should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own references/resources.
	The Conflict Resolution Network, PO Box 1016, Chatswood, NSW 2057.
	The Conflict Resolution Network runs workshops and seminars as well as producing a newsletter. It also markets the following resources:
	 Trainer's Manual Everyone Can Win (book) Resolution of Conflict (audio tapes).
	Cornelius, H and Faire, S. Everyone Can Win, Simon Shuster, Brookvale, NSW, 1989.

Dealing With Conflict, NCSP module.

DeBono, Edward. Conflicts: A Better Way to Resolve Them, Penguin, Ringwood, Victoria, 1989.

Fisher, R and Ury, W, Getting to Yes: Negotiating Agreement Without Giving In, Penguin, Ringwood, Victoria, 1981.

Johnson, D.W. and F. P. Joining Together. Group Theory and Groups Skills, Prentice-Hall International, New Jersey, USA, 1975.

McBride. Participating in Meetings and Discussions, Unit Five, Communication Skills Core, VTOCN, Melbourne.

McCarthy. Developing Negotiations Skills and Behaviour.

Montgomery, Bob. Working Together, Nelson Publishers, Melbourne, 1986.

Negotiation Skills, NCSP module.

Richards, C. and Walsh, F. Negotiating, Australian Govt. Publishing Service, Canberra, ACT, 1990.

Robert, M. Managing Conflict, Learning Concepts, Austin, USA, 1982.

Videotapes

Conflicts, Conflicts, The Training Resource Company.

Managing Conflicts, The Training Resource Company.

Managing Organisational Conflict, The Business Management, Program 17.

Mediation - the Solution, Film, Victoria.

Negotiation Skills, Educational Video Tapes, Box Hill C.O.T. (30 min).

Resolving Conflicts, The Training Resource Company.

Occupational Health and Safety Requirements

Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

Conditions of Assessment

Assessment will take place in a suitably equipped theory space.

RECOGNITION OF PRIOR LEARNING

Acknowledges the skills and knowledge obtained through:

- formal training (conducted by industry or educational institutions in Australia or overseas)
- work experience (informal training)
- life experience.

The main focus is on the learning outcomes of these experiences, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one or more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

`Learning Outcome 1	Describe the characteristics of effective time management for sportspeople and utilise these in planning and undertaking a task in the sporting environment.
Assessment Criteria	 Define the terms: time management, time wastage. Describe the factors that lead to time wastage. State the advantages of effective time management. Describe the factors that contribute to effective time management. Identify strategies for monitoring and improving time management. Demonstrate effective time management in undertaking a sports-related task.
Assessment Task(s)	It is recommended that this task be completed off the job.
	Maintain a written log of weekly activities and analyse the results to identify forms of time wastage. Then use this information to develop a plan which demonstrates effective personal time management, though integrating schedules for education, training, work and leisure.
Conditions	The trainee will have access to: . suitably equipped theory space . template document for time log.
Content	This learning outcome may include but is not restricted to the following:
	Definitions: ime management time wastage. Factors that lead to time wastage: goal conflicts reliance on others being controlled by others lack of planning ineffective communication poor organisation. Advantages of effective time management: increased productivity prevention of duplication of effort lower costs reduced stress increased output realisation of personal and professional goals.
	Effective time management: time scheduling establishment of priorities for - education - training - work - leisure intergration of these schedules

- dealing with distraction
- task orientation
- . delegation of tasks
- effective communication.

Strategies for monitoring and improving time management:

- maintenance of personal diary
- planning daily, monthly and annual activities
- effective use of telecommunication technologies:
 - facsimile
 - mobile telephone
 - effective use of personal computer:
 - word-processing
 - databases
 - spreadsheets

Self evaluation of personal time wastage:

- identifying particular time wastage factors
- dividing tasks into achievable goals.

Delivery of the Module

Delivery Strategy	
	This module provides for delivery in a variety of modes including workshops, self-paced and on and off the job delivery. Strategies should reflect the nature of the learning outcome and therefore integration may be appropriate.
	On job activities It is recommended that all trainees participate in the following activities:
	. collect information in order to complete a written time log of weekly activities and to complete assessment task for Learning Outcome 1.
Resource Requirements	
	Specialised facilities and equipment The training provider should have access to: . a suitably equipped theory space . template document for time log.
	Training staff and assessors Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise on the program content.
	Learning resources The following references should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own references/resources.
	Lakin, A. How to Get Control of Your Time and Life.
	Lee Emery, Bill. Stop Procrastinating, Change Your Habits - Change Your Life, Hutchinson, Sydney, 1990.
	Mackenzie, A.R. The Time Trap, McGraw-Hill, 1975.
	Videotapes Time Management, Vidi Learn, Hampton, Vic (20 min).
	The Time of Your Life, Cally Curtis, Hollywood. (24 min).
Occupational Health and Safety Requirements	
	Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

SRT506 Stress Management (AFL506)

Module Name	Stress Management
Nominal Duration	10 Hours (5 Hours on the job, 5 hours off the job.)
Module Code	SRT506 - (AFL506).
Discipline Code	1203205
Module Purpose	To provide trainees with an understanding of the impact of stress and of stress management and relaxation techniques.
Pre-requisites	Nil.
Co-requisites	
	Nil
Relationship to Competency Standards	
	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
Summary of Learning Outcomes	
	 Outline the impact that stress can have on sports person's on and off the field performance. Outline the ways of effectively dealing with stress in both on and off the field situations.
Assessment Strategy	
Assessment Method	Written report, interview, practical exercise, class discussion. Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency in all learning outcomes. For specific assessment refer to the individual learning outcomes.

Conditions of Assessment	
	Assessment will take place in a suitably equipped theory space.

RECOGNITION OF PRIOR LEARNING

Acknowledges the skills and knowledge obtained through:

- formal training (conducted by industry or educational institutions in Australia or overseas)
- work experience (informal training)
- life experience.

The main focus is on the learning outcome of these experiences, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one or more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

Learning Outcome 1	Outline the impact that stress can have on sport person's on and off the field performance.
Assessment Criteria	 Define the terms: stress, stressor. Outline the causes of stress. Describe the effects of stress on a person's physiological and psychological well being.
Assessment Task(s)	It is recommended that this task be performed off the job.
	Participate in a class discussion and write a report about the major stressors in the trainee's life.
Conditions	Trainee should have access to a: . suitably equipped theory space.
Content	This learning outcome may include but is not restricted to the following:
	Definitions: stresss stressor. Causes of stress: social environmental technological fear/worry time management guilt/manipulation. personal. Effects of stress: physiological: fight or flight response cardiovascular disease psychological: emotional swings mood swings self-esteem.

Learning Outcome 2	Outline the ways of effectively dealing with stress in both on and off the field situations.
Assessment Criteria	 2.1 Define the term: stress management. 2.2 List the main forms of stress management. 2.3 Describe and identify the benefits of a range of relaxation techniques. 2.4 Describe the role of leisure and recreation in stress management.
Assessment Task(s)	It is recommended that these tasks be completed off the job.
	Present a written report of an interview with two athletes as to the strategies they use to manage stress and to relax.
	Identify personal stress factors and devise a plan for stress management which includes at least two relaxation techniques.
Conditions	the trainee should have access to: . a suitably equipped theory space . trainee handouts.
Content	This learning outcome may include but is not restricted to the following:
	Definition: . stress management.
	Forms of stress management: relaxation conflict resolution leisure and recreation assertiveness diet and exercise time management goal setting. Relaxation techniques: deep breathing autogenics visualisation meditation
	. progressive relaxation . physical exercise.

DELIVERY OF THE MODULE

Delivery Strategy

This module provides for delivery in a variety of modes including workshops, self-paced and on and off the job delivery. Strategies should reflect the nature of the learning outcomes and the needs of the trainee. Some areas of content may be common to more than one learning outcome and therefore integration may be appropriate.

Suggested on job activities

It is recommended that all trainees participate in the following activities:

- identify the major causes of stress observed in the workplace.
- interview relevant officials at the workplace to determine the stress management techniques that are used.

Resource Requirements

Specialised facilities and equipment

The training provider should have access to: a suitably equipped theory space.

Training staff and assessors

Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise in the program content.

Learning resources

The references listed below should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own references/resources.

Davis, Eshelman, McKay. The Relation and Stress Reduction Workbook, New Harbinger, 1982.

Wilson, Paul. The Calm Technique, Greenhouse Publications, 1985.

Videotape

Master Class Videos. Holiday Bros. (90 min) How to Cope With Stress.

Occupational Health and Safety Requirements

Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during delivery of this module. SRIJ

SRT507 Effective Personal Presentation and Public Interaction (AFL507)

Module Name	Effective Personal Presentation and Public Interaction.
Nominal Duration	10 Hours (5 Hours on the job, 5 hours off the job)
Module Code	SRT507 - (AFL507).
Discipline Code	1301205
Module Purpose	
	To provide athletes with a knowledge of personal presentation in order to deal with the public effectively.
Pre-requisites	
	Nil.
Co-requisites	
	Nil
Relationship to Competency Standards	
	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
Summary of Learning Outcomes	
	. Demonstrate effective personal presentation and interaction with the public.
Assessment Strategy	
Assessment Method	
	Demonstration. Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency in all learning outcomes. For specific assessment refer to the individual learning outcomes.

Conditions of Assessment

Assessment will take place in an environment where the trainee will interact with the public in a professional situation.

RECOGNITION OF PRIOR LEARNING

Acknowledges the skills and knowledge obtained through:

- formal training (conducted by industry or educational institutions in Australia or overseas)
- work experience(informal training)
 - life experience.

The main focus is on the learning outcomes of these experiences, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one ore more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

States with the existing RPL policy guidelines should refer to these policies until the national policy is available.

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Learning Outcome 1	Demonstrate effective percent presentation and intervalian with the set 1
	Demonstrate effective personal presentation and interaction with the public.
Assessment Criteria	
	1.1 List the various professional and social situations in which a sports person may be required to interact with the public.
	1.2 Identify the characteristics of effective and personal presentation for a
	sports person, appropriate to the requirements of the sport
	1.3 Identify the characteristics of effective interaction with the public.
	1.4 Demonstrate effective personal presentation and interaction with the
	public in a professional situation.
Assessment Task(s)	
	It is recommended that these task be completed on the job, after suitable off the
	job training.
	Demonstrate effective personal presentation and interaction with the public in a
	professional situation.
Conditions	
Conditions	The trainee should have access to:
	. suitably equipped theory space
	. the public.
Content	
Content	This learning outcome may include but is not restricted to the following:
	Interpersonal Skills
	. courtesy . acceptance of responsibility
	. tact and diplomacy
	effective communications skills
	. predicting client behaviour
	analysing situations
	Effective personal presentation:
	. grooming
	. vocal skills
	. dress
	language
	behaviour
	. etiquette and protocols.
	Interaction with the public:
	. professional situations, such as:
	- interviews
	- media appearances
	- training sessions
	- competition - promotional functions
	- speech nights
	- sporting club functions
	- after competition activities
	- travel related to competition
	- sports clinics for schools and community organisations
	- public speaking engagements.
	social situations:
	- social contact with supporters/fans
	Trontoniace

- workplace. -

Delivery of the Module

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Delivery Strategy	This module provides for delivery in a variety of modes including workshops, self-paced and on and off the job delivery. Strategies should reflect the nature of the learning outcome and therefore integration may be appropriate.
	On job activities It is recommended that all trainees participate in the following activities:
	. observe members of their workplace dealing with the public practise dealing with the public in as many different situations as possible.
Resource Requirements	Specialised facilities and equipment The training provider should have access to: . a suitably equipped theory space.
	Training staff and assessors Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise on the program content.
	Learning resources
	The references listed below should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own references/resources.
	Cook, J. The Elements of Speech and Writing and Public Speaking, Maxwell Macmillan International, Sydney, 1989
	Frank, M. How to get your Point Across in 30 Seconds or Less, Pocket Books, Sydney, 1986
	Sport and Recreation Victoria, Sport and Recreation and The Media, Sport and Recreation Victoria.
Occupational Health and Safety Requirements	
	Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

SRT509 Managing Personal Income and Budgeting (AFL509)

Module Name	
	Managing Personal Income and Budgeting
Nominal Duration	10 Hours (5 Hours on the job, 5 hours off the job.)
Module Code	SRT509 - (AFL509).
Discipline Code	0902110
MODULE PURPOSE	
	To provide the athlete with the skills to manage personal income and to prepare a simple personal budget.
Pre-requisites	
	Nil.
Co-requisites	
	Nil
Relationship to Competency	
Standards	
	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
Summary of Learning Outcomes	
	Evaluin the elements of and reasons for personal hudsoring
	 Explain the elements of and reasons for personal budgeting. Describe and assess the services provided by financial institutions. Explain the eligibility criteria and procedures involved in applying for Social Security Benefits.
Assessment Strategy	
Assessment Method	Written reports Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency in all learning outcomes. For specific assessment refer to the individual learning outcomes.

Conditions of Assessment

Assessment will take place in a suitably equipped theory space.

RECOGNITION OF PRIOR LEARNING

Acknowledges the skills and knowledge obtained through:

- formal training (conducted by industry or educational institutions in Australia or overseas)
- work experience (informal training)
- . life experience.

The main focus is on the learning outcomes of these experience, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one or more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

Learning Outcome 1	Explain the reasons for and elements of personal budgeting.
Assessment Criteria	 Define the terms: budget, personal budgeting. Identify the reasons for personal budgeting. Identify the elements of a personal budget. Establish a personal financial record-keeping system.
Assessment Task(s)	It is recommended that these tasks be completed off-the-job. Draw up a checklist of the elements of a personal budget.
	Plan a personal budget for a three month period.
Conditions	The trainee will have access to: . trainee handout detailing the elements of personal budgeting.
Content	This learning outcome may include but is not restricted to the following:
	Definitions: . budget . personal budgeting
	 Reasons for personal budgeting: keeping track of expenses/savings planing for the future assessing the ability to borrow money for car/house purchase gaining financial independence.

Learning Outcome 2	Describe and assess the services provided by financial institutions.
Assessment Criteria	 2.1 Identify the different types of financial institutions. 2.2 List the services provided by financial institutions. 2.3 Demonstrate applying for a credit, savings and cheque account. 2.4 List the criteria for assessing the services provided by financial institutions.
Assessment Task(s)	It is recommended that this task be completed off the job. Describe and assess the range of services provided by financial institutions -
	credit, savings and cheque account with access via ATM (Automatic Teller Machines)) which are available to the trainee.
Conditions	 The trainee will have access to: trainee handout detailing information on a variety of the systems and procedures a range of financial institutions.
Content	This learning outcome may include but is not restricted to the following:
	Forms of financial institutions: banks credit unions building societies. Services provided by financial institutions: savings accounts cheque accounts credit/debit cards investment accounts ATM EFTPOS financial advice personal and housing loans overdrafts '100' points system of identification appropriate forms.
	Criteria for assessing services: . cost . availability of funds . location of branches . range of services.

Learning Outcome 3	
Learning Outcome 5	Explain the eligibility criteria and procedures involved in applying for Social Security benefits.
Assessment Criteria	 3.1 Identify the purpose and features of the Social Security system. 3.2 Identify and explain the eligibility of a sports person applying for Social Security benefits. 3.3 Identify and explain the criteria and procedures in applying for Social Security benefits for a sports person.
Assessment Task(s)	It is recommended that this task be completed off the job.
	List the features of the Social Security system which could apply to a sports person.
Conditions	The trainee will have access to : information on a variety of banking systems and procedures.
Content	This learning outcome may include but is not restricted to the following:
	Types of social security benefits: Disability Support Pension Sole Parent Pension Job Search Allowance Widowed Person Allowance Newstart Allowance Sickness Allowance Rehabilitation Special benefits Family payments: Basic Family Payment Multiple Birth Allowance Additional Family Payment Guardian Allowance Child Disability Allowance Remote Care Allowance.
	Eligibility for social security: income employment status personal circumstances. Procedures for applying for social security: application forms identification waiting periods.

DELIVERY OF THE MODULE

Delivery Strategy

This module provides for delivery in a variety of modes including workshops, self-paced and on and off the job delivery. Strategies should reflect the nature of the learning outcome and therefore integration may be appropriate.

On the job activities

It is recommended that all trainees participate in the following activities:

- Speak to club financial adviser/accountant about:
 - personal budgeting
 - the types of financial institutions and services used by the club.

Resource Requirements

Specialised facilities and equipment

The training provider should have access to: a suitably equipped theory space.

Training staff and assessors

Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise on the program content.

Learning resources

The references listed below should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own references/resources.

Dixon, Hodgetts, Kelmar & Kuratko, Effective Small Business Management, (Australasian Ed.), HBJ, 1991.

Dunn, C. Lets Plan A business: A Practical Guide to Success, BEA Publications, 1993.

Gaffney, T.F. First Steps in Business, Butterworths, 1990.

Reynolds, Savage & Williams. Your Own Business - A Practical Guide to Success, Nelson, 1989.

Saville, James. Business Studies 11, Macmillan Education Australia, 1992.

Video/Workbooks

Budgeting, Australian Credit Union.

Occupational Health and Safety Requirements

Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

SRT510 Personal Financial Planning (AFL510)

Module Name	Personal Financial Planning.
Nominal Duration	10 Hours (5 Hours on the job, 5 hours off the job.)
Module Code	SRT510 - (AFL510).
Discipline Code	0903125.
MODULE PURPOSE	
	To provide the traince with basic financial planning skills and an awareness of specialist advice.
Pre-requisites	
	Nil.
Co-requisites	
	Nil.
RELATIONSHIP TO COMPETENCY	
Standards	
	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
SUMMARY OF Learning Outcomes	
	 Explain the reasons for personal financial planning. Describe and discuss the major forms of personal investment. Explain personal income taxation liabilities. Describe and discuss the main forms of insurance and personal superannuation.

ASSESSMENT	
STRATEGY	
Assessment Method	
	Checklists, glossaries and written reports.
	Assessment does not have to take place at the end of every learning outcome.
	Learning outcomes can be grouped together for assessment. To be credited with
	this module the trainee must demonstrate competency in all learning outcomes. For specific assessment, refer to the individual learning outcomes.
Conditions Of Assessment	
	Assessment will take place in a suitably equipped theory space.
RECOGNITION OF	
Prior Learning	
PRIOR LEARNING	
	Acknowledges the skills and knowledge obtained through:
	formal training (conducted by industry or educational institutions in
	Australia or overseas) work experience (informal training)
	. life experience.
	The main focus is on the learning outcomes of these experiences, not the how,
	when and where learning occurred. Some people applying to do this module may
	already be competent in one or more of the learning outcomes and should

therefore be given the opportunity to apply for recognition of prior learning.

Learning Outcome 1	Explain the reasons for personal financial planning.
Assessment Criteria	1.1 Define the term: financial planning.1.2 Identify and list the reasons why personal financial planning is important.
Assessment Task(s)	It is recommended that these tasks be completed off the job.
	Prepare a glossary of finance industry terms. Prepare a checklist of reasons for financial planning.
Conditions	The trainee will have access to: trainee handout detailing the reasons for financial planning.
Content	This learning outcome may include but is not restricted to the following
	Definition: financial planning.
	Reasons for financial planning: risk management future planning retirement variation in income levels protection from inflation protection from unemployment career changes in/out of sport

. trust fund management.

Learning Outcome 2	Describe and discuss the major forms of personal investment.	
Assessment Criteria	 2.1 Identify and describe the sources of professional advice on banking, taxation, insurance, superannuation and other financial matters. 2.2 Describe the major forms of personal investment. 	
Assessment Task(s)	It is recommended that these tasks be completed off the job.	
	Update the financial glossary of sources of professional advice/assistance. Prepare a checklist of personal investment opportunities.	
Conditions	The trainee will have access to: . a personal investment or financial matter . relevant information, text or reference material.	
Content	This learning outcome may include but is not restricted to the following:	
	Sources of assistance/advice: banks stock brokers independent financial planners associations insurance companies accountants	

. solicitors.

Learning Outcome 3	Explain personal income tax liabilities.
Assessment Criteria	 3.1 Define: income tax. 3.2 Identify and list the sources of taxation advice. 3.3 Describe the obligations/responsibilities for paying tax. 3.4 Identify and list possible sources of income for sportspeople. 3.5 Identify and list some allowable deductions. 3.6 Identify the types of records to be kept for taxation purposes. 3.7 Identify a variety of income tax forms.
Assessment Task(s)	It is recommended that these tasks be completed off the job. Update a financial glossary of sources of advice/assistance. Prepare a checklist of definitions of taxation liabilities and allowable deductions. Explain the variety of income tax forms. Record your taxation liabilities and allowable deductions.
Conditions	 The trainee will have access to: a taxable income a variety of income tax forms relevant information, text and/or reference material.
Content	This learning outcome may include but is not restricted to the following: Definition of income tax: exempt income assessable income taxable income. Sources of taxation advice; banks accountants financial advisers. Personal taxation responsibilities; legal obligations sources of income deductions records income tax forms.

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Learning Outcome 4	Describe and discuss the main forms of insurance and personal superannuation.
Assessment Criteria	 4.1 Define the terms: insurance, superannuation. 4.2 Identify and list the forms of insurance and superannuation available and relevant to sport and recreation. 4.3 List the reasons for taking out insurance and personal superannuation. 4.4 Describe various forms of insurance and superannuation.
Assessment Task(s)	It is recommended that these tasks be completed off the job.
	Add the following to your glossary of industry terms: 'insurance' and 'superannuation'. Update a checklist of insurance and superannuation options. List the forms of insurance that may be appropriate for sportspeople.
Conditions	The trainee will have access to: financial consideration/circumstances for a sportsperson. trainee handout detailing insurance and superannuation options.
Content	This learning outcome may include but is not restricted to the following:
·	Definition: . insurance . superannuation. Forms of insurance: . . whole of life . life . personal/accident and sickness . property; building and contents . public liability . professional indemnity . motor vehicle . income protection.
	retirement planning risk management taxation. Forms of superannuation: roll over lump sum payment personal/employer contributions defined benefit/accumulation funds.

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DELIVERY	OF	THE
MODULE		

Delivery Strategy	This module provides for delivery in a variety of modes, including workshops, self-paced and on and off the job delivery. Strategies should be selected to reflect the nature of the learning outcomes and the needs of the trainee. Some areas of content may be common to more than one learning outcome and therefore integration may be appropriate.
Resource Requirements	
	Specialised facilities and equipment
	The training provider should have access to: a suitably equipped theory space.
	Training staff and assessors Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise in the program content.
	Learning resources
	The references listed below should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own references/resources.
	Australian Small Business Manual, 2nd Ed, CCH, 1988.
	Dunn, C. Business Basics, CCH, 1991.
	Dunn, C. Let's Plan a Business - A Practical Guide to Success, BEA Publication, 1993.
	Dixon, Hodgetts, Kelmar & Kuratko. Effective Small Business Management, (Australasian Ed.) HBJ, 1991.
	Reynolds, Savage & Williams. Your Own Business - A Practical Guide to Success, Nelson, 1989.
	Saville, James. Business Studies 11, Macmillan Education Australia, 1992.
Occupational Health and Safety Requirements	Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

SRT511 Personal Health and Fitness (AFL511)

Module Name	Personal Health and Fitness.
Nominal Duration	10 Hours (5 Hours on the job, 5 hours off the job.)
Module Code	SRT511 - (AFL511).
Discipline Code	0809505.
Module Purpose	
	To provide the trainee with an appreciation of the need for personal health and fitness.
Pre-requisites	
	Nil.
CO-REQUISITES	
	Nil
Relationship to Competency Standards	
	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
Summary of Learning Outcomes	
	 Identify the sources of professional advice on health, fitness and dietary matters. List the major types of drugs available in Australian Society and describe their effects on the human body. Identify the ways in which the use of performance enhancing, weight control and other drugs are controlled in Australian Society.

ASSESSMENT	
STRATEGY	
Assessment Method	Written reports, group discussions, role-plays. Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency in all learning outcomes. For specific assessment, refer to the individual learning outcomes.
Conditions of Assessment	Assessment will take place in a suitably equipped theory space.
RECOGNITION OF Prior Learning	
	 Acknowledges the skills and knowledge obtained through: formal training (conducted by industry or educational institutions in Australia or overseas) work experience (informal training) life experience.
	The main focus is on the learning outcomes of these experiences, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one ore more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

Learning Outcome 1	Identify the sources of professional advice available to sportspeople on health, fitness and dietary matters.
Assessment Criteria	1.1 Identify the range of professional advice available to sportspeople on
	health and dietary matters.1.2 Describe the function of each of these professional services.
Assessment Task(s)	It is recommended that this task be completed off the job.
	Compile a list of professional services and contact numbers available on health, fitness and dietary matters.
Conditions	
	The trainee will have access to: . student handout of information related to health, fitness and dietary matters.
	. information regarding government health services.
Content	This learning outcome may include but is not restricted to the following:
	Range of professional advice:
	. dietitian . general practitioner
	. physiotherapist
	. dentist
	. personal trainer/coach
	health educator
	. occupational therapist.
	. psychologist
	. recovery training.
	Functions of each service:
	. dietitian: - advice on diet and nutrition
	general practitioner:
	- preventative and acute health care
	. physiotherapist:
	- treatment of disease or injury by massage, exercises and heat
	. dentist:
	- preventative and acute dental care
	personal trainer/coach:
	 provides assessment, advice, strategies and techniques for improving physical fitness
	 health educator: provides assessment, advice, strategies and techniques for improving health
	 occupational therapist: provides mental or physical activity to assist recovery from disease
	or injury. psychologist:
	 provides mental skills training, advice, counselling recovery training:
	- provides massage and post-exercise, advice and care.

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Learning Outcome 2	To develop knowledge of the major drugs used in society and describe how drug use can impact on health and fitness.
Assessment Criteria	 2.1 Classify major drugs in relation to their legal status. 2.2 Describe the short-term and long-term effects of the major drugs on the human body. 2.3 Identify other possible harmful effects of drug use as it relates to the individual and society.
Assessment Task(s)	It is recommended that this task be completed off the job.
	Identify possible harms related to individual and society in five (5) case studies.
Conditions	The trainee will have access to: . a trainee handout detailing the major types of drugs.
Content	This learning outcome may include but is not restricted to the following:
	Major drugs:alcoholtobacco (nicotine)marijuanacaffeineamphetaminescocaineheroindiureticsanabolic steroids
	Effects on the human body: . psychological

physical effects:

.

- short term
 - long term.

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Effects of weight control drugs on the human body:

diuretics:

- greater water loss through urine
- salts and minerals are lost with the water
- too much water loss can lead to dehydration
- loss of water:
 - possible side effect blood pressure
- loss of salt and potassium:
 - possible side effect heart problems
 - warning signs:
 - dizziness
 - dry mouth
 - weakness and light-headedness.

Learning Outcome 3	
Learning Outcome o	Awareness of the various aspects of the 'drugs in sport' issue and the implications for the individual sportsperson.
Assessment Criteria	3.1 Define doping and classify drugs either banned or permitted in sport.
	3.2 Identify reasons for drug use, and the physical and psychological effects
	of banned and restricted drugs.
·	3.3 Identify drug testing procedures and sports doping policies that apply to
	the individual sportsperson.
	3.4 Identify sources of further information on the 'drugs in sport' issue.
Assessment Task(s)	
Assessment rask(s)	It is recommended that this task be completed off the job.
	Based on case study and real life examples, report on the repercussions of illicit
	drug taking by persons in the sporting industry.
Conditions	
Conditions	The trainee will have access to:
	. Drugs in Sport Handbook
	. Infopac
	. Sports Doping Policy
Cantant	
Content	This learning outcome may include but is not restricted to the following:
	. Overview - Drugs in Sport
	- Performance Enhancing
	- Medical
	- Recreational
	Doping
	- Definition
	. Classes of banned and restricted drugs in sport
	- IOC
	. Why they are banned?
	- health
	- ethics
	- legal issues
	. Effects of banned and restricted drugs. . Reasons for use:
	- person
	- environment
	- drug
	Legal performance enhancing strategies
	. Rules
	. Policies
	. Code of Conduct
	. Sanctions
	. Testing Agency - Australian Sports Drug Agency (overview)
	. Drug Testing Procedures
	- Out-of-Competition vs Event vs No-Notice
	-Athletes rights and responsibilities

Delivery of the Module

Delivery Strategy	This module provides for delivery in a variety of modes, including workshops, self-paced and on and off the job delivery. Strategies should be selected to reflect the nature of the learning outcomes and the needs of the trainee. Some areas of content may be common to more than one learning outcome and therefore integration may be appropriate.
Resource Requirements	Specialised facilities and equipment The training provider should have access to: . a suitably equipped theory space.
	Training staff and assessors Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise in the program content.
	Learning resources The references listed below should not be regarded as a definitive and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own references/resources.
	Drugs In Sport Handbook Drugs In Sport - Coach Education Manual Infopac (General Drugs In Sport Information Kit) Drug Testing Video
	The Value of Sport, Ethics and the Control of Performance Enhancing Drugs: A Study in the Australian Sports Community Dr Stephen Mugford - Canberra December 1993 Survey of Elite Athletes - Australian Sports Drug Agency Australian Sports Drug Agency Pamphlets
	Pamphlets National Heart Foundation State Health Commission State Centre for Education and Information on Drugs National Pharmacies SGIC Health Nutrition Notes, Victorian Institute of Sport.
Occupational Health and Safety Requirements	Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

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SRT512 Basic Sports Psychology (AFL512)

MODULE DETAILS

Module Name	Basic Sports Psychology.
Nominal Duration	10 Hours (5 Hours on the job, 5 hours off the job.)
Module Code	SRT512 - (AFL512).
Discipline Code	0201105
MODULE PURPOSE	
	To provide participant with a basic knowledge of sports psychology which will enhance performance.
PRE-REQUISITES	
	Nil.
Co-requisites	
	Nil
Relationship to Competency Standards	
	To be determined by the Industry Competency Standards Body and endorsed by the National Training Board.
Summary of Learning Outcomes	
	 Describe how motivation can be used to improve performance. Describe the effects of arousal on performance. Outline methods of psychological preparation for performance. Describe the role of verbal feedback on performance.

Assessment Method	Discussion, written and verbal reports. Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency in all learning outcomes. For specific assessment and conditions of assessment, refer to the individual learning outcomes.
Conditions of Assessment RECOGNITION OF	Assessment will take place in a suitably equipped theory space.
Prior Learning	
	 Acknowledges the skills and knowledge obtained through: formal training (conducted by industry or educational institutions in Australia or overseas) work experience (informal training) life experience.
	The main focus is on the learning outcomes of these experiences, not the how when and where learning occurred. Some people applying to do this module may already be competent in one or more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

States with the existing RPL policy guidelines should refer to these policies until the national policy is available.

Learning Outcome 1	Describe how motivation can be used to improve performance.
Assessment Criteria	 Define the term: motivation. Identify personal, sporting, work, (etc) goals.
Assessment Task(s)	It is recommended that this task be completed off the job.
	Class discussion about motivation factors.
Conditions	The trainee will have access to: . a suitably equipped theory space
Content	This learning outcome may include but is not restricted to the following:
	Definition: . motivation.
	Goal setting: long-term medium-term short-term
	Importance of Time frames.

Learning Outcome 2	
	Describe the effects of arousal on performance.
Assessment Criteria	
	2.1 Define the term: arousal.
	2.2 Describe the characteristics of being under aroused and over aroused.
	2.3 Describe the optimal level of arousal and explain how athletes can achieve this.
Assessment Task(s)	
	It is recommended that this task be completed off the job.
	A written report on how the trainee achieves optimal arousal for performance.
Conditions	
	The trainee will have access to:
	a suitably equipped theory space
	. handouts describing the effects of arousal on performance.
Content	
	This learning outcome may include but is not restricted to the following:
	Definition:
	. arousal.
	Characteristics of being under aroused:
	drowsy
	inattentive
	. poor performance.
	Characteristics of being over aroused:
	tense
	overly excited
	. poor performance.
	Optimal arousal:
	. inverted U function
	. the Ideal Performing State (IPS).
	Methods for achieving optimal arousal:
	. music
	. incentives
	. video
	sub-maximal physical exertion
	interaction with appropriate others
	. visualisation
	. good fitness
	. good skills
	time management
	relaxation techniques

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Learning Outcome 3	Outline methods of psychological preparation for competition.
Assessment Criteria	3.1 Define the term: psychological preparation.3.2 Discuss different methods of psychological preparation.
Assessment Task(s)	It is recommended that this task be completed off the job. Verbal reports by the trainee of their preferred methods of mental preparation for their sports competition.
Conditions	The trainee will have access to: a suitably equipped theory space handouts outlining methods of psychological preparation.
Content	This learning outcome may include but is not restricted to the following: Definition: . psychological preparation.
	Methods of psychological preparation: - relaxation skills - visualisation/imagery - mental rehearsal - positive self-talk - concentration skills pre comparition routines

pre-competition routinescompetition de-briefing.

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Learning Outcome 4	Describe the role of verbal feedback on performance.
Assessment Criteria	4.1 Define: feedback, verbal feedback, positive feedback, negative feedback.4.2 Describe positive and negative feedback and its effect on the individual.
Assessment Task(s)	It is recommended that this task be completed of the job.
	Present a written report on the different types of verbal feedback used by a past or present coach of the trainee.
Conditions	The trainee will have access to : a suitably equipped theory space handouts describing the role of verbal feedback on performance.
Content	This learning outcome may include but is not restricted to the following:
	Definitions: . feedback . verbal feedback . positive feedback . negative feedback.
	Effects of positive/negative verbal feedback: athlete is encouraged/discouraged can lead to better/worse performance

. increased/decreased level of motivation.

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Delivery of the Module

Delivery Strategy

This module allows for delivery through a variety of off the job training strategies. Strategies should be selected to reflect the nature of the learning outcomes and the needs of the participant. Some areas of content may be common to more than one learning outcome and therefore integration may be appropriate.

On job activities

It is recommended that all trainees participate in the following activities:

speak to athletes and coaches about methods of psychological preparation used before competition.

Resource Requirements

Specialised facilities and equipment

The training provider should have access to:

- a suitably equipped theory space
- personality inventories.

Training staff and assessors

Staff delivering the program require as a minimum of Workplace Trainer Competency Standards Category 1, or equivalent. They must have expertise in sports psychology and/or NCAS Level 2 or 3 Accreditation.

Learning resources

The references listed below should not be regarded as a definitive list and should be amended and updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers/trainers have assembled their own references and resources.

Jacobsen, E. *Progressive Relaxation*. Chicago: University of Chicago Press, 1938.

National Coaching Accreditation Levels 1 and 2, N.A.F.C.

Stewart. Anthony., Personal Best: A Practical Approach, Intoprint Publishing.

Occupational Health and Safety Requirements

Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.

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SRT515 Nutrition for Sportspeople (AFL515)

MODULE DETAILS

Module Name	Nutrition for Sportspeople.
Nominal Duration	10 Hours (5 Hours on the job, 5 hours off the job.)
Module Code	SRT515 - (AFL515).
Discipline Code	0804105.
MODULE PURPOSE	
	To provide the sportspeople with the principles of good nutrition and relate these to the demands of sport.
PRE-REQUISITES	
	Nil.
Co-requisites	
	Nil
Relationship to Competency Standards	
	To be determined by the Industry Competency Standards Body when established and endorsed by the National Training Board.
Summary of Learning Outcomes	
	 Design a balanced diet which fulfils the training needs of the trainee as an athlete. Design a diet for the trainee's competition and recovery requirements. Asses different dietary strategies for optimising an athlete's body composition and sporting performance.
Assessment Strategy	
Assessment Method	Written reports. Assessment does not have to take place at the end of every learning outcome. Learning outcomes can be grouped together for assessment. To be credited with this module the trainee must demonstrate competency in all learning outcomes. For specific assessment refer to the individual learning outcomes.

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Conditions of Assessment	Assessment will take place in a suitably equipped theory space.
RECOGNITION OF PRIOR LEARNING	
	 Acknowledges the skills and knowledge obtained through: formal training (conducted by industry or educational institutions in Australia or overseas) work experience (informal training) life experience. The main focus is on the learning outcomes of these experiences, not the how, when and where learning occurred. Some neople applying to do this module neople.

The main focus is on the learning outcomes of these experiences, not the how, when and where learning occurred. Some people applying to do this module may already be competent in one or more of the learning outcomes and should therefore be given the opportunity to apply for recognition of prior learning.

States with the existing RPL policy guidelines should refer to these policies until the national policy is available.

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Learning Outcome 1	Outline a balanced diet which fulfils the training needs of the trainee as a sportsperson.
Assessment Criteria	1.1 Identify the energy requirements for a sports person in training.1.2 Design a menu which satisfies the individual's needs.
Assessment Task(s)	It is recommended that this task be completed off the job.
	Outline a healthy three day menu to suit the trainee while in training.
Conditions	 The trainee will have access to: a suitably equipped theory space appropriate handouts with information related to nutrition and the planning of menus.
Content	This learning outcome may include but is not restricted to the following:
	Assessment of Individual Diet:.Kilojoules.g CHO.g fat.g protein.g micronutrient.
	Individual needs of an athlete: . energy needs . carbohydrate intake . protein intake

- fat intake
- . micronutrient intake
- . fluids.

Designing a meal plan(s):

- . timing meals
- . reading labels
- . ready reckoners
- . quantities and measurements
- . food from the five food groups
- . types of food sources
- . cooking and preparation.

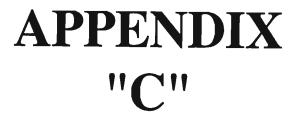
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Learning Outcome 2	Outline a diet which meets the competition and recovery requirements of the trainee.
Assessment Criteria	 Define the term: carbohydrate loading. Describe the principle of carbohydrate loading and its benefits for competition. Identify pre competition foods and the timing of pre competition meals. Explain the importance of maintaining fluids. Describe the benefits of recovery eating after competition.
Assessment Task(s)	It is recommended that this task be completed off the job. Analyse and design the traince's pre-and post-competition diet.
Conditions	The trainee will have access to: . a suitably equipped theory space. . handouts detailing nutrition for competition requirements.
Content	This learning outcome may include but is not restricted to: Pre-competition eating: carbohydrate loading food and fluid timing. Event Meals: fluid vs food Pre event meals: food types timing. Importance of fluids: cooling down process fluid loss fluid loss signs of dehydration prevention of dehydration. Recovery eating: food types fluid replacement abstinence from alcohol. Travelling Athlete: tips for travelling.

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Learning Outcome 3	Asses dietary strategies for optimising the trainee's body composition and performance.
Assessment Criteria	 3.1 Identify a range of weight and body fat control practices. 3.2 Identify the advantages and disadvantages of various weight and body fat control practices.
Assessment Task(s)	It is recommended that this task be completed off the job.
	Present a written report evaluating the range of weight control practices.
Content	This learning outcome may include but is not restricted to the following:
	Definition of: . body composition . importance of body composition to performance . assessment of body composition techniques.
	Strategies to aid weight reduction/body fat control: . low fat vs low kilojoule diets . 'fad' diets . purging . drug therapy . dehydration techniques . excessive exercise.
· .	To gain weight/body size: high protein vs kilojoule intake weight training and rest supplementation.

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DELIVERY OF THE	
MODULE	
Delivery Strategy	
	This module provides for delivery in a variety of modes including workshops, self-paced and on and off the job delivery. Strategies should reflect the nature of the learning outcomes and the needs of the trainee. Some areas of content may be common to more than one learning outcome and therefore integration may be appropriate.
Resource Requirements	
	Specialised facilities and equipment The training provider should have access to: . a suitably equipped theory space.
	Training staff and assessors
	Staff delivering the program require as a minimum Workplace Trainer Competency Standards Category 1, or equivalent. This incorporates expertise in the program content ie Sports Psychologist.
	Learning resources
	The references listed below should not be regarded as a definitive list and should be amended or updated on a regular basis. This list is not intended to be prescriptive as it is realised that many teachers have assembled their own references/resources.
P	Inge, K. Food for Sport.
7	Inge, K. and Roberts, C. Food for Sport Cookbook
	Burke, L. Complete Guide to Food for Sport Performance.
	O'Conner H. Fitness Food.
	National Heart Foundation (Pamphlet).
	State Health Commission (Pamphlet).
	Nutrition Notes - Victorian Institute of Sport.
Occupational Health and Safety Requirements	Providers of training should ensure that the relevant industry codes of practice and Occupational Health and Safety requirements are met during the delivery of this module.





A. Rate your performance over the past four weeks by placing a cross somewhere on the line.

1. In Competition

ineffective effective of 100

2. <u>In Training</u>

ineffective | | | | | | | effective 0 100

THANK YOU FOR YOUR ASSISTANCE

APPENDIX "D"

COACHES PERCEPTION OF ATHLETE'S PERFORMANCE

NAME ______

- A. Rate _____ performance over the past four weeks by placing a cross somewhere on the line.

THANK YOU FOR YOUR ASSISTANCE

APPENDIX "E"

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POMS PROFILE SHEET

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COLLEGE NORMS

Name: _____

Date: _____

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78		45	31				78
77	33	44	30		28	26	77
76	32	43	29	32	20	20	76
75		.42	20	52	27	25	75
74	31	41	28	31	21	25	
	30	41	28		20	24	74
73				30	26	24	73
72	29	38-9	26		25	23	72
71		37		29			71
70	28			28	24	22	70
69	27	35	24		23		69
68		34	23	27		21	68
67	26	33			22		67
66	25	32	22	26	21	20	66
65	24	31	21	25			65
64		30	20		20	19	64
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58	19	23	16		16		58
57		22	15	20	15	15	57
56	18	21	14				56
55	17	20		19	14	14	55
54	16	19	13	18	13		54
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44		7-8	5	12		8 7	44
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Col ©	0.P. (0)	22. Relaxed	46. Sluggish
	ALL BIT ELY	23. Unworthy	47. Rebellious 0 1 2 3 4
	NOT AT ALL A LITTLE MODERATELY QUITE A BIT EXTREMELY	24. Spiteful	48. Helpless
1. Friendly.		25. Sympathetic	49. Weary (0 1 2 3 4
2. Tense		26. Uneasy	50. Bewildered (0 (1 (2 (3 (4
3. Angry	01234	27. Restless	51. Alert 01234
4. Worn out	01234	28. Unable to concentrate @ 1 2 3 4	52. Deceived
5. Unhappy	01234	29. Fatigued	53. Furious
6. Clear-headed	01234	30. Helpful	54. Efficient
7. Lively	01234	31. Annoyed	55. Trusting
8. Confused		32. Discouraged	56. Full of pep
^{9.} Sorry for things d	one 01234	33. Resentful	57. Bad-tempered
10. Shaky		34. Nervous	58. Worthless
11. Listless		35. Lonely	59. Forgetful
12. Peeved		36. Miserable	60. Carefree
^{13.} Considerate	01234	37. Muddled	61. Terrified
14. Sad		38. Cheerful	62. Guilty
15. Active	01234	39. Bitter	63. Vigorous
16. On edge	01234	40. Exhausted	64. Uncertain about things (01234
17. Grouchy	01234	41. Anxious	65. Bushed
18. Blue	01234	42. Ready to fight	
^{19.} Energetic	01234	43. Good natured	
20. Panicky	01234	44. Gloomy	POM 021

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APPENDIX "F"

1

SELF DESCRIPTION QUESTIONNAIRE III

This is a chance for you to consider how you think and feel about yourself. This is not a test - there are no right or wrong answers, and everyone will have different responses. The purpose of this study is to determine how people describe themselves and what characteristics are most important to how people feel about themselves.

On the following pages are a series of statements that are more or less true (or more or less false) descriptions of you. Please use the following eight-point response scale to indicate how true (or false) each item is as a description of you. Respond to the items as you now feel even if you felt differently at some other time in your life. In a few instances, an item may no longer be appropriate to you, though it was at an earlier period of your life (e.g., an item about your present relationship with your parents if they are no longer alive). In such cases, respond to the item as you would have when it was appropriate. Try to avoid leaving any items blank.

After completing all the items, you will be asked to select those that best describe important aspects - either positive or negative - of how you feel about yourself. Consider this as you are completing the survey.

1	2	3	4	5	6	7	8
Definitely	False	Mostly	More False	More True	Mostly	Тпе	Definitely
False		False	than True	than False	True		True

THANK YOU VERY MUCH FOR YOUR CO-OPERATION.

H.W. Marsh, 1982

APPENDIX "G"

Please <u>Circle</u> the number that indicates your reaction to the following statements RELATED TO YOUR LIFE IN GENERAL

S	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
Life always seems exciting	1	2	3	4	5
I feel satisfied with my Life	e 1	2	3	4	5
I feel fulfilled with my Life	e 1	2	3	4	5
This is the best time of my Life	1	2	3	4	5

Please <u>Circle</u> the number that indicates your reaction to the following statements RELATED TO YOUR PRESENT FEELINGS

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
I am enthusiastic about Li	fe 1	2	3	4	5
I am a cheerful person	1	2	3	4	5
I am content	1	2	3	4	5
I am happy	1	2	3	4	5
My life is interesting	1	2	3	4	5
My life is enjoyable	1	2	3	4	5
My life is worthwhile	1	2	3	4	5
My life has real purpose	1	2	3	4	5

THIS IS THE END TO THE QUESTIONNAIRE

THANK YOU FOR YOUR ASSISTANCE

APPENDIX "H"

ANTIBALICUTE (CARACTER ANNI LEIDUCANTION: PROGRAMM INIDIN'IDU ANL ANSTERMAENTI

Date:

Adviser:

Introduce by discussing the objectives of the ACE Program, including its role, training courses and financial assistance.

Personal Details

Transport?

Name Address	 			
Telephone Sport	 		Date of.	Birth
Scholarship Status (circle): Living at Home / Independer	VIS Full	VIS Part	VIS Assoc. Own	AIS

Current Employment Status

F/T	P/T	Casual	Unemployed	Social Security	F/T Student	P/T Student

Present Employer	
Position	
Suburb	
Is this employment a career or simply for the money?	
Do you have a current resume? Yes/No	When was it last updated?

Current Education Status

F/T	P/T	Distance Education	On Campus	Short course	Apprenticeship/Traineeship

College/School	
Name of Course	
Present Year	
For Secondary School aged athletes only:	
Principal	
Year Coordinator	
Subjects Studying	

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Previous Employment

List your 2 most recent positions (if relevant):

Ι.	Position Company Dates	
2.	Position Company Dates	

Previous Education

Other certificates or qualifications:

Do you need to do further studies to achieve your career goals?

Explain: _____

<u>Finances (optional)</u>

What weekly income do you currently have?

Employment	\$
Scholarships	\$
Sponsorships	\$
Parents	\$
Spouse	\$
Austudy	\$
Government Benefits (e.g.dole, pensions etc)	\$
TOTAL	\$

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NOTES:	Social:	Study:	Work:	Sport:	KEY	Low		Medium	T	High	STRESS	Month Week Date (Mon)
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					0r							BRUARY
		X X X X X X X X X			Line Style							JANIJARY FEBRUARY MARCH APRIL MAY JUNE JULY 1 7 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 5 17 19 26 2 9 16 23 2 9 16 23 30 6 13 20 27 4 11 18 25 1 8 15 22 29 6 13 20 27 3
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												JUNE 22 23 24 25 26 2 1 8 15 22 29
												AUGUST SEPTEN 31 32 33 34 35 36 37 3 3 10 17 24 31 7 14 2
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												NOVEMBER 44 45 46 47 48 2 9 16 23 30
												DECEMBER 49 50 51 52 7 14 21 28

Career Awareness

Are you confident about your future	directions in:
your education? (please detail)	
your career? (please detail)	

Would you like to do a vocational assessment?

Comments:

Outline your career, education and sporting goals:

Year	Sporting Goals	Education Goals	Career Goals
1997			
1998			
1999			
2000			
2001			
2002			

 $\overline{21}$

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Planning

How well do you plan your time? (Use a 'C' to indicate your current situation and a 'D' to indicate your desired)

Territ	bly	С	Ж	E	xtremely	v Well			
1	2	3	4	5	6	7	8	9	10

Do you have a yearly/weekly planner?_____

Have you included:

- school commitments
- work commitments
- family time
- training camps
- competitions

Comments:

Integration

How effectively are you combining your sporting and career/education goals?

Training Courses

Are you interested in attending courses in any of the following subject areas?

Course	Yes/No	Course	Yes/No
Sponsorship		Presentation Skills	
Media Skills	· · · · · · · · · · · · · · · · · · ·	Budgeting	
Public Speaking		Time Management	
Cooking/Nutrition		Practical Job Seeking Skills	
Communication		Stress Management	
Sports Law		Overseas Travel	

Any others?

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For the adviser to complete:
How specific is the athlete's career goal?
Very specific General No Career Goal
1 2 3 4 5 6 7 8 9 10
How detailed is the athlete's career plan?Very specificGeneralNo Career Goal12345678910
Support Network What existing support structures does the athlete have? Coach
 Remind them of the extended support hem through the VIS: Mentor Group Other ACE advisers Medical personnel Referral Counselling Sports Science staff etc
Comments:
Summary of Issues Identified
Action Plan/Recommendation
Final Comments/Background Information

Adviser's Signature:_____

Date: ____

DATE	ADVISOP	<u>IDENTIAL</u> PURPOSE OF	CONDENTS
DALL	AUTIOK	rukruse ur	COMMENTS
		VISIT	 •
			· · · · · · · · · · · · · · · · · · ·
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File Notes

ATHLETE NAME:

SPORT;

ADVISOR: DATE;

SESSION INFORMATION: (Including action if required)

SECTION 1: CAREER AWARENESS ASSESMENT

Read each statement and decide if the statement is YES or NO about you. Circle the response that best describes what you believe about the statement. Please be sure to answer every question.

I know where to get information about different careers. 1.

2.

3.

4.

5.

б.

7.

		-		
	YES		NO	
•	I know wh	ere to find out	the prospec	ts for getting a job in a vocational field.
	YES		NO	
5.			• •	ositions that would be open to me in business, industry after my sport career ends.
	YES	<u></u>	NO	
4.	I am work	ing at improvin	ig my know	ledge of particular careers.
	YES		NO	
5.	I know mo	ost of the basic	requiremen	ts for entering particular occupations.
	YES		NO	
б.		e past year I hav occupations af	-	about what it would be like to be employed in t career ends.
	YES	<u> </u>	NO	
7.		y personal strer		nesses, interests and skills and can relate these to
	YES		NO	
8.	I really do	on't think about	: my sport c	areer ending.
	YES		NO	
9.	I find that	: I 'put off' plar	ning for m	y 'post-sport' career.

YES NO

SECTION 2: CAREER PLANNING ASSESSMENT

Read each statement and decide if the statement is YES or NO about you. Please be sure to answer every question.

10. I have identified several occupations in which I believe I can be successful after my sport career ends.

YES _____ NO _____

11. I am familiar with the requirements that must be met in terms of educational background, work experience and skills for the occupations I have identified as suitable to me.

YES _____ NO _____

12. During my free time, I participate in activities to help me learn about occupations 1 could enter after my sport career ends.

YES _____ NO _____

13. I am getting work experience through 'off-season' jobs and/or part time work related to particular occupations I have identified.

YES _____ NO _____

14. Within the past year I have read an article or book about a career I have identified for myself after my sport career ends.

YES _____ NO _____

15. Within the past year I have talked with relatives, friends, or others about occupations suitable to me after my sport career ends.

YES _____ NO _____

16. I know some people who have worked in occupations I have identified for myself after my sport career ends.

YES _____ NO _____

17. Within the past year I have looked at the demand for people working in occupations I have identified for myself after my sport career ends.

YES _____ NO _____

27

18. I have a plan for getting a job in an occupation of my choice after my sport career ends.

YES _____ NO _____

19. I have managed my finances to cover my living costs for up to 2 years after my sport career ends while I identify and start a new career.

YES _____ NO _____

20. I have managed my finances to provide for my retirement needs.

YES _____ NO _____

SECTION 3: CAREER NEEDS ASSESSMENT

Read each statement and decide what you believe about each of the statements. Circle the response that best describes what you believe about that statement. Please mark ONLY ONE response for each statement.

You will also be asked to 'rank in order' a set of statements. Start with 1 being the highest ranking with 3, 4, or 5 being your lowest ranking. Please make sure you answer each question.

- 21. How important is it that help be provided for you in planning a new career after your sport career ends?
 - A. Extremely important
 - B. Somewhat important
 - C. Not important
- 22. To what extent do you believe the ACE Program should be involved in providing programs and services to help you in planning for a new career?
 - A. A great deal of involvement
 - B. Some involvement
 - C. Little or no involvement
- 23. When do you believe career planning programs and services would be most helpful to you in planning for a new career?
 - A. During your sport career
 - B. After your sport career ends
 - C. Both during and after your sport career
- 24. How important is it that help be provided to you in managing your finances?
 - A. Extremely important
 - B. Somewhat important
 - C. Not important
- 25. When do you believe programs and services in managing finances would be most helpful to you?
 - A. During your sport career
 - B. After your sport career ends
 - C. Both during and after your sport career

29

26. Please rank in order, the kind of programs and services you believe would be most helpful to you in planning for a new career.

(1=most helpful, 5=least helpful)

Helping you identify your personal strengths, weaknesses, interests and skills and relate these to careers best suited for you.

Arranging for you to work at jobs in career fields part time and/or during the off-season so you can learn more about the specific careers and obtain valuable work experience.

Helping you to identify skills and/or further education and training you need to qualify for careers in which you are interested.

Helping you to develop and carry out a plan to obtain education, training and skills required for careers in which you are interested.

Helping you to develop and carry out a job search campaign to include: helping you to identify prospective employers; helping to you prepare a resume; and teaching you how to job interview successfully.

27. Please rank in order the kind of programs and services you believe would be most helpful to you in managing your finances.

Offering small group financial management seminars

Offering small group skills building sessions on managing finances

Offering individual financial counselling

SECTION 4: LIFE SATISFACTION ASSESSMENT

Read each statement and decide what you believe about each of the statements. Circle the response that best describes what you believe about that statement. Please mark ONLY ONE response for each statement.

- 28. How do you feel about your age compared to your ability to compete successfully?
 - A. Good
 - B. OK
 - C. Not so good
- 29. How do you expect things will be different, from the way they are now in your life, after your sport career ends?
 - A. Better or no change
 - B. It depends on what kind of job I get
 - C. Worse
- 30. What is the most important thing in your life right now?
 - A. My sport career
 - B. Planning for the future after my sport career ends
 - C. Being recognised for past achievements
- 31. How do you feel about your life situation right now, compared with earlier periods in your life?
 - A. Good
 - B. OK
 - C. Not so good

32. If you could do anything you pleased, where in Australia would you most like to live?

- A. Present location
- B. A different location of my choice
- 33. Do you wish you could be with your family and friends more than you are right now?
 - A. OK as is
 - B. Wish I could spend more time with family and friends
- 34. Do you wish you had more time to yourself?
 - A. OK as is
 - B. Wish I had more time to myself

31

- 35. As you get older do you find that your life situation is better or worse than you thought it would be?
 - A. Better
 - B. About as I expected
 - C. Worse
- 36. How do you feel about your life situation right now?
 - A. Good
 - B. OK
 - C. Not so good
- 37. How satisfied are you with your athlete performance THIS season?
 - A. Very satisfied
 - B. Somewhat satisfied
 - C. Not very satisfied
- 38. How satisfied were you with your athletic performance LAST season?
 - A. Very satisfied
 - B. Somewhat satisfied
 - C. Not very satisfied
- 39. How satisfied are you that you have managed your finances to provide for emergencies, and financial support for up to 2 years while identifying and starting a new career, and retirement needs?
 - A. Very satisfied
 - B. Somewhat satisfied
 - C. Not very satisfied
- 40. How often do you think about your sport career ending?
 - A. Very often
 - B. Sometimes
 - C. Not so often or never

GO	AL SETTING	
	SPORT	

1. What is your long term sporting goal?
2. To reach this goal I need to carry out the following steps:-
Step 1
Step 2
Step 3
Step 5
 Step 6

GOAL SETTING CAREER / EDUCATION

1. What is your long term career/education goal?

2. To reach this goal I need to carry out the following steps:-

Step 1			
Step 2		 	
Step 3	 	 	
Step 4	 	 	
Step 5	 	 	
Step 6	 	 	

CAREER GOAL STATEMENTS

It is useful to prepare two career goal statements: one for the short-term (next 6 months), and the other for the longer term (to be achieved within 3 years).

Short-Term Goal (next 6 months)

Write a statement of your short-term goal.

Is it positively stated? If not, rewrite it.

Is the goal important enough to you that you want to work on it and have the time and energy?

What more do I need to know to achieve my goal?

What more must I learn how to do?

What risks must I take?

From whom do I need support? What kind of support is it?

35

Long-Term Goal (to be achieved within 3 years)

Write a statement of your long-term goal.

Is it positively stated? If not, rewrite it.

Is the goal important enough to you that you want to work on it and have the time and energy?

What more do I need to know to achieve my goal?

What more must I learn how to do?

What risks must I take?

From whom do I need support? What kind of support is it?

				Wednesday T					Tuesday					Monday	DATE
Rest/Sleep	Leisure	School/University/Study	Work	Training/Competition	Rest/Sleep	Leisure	School/University/Study	Work	Training/Competition	Rest/Sleep	Leisure	School/University/Study	Work	Training/Competition	
															AM
															PM

ATHLETE CAREER AND EDUCATION PROGRAM ATHLETE WEEKLY COMMITMENTS

	-	
Thursday	Training/Competition	
	Work	
	School/University/Study	
	Leisure	
	Rest/Sleep	
Friday	Training/Competition	
	Work	
	School/University/Study	
	Leisure	
	Rest/Sleep	
Saturday	Training/Competition	
	Work	
	School/University/Study	
	Leisure	
	Rest/Sleep	
Sunday	Training/Competition	
	Work	
	School/University/Study	
	Leisure	
T	Rest/Sleep	

Name: Sport:	CAREER PLAN	
YEAR	SPORT	CAREER
1995		
1996		
7661		
8661		
6661		
2000		

ATHLETE BUDGET

PART ONE: EXPENDITURE

EXPENDITURE	WEEKLY	FORT.	ANNUAL
	AMOUNT	AMOUNT	AMOUNT
ACCOMMODATION:			AMOUNT
1. Rent			
2. Mortgage			
HOME OWNER EXPENSES & UTILITIES			
1. Municipal Rates			
2. Land Tax			
3. Sewerage			
4. Electricity			
5. Gas			
6. Water			
7. Phone/Fax			
SHOPPING:			
I. Food			
2. Household Supplies			
3. Clothing (work/casual)			
MOTOR VEHICLE / TRANSPORT:			
1. Car Re-payments		13	
2. Fuel			
3. Registration (third party)			
4. Repairs and Maintenance			
5. Public Transport			
INSURANCES:			
1. House/Contents			
2. Car (additional tothird party)			
3. Health/Hospital		i i i i i i i i i i i i i i i i i i i	
4. Life/Accident			
EDUCATION:			
1. Fees			
2. Books and Materials			
3. Other			
HEALTH / MEDICAL			
1. Doctor			
2. Dentist			
3. Regular Medications			
4. Massage			
5. Other (physio, chiro)			
SPORTING EXPENSES:			
1. Equipment			
2. Clothing			
3. Travel for Training			
4. Travel for Competition			
5. Competition Expenses			
6. Sporting Association/Club Fees			
ADDITIONAL / PERSONAL EXPENSES			
1. Entertainment			
2. Clubs or Association Fees			
3. Existing Debts/Loan Re-payments		1	
4. Bank Charges/Govt. Bank Taxes			
5. Specific Savings Accounts, eg Xmas			
TOTALS			

-

ATHLETE BUDGET

PART TWO: INCOME

INCOME ITEM	FORTN.	MONTHLY	ANNUAL
	AMOUNT	AMOUNT	AMOUNT
ATHLETE SALARY			
SPOUSE SALARY			
UNEMPLOYMENT BENEFITS			
PENSION			
GOVERNMENT ALLOWANCE			
RENTS RECEIVABLE			
DIVIDENDS RECEIVABLE			
INVESTMENTS YIELD (OTHER)			
INTEREST ON SAVINGS			
ANNUITY			
SCHOLARSHIPS:			
1. Sporting			
2. Scholastic			
GRANTS			
Sponsorships		,	
OTHER INCOME			
TOTALS			

FORTNIGHT	TOTAL FORT. INCOME	\$
	LESS TOTAL FORTNIGHT EXPENDITURE	S
	TOTAL FORNIGHT SURPLUS OR DEFICIT	\$
MONTHLY		
	TOTAL MONTHLY INCOME	\$
	LESS TOTAL MONTHLYEXPENDITURE	S
	TOTAL MONTHLY SURPLUS OR DEFICIT	S
ANNUAL		
	TOTAL ANNUAL INCOME	\$
	LESS TOTAL ANNUAL EXPENDITURE	\$
	TOTAL ANNUAL SURPLUS OR DEFICIT	\$

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VICTORIA UNIVERSITY OF TECHNOLOGY

(FOOTSCRAY CAMPUS)

DEPARTMENT OF PHYSICAL EDUCATION AND RECREATION

LIFESKILL INTERVENTION AND ELITE ATHLETES PROJECT: PROGRAM

INVESTIGATOR: DEIDRE ANDERSON

Informed Consent Form

1. I acknowledge that:

- I fully understand the nature of the VIS Athlete Career ---and Education Program,
- the assessment process and detail of the program have been explained to me fully,
- I have been informed that I am free to withdraw from the project at any time,
- the project is for the purpose of further program development and research,
- I have been informed that the confidentiality of the information I provide will be safeguarded.

2. To the best of my knowledge there is no reason why I should not take part in this research.

Signed: _____ Date: ____



DATE	TENSION	DEPRESSION	ANGER	มเดอห	FATIGUE	CONFUSION
2.00	27	27	24	10	34	1 9
2.25		30	25	12	32	28
2.50	38	31	24	14	38	21
2.75	27	28	26	13	27	18
3.08	18	19	24	12	21	10
3.25	12	15	19	11	19	12
3.58	17	12	16	8	21	16
3.75	14	17	15	10	18	15
4.88	19	19	17	13	28	16
4.25	17	16	13	16	28	14
4.58	15	16	14	18	16	14
4.75	16	15	14	15	15	14
5.80	12	14	12	28	14	13
5.25	9	13	13	24	16	18
5.50	15	15	12	22	12	13
5.75	15	16	13	16	23	12
6.00	15	15	14	13	26	14
6.25	14	16	13	16	14	13
6.50	16	15	13	16	19	13
6.75	15	16	14	17	17	13
7.08	14	15	11	25	15	12
7.25	14	15	11	12	17	. 12
7.50	8	3	4	6	8	9
7.75	9	3	2	4	13	7
8.08	9	9	8	1	15	7
8.25	3	8	8	6	12	б
8.59	2	1	Ø	12	6	5
8.75	3	4	8	3	12	6
9.88	8	11	2	5	13	9
9.25	9	2	3	6	17	7
9.58	2	1	2	6	. 9	5
9.75	9	8	2	5	15	5
18.88	2	0	8	18	12	4
10.25	5	4	4	11	8	8
19.59	8	8	8	21	12	7
18.75	0	8	8	19	18	6
11.00	16	19	11	21	14	14
11.25	15	24	16	15	16	18
11.50	17	17	14	15	13	13
11.75	13	28	12	15	1.2	

DATE	TENSION	DEPRESSION	ANGER	DIGOR	FATIGUE	CONFUSION
2.00	29	38	18	17	18	18
2.25	27	24	20	19	20	21
2.50	29	28	16	21	24	24
2.75	30	19	19	24	21	19
3.88	26	18	18	23	18	17
3.25	16	15	13	26	10	13
3.50	12	17	12	27	7	18
3.75	16	15	13	30	7	12
4.88	17	15	14	33	7	12
4.25	14	17	12	17	9	20
4.50	14	16	13	21	7	19
4.75	14	16	12	20	7	15
5.00	15	15	13	19	7	15
5.25	21	16	12	18	13	16
5.50	19	16	12	16	16	16
5.75	19	15	12	15	18	14
6.00	21	15	14	38	7	12
6.25	15	16	12	21	8	14
6.50	14	19	13	18	11	15
6.75	17	15	13	25	12	12
7.00	16	15	13	28	9	13
7.25	3	0	2	17	4	3
7.50	14	17	12	14	9	14
7.75	- 17	.16	12	20	12	14
8.00	7	3	1	12	1	7
8.25	5	5	1	15	3	6
8,50	7	8	1	11	3	5
8.75	б	Ø	1	12	8	5
9.00	7	2	2	12	5	7
9.25		0	2	16	4	б
9.50	5	0	1	13	0	3
9.75	8	1	8	7	2	5
10.00	11	0	1	9	1	2
18.25	3	2	1	9	8	6
10.50	8	8	1	8	3	6
10.75	7	8	0	6	1	8
11.00	4	8	2	17	8	3
11.25	3	0	2	19	0	2

OF MOOD STATES RAW DATA SUBJECT 3

DATE	TENSION	DEPRESSION	ANGER	VIGOR	FATIGUE	CONFUSION
2.00	26	27	34	21	18	16
2.25	24	24	33	19	17	18
2.50	22	21	25	20	28	14
2.75	26	27	24	14	18	16
3.00	20	28	23	22	17	12
3.25	16	16	15	28	15	14
3.50	15	15	14	31	12	14
3.75	16	15	15	32	10	13
4.88	28	16	17	29	16	14
4.25	16	21	13	30	10	13
4.50	18	17	16	28	13	14
4.75	20	20	21	31	13	16
5.00	15	16	15	35	11	13
5.25	15	15	11	38	7	9
5.50	13	23	26	26	11	16
5.75	19	21	22	24	15	15
6.00	19	19	23	27	15	16
6.25	17	17	17	31	13	12
6.50	15	16	19	33	14	15
6.75	14	16	14	32	12	14
7.00	17	16	14	32	18	14
7.25	14	16	13	34	11	10
7.58	15	13	12	31	18	8
7.75	17	14	14	38	9	14
8.88	14	16	13	- 31	7.	12
8.25	13	14	11	28	8	7
8.50	14	14	12	30	3	6
8.75	14	13	10	31	8	5
9.00	13	12	9	30	5	9
9.25	14	14	7	29	7	6
9.50	14	12	4	28	8	9
9.75	13	13	5	30	7	5
10.00	14	14	7	29	4	6
10.25	14	13	6	31	2	4
10.50	13	14	4	28	8	7
10.75	14	12	3	27	- 1	4
11.00	12	14	2	31	3	6

DAIE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.88	27	27	22	17	18	18
2.25	28	29	21	9	22	19
2.50	31	32	19	17	23	21
2.75	27	26	20	20	21	20
3.00	22	28	18	21	19	18
3.25	21	21	14	23	15	17
3.50	28	16	14	29	11	15
3.75	18	15	12	31	8	14
4.80	14	15	11	21	13	13
4.25	28	17	15	19	14	12
4.50	20	20	23	19	13	22
4.75	21	26	28	20	15	21
5.00	28	30	34	18	17	23
5.25	28	15	13	28	8	14
5.50	24	15	14	19	12	17
5.75	23	15	14	19	11	17
6.00	27	15	13	24	9	15
6.25	19	15	11	32	9	13
6.50	19	15	11	32	9	13
6.75	18	15	11	29	11	13
7.80	18	15	13	29	8	14
7.25	3	1	8	14	5	4
7.58	7	4	1	11	6	5
7.75	7	1	1	8	8	6
8.00	9	5	8	11	11	8
8.25	17	19	22	7	13	14
8.50	20	24	24	9	14	14
8.75	17	28	27	8	28	18
9.00	13	17	15	13	11	12
9.25	7	3	2	20	1	18
9.50	8	4	1	20	1	9
9.75	9	3	1	15	2	7
18.88	3	8	3	17	1	6
10.25	4	1	1	16	8	4
10.50	4	0	1	19	8	3.
10.75	4	Ø	2	19	8	2

DATE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.88	21	22	21	16	12	18
2.25	24	25	20	18	18	19
2.50	23	23	19	20	10	17
2.75	27	26	17	22	11	18
3.00	28	21	28	26	12	19
3.25	19	28	22	28	18	28
3.50	14	17	12	30	18	12
3.75	12	15	12	31	15	11
4.88	28	18	11	28	16	16
4.25	21	15	11	24	12	12
4.58	17	17	13	20	12	14
4.75	28	18	14	18	12	11
5.00	19	20	13	16	13	14
5.25	16	20	21	24	12	18
5.50	15	15	11	24	12	12
5.75	18	32	32	31	14	17
6.80	16	24	22	30	14	16
6.25	12	15	11	32	7	12
6.50	3	8	8	29	4	2
6.75	3	Ø	2	22	12	4
7.00	5	8	9	20	4	4
7.25	4	8	2	17	5	4
7.58	7	0	8	29	1	3
7.75	5	1	5	29	3	3
8.88	7	2	2	30	18	5
8.25	5	16	3	32	9	б
8.50	4	8	8	29	5	5
8.75	3	2	3	27	8	5
9.00	1	1	5	21	4	5
9.25	6	2	2	14	6	7
9.58	4	4	2	18	8	7
9.75	4	3	1	24	4	5
18.88	3	3	Ø	26	. 7	4
18.25	10	4	0	15	18	7
18.58	18	4	1	14	б	5
18.75	2	5	8	16	10	4
11.00	2	8	В	16	4	4

\equiv OF MOOD STATES RAW DATA SUBJECT 6

DATE	TENSION	DEPRESSION	ANGER	DIGOR	FATIGUE	CONFUSION
3.00	25	25	28	23	28	19
3.25	24	19	27	22	27	20
3.50	20	24	26	21	24	21
3.75	23	28	23	23	20	19
4.88	24	23	26	24	28	17
4.25	19	18	22	23	17	14
4.50	13	16	21	34	13	13
4.75	18	17	18	16	23	14
5.00	19	20	19	33	14	15
5.25	15	19	21	34	13	14
5.50	17	17	16	36	19	13
5.75	19	15	14	28	24	13
6.00	18	18	15	23	27	15
6.25	16	16	17	22	20	12
6.50	22	22	21	27	21	11
6.75	26	39	37	30	18	17
7.00	22	24	19	33	8	20
7.25	16	16	14	33	13	13
7.50	23	24	22	34	10	17
7.75	17	16	13	24	14	12
8.99	4	2	3	27	18	7
8.25	6	2	3	23	25	6
8.50	17	25	18	17	22	16
8.75	7	10	9	24	12	9
9.88	4	1	1	12	2	4
9.25	4	6	8	20	2	7
9,50	3	1	8	15	8	7
9.75	4	1	8	21	B	4
10.00	2	0	8	14	10	5
18.25	7	2	8	16	5	6
18.50	б	2	8	13	5	6
10.75	9	4	6	24	3	4
11.00	7	4	5	.26	5	3
11.25	8	7	13	Ø	12	10
11.50	4	B	1	18	1	5
11.75	4	8	Ø	20	0	5
12.80	3	8	8	18	8	4

DATE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.09	28	27	20	20	14	19
2.25	30	29	21	29	13	21
2.50	30	26	23	16	25	23
2.75	27	24	27	26	28	21
3.00	24	20	24	29	19	18
3.25	20	18	23	27	11	17
3.50	19	14	21	33	17	14
3.75	14	15	14	25	22	12
4.80	14	15	14	20	24	14
4.25	15	16	15	30	24	11
4.50	21	19	14	26	28	15
4.75	14	16	12	32	23	15
5.00	17	15	12	27	25	13
5.25	16	15	14	30	20	13
5.58	18	17	16	31	23	17
5.75	15	15	13	32	18	13
6.09	16	15	13	31	16	13
6.25	14	16	14	38	19	11
6.50	16	15	12	35	26	12
6.75	14	15	14	31	20	12
7.00	18	17	15	23	15	13
7.25	17	22	18	31	20	15
7.50	13	16	13	20	9	12
7.75	14	15	12	16	19	13
8,89	15	15	13	24	18	11
8.25	17	2	2	5	20	б
8.50	14	1	3	13	19	4
8.75	8	9	13	19	12	3
9.80	5	2	2	20	14	4
9.25	5	0	1	28	12	1
9.50	5	0	1	24	10	1
9.75	12	2	2	27	14	3
10.00	14	9	13	26	16	7
18.25	9	7	9	27	14	6
18.58	4	8	6	28	12	7
18.75	7	0	4	30	10	5
11.08	17	15	11	22	8	11
11.25	13	15	11	23	7	12
11.58	13	15	12	30	8	12
11.75	14	15	11	29	8	13

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DATE	TENSION	DEPRESSION	ANGER	DIGOA	FATIGUE	CONFUSION
2.00	27	26	26	29	15	18
2.25	24	29	23	27	14	18
2.50	27	23	21	24	18	15
2.75	26	21	19	38	17	16
3.00	22	27	18	36	7	14
3.25	24	28	22	26	8	16
3.50	18	28	21	29	8	13
3.75	15	15	14	33	7	12
4.88	14	15	15	30	7	12
4.25	28	23	22	29	9	17
4.58	19	22	28	32	10	14
4.75	17	20	23	31	9	15
5.00	16	16	16	33	13	9
5.25	16	15	14	15	29	12
5.50	19	17	28	28	28	12
5.75	18	15	14	21	27	12
6.00	17	15	14	16	32	12
6.25	17	21	28	24	28	11
6.50	11	14	22	18		11
6.75	7	11	13	19	24	7
7.00	12	13	18	28	28	9
7.25	4	4	18	21	4	5
7.58	4	. 1	7	23	0	3
7.75	3	3	5	15	1	3
8.88	8	4	9	б	1	4
8.25	7	2	9	15	2	2
8.50	5	1	8	11	2	4
8.75	5	1	7	8	3	3
9.88	8	5	8	16	5	5
9.25	3	1	6	20	5	3
9.50	3	8	5	29	5	3
9.75	8	5	11	19	6	8
10.00	4	8	3	20	5	4
18.25	3	8	2	23	6	4
18.58	3	8	2	23	6	4
18.75	3	8	2	22	6	3
11.08	18	18	19	31	13	16
11.25	17	19	22	28	13	16
11.58	16	17	15	38	11	16
11.75	17	29	23	23	14	19

DRTE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.00	23	24	28	23	18	14
2.25	26	27	21	26	16	12
2.58		15	18	32	28	13
2.75	24	35	33	19	17	20
3.00	16	15	13	29	15	10
3.25	28	17	16	28	12	13
3.58	8	14	8	18	8	3
3.75	5	15	9	22	7	4
4.00	7	12	2	21	6	7
4.25	11	12	19	12	6	10
4.50	δ	2	3	17	3	3
4.75	7	2	5	21	5	3
5.88	13	16	17	25	11	11
5.25	17	20	20	27	12	15
5.50	14	15	12	26	12	12
5.75	23	31	35	18	16	22
6.08	15	16	11	24	14	11
6.25	13	17	TI	27	11	15
6.50	13	15	11	27	9	12
6.75	17	18	22	22	12	15
7.80	4	1	9	15	5	4
7.25	3	2	2	18	7	2
7.50	5,	2	4	14	7	3
7.75	5	7	5	12	4	б
8.86	5	9	6	9	3	11
8.25	5	б	7	14	2	18
8.50	4	4	5	28	3	8
8.75	3	3	6	24	4	7
9.00	18	9	13	9	3	7
9.25	12	11	14	8	6	8
9.50	19	23	· 28	18	4.	12
9.75	24	· · 23	23	8	1	12
18.00	14	20	18	26	3	10
18.25	18	16	17	25	1	9
18.50	7	12	14	24	2	18
18.75	9	9	12	30	3	18
11.00	15	17	15	31	1	10
11.25	30	32	29	20	12	18
11.50	24	27	27	22	10	19
11.75	16	16	14	26	11	13
12.00	19	23	17	25	13	13

OF MOOD STATES RAW DATA SUBJECT 10

DATE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.00	28	27	29	21	24	22
2.25	24	28	30	20	28	19
2.50	26	26	31	21	26	28
2.75	28	28	27	20	24	21
3.00	23	24	26	19	30	23
3.25	24	28	22	20	22	21
3.58	27	27	21	18	18	19
3.75	24	28	19	28	17	17
4.00	26	26	24	24	19	19
4.25	22	26	26	25	15	28
4.58	24	25	26	29	12	20
4.75	19	18	27	27	10	18
5.08	20	15	16	22	9	14
5.25	21	20	22	32	16	21
5.50	26	16	16	31	12	28
5.75	21	17	17	30	11	24
6.00	16	15	16	29	13	14
6.25	21	24	38	27	9	19
6.50	24	17	19	25	23	18
6.75	16	15	14	27	11	12
7.80	16	15	16	28	12	14
7.25	15	15	15	29	11	15
7.50	26	24	17	27	11	16
7.75	33	29	21	27	16	23
8.00	18	15	15	30	10	15
8.25	4	0	3	21	5	6
8.50	10	2	5	14	10	6
8.75	10	2	7	21	18	6
9.08	15	9	12	14	5	11
9.25	8	8	10	13	4	11
9.50	4	3	7	18	4	12
9.75	4	4	6	31	3	10
10.00	22	6	9	17	10	11
10.25	18	16	12	13	14	13
10.50	13	17	11	18	12	14
19.75	28	34	24	14	18	19

DATE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.00	33	32	29	21		10
2.00	33		29	21	17	19
2.25	36	33	38	19	17	28
2.58	34	<u> </u>	21	18	18	4
2.75	20	34	26	15	28	24
3.00	19	32	20	28	19	18
3.25	24	16	11	23	17 18	15
3.50	24	31	37	23		14
3.75	16				15	21
4.88	13	18	13	28	16	18
4.25		14	12	22	12	17
4.58	12	15	18	23	12	15
4.75	19	19	16	22	12	12
5.88	19	27	28	19	13	14
5.25	27	29	19	23	12	15
5.58	22	24	17	22		16
5.75	24	26	28	14	14	17
6.88	19	28	27	18	14	19
6.50		16	13	12	4	14
6.75	19	23	29	12	12	26
7.88	27	25	15	12	4	17
7.25	28	28	12	14	5	16
7.50	20	35	28	16		16
7.75	16	17	16	15	3	12
8.88	10	3	5	14	18	5
8.25	7	2	5	11	9	б
8.58	16	15	12	12	8	
8.75	8	4	7	14	7	6
9.88	18	17	23	18	8	16
9.25	24	23	15	28	9	14
9.50	10	7	8	24	5	3
9.75	1	2	3	26	7	3
18.88	9	4	4	31	8	8
18.25	4	4	6	31	7	5
18.50	8	4	4	31	18	4
18.75	5	4	3	30	12	4

DATE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.99	18	25	16	27	16	15
2.25	22	18	17	24	13	13
2.58	26	39	29	26	14	22
2.75	24	38	30	27	17	24
3.88	23	27	21	29	18	17
3.25	19	21	13	30	9	17
3.50	18	16	13	28	18	13
3.75	23	25	15	29	12	17
4.88	22	31	22	33	13	21
4.25	23	24	21	31	10	17
4.50	27	38	26	35	8	22
4.75	18	19	29	25	19	16
5.00	23	21	34	29	12	28
5.25	17	17	17	31	18	13
5.50	19	20	18	33	11	18
5.75	19	24	18	32	12	17
6.00	20	22	20	31	10	18
6.25	24	19	21	35	10	16
6.50	31	21	27	36	7	16
6.75	22	23	24	29	9	17
7.00	18	20	18	34	7	12
7.25	19	15	16	31	10	16
7.50	3	3	8	28	11	3
7.75	14	16	14	32	9	11
8.09	4	4	7	32	9	5
8.25	19	34	12	29	11	19
8.50	11	19	19	29	9	11
8.75	6	13	10	28	9	5
9.08	8	12	9	28	9	5
9.25	9	10	7	21	10	5
9.50	8	12	3	30	7	3
9.75	24	33	26	29	23	21
10.00	20	32	24	25	24	21
10.25	22	36	24	22	24	23
10.50	22	30	24	24	24	23
19.75	28	42	32	22	28	25
11.00	25	27	22	33	20	14
11.25	22	31	25	23	19	20
11.50	22	· 32	24	23	20	21
11.75	22	33	28	28	21	18
12.00	21	26	21	30	18	18
12.25	21	28	28	38	17	17
12.50	19	28	14	30	19	18

DATE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.00	28	20	29	15	14	11
2.25	18	19	27	16	28	18
2.58	19	28	26	14	21	18
2.75	19	28	24	14	23	16
3.88	15	28	12	17	21	16
3.25	15	15	12	21	24	12
3.58	16	18	13	28	22	14
3.75	14	17	13	24	18	13
4.88	19	21	42	26	16	12
4.25	14	18	27	27	14	11
4.50	24	23	36	24	18	21
4.75	31	20	32	23	9	21
5.80	21	15	13	21	18	19
5.25	15	51	29	30	8	27
5.50	26	38	18	22	7	21
5.75	22	31	28	23	13	18
6.89	26	57	52	16	7	27
6.25	23	32	29	26	8	20
6.50	26	42	30	18	11	19
6.75	33	41	37	38	7	24
7.88	28	37	30	26	8	23
7.25	13	3	1	21	8	6
7.50	14	8	5	2	12	4
7.75	6	25	28	18	2	8
8.88	15	36	38	25	8	14
8.25	10	11	8	7	8	7
8.50	27	41	28	7	1	18
8.75	27	50	20	14	8	20
9.88	21	. 41	17	28	8	19
9.25	26	47	Ø	19	8	18
9.50	16	20	3	19		14
9.75	13	18	2	16	3	18
18.99	14	24	1	18	2	16
18.25	18	28	Ø	17	8	14
10.50	15	26-	2	20	3	14
10.75	17	29	1	21	2	16
11.00	36	52	30	28	16	32
11.25	15	16	12	23	10	12
11.58	15	15	13	38	10	12
11.75	21	21	20	29	15	14

DATE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.00	18	26	24	21	14	14
2.25	19	25	21	27	15	13
2.50	22	21	20	21	13	9
2.75	19	21	16	21	14	10
3.00	21	28	25	21	18	14
3.25	23	30	29	23	18	15
3.58	26	26	28	24	g .	18
3.75	25	29	27	31	9	17
4.00	24	21	15	24	9	13
4.25	20	24	18	31	8	12
4.50	20	27	17	19	8	11
4.75	21	24	19	22	7	10
5.00	23	23	14	22	8	12
5.25	22	24	12	22	8	18
5.50	22	26	16	20	8	10
5.75	26	38	13	32	9	11.
6.00	28	32	10	35	9	12
6.25	30	28	15	22	13	11
6.50	16	25	22	26	9	16
6.75	14	18	17	27	9	18
7.00	13	16	14	21	13	9
7.25	19	18	18	15	14	10
7.50	17	17	12	28	7	10
7.75	17	15	18	33	10	8
8.80	18	12	9	31	9	7
8.25	17	15	7	10	10	8
8.50	4	3	5	13	5	5
8.75	4	2	6	8	7	4
9.88	4	0	6	15	4	4
9.25	8	15	13	19	1	8
9.50	5	7	12	17	2	6
9.75	1	. 1	4	13	8	4
10.00	7	7	2	14	7	6
19.25	11	10	8	14	6	5
18.58	7	4	5	21	7	7
18.75	7	11	7	14	8	6
11.00	6	11	7	13	5	6

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DATE	TENSION	DEPRESSION	ANGER	UIGOR	FATIGUE	CONFUSION
2.00	36	34	21	18	14	21
2.25	33	32	24	19	12	22
2.58	27	31	23	26	11	23
2.75	29	34	21	21		21
3.00	31	32	19	17	12	19
3.25	27	31	16	25	15	28
3.50	28	33	14	25	14	28
3.75	21	31	15	27	11	23
4.00	29	39	25	24	10	26
4.25	21	38	18	23	8	22
4.50	32	41	28	26	7	22
4.75	27	25	16	24	8	19
5.80	21	27	16	23	6	18
5.25	24	37	27	30	4	23
5.50	28	31	28	31	8	24
5.75	29	43	32	30	7	28
6.00	19	25	24	28	9	18
6.25	17	20	13	22	10	18
6.50	23	28	18	13	14	22
6.75	19	28	17	16	8	28
7.88	17	17	13	14	8	18
7.25	18	19	18	23	14	11
7.50	11	6	8	24	12	9
7.75	8	4	4	23	14	- 4
8.88	13	18	13	24	13	10
8.25	5	4	2	26	18	- 7
8.50	14	28	11	9	0	12
8.75	5	3	4	15	1	4
9.88	4	1	2	13	0	2
9.25	11	18	9	8	8	8
9.50	10	6	8	3	6	7
9.75	16	15	14	11	Ø	11
18.00	6	1	3	24	0	1
10.25	11	3	3	24	3	10
18.50	11	11	4	28	3	9
10.75	14	13	11	21	5	12
11.00	17	17	17	32	8	19
11.25	24	18	17	31	19	15
11.50	52	22	16	30	12	19
11.75	23	24	21	22	11	18

SUBJECT 1 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-Train	C-comp	C-Train
2.1	85.00	90.00	85.00	85.00
2.2	82.50	90.00	•	•
3.1	85.00	90.00	72.50	85.00
3.2	70.00	80.00	•	•
4.1	75.00	70.00	57.50	78.00
4.2	70.00	80.00	•	•
5.1	50.00	50.00	50.00	50.00
5.2	50.00	80.00	•	•
6.1	50.00	80.00	50.00	60.00
6.2	50.00	90.00	•	•
7.1	50.00	90.00	50.00	75.00
7.2	50.00	90.00	•	•
8.1	50.00	90.00	50.00	85.00
8.2	50.00	90.00	•	•
9.1	50.00	40.00	50.00	50.00
9.2	50.00	90.00	•	•
10.1	50.00	85.00	50.00	85.00
10.2	50.00	90.00	•	•
11.1	50.00	85.00	80.00	90.00
11.2	70.00	90.00	•	•
12.1	70.00	70.00	80.00	90.00
12.2	70.00	70.00	•	•

SUBJECT 2 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-Train	C-Comp	C-Train
1.1	60.00	55.00	50.00	50.00
1.2	62.50	60.00	•	•
2.1	65.00	65.00	65.00	65.00
2.2	70.00	70.00	•	•
3.1	75.00	75.00	75.00	75.00
3.2	50.00	50.00	•	•
4.1	90.00	90.00	85.00	82.50
4.2	95.00	95.00	•	•
5.1	95.00	95.00	95.00	85.00
5.2	95.00	95.00	•	•
6.1	85.00	85.00	50.00	50.00
6.2	95.00	95.00	•	•
7.1	95.00	95.00	90.00	95.00
7.2	95.00	95.00	•	•
8.1	85.00	85.00	50.00	95.00
8.2	75.00	95.00	•	•
9.1	85.00	95.00	65.00	92.50
9.2	95.00	95.00	•	•
10.1	75.00	85.00	50.00	90.00
10.2	50.00	50.00	•	•
11.1	75.00	85.00	55.00	87.50
11.2	95.00	95.00	•	•

SUBJECT 3 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-Train	C-Comp	C-Train
1.1	70.00	55.00	65.00	40.00
1.2	72.50	60.00	•	•
2.1	75.00	65.00	70.00	55.00
2.2	77.50	70.00	•	•
3.1	80.00	75.00	80.00	70.00
3.2	82.50	75.00	•	•
4.1	78.50	82.50	95.00	95.00
4.2	80.00	75.00	•	•
5.1	90.00	80.00	90.00	90.00
5.2	85.00	70.00	•	•
6.1	97.50	87.50	80.00	80.00
6.2	82.50	97.50	•	•
7.1	45.00	47.50	75.00	75.00
7.2	95.00	85.00	•	•
8.1	92.50	70.00	75.00	75.00
8.2	90.00	72.50	•	•
9.1	87.50	75.00	60.00	70.00
9.2	85.00	75.00	•	•
10.1	85.00	75.00	50.00	50.00
10.2	80.00	75.00	•	•
11.1	77.50	75.00	50.00	50.00
11.2	77.50	75.00	•	•

SUBJECT 4 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	8-Train	C-Comp	C-Train
3.1	85.00	75.00	72.50	75.00
3.2	85.00	75.00	•	•
4.1	85.00	85.00	75.00	72.50
4.2	85.00	95.00	•	•
5.1	90.00	95.00	80.00	75.00
5.2	85.00	80.00	•	•
6.1	70.00	70.00	85.00	75.00
6.2	80.00	90.00	•	•
7.1	90.00	95.00	87.50	67.50
7.2	92.50	92.50	•	•
8.1	87.50	80.00	90.00	60.00
8.2	95.00	00.08	•	
9.1	77.50	50.00	70.00	80.00
9.2	70.00	50.00	•	•
10.1	70.00	50.00	90.00	85.00
10.2	75.00	50.00	•	•
11.1	80.00	50.00	85.00	70.00
11.2	80.00	80.00	•	•
12.1	90.00	85.00	77.50	80.00

SUBJECT 5 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-Train	C-Comp	C-Train
3.1	65.00	65.00	80.00	65.00
3.2	65.00	65.00	•	•
4.1	75.00	65.00	77.50	70.00
4.2	75.00	75.00	•	٠
5.1	65.00	55.00	75.00	75.00
5.2	65.00	65.00	•	•
6.1	65.00	65.00	75.00	85.00
6.2	65.00	75.00	•	•
7.1	75.00	65.00	75.00	80.00
7.2	95.00	85.00	•	•
8.1	75.00	75.00	75.00	75.00
8.2	75.00	75.00	•	•
9.1	85.00	65.00	90.00	90.00
9.2	95.00	75.00		•
10.1	75.00	65.00	85.00	85.00
10.2	75.00	50.00	•	•
11.1	55.00	15.00	95.00	55.00
11.2	50.00	50.00	•	•
12.1	55.00	35.00	90.00	60.00
12.2	55.00	35.00	•	•

SUBJECT 6 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-Train	C-Comp	C-Train
3.1	60.00	50.00	50.00	50.00
3.2	55.00	50.00	•	•
4.1	50.00	50.00	50.00	50.00
4.2	50.00	50.00	•	•
5.1	50.00	80.00	50.00	50.00
5.2	50.00	75.00	•	•
6.1	70.00	85.00	50.00	50.00
6.2	50.00	85.00	• .	•
7.1	70.00	80.00	50.00	50.00
7.2	62.50	90.00	•	•
8.1	50.00	85.00	60.00	50.00
8.2	50.00	85.00	•	•
9.1	· 70.00	70.00	50.00	50.00
9.2	75.00	80.00	•	•
10.1	70.00	50.00	50.00	50.00
10.2	50.00	50.00	•	•
11.1	50.00	50.00	50.00	50.00
11.2	55.00	55.00	•	•
12.1	60.00	60.00	50.00	50.00
12.2	60.00	60.00	•	•

SUBJECT 7 PERFORMANCE RAW DATA ATHLETE AND COACH

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	R-Comp	0 Train	C-Comp	C Troin
	η-υπμ		_ <u> </u>	C-Train
3.1	75.00	65.00	65.00	57.50
3.2	95.00	95.00	•	•
4.1	85.00	75.00	75.00	65.00
4.2	85.00	85.00	•	•
5.1	85.00	75.00	85.00	70.00
5.2	75.00	75.00	•	•
6.1	95.00	95.00	80.00	75.00
6.2	95.00	95.00	•	•
7.1	85.00	75.00	90.00	80.00
7.2	85.00	85.00	•	•
8.1	85.00	75.00	85.00	75.00
8.2	85.00	65.00	•	•
9.1	65.00	65.00	70.00	70.00
9.2	65.00	65.00	•	•
10.1	65.00	55.00	50.00	50.00
10.2	65.00	65.00	•	•
11.1	40.00	40.00	60.00	60.00
11.2	70.00	70.00	•	•
12.1	80.00	70.00	65.00	65.00
12.2	85.00	70.00	•	•

SUBJECT 8 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-Train	C-Comp	C-Train
3.1	70.00	70.00	100.00	95.00
3.2	80.00	70.00	•	•
4.1	90.00	78.00	75.00	95.00
4.2	80.00	70.00	•	•
5.1	85.00	80.00	50.00	95.00
5.2	80.00	85.00	•	•
6.1	50.00	85.00	100.00	100.00
6.2	50.00	80.00	•	•
7.1	90.00	70.00	50.00	50.00
7.2	50.00	50.00	•	•
8.1	90.00	85.00	50.00	50.00
8.2	65.00	90.00	•	•
9.1	50.00	50.00	50.00	50.00
9.2	50.00	50.00	•	•
10.1	50.00	50.00	50.00	50.00
10.2	50.00	60.00	•	•
11.1	80.00	70.00	70.00	65.00
11.2	80.00	60.00	•	•
12.1	50.00	70.00	70.00	75.00
12.2	50.00	70.00	•	•

SUBJECT 9 PERFORMANCE RAW DATA ATHLETE AND COACH

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DATE	A-comp	A-Train	C-comp	C-train
1.1	50.00	75.00	75.00	70.00
1.2	50.00	75.00	•	•
2.1	50.00	75.00	75.00	70.00
2.2	50.00	60.00	•	• • •
3.1	50.00	50.00	70.00	70.00
3.2	50.00	50.00	•	•
4.1	50.00	50.00	65.00	72.50
4.2	50.00	50.00	•	•
5.1	50.00	98.00	60.00	75.00
5.2	50.00	80.00	•	•
6.1	50.00	80.00	55.00	77.50
6.2	58.00	98.80	•	•
7.1	50.00	90.00	50.00	80.00
7.2	50.00	80.00	•	•
8.1	50.00	100.00	50.00	85.00
8.2	50.00	80.00	•	•
9.1	50.00	60.00	50.00	75.00
9.2	50.00	40.00	•	•
10.1	60.00	90.00	50.00	65.00
10.2	50.00	80.00	•	•
11.1	55.00	80.00	55.00	70.00
11.2	55.00	75.00	•	•

SUBJECT 10 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-Train	C-Comp	C-Train
1.1	70.00	60.00	50.00	50.00
1.2	70.00	62.50	•	•
2.1	70.00	65.00	50.00	60.00
2.2	70.00	67.50	•	•
3.1	70.00	70.00	50.00	65.00
3.2	70.00	70.00	•	•
4.1	95.00	80.00	50.00	55.00
4.2	50.00	50.00	•	•
5.1	50.00	70.00	50.00	75.00
5.2	50.00	40.00	•	•
6.1	50.00	60.00	50.00	65.00
6.2	70.00	50.00	•	•
7.1	40.00	60.00	50.00	50.00
7.2	50.00	60.00	•	•
8.1	50.00	60.00	50.00	55.00
8.2	50.00	70.00	•	•
9.1	50.00	75.00	50.00	45.00
9.2	30.00	55.00	•	•
10.1	50.00	60.00	50.00	45.00
10.2	45.00	60.00	•	•
11.1	40.00	60.00	50.00	65.00
11.2	35.00	55.00	•	•

SUBJECT 11 PERFORMANCE RAW DATA ATHLETE AND COACH

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DATE	A-Comp	A-train	C-Comp	C-Train
1.1	70.00	75.00	90.00	75.00
1.2	60.00	80.00	•	•
2.1	50.00	85.00	87.50	80.00
2.2	60.00	90.00	•	•
3.1	50.00	80.00	87.50	82.50
3.2	50.00	90.00	•	•
4.1	50.00	95.00	87.50	80.00
4.2	100.00	100.00	•	٠
5.1	50.00	85.00	85.00	75.00
5.2	100.00	90.00	•	٠
6.1	50.00	90.00	85.00	65.00
6.2	50.00	95.00	•	•
7.1	100.00	100.00	95.00	85.00
7.2	75.00	70.00	•	•
8.1	85.00	60.00	95.00	95.00
8.2	50.00	75.00	•	•
9.1	90.00	80.00	95.00	85.00
9.2	50.00	70.00	•	•
10.1	50.00	80.00	90.00	75.00
10.2	50.00	75.00	•	•
11.1	50.00	78.00	87.50	70.00
11.2	50.00	65.00	•	•

SUBJECT 12 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-train	C-Comp	C-Train
3.1	90.00	80.00	82.50	75.00
3.2	30.00	40.00	•	•
4.1	0	70.00	77.50	70.00
4.2	70.00	80.00	•	•
5.1	100.00	70.00	75.00	65.00
5.2	60.00	100.00	•	•
6.1	90.00	90.00	95.00	95.00
6.2	70.00	80.00	•	•
7.1	90.00	90.00	95.00	95.00
7.2	90.00	100.00	•	•
8.1	90.00	90.00	95.00	95.00
8.2	90.00	90.00	•	•
9.1	60.00	60.00	90.00	80.00
9.2	80.00	90.00	• • • •	•
10.1	50.00	80.00	95.00	65.00
10.2	80.00	60.00	•	•
11.1	40.00	40.00	90.00	75.00
11.2	50.00	50.00	•	•
12.1	60.00	20.00	85.00	65.00
12.2	60.00	40.00	e	•

SUBJECT 13 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-Train	C-Comp	C-Train
3.1	95.00	95.00	65.00	67.50
3.2	95.00	85.00	•	•
4.1	50.00	85.00	55.00	70.00
4.2	50.00	50.00	•	•
5.1	50.00	70.00	50.00	78.00
5.2	50.00	90.00	•	•
6.1	50.00	95.00	85.00	65.00
6.2	20.00	30.00	•	•
7.1	90.00	70.00	45.00	75.00
7.2	50.00	85.00	•	•
8.1	95.00	95.00	50.00	80.00
8.2	50.00	50.00	•	•
9.1	50.00	50.00	85.00	75.00
9.2	50.00	50.00	•	•
10.1	50.00	50.00	80.00	72.50
10.2	80.00	100.00	•	•
11.1	80.00	100.00	70.00	75.00
11.2	50.00	30.00	•	•

SUBJECT 14 PERFORMANCE RAW DATA ATHLETE AND COACH

DATE	A-Comp	A-Train	C-Comp	C-Training
3.1	50.00	50.00	90.00	50.00
3.2	70.00	60.00	•	•
4.1	70.00	70.00	80.00	60.00
4.2	70.00	80.00	•	•
5.1	50.00	80.00	80.00	70.00
5.2	65.00	80.00	•	•
6.1	77.50	80.00	80.00	80.00
6.2	80.00	80.00	•	•
7.1	85.00	80.00	90.00	80.00
7.2	90.00	80.00	•	•
8.1	80.00	80.00	90.00	90.00
8.2	80.00	70.00	•	•
9.1	90.00	80.00	50.00	50.00
9.2	70.00	80.00	•	•
10.1	80.00	80.00	50.00	50.00
10.2	60.00	80.00	•	•
11.1	80.00	90.00	50.00	50.00
11.2	80.00	87.50	•	•

SUBJECT 15 PERFORMANCE RAW DATA ATHLETE AND COACH

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DATE	A-Comp	A-Train	C-Comp	C-Train
3.1	65.00	40.00	80.00	65.00
3.2	60.00	35.00	•	•
4.1	55.00	30.00	85.00	75.00
4.2	55.00	25.00	•	•
5.1	55.00	25.00	65.00	60.00
5.2	45.00	45.00	•	•
6.1	65.00	65.00	50.00	50.00
6.2	75.00	75.00	•	•
7.1	75.00	75.00	50.00	55.00
7.2	85.00	85.00	•	٠
8.1	85.00	80.00	50.00	35.00
8.2	75.00	65.00	•	•
9.1	75.00	65.00	50.00	50.00
9.2	95.00	75.00	•	•
10.1	65.00	65.00	80.00	35.00
10.2	65.00	55.00	•	•
11.1	65.00	65.00	75.00	40.00
11.2	95.00	65.00	•	•
12.1	55.00	55.00	70.00	42.50
12.2	90.00	90.00	•	•
1.1	60.00	60.00	65.00	45.00

8.600	6.500	5.300	6.400	6.800	6.100	7.700	7.100	6.700	7.000	7.500	4.000		12
8.600	6.700	5.208	6.400	6.800	6.100	7.800	7.100	6.700	7.083	7.500	4.416	4.000	
8.100	6.500	5.600	6.200	6.400	5.500	7.000	7.200	6.500	6.916	7.166	3.416	4.000	10
8.200	6.600	5.500	6.500	6.800	6.000	7.100	7.200	6.900	7.000	7.550	3.300	4.100	6
8.100	6.800	5.400	6.900	7.100	6.300	7.100	7.100	7.280	7.166	7.833	3.333	4.200	8
7.700	6.400	5.700	6.300	6.400	6.200	6.900	7.100	6.200	6.916	7.660	4.830	4.400	7
7.400	6.100	5.300	6.200	6.500	6.000	6.800	008.9	6.300	6.416	7.330	4.830	3.700	9
7.500	6.200	5.200	6.100	5.600	5.900	6.300	6.700	6.100	6.550	7.200	4.600	4.100	5
7.600	6.200	5.200	6.100	5.300	6.000	6.100	6.800	5.900	6.750	7.000	4.583	4.200	4
7.700	6.600	5.300	5.800	6.100	6.600	7.000	7.400	7.300	6.330	7.583	4.916	3.900	3
phys.ability	samesex	phys.appear	prob.solve	academic prob.solve	parent	emotional	verbal	opp.sex	honesty	general	religion	maths	date

7.800	7.100	6.200	6.200	6.100	7.400	6.700	6.500	5.800	7.416	7.083	7.833	6.800	21
7.400	6.900	008.5	6.100	7.100	7.500	6.900	6.200	6.800	7.583		8.166	7.200	
7.500	6.800	6.000	6.200	7.100	7.500	6,900	6.300	6.900	7.583	7.300	8.200	7.300	10
7.600	7.000	6.100	6.100	7.200	7.400	7.000	6.400	6.900	7.583	7.416	8.333	7.300	6
7.300	6.900	5.900	6.400	7.200	7.400	7.000	6.100	6,500	7.500	7.166	8.166	7.300	6
7.800	7.100	5.900	6.400	7.500	7.400	7.000	6.300	6.700	7.500	6.916	7.666	7.700	7
7.600		6.000	6.300	7.200	7.408	6.700	6.100	6.600	7.500	7.166	8.416	9.600	6
7.500	6.600	6.800	6.100	7.200	7.400	6.400	6.200	6.100	7.666	7.166	8.250	7.300	 س
7.200		5.600	5.800	7.200	6.800	5.900	6.200	6.400	7.250	6.916	7.750	7.000	4
7.600	7.100	5.400	6.300	7.500	7.400	7.000	6.200	6.800	7.666	8.300	7.833	7.700	3
			1										
phys.ability	. samesex	phys.appear	prob.solue	academic	parent	emotional ,	verbal	орр.зен	honesty	general	religion	maths	dale

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date	maths	religion	general	honesty	opp.sex	verbal	emotional	parent	academic	prob.solue	phys.appear	.samesex	phys.ability
3	3.600	8.083	8.333	7.833	7.700	3.700	6.900	8.000	6.700	5.100	6.300	6.400	8.500
4	3.700	7.800	8.000	7.500	7.800	4.000	6.600	7.700	6.400	4.900	6.100	6.200	8.300
S	4.200	7.750	7.666	7.250	6.800	4.300	5.800	7.400	5.800	4.700	6.000	6,100	8.100
6	4.000	7.916	7.667	7.750	6.900	4.400	6.600	8.000	6.400	4.600	6.300	5.400	7.700
۲	3.500	8.700	6.916	7.083	6.300	4.000	6.300	7.400	5.600	4.500	6.100	5.300	8.300
8	3.700	7.583	6.583	7.583	6.500	4.800	7.200	7.400	6.100	4.500	5.600	6.100	8.600
6	3.400	7.083	6.750	6.916	5.800	3.700	6.100	7.100	5.600	4.200	5.500	5.400	7.700
10	3.600	7.000	6.800	7.000	5.900	3.800	6.200	7.200	5,700	4.100	5.600	5.600	7.900
11	3.900	7.000	7.000	6.666	6.300	4.000	6.100	7.000	5.700	4.700	6.100	5.000	7.900
21	4.200	7.000	7.083	7.083	6.500	4.800	6.700	7.100	5.700	4.700	6.300	5.000	7.900

8.400	7.200	5.900	5.200	5.900	7.700	6.600	6.200	6.400	8.000	6.500	2.400	6.200	12
8.300	7.300	5.800	5.200	5.900	7.700	6.800	6.300	6.400	8.000	6.500	2.600	6.300	11
8.400	7.500	6.100	5.400	6.300	7.600	6.600	6.200	6.800	9.000	6.900	2.700	6.000	01
8.500	7.300	6.000	5.300	6.200	7.900	6.700	6.400	6.700	7.833	6.200	2.400	6.100	6
8.400	7.300	5.900	5.300	6.100	7.800	6.600	6.200	6.600	7.833	6.666	2.583	6.200	8
8.400	7.700	6.100	5.400	6.400	8.000	6.600	6.000	6.600	7.750	6.666	2.083	6.100	۲
8.400	6.600	5.900	4.800	5.900	7.700	6.000	6.300	6.600	8.083	6.500	2.500	6.100	9
8.500	8.100	6.100	5.000	5.700	8.100	6.700	6.500	7.400	8.000	6.750	1.916	6.700	പ
8.600	7.500	6.000	5.600	6.200	8.000	6.300	6.700	7.500	8.(183	7.083	2.333	6.900	4
8.500	7.400	6.100	5.700	6.100	7.900	6.400	6.800	7.600	8.000	7.100	2.300	7.100	3
phys.ability	катехен	phys.appear	prob.solue	academic	parent	emotional	verbal	орр.sex	honesty	general	religion	maths	date
				4	- SUBJECT	<u>SUBJECT 4 SUBJECT 4</u>	JELF DE	I					

						LF DESC	"SELF DESCRIPTION"	- SUBJECT 5	01				
DATE	maths	religion	general	honesty	орр.зеж	verbal	emotional	parent	academic	prob.solue	phys.appear	samesex	phys.ability
3	6.800	1.916	7.600	6.200	6.300	5.400	6.500	5.000	5.700	5.200	6.700	7.300	7.400
4	6.800	1.916	7.416	6.083	6.400	5.300	6.400	4.900	5.500	5.400	6.600	7.400	7.600
л	6.500	1.666	7.500	6.083	5.300	5,900	6.300	5.100	5.000	5.700	6.300	7.500	8.000
6	6.400	1.666	7.500	5.666	5.300	5.200	6.100	5.400	5.700	5.900	6.400	7.200	7.500
7	6,500	1.583	7.416	5.666	5.100	5.600	5.900	5.300	5.200	5.500	6.500	7.400	7.900
8	6.200	1.500	7.500	5.500	5.400	6.000	5.600	5.300	5.000	5.800	7.100	7.500	8.000
6	6.600	1.500	7.583	5.833	7.400	6.100	5.700	5,708	5.500	5.700	6.300	7.400	8.200
10	6.900	1.666	6.750	6.083	5.300	6.100	5.600	5.100	5.600	5.500	6.500	7.500	8.200
	6.700	1.583	6.916	5.833	5.400	6.000	6.400	5.200	5.300	5.800	6.000	7.500	8.100
12	6.600	1.666	6.900	5.833	5.400	5.900	6.300	5.300	5.200	5.700	6.200	7.400	7.900
		,											

1.000	0.400	3,400	0.400	5.000	6.000	3.400	4.000	4.200	8.400	5.300	5.500	1.900	21
1 600	0.200	5.100	6.300	5.100	5.900	2.800	4.000	4.400	8.333	4.833	5.750	1.700	11
7 400	1.100	5.400	0.200	5.500	6.700	3.500	4.400	5.100	8.000	5.300	6.200	2.100	10
00.7	7 200	5.200	6.300	5.400	6.608	3.400	4.300	5.000	8.166	5.250	6.333	2.000	6
004.1	1.000	5.500	6.500	5.100	6.700	3.800	4.100	4.100	8.166	6.083	8.166	2.400	3
7 400	000.7	5.600	6.800	5.600	6.700	4.400	4.400	4.600	8.000	5.333	6.080	1.800	7
1.100	0.900	0.200	6.200	5.300	7.000	4.600	4.500	4.900	7.666	6.166	6.083	1.900	9
7 300	0.400	0.100	6.200	4,000	6.400	3.800	3.500	4.000	8.700	4.830	6.416	2.300	5
7 000	0,100	5.200	6.900	4.900	5.200	3.000	3.700	3.700	7.666	5.333	5.333	1.800	4
7.900	6.000	5.300	7.000	5.008	5.300	3.100	3.600	3.800	7.700	5.300	5.300	2,000	5
		1											
phys.aumry	samesex	phys.appear	prub.solue	academic prob.solve	parent	emotional	verbal	орр.зен	honesty	general	religion	maths	DULE
	•	_	-	· 6	- SUBJECT 6	SCRIPTION"	"SELF DESCRIPTIO	200					

7.500	7.400	6.200	7.300	6.600	7.200	6.500	7.350	7.100	7.200	7.400	3.200	6.900	12
7.500	7.500	6.100	7.400	6.500	7.500	6.400	7.400	7.200	7.416	7.500	3.333	6.900	11
7.100	7.600	6.400	6.800	5.800	7.300	7.200	7.500	7.000	7.200	7.100	3.700	7.400	10
7.000	7.500	6.300	6.800	5.900	7.300	7.100	7.500	6.800	7.083	7.083	3.750	7.500	6
7.600	7.500	6.200	7.300	6.800	7.000	6.800	7.400	7.300	7.500	7.333	3.333	7.500	00
7.500	7.500	6.000	6.900	6.800	7.300	6.100	7.400	7.100	7.250	7.500	3.500	7.100	7
7.500	7.400	6.200	6.900	7.300	6.900	5.500	7.300	7.300	7.166	7.000	3.333	6.100	9
7.600	7.100	6.300	6.700	7.400	6.800	6,700	7.200	6.800	6.900	6.900	3.100	7.000	5
7.700	6.800	6.200	6.600	7.300	6.800	7.000	7.100	6.500	6.500	7.083	2.500	7.300	4
7.600	7.200	6.000	7.300	7.200	7.000	6.700	7.300	6.900	7.083	7.333	3,333	6.600	3
phys.ability	sameseн	phys.appear	prob.sotue	academic	parent	emotional	verbal	орр.sex	honesty	general	religion	maths	DRIE

"SELF	
DESCRIPTION"	
- SUBJECT 7	

7.600	7.400	6.000	5.200	5.200	7.800	7.300	4.700	7.300	7.000	7.916	3.600	4.700	21
7.600	7.500	6.000	5.200	5.100	7.800	7.300	4.700	7.300	7.000	7.916	3.667	4.700	
7.100	7.900	5.700	5.300	5.300	7.700	7.600	4.900	7.800	7.083	8.250	3.583	5.000	10
7.900	8.100	5.700	5.400	5.300	7.900	7.900	5.000	8.000	7.166	8.000	3.916	5.100	6
8.100	7.900	9.200	5.400	5.400	7.700	7.800	4.800	7.200	7.083	8,250	3.583	5.000	8
7.500	7.600	5.700	5.300	4.700	7.700	7.700	4.800	7.700	6.583	7.333	3.583	5.000	۲
7.900	7.600	5.700	5.200	6.200	7.700	6.800	5.300	7.900	7.166	7.583	2.750	6.000	6
8.300	8.400	6.400	5.700	5.100	8.300	7.700	5.200	8.200	6.833	8.416	2.750	5.900	S
8.100	8.000	5.700	5.300	6.500	7.700	7.700	4.800	7.700	7.166	8.250	3,583	5.000	4
8.100	7.100	6.400	6.000	6.300	8.200	7.800	4.900	7.300	7.000	8.166	3.833	6.300	5
phys.ability	Rasemesex	phys.appear	prob.solue	academic p	parent	emotional	verbal	opp.sex	honesty	general	religion	maths	DATE

7.100	7.800	6.100	5.200	3.500	7.500	6.700	6.400	b.4-UU	0.700	0.271	1.910	1.000	Ī
1.500	7.100	B.100	3.700	7.200	1.000					2 2 2 2 2		4 000	12
с с г г	1	C 100		U00 V	7 200	7 100	6.300	6.900	6.667	7.000	5.583	0.200	-
7.500	6.800	5.800	6.300	3.900	7.400	6.800	b.4UU	6.900	0.100	9.000	2.7.00	2 J J J J J J J J J J J J J J J J J J J	
7.500	6.300	6.200	5.500	5.400	1.100	0.400	0.200					2 200	10
1.000	1.500	0.100				6 4 0 0	חחרש	100 2	2209	ל לאל	6.000	3.100	9
nu7 C	192 6	6 4 N N	5 400	3.900	7.000	7.500	6.000	7.100	6.585	1.416	016.0	0.000	0
7.500	7.200	6.500	5.600	3.700	7.100	1.400	0.000	1.000	0.700			0.000	0
1.100	1.000	0.000					1 1 1 1		ל שבט	7 4 0 0	5 700	3 600	7
7 500	7 7 7 0 0	009 9	108 5 800	3.400	7.000	7.500	6.500	6.900	280.7	0.00	0.00	0.00	
1.800	1.000	0.100	T.200	1.400					1 1 1			ע ט ט ע	ת
		6 500	1 2 N N	2 200	7 6 A A	7.400	7.000	7.100	6.666	7.666	ე. სხ	0.000	
7.800	1.000	6.20U	0.00	000.0	1.300		0.100	0.000		1		2000	n
				7 000	מחב ר	7 500	UU1 Y	9 9 9	5.916	7.700	5.500	3.200	4
7 800	7.400	6.400	5.900	3.000	7.800	6.400	5.700	6.600	6.416	1.250	2.085	4,400	
												1 1 1 1	M
Prigoraoning		puga.appea											-
nhue ahilitu	Vasames	nhue annear	hrnh solue	academic	parent	emotional	verbal	opp.sex	honesty	general	religion	maths	UNTE

UNTE	maths	religion	general	honesty	opp.sex	verbal	emotional	parent	academic	prob.solue	phys.appear	samesex	phys.ability
										_			
ε	2.800	3.200	7.400	5.083	6.300	8.100	5.000	7.700	5,500	5.400	5.700	6.200	7.700
4	2.800	3.000	7.500	2.700	6.400	7.700	5.000	7.800	5.600	5.100	6.100	6.400	7.900
പ	2.900	3.166	7.416	2.800	6.200	7.900	5.100	7.600	5.400	5.200	5.900	6.200	7.800
6	2.800	3.050	7.416	3.000	5.900	8.100	5.200	7.500	5.500	5.300	5.800	6.100	7.700
7	2.700	3.000	7.416	3.100	5.700	8.000	5.000	7.600	5.600	5.400	5.900	6.200	7.700
8	2.700	2.833	7.660	3.166	7.100	7.900	5.000	8.000	5.300	5.500	6.100	6.800	7.600
6	2.700	2.750	7.333	2.830	7.000	6.200	4.600	7.500	4.500	4.900	6.400	6.700	7.600
10	3.000	2.690	7.100	2.930	6.700	6.000	4.600	7.600	4.800	5.100	6.200	6.600	7.500
	3.000	2.818	7.000	5.083	6.900	6.200	4.000	7.500	5.800	5.000	6.200	6.700	7.400
12	3.000	2.800	7.000	3.100	6.900	6.200	4.000	7.500	5.400	5.000	6.200	6.700	7.400

7.500	6.600	5.300	5.800	7.408	6.600	4.500	5.700	6.800	9.000	1.600	0.00	1.100	-
7.500	7.100	5.800	5.600	7.200	6.800	6.200	5.900	1.300	1.410	7.000	4.000		
7.500	7.400	5.500	0.06.0	0.00	0.900	0.000	0.000	1.000					
				l l l			6 DOD		7 7 7	7 250	999 2	2.800	10
7 4 0 0	7.200	5.900	6.000	7.600	7.100	5.800	6.300	7.300	7.250	1.333	6.666	2.600	2
7.600	7.000	5.500	5.400	7.500	7.300	5.500	6.000	1.100	1.333	0.833	4.000	2.000	5 0
7.600	6.800	5.500	6.300	7.300	6.000	5.100	006.5	1.200	1.000	0.20	4.001	2.000	- 0
1.600	1.400	1.200		1.100		1.1			4		4 0 0 4		۲
	7 7 7 7	2 000	2 800	7 500	7 000	<u>109 5</u>	5.700	7.300	7.416	7.416	4.666	2.400	6
7.500	7.200	5.400	5.900	7.500	7.200	5.400	5.400	7.300	7.160	6.250	<u>3.166</u>	2.800	 u
7.600	7.400	5.400	5.900	7.600	1.100	0.00	0.00	1.400	1.000	0.700	2		n .
1.000								007 1	000 F	101 Y	2 000	109 6	4
7 500	7 700	5 300	6.000	7.500	7.000	5.500	5.500	7.400	7.250	6.200	3.000	2.600	ر د
phys.ability	казышез	pugs.appear		arguenic	parent	CHICKOULD		000000					
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8.000	3.300	4,400	4.600	6.700	6.600	4.900	3.900	3.000	9.300	7.300	4.300	7.200	12
8.000	3.300	4.200	4.600	6.700	6.600	4.900	3.900	3.000	6.750	5.083	3.500	7.200	
7.500	7.500	6.300	7.400	5.100	7.500	6.100	7.000	6.300	7.083	7.250	3.333	7.100	01
7.300	3.200	4.500	4.800	6.800	6.700	5.100	4.000	4.500	6.833	5.500	3.250	6.100	6
7.500	4.000	4.500	5.400	6.800	6.700	5.100	4.200	4.500	5.666	5.500	3.916	5.100	00
7.800	3.600	4.400	4.700	7.100	6.700	4.900	4.200	4.500	6.583	5.750	3.583	5,400	۲
6.500	3.500	4.300	4.600	6.900	6.700	5.600	4.100	4.800	6.100	5.200	3.300	6.600	6
6.800	3.500	4.300	4.800	6.700	6.600	5.900	4.200	5.000	5.916	5.000	3.166	6.900	ۍ ا
7.100	3.400	4.600	4.900	6.600	6.700	6.200	4.200	5.000	6.333	5.666	3.583	6.900	4
7.500	7.000	5.300	5.100	6.200	7.500	6.200	6.800	7.000	6.833	6.666	2.833	6.600	ε
phys.ability	samesex	phys.appear	prob.solue	academic	parent	emotional	verbal	орр.seн	honesty	general	religion	maths	DNTE

6.600	1.000	002.0		0.100									
		0065	6.500	6 100	6.500	6.500	5.400	6.600	5.833	6.800	5.4 I b	0.700	
6.900	7.400	5,300	5.700	5.800	6.300	0.600	0.2.0	1.000	L 0.L	1.000			. .
6. TUU	0.000	0.2.0							ד סאא	200 C	7 4 1 6	6.900	
	0 7 D	006.5	5.600	6 3 0 0	6.800	6.600	6.000	6,700	6.000	1.416	2.285	0.700	
0.00	7.300	5.600	5.300	6.800	6.100	0.200	0./00	1.000	0.100		1.000	001.9	
6.UUU	0,000	1.000							0 100	2 2 Z L	474 2 2	7 2 0 0	þ
		4 600	7.300	UUU 9	6.200	5.900	5.800	5.900	6.000	6.166	4.416	0.000	0
6.000	5.700	4.700	1.400	5.800	5.900	6.200	0.000	0.100	J. JUU	0.200			0
6.300	3.300							6 100		006 9	4 500	6.300	۲.
6 200	7 000	4 600	7.100	5.800	6.100	6.000	5.800	6.000	6.000	0.000	4.000	0.100	6
6.200	0.800	4.700		J.200	0.000						7 600	005 Y	ע
		006 1	7 7 7 0	2 000	000 9	6.100	5.600	5.900	6.200	2.920	4.500	0.00	ا د
6.100	6.300	4.600	0.00	006.5	0.000	0.000	1.900	0.000	0.100				n
0.000	0.200						5 000	2 800	9 100	6.000	4.600	6.300	4
	UUC 9	4 500	7.400	6.200	6.400	5.700	5.700	6.000	6.200	6.300	4.200	0.700	0
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	someson -	phus annear	prob.solue	academic	parent	emotional	verbal	орр.sex	honesty	general	religion	maths	UNTE

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DATE	maths	religion	general	honesty	орр.sex	verbal	emotional	parent	academic	prob.solue	phys.appear	затезен	phys.ability
				-									
5	6.700	2.500	5.900	7.100	6.600	6.800	5.300	8.000	6.300	5.200	4.800	7.000	7.700
4	6.600	2.583	5.750	7.000	6.700	6.900	5.200	7.800	6.300	5.300	4.700	6.800	7.600
ر م	6.300	2.333	6.583	6.666	7.200	6.600	6.100	8.200	6.100	5.400	5.200	7.500	7.600
6	6.400	2.250	6.000	7.000	7.400	6.700	6.000	7.600	5.600	4.900	5.100	7.300	7.100
7	6.500	1.916	6.833	7.166	7.400	6.800	6.000	7.500	6.400	5.300	5.300	7.500	7.500
8	6.500	3.250	6.750	6.500	6.900	5.900	7.800	7.800	6.300	5.700	5.500	7.500	7.600
0	6.600	3.200	6.800	6.600	6.700	6.100	7.900	8.000	6.200	5.900	5.600	7.300	7.500
10	6.400	2.667	6.500	6.750	7.400	7.100	5.500	7.500	6.300	5.400	5.800	7.300	7.600
	6.300	2.583	6.583	7.166	7.400	7.000	5.600	7.200	6.300	5.300	5.500	7.300	7,600
12	6.100	3.000	5.333	6.670	7.200	6.400	4.900	7.600	5.800	5.000	4.800	7.400	7.700

7.700	6.900	5.300	5.700	6.700	7.100	6.600	6.000	4.700	7.166	1.555	5.41b	6.600	 -
7.100	7.000	4.900	5.800	5.900	7.000	6.200	6.000	5.100	7.083	6.583	j./50	6.200	
7.100	5.900	5.300	6.100	6.600	7.200	6.000	6.200	5.800	6.750	6.916	2.585	0.000	
7.100	6.400	5.300	6.400	6.400	7.000	6.300	6.300	4.900	7.083	6,666	3.416	b.400	10
7.200	6.800	4.900	6.100	6.600	7.000	6.000	6.000	5.100	6.583	6.833	2.916	b./UU	
7.100	6.800	4.800	6.200	6.900	7.100	6.400	6.600	5.300	7.330	7.083	4.250	0.900	- I
7.200	6.800	5.300	5.700	6.600	6.900	6.100	6.300	5.400	6,666	7.166	0.000	1.400	0
7.100	6.900	4.800	5.700	7.000	7.300	6.400	6.200	5.600	6.500	6.666	2.916	1.200	2
7.600	7.400	5.000	6.200	7.400	7.900	5.900	6.700	6.300	6.583	1.000	2.916	007.7	n _
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TOTAL WELL BEING - ALL SUBJECTS (1 - 15)

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