Achievement Motivation Orientation And Psychological/Interpersonal Well-Being In Male Recreational And Elite Cricket Players.

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ABSTRACT

The present study examined differences between a convenience sample of elite (n=55) and recreational (n=31) cricketers in achievement motivation orientation, psychological well-being, relationship satisfaction and general attitudes and feelings to the game. Major findings were that (a) Elite athletes scored higher on both competitiveness and win orientation. (b) There was no significant difference between groups on psychological well-being. (c) There was no significant difference in relationship satisfaction between groups. Qualitative data from two open-ended questions indicated that for 40% of elite players, relationship sacrifices were the worst aspect of playing at elite level. (d) Elite cricketers scored significantly higher on *commitment to cricket*, *achievement needs*, *competitive anxiety*, *intrinsic motivation* and *extrinsic motivation,* and lower on *fun/stimulation needs*. (e) For elite players the best things about playing were the challenge, comradeship and win-oriented achievement, while the worst aspects were relationship sacrifices, travel, and career/financial sacrifices. For the recreational group, the best aspects were comradeship (83%) and enjoyment, and the worst aspects were overcompetitive players, cheating or incompetent umpires and rain.

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Firstly, I would like to thank my supervisor Ross Flett - a big man in every way. Ross's professional support and guidance not just during this thesis, but throughout my Massey journey, has been a significant factor in my academic and vocational development.

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GENERAL OVERVIEW OF SPORT

Sport is ubiquitous in New Zealand society. It is "fundamental to the New Zealand image and is seen as a distinct characteristic of New Zealanders" (Hillary Commission, 1993, p.5). The performance of our national sporting teams and individuals is arguably a patent source of national self-esteem, and these sporting achievements are used extensively by marketers and business people to assist export performance and to increase New Zealand's appeal as a travel destination. The Hillary Commission (1993) states "...the social impacts...demonstrate clearly that physical leisure plays a major role in enhancing the lives of New Zealanders" (p.6). A recent letter in the press (Evening Post, 1995) from an English visitor summed up New Zealanders' interest in sport - particularly rugby union:

> Dear Sir - I am an English sports doctor who has had a considerable recent involvement with Wellington rugby. I thought I understood the passion the Ranfurly Shield evoked. This was until I found myself in a crowded bar at the Whakapapa ski-fields watching Auckland's challenge on a small television set when Ruapehu erupted so dramatically. Most of us rushed outside to watch, our fear heightened by the eerie silence. It was a moment when the force of nature was utterly overwhelming. A substantial part of the bar, however, clearly felt that events at Lancaster Park were more compelling and remained glued to their seats. The more fanatical, wanting to get closer to "their" action even moved forward to take the seats of the departed. It seems to me that the future of both rugby generally and the Ranfurly Shield in particular seems assured in this country.

Directly and indirectly, the sport and leisure industry employed 22,745 people in New Zealand in 1991 (Hillary Commission, 1993). Sport and leisure provides a direct contribution to Gross Domestic Product of $831 million, representing 1.2% of GDP. The Hillary Commission (1993) estimates that the total economic impact of the sport and leisure industry is equivalent to $1,648 million.

This then, is the face of sport in New Zealand. Clearly, the general population is sport-loving, at least in terms of watching sport. But are we merely a nation of sport watchers? The evidence would suggest otherwise. While we are keen watchers of sport, New Zealanders are also zealous participants in the sport experience. Physical activity at the level required to acquire and maintain cardio-respiratory fitness is sustained by 28 percent of New Zealanders, 41% maintain a moderate level of activity, and about 31% are sedentary (Hillary Commission, 1993).

About 50% of New Zealander males (34% of females) report an involvement in informal sport, while 38% of males take part in organised sport (25% of females). Cricket, alongside bowls and golf, is among the most popular summer codes in New Zealand, but unlike bowls and golf, cricket is heavily televised and extensively reported by the print media. In the 1994/5 season, 24,283 adult males, 1631 adult females, 51,917 junior males (under 18 years) and 9658 junior females played competitive cricket, a total of 87,489 competitive players (Webb, 1995, personal communication). However of this total, only a small number progress to elite levels of cricket.

At male international level, there is a squad of about 18 who are currently New Zealand representatives, or who have recently been in the side. At first class and Shell Cup level there are around 80 players each season, with the same number playing at national "B" level, and 75 players who represent their associations at national under 20 level. In the present study, these three groups have been designated "elite" players. So out of the 76,200 male cricketers in New Zealand, only 173 play at "elite" level each season. There are many reasons why a few athletes reach national and international level and the vast majority remain, willingly or unwillingly, playing at lower levels. Clearly, these reasons include physical and mental ability, and the desire to seek excellence. Why do these few reach the top? What is it about the way they approach their sport that enables them to compete successfully at high levels of competition? The present study seeks to extend current knowledge of this area and focuses on investigating achievement motivation

orientation, psychological well-being, interpersonal satisfaction and general attitudes, feeling and motivations for playing in elite and recreational male cricket players. The rest of this introduction is organised as follows:

Firstly, the phenomena of sport and motivation are individually outlined. As will be explained, motivation is a complex, interactional construct, and common misunderstandings of motivation are outlined in the section following. Next, the various current models of sport motivation are explored. Individual motivation orientations have been considered largely from three different theoretical perspectives, specifically intrinsic and extrinsic motives, participation and discontinuation motives, and achievement goal orientations. In the following section sport motivation research will be covered in depth and a proposed integrated model of sport motivation will be presented (Weiss & Chaumeton, 1992).

The goal perspective approach to sport motivation will then be considered at length. Difficulties in construct definition will be delineated, and commonalities amongst theorists identified. A range of constructs that have been found to associate with goal orientation will be explained, and a number of pertinent studies outlined.

The distinction between elite and non-elite athletes in terms of goal orientation will then be considered, and a range of studies listed that have investigated specific qualities possessed by elite athletes as opposed to their non-elite and recreational counterparts. Issues in measurement of achievement orientation will be examined, and an argument put forward for adopting the Sport Orientation Questionnaire (SOQ) (Gill & Deeter, 1988) as the preferred measure for this construct. General psychological well-being will be examined as it relates to playing sport at recreational and elite levels, and the effects of playing sport at elite level on interpersonal happiness will be investigated. Aspects of the game of cricket will be outlined, with a focus on unique features of the code, and

how they may impinge upon the constructs under study in the present thesis. Finally a summary is presented and the research goals of the present study are specified.

OVERVIEW OF SPORT MOTIVATION

'Motive' can be defined as the "dynamic property of behaviour that causes it to be initiated, gives it organisation over time, defines its end states, and influences its vigour and persistence" (Bootzin, Bower, Zajonc & Hall, 1986, p.300). 'Motivation' can be thought of as the corresponding process. Motivation is concerned with the "why" of behaviour. While human activities aimed at assuaging thirst or hunger are clearly connected to basic requirements for food and water, we also occupy ourselves with many other activities that have no relationship to basic physiological needs. Roberts (1992) states that "typically, in the research literature, motivation refers to those personality factors, social variables, and/or cognitions that come into play when a person undertakes a task at which he or she is evaluated, enters into competition with others, or attempts to attain some standard of excellence" (p.5).

One of the activities people interest themselves with other than the satisfying of basic physiological needs is the worldwide phenomenon of sport. The Report of the Sports Development Enquiry Committee (1985), which was presented to the New Zealand Minister for Recreation and Sport, used a broad-based definition of sport which incorporated both recreational and competitive activities. For the purposes of the present research however, a more particular definition of sport will be utilised. Using a combination of the definitions provided by Synder and Spreitzer (1989) and Loy (1968), the present writer defines sport as being: competitive human physical activity, involving elements of skill, strategy, and chance, which has an uncertain outcome, and is governed by institutional rules.

There is anecdotal, as well as empirical evidence, that motivation is a poorly understood phenomenon by practitioners of sport coaching (Roberts, 1992). Sport coaches are, perhaps, among the most conservative of practitioners, and their resistance to change,

coupled with the inefficiency of the sport science/coach interface, has contributed to a general lack of understanding of the construct of motivation.

COMMON MISUNDERSTANDINGS OF MOTIVATION

At the end of this section, the complexity of motivation as a construct will be briefly explained, but firstly some common misunderstandings of motivation will be outlined. Among the misunderstandings held by coaches are firstly that motivation is similar to arousal, so the perception is that a pre-competition inspirational speech along the lines of Winston Churchill's "We shall fight them on the beaches, we shall never surrender" will rouse the athletes to a supreme performance. Secondly many coaches adhere to a simplistic "positive thinking" model, where players are instructed with such parables as "If you think you're beaten you are; If you think you dare not, you don't; If you'd like to win but think you can't; It's almost a cinch you won't." Thinking helpful, rather than unhelpful, thoughts will almost certainly aid athletic performance (Martens, 1987), but to prescribe positive thoughts as a panacea for motivational ills is naive. Thirdly, many coaches see motivation as genetically "hard-wired", and make judgements as to whether athletes are motivated or un-motivated individuals (Roberts, 1992). Those perceived as unmotivated (or being low in motivation) may find themselves being assigned this global judgement by coaches and cut from the team. In reality the athlete may have become totally bored by training and/or playing and was seeking a fresh challenge. While some athletes may well be inherently less motivated than others, it is naive to assume that all who display unmotivated behaviour are necessarily innately lacking in motivation (Feltz, 1992).

While these misconceptions may contains kernels of truth, motivation is a far more complex phenomenon than is realised by many coaches. Among factors which impact upon motivation are motivational orientation, task difficulty, success/failure, feedback from coaches, self-efficacy and affect. Moreover, these factors are moderated by cognitive and physical maturity, gender, the importance of sporting success to the individual, type of sport and sociocultural issues (Weiss & Chaumeton, 1992). As many of these factors are variable, the "motivation as a stable trait" notion has gained little

credibility. Furthermore, while the state-trait debate has been as hotly debated in the sport psychology literature as it has in general psychology, the trait approach to the study of personality has long been out of vogue in sport psychology circles (Feltz, 1992).

There exists among all educational sport psychologists a real challenge, not least in New Zealand, to explain to coaches the multi-faceted nature of motivation.

EXISTING APPROACHES TO SPORT MOTIVATION

Sport motivation can be viewed then, axiomatically, as the study of motivation in the sports arena. However, as Weiss and Chaumeton (1992) state, "within the sport psychology literature, motivation has been seen as a topic so pervasive, so complex, and even so curious, that its general definition as 'the direction and intensity of effort' seems too simplistic and nondescript in nature" (p.61). Nevertheless, despite the complexity of the topic, sport psychologists have keenly sought to gain greater knowledge of why people play and cease playing sport, what extrinsic and intrinsic elements are at work, and what influence goal-orientation has on both involvement in the activity and performance quality.

From a social-psychological standpoint, sport motivation has been studied as both an outcome variable (e.g. selection, effort and perseverance) and as an individual difference phenomenon. Although these two standpoints have been taken, it is germane to point out that there is, in reality, a strong connection between motivation as an individual difference factor and motivation as an outcome variable (Weiss & Chaumeton, 1992). Testing motivation as an outcome variable, researchers have found that young athletes playing for coaches with a "positive" approach display greater levels of enjoyment and are keener to continue their participation than athletes working under coaches who displayed a less "positive" approach (e.g. Alderman, 1978; Smith, Smoll & Curtis, 1979). This supports the factor of coaching style and coach feedback as a moderator of motivation (Weiss & Chaumeton, 1992).

It is not however, as an outcome variable that the present writer will be viewing motivation, but rather from an individual difference perspective. From this standpoint, individual differences in motivational characteristics are compared to resultant self-perception and participation behaviours. Studying motivation from this perspective aims to explain the behaviour of participants in sport and fitness settings. From the sport

motivation perspective, the current study seeks to discover any differences existing between the motivation orientations of elite and recreational cricketers. In the present study, this information will be augmented by investigating player ratings of satisfaction/enjoyment with their cricket and their relationship with their partner, how important they rate cricket in their lives, and what needs are being met by playing. Players are also asked what they consider to be the best and worst aspects of playing cricket.

Individual motivation orientations have been considered largely from three different theoretical perspectives, namely intrinsic and extrinsic motives, participation and discontinuation motives, and achievement goal orientations (Weiss & Chaumeton, 1992). Researchers (e.g. Gill, Gross & Huddlestone, 1983; Gould, Feltz & Weiss, 1985; Longhurst & Spink, 1987; Wankel & Kreisel, 1985) working from the participation and discontinuation motives perspective have as their focus the reasons why individuals start and maintain their active sport involvement and, conversely, why others choose to discontinue their involvement in sport or physical activity.

Those employing an intrinsic/extrinsic approach (e.g. Deci, 1975; Deci & Ryan, 1985; Harter, 1978; Weiss, 1987) have focused upon motives governed by an inherent desire to take part in the sport experience for what it provides in fun, self-satisfaction and being with others, versus incentives mainly governed by sources outside the athlete, such as praise from coach and peers, positive media exposure, monetary or other material rewards and a competitive accent on winning.

Sports psychologists (e.g. Ames, 1984; Dweck, 1986; Gill & Deeter, 1987; Maehr & Nicholls, 1980; Roberts, 1984; Spence & Helmreich, 1983; White & Duda, 1994) approaching the issue from the achievement goal orientation perspective place their focus on contrasting those who are task (or mastery) -oriented in sport involvement and goalsetting, as against those who are ego (or outcome) -oriented. These researchers are

interested in investigating how these orientations are demonstrated by future motivated behaviour (Weiss & Chaumeton, 1992). This perspective has been chosen as the basis of the motivation research in the present study for reasons which will be outlined.

ISSUES IN SPORT MOTIVATION ORIENTATION RESEARCH

This section outlines nomenclature and conceptual problems faced by those investigating motivation orientation and proposes that motivation can be more effectively explored and understood if researchers conceive their particular study as fitting into an overall, inclusive model of motivation.

One of the very real problems of sport motivation research has been the development of disparate factions of researchers focusing on different factors and identifying many, often overlapping, constructs. In this, sport motivation research is similar to research in many other areas of psychology, where individual researchers seek to extend knowledge in an area by focusing on a specific feature, or testing a particular theory or model. This phenomenon can be both a strength and a weakness. It seems apparent, not to say obvious, that all research has the potential to increase knowledge. However, it is equally apparent that the disparity of the research, coupled with the different names used by various researchers to label conceptually similar constructs, throws up a latently confusing picture.

Nevertheless, Duda (1992) argues that "although each (researcher) might have his or her preferred nomenclature, issues of emphasis, and conceptual nuances, commonality exists among their theoretical frameworks with respect to the conception and role of goals in human motivation"(p.57). The current study is based on an acceptance of Duda's "commonality" viewpoint. Progress will be made more rapidly if various researchers working in the area can agree on common terms and concepts and work to accept that there is considerable accord.

While researchers from each differing perspective of motivation have made significant contributions to scientific knowledge, each of these contributions would be more meaningful if understood as a part of a holistic picture of sport motivation. Weiss and

Chaumeton (1992) have proposed an integrated model of sport motivation which attempts to link existing perspectives and provide a framework in which current research can be considered, and from which future research can be continued. This model is outlined below.

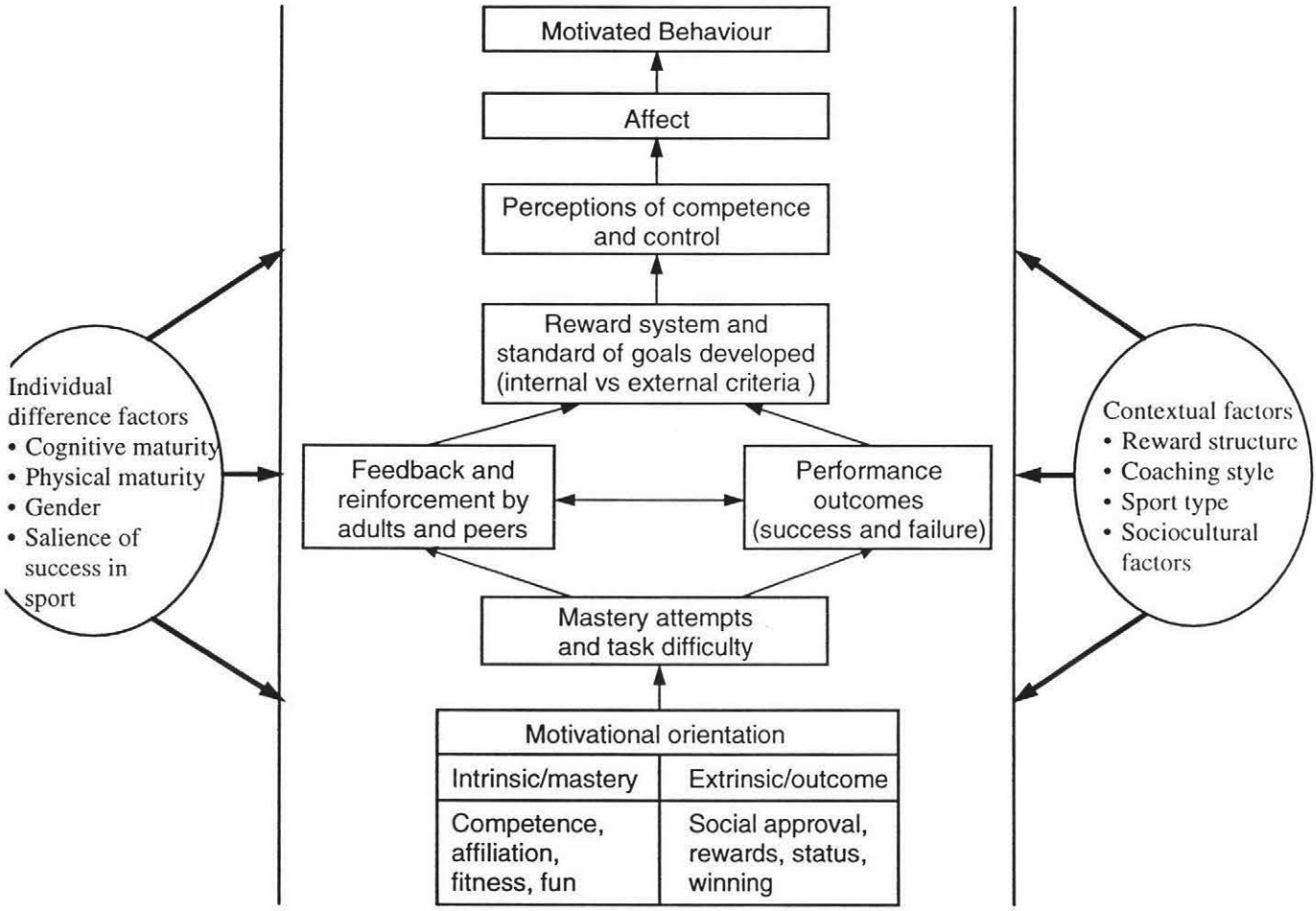

Figure 1. A proposed integrated model of sport motivation

(Weiss & Chaumeton, 1992)

This model illustrates the interactional nature of the sport motivation construct, but also, in the writer's opinion, provides a utilitarian template from which further research of the various components can take place. The present study is firstly concerned with exploring the lowest "box" of the above model, and seeks to make a contribution to knowledge in the achievement motivation area.

There do appear to be omissions in the Weiss and Chaumeton model, however. Firstly, the level of sport involvement is not taken into consideration as a moderating variable. While task difficulty and the salience of success in sport are both included as factors influencing motivation, the level at which athletes are competing appears to be a discrete phenomenon which is not covered by task difficulty or success salience. Level of competition (for example - elite versus recreational) has been found to influence goal orientation, as will be discussed in a later section of the present thesis, and certainly appeals as being a relevant influencing variable of motivated sporting behaviour.

Secondly, while the Weiss and Chaumeton (1992) model includes affect as a moderator of motivation, and alludes to such emotions as happiness, pride, pleasure, anxiety, shame and sadness, the present writer considers that a wider view could be taken. Rather than just affect, it seems sensible to broaden this term to "psychological well-being". This would allow a more psychologically inclusive perspective on the link between motivation and the psychological trait or state of the individual. In line with this, the current study seeks to investigate general psychological well-being of the elite and recreational athletes. As a further extention of the Weiss and Chaumeton model, the present study tests the general attitudes and feelings of subjects about playing cricket. Using a Likert scale, subjects are asked to respond to such statements as "cricket is very important to me; I find playing cricket highly satisfying; I always enjoy playing cricket; I get bored with cricket; and I feel like giving cricket up sometimes".

Thirdly, the present study inquires into the relationship satisfaction of those subjects who are currently partnered. Again, the Weiss and Chaumeton model seems to be undeveloped regarding this area. Furthermore, the issue of the impact of playing sport (especially in the elite athlete group) on relationship happiness appears to be a neglected area of sport psychology research. This topic will be covered more extensively in a later section, but anecdotal evidence and what empirical research exists indicate that playing elite sport (particularly a code which entails considerable time away from home and

family) impacts upon relationship functioning and satisfaction, and the present study tentatively proposes that the partnership relationships of the elite cricketers will reflect this situation.

While Weiss and Chaumeton (1992) include sociocultural factors as being contextual moderators of motivation, interpersonal issues appear to be a highly-pertinent, stand-alone additional construct that would add to the "all-inclusiveness" of the sport motivation model. Sport participants are each embedded in social contexts which include relationships with partners and others, and commitments to work and to leisure. The relationship between these contextual factors and motivations, psychological well-being and general feelings and attitudes about sport need to be further clarified by research. Hopefully, the present study will augment the knowledge existing in these areas, and make a meaningful addition to the study of motivation in sport.

GOAL ORIENTATION - EXISTING RESEARCH

The present study is particularly concerned with achievement goal orientations, specifically testing the orientations of elite athletes as compared to recreational athletes. While there is undoubted merit in adopting intrinsic/extrinsic motives and participation motivation as the basis of study, achievement goal orientation appeals as having the most utility in this study of cricketers. While this is a subjective decision on the writer's part, there is, as evidenced by Weiss and Chaumeton's (1992) integrated model, considerable conceptual overlap between the research perspectives of achievement orientation and intrinsic/extrinsic motivation.

The basis of the achievement orientation model is that there exist two distinct types of goal perspectives that influence motivation - *task* and *ego*. These perspectives relate to how individuals construe their level of competence in any given situation. In the first perspective (***task***), perceptions of demonstrated competence are self-referenced, and the subjective assessment of bettering one's performance or becoming more expert at performing the motor skill are the criteria underlying subjective success (Duda, 1992). The major question for an athlete with this perspective is, according to Elliot and Dweck (1988), "How can I best acquire this skill or master this task ?" (p.5). With regard to the second goal perspective (***ego***), demonstrating mastery or improvement over past performance is not sufficient to bring about feelings of competence. With this perspective, perceptions of demonstrated competence are normative or referenced to others, and subjective measuring of success depends on comparing oneself favourably to others (Duda, 1992).

As mentioned previously, these constructs are also known by other terms. Terms used by other theorists which are more or less synonymous with *task* orientation are *ability orientation* (Maehr & Nicholls, 1980), *learning goals* (Dweck, 1986), *work/mastery goal orientations* (Spence & Helmreich, 1983), *goal orientation* (Gill & Deeter, 1988), and

performance orientation (Vealey, 1986; Martens, 1987). There are also clear similarities between ego orientation and the terms *ability orientation* (Maehr & Nicholls, 1980), *ego-involved goals* (Nicholls, 1989), *performance goals* (Dweck, 1986;), *competitiveness* (Spence & Helmreich, 1983), *win orientation* (Gill & Deeter, 1988) and *outcome orientation* (Vealey, 1986, Martens, 1987). The variety of these terms illustrates the "conceptual confusion" referred to on page 10 of the present thesis. The current study will use the terms ego/win orientation synonymously, and task/goal orientation in the same manner. White and Duda (1994) comment

> ...When task involved, the focus is on learning, improvement and meeting the demands of the activity. Perceived competence is self-referenced and the subjective experience or personal improvement or task mastery underlies subjective success. Ego involvement implies that superiority over others is the primary goal. Perceived competence is normatively-referenced when ego-involved and subjective success entails the favourable comparison of one's ability with others (p.5).

Contrary to the views of Dweck (1986), research from the classroom has indicated that these two goal orientations are independent (Nicholls, 1989). That is, they are discrete entities and do not lie at opposite ends of a continuum. Individuals can be strongly task and ego-oriented, low in both orientations, or high in one and low in the other (Duda, 1993).

Most researchers working in the area concur in believing that an individual's goal perspective is a result of situational factors and individual inclination to the different types of involvement (Nicholls, 1989). Dweck and Leggat (1988) state that inherent individual differences in goal perspective "determine the a priori probability of adopting a particular goal and displaying a particular behaviour pattern, and situational factors are seen as potentially altering these probabilities" (p.269). In sporting situations characterised by an emphasis on competition and public evaluation, participants are more

likely to show higher levels of ego involvement. Conversely, occasions where the emphasis is on the learning or mastery of skills, or participation, will tend to promote task involvement in the sport (Ames & Archer, 1988; Nicholls, 1989).

While sporting situations can be seen as more or less task and ego involving, so individuals are seen as differing in task and ego orientation (Nicholls, 1989). Nicholls (1989) and others (Nicholls, Patashnick & Nolen, 1985) suggest that these dispositional goal perspectives are influenced considerably by childhood experiences, in line with the Weiss and Chaumeton model outlined in the present study.

Some studies indicate that there exist relationships between goal perspectives, motivational processes and sporting behaviour (Duda, 1992). These studies indicate that an athlete's goal perspective will affect self-assessments of attributions for success or failure, expended effort (Duda, Smart & Trapp, 1989) and demonstrated ability. Concomitantly, these cognitions are understood to moderate achievement-related affect, tactics and ensuing behaviours such as perseverance (Burton & Martens, 1986; Klint & Weiss, 1986) task selection (Dweck & Leggett, 1988; Elliot & Dweck, 1988) and performance (Gill, 1986; Gill & Deeter, 1988). Different achievement-related patterns are predicted depending on whether an individual is largely ego or task-oriented. Task-involved athletes tend to relate to the selection of moderately difficult tasks, intrinsic interest in the activity, the exertion of effort, improved performance and perseverance, notably after failure. These beneficial behaviours are also predicted for ego-involved athletes, but only if they have high levels of self-efficacy, or confidence in their ability to successfully perform the task in hand (Duda, 1992). Perceptions of self-efficacy, however, are held to be much more frail in ego-involved individuals that they are in those holding a predominantly task-oriented perspective (Dweck, 1986). Ego-involved individuals who are low in self-efficacy are expected to choose tasks that are either too difficult or too easy, to show less effort, and to downgrade the importance of the event if they are failing. They are also predicted to persevere less (especially after failure) and to

demonstrate impaired performance. Ego-involved athletes who question their own competence are also likely to show reduced intrinsic interest, and are more likely to drop out than task-involved individuals (Chaumeton & Duda, 1988).

Testing Nicholls' (1989) assertion that different motivational orientations are more than merely different types of goals or needs, but rather reflect "differing world views"(p.102), Duda (1989c) examined the relationship between goal orientation and the perceptions of the wider value of sport. Individuals who were more task-involved showed an endorsement of the intrinsic dimensions and prosocial consequences of playing sport, while ego-orientated individuals espoused a belief that sport should build a competitive spirit and enable people to get ahead in the world. Ego-involved individuals tended to treat sport as a means to an end.

Current models of achievement motivation suggest that the goal perspective influences intrinsic motivation in sport activities, specifically that task orientation fosters intrinsic interest, and conversely that ego involvement leads to a lessening of intrinsic motivation. Dweck (1986) proposes that athletes who are highly ego or win involved are primarily concerned with attaining these goals and showing they are better than others. Accordingly, this win-oriented focus is also seen as decreasing intrinsic interest in a sport event and diminishing enjoyment gained from other aspects of the event, such as honest effort, or enjoying the healthy exercise provided. A number of studies, both in laboratories and in the field, support the achievement orientation/ intrinsic motivation link.

Laboratory experiments have indicated a significant decline in intrinsic interest to take part in mental tasks when individuals are placed in competitive situations, or where their performance will be judged (ego-oriented situations)(Deci & Ryan, 1980; Plant & Ryan, 1985). A study by Duda and Nicholls (1989b) showed a significant and positive relationship between motivation orientation and degree of satisfaction and enjoyment of

playing sport. Task oriented individuals were far more likely to report their sporting experiences as fun and enjoyable, while more ego-involved athletes were less likely to do so. Another study found task-involved athletes far more likely to report experiencing "flow", an optimal psychological performance state first proposed by Csikszentmihalyi (1975). This study (Jackson, 1988) also found that ego-involved individuals experienced flow during competition much less frequently, particularly if they showed low levels of self-efficacy. Preliminary studies have also indicated that a focus on ego-involved goals tends to relate to higher levels of anxiety when playing sport (Lewthwaite, 1990; Vealey & Campbell, 1988), especially when ego-orientation was coupled with low self-efficacy.

In conclusion, the achievement motivation approach appeals as having real utility. It is arguably the most widely adopted model of motivational research, and although there is divergence regarding nomenclature (as mentioned above), there is wide agreement among researchers and theorists as to the underlying validity of the achievement motivation dichotomy - the existence of the two discrete goal orientations. There are also, as outlined above, a raft of other interesting and pertinent constructs with which motivational orientation interacts. To summarise this section it is proposed that situational/contextual factors impact upon goal orientation with childhood experiences being particularly powerful in this regard. Goal perspective has also been shown to influence self-assessment of performance and effort. There is a demonstrated link between task orientation and a focus on intrinsic motivators, and conversely between highly-ego involved athletes and extrinsic motivators. Task-oriented athletes report greater affiliation needs and higher levels of enjoyment than their more ego-oriented peers. Those higher in task orientation tend to have an "as you sow so will you reap" approach to sport participation, while those higher in ego orientation tend to attribute their success or failure in sport to factors outside their control.

ACHIEVEMENT ORIENTATION MEASURE

The achievement orientation measure chosen for the present study was the Sport Orientation Questionnaire (SOQ) (Gill & Deeter, 1988). Reading of the literature indicated that two measures were generally suitable for the current study. Along with the SOQ, Duda's Task and Ego Orientation in Sport Questionnaire (TEOSQ)(1992) was evaluated. Both the SOQ and the TEOSQ appear to measure similar constructs, with the TEOSQ's *task* and *ego* distinction seeming to correspond closely to the SOQ's terms *win* and *goal* orientation. The SOQ also contains another construct measure, that of *competitiveness*. Gill and Deeter (1988) define the competitiveness factor as measuring:

> ...the desire to enter and strive for success in sport achievement situations...The items...reflect a desire to enter sport achievement situations, to strive for success, to work hard, to master skills, and an eagerness to meet competitive challenges. (p.195)

Gill and Deeter's conception of the term "competitiveness" should not be confused with the meaning ascribed it by Spence and Helmreich (1983), who use the term synonymously with ego-orientation.

Duda (1992) argues that the TEOSQ should be regarded as the achievement motivation measure of choice, and proposes that there are ambiguities in the construction and definition of Gill and Deeter's orientation terms "goal" and "competitiveness". Duda argues that both task and ego oriented individuals may be rated as "competitive", but it is their subjective perception of what they are trying to achieve, and what they may gain , that is important from an achievement orientation standpoint. According to Duda (1992), the key conceptual distinction between task and ego orientation is

> how such people tend to construe their ability and judge subjective success (or goal accomplishment) in particular situations...that is the very nature of the goal is different when one is in a state of task or ego involvement (p.64).

Duda further states that "although a task-oriented person may also be to some degree competitive, the very nature and meaning of the competitive challenge would contrast to what is assumed by an ego-involved person. Thus, the concept of 'competitiveness' seems obscure when analysed from a goal perspective" (p.63). In the present writer's view, the Gill and Deeter competitiveness measure seems to provide an interesting "extra" to their win/goal orientations. In contrast with Duda (1992), the present study takes the view that the process of discovering whether task or ego-oriented individuals have a differential desire to become involved in competitive situations will serve to make the concept of competitiveness clearer when analysed alongside goal perspective. While athletes may be more or less task or ego-oriented, knowing how keen they are to enter a sporting environment in which they will be competing against others adds a pertinent additional ingredient to the motivational orientation "recipe".

Where the present writer considers Gill and Deeter's SOQ to be greatly superior is in the questionnaire construction. Duda's TEOSQ items are couched in language that seems aimed at 8-10 year olds. Examples are "Others mess up and I don't"; I'm the best" and "A skill I learn really feels right". The statements used are, in the present writer's view, ill-suited for use with adult athletes, especially elite athletes. The SOQ statements, conversely, are couched in more "adult" language and generally the SOQ appears to have greater face validity . Thus Gill and Deeter's SOQ has been chosen as the achievement motivation measure for the present study.

ELITE VS NON-ELITE AND ACHIEVEMENT MOTIVATION ORIENTATION

There exist in the literature a considerable number of studies testing a wide range of psychological aspects of elite athletes (Feigley, 1984; Feltz & Ewing, 1987; Gutmann, Pollock, Foster & Schmidt, 1984; Montgomery & Dallaire, 1984; Orlick & Partington, 1988) and also comparing the psychological nature of elite versus non-elite athletes (Durtschi & Weiss, 1984; Kerr & Cox, 1991; Mahoney & Avener, 1977). Many of these studies show that there are significant differences between the psychological functioning of elite as compared to non-elite athletes. A study conducted among squash players found that elite players engaged in more planning and other mental strategies (especially those concerned with attention and focusing) that did novice players. Skilled players were also more successful in achieving their preferred arousal state and also seemed to show more stable and appropriate mood states (Kerr & Cox, 1991). While athletes across all skill levels report some degree of cognitive anxiety before, during and after competition, elite athletes seem better able to initiate a calm period in the 24-48 hours leading up to competition (Mahoney & Meyers, 1989). Furthermore, elite athletes tend to be able to control their arousal level more effectively than their non-elite counterparts during competition itself (Mahoney & Avener, 1977). Some studies also indicate that elite athletes are superior at processing and retrieving sport specific cues and information (Allard, Graham & Paarsalu, 1980; Starkes & Deacon, 1984). Further discussion of these aspects can be found elsewhere in the literature.

More pertinently to the present study, considerable research has shown a clear correlation between ego or win orientation (and task or goal orientation) and level of competition (Duda, 1988; Duda & Nicholls, 1993; Gill & Deeter, 1988; White & Duda, 1994). The more elite the level athletes are competing at, the more likely it is that they will score highly on a measure of ego (win) orientation. The findings with regard to motivation orientation and level of competition support the developmental-based

predictions of Nicholls (1989; Nicholls & Miller, 1984) concerning the progression of individual goal orientations in sportsmen and women. Once children reach the age where they can experience the reality of ego involvement (around 10 years) then they begin to comprehend and use a differentiated conception of ability (which forms the foundation for ego involvement) (Duda and White, 1994). After this stage, predisposition for ego or task involvement is seen as being dependent on a number of factors. Contact with environments which encourage competition and comparison with others; or bolster a focus on honest effort or personal mastery, will affect an individual's level of ego and task orientation, respectively (Duda and White, 1994). Concomitantly, one would expect that athletes competing at higher levels at which an ever greater emphasis is placed on the outcome of the competition would be more ego-involved than athletes competing at lower grade or recreational levels. It is expected that this state of affairs will be reflected by the results of the present study.

In a study testing level of competition, coaching behaviours and achievement motivation orientation (using the Task and Ego Orientation in Sport Questionnaire, TEOSQ), Chaumeton and Duda (1988) found significant differences between the level of ego involvement of elementary (11-13 years), junior high (13-14 years) and senior high (15-18 years) school athletes. The senior high athletes were significantly more ego-involved than the junior high athletes, and the junior high players were similarly more ego-involved than their elementary school counterparts. Interestingly, there was no significant difference between any of the three groups in task involvement, with each group placing importance on the mastery aspect of sport participation. This reinforces the discrete nature of task and ego orientation. Athletes who are markedly ego-involved may also be task oriented. Commenting on this phenomenon, White and Duda (1994) state that "personal mastery and skill improvement, or task orientation, should be relatively valued regardless of competitive level - at any level of sport there is always room for improvement" (p.13).

In a more recent study (White and Duda, 1994) the TEOSQ was administered to youth (mean age -10.8 years) , high school (16.3), intercollegiate (20.2) and adult recreational (26.04) athletes. Results supported the level of competition and achievement motivation orientation link. The intercollegiate athletes (the group at the highest level of competition) showed significantly higher levels of ego-involvement than any other group. Similarly to the Chaumeton and Duda (1988) study, there was no significant effect of level of competition on task orientation of athletes.

In summary, while high levels of task orientation may be found in both elite and non-elite athletes, research indicates that the elite tend to be higher in ego-orientation than are recreational or non-elite athletes. So in the sample selected for the present study, it is expected that the elite (first class and national under 20) cricketers will score more highly in ego orientation that will the lower grade players, reflecting the disparity of "pressure to win" between the two groups.

ELITE VS NON-ELITE - GENERAL ATTITUDES TO AND MOTIVATIONS FOR PLAYING CRICKET.

As an exploratory section of the current thesis, both elite and recreational cricketers will be questioned as to their general attitudes to and motivations for playing cricket. Five separate constructs will be investigated, namely - *satisfaction with cricket, commitment to cricket, effect of playing cricket on partner; general motivations for playing (fun/stimulation; affiliation needs; and achievement) and intrinsic/extrinsic motivation for playing*. These constructs will be tested by way of a simple questionnaire designed by the present writer. Satisfaction with, commitment to, and the importance of cricket (multi-item scales) were included by the present writer to explore if there were differences in these areas between elites and recreationals. The general motivation questions are designed to test Martens' (1987) contention that athletes play for three reasons - need for stimulation, need for affiliation and need to achieve. The intrinsic/extrinsic motivation questions seek to replicate previous studies (Deci & Ryan, 1980; Plant & Ryan, 1985; Dweck, 1986) and ascertain whether a higher score on intrinsic motivation is linked to higher scores on goal orientation, and conversely whether extrinsic motivation is linked to win orientation.

NEW ZEALAND SPORT MOTIVATION STUDIES

Previous research on motivation orientation has been both generic and sport-specific, with by far the majority of studies occurring among populations of young American sportspeople - normally grade school children and college attendees. There is little existing research in the area of achievement motivation that investigates athletes competing at the adult elite levels of sport.

A recent study in New Zealand (Hodge & Zaharopoulos, 1992; 1993) has sought to establish the motives/goals of participants in netball (1992) and rugby (1993). This study focused on the participation motives of high school rugby and netball players. For the netball players, the four most important factors were: improving skills/learning new skills, increasing fitness, having fun, and achieving goals. For the young rugby players, the three most important factors were: having fun, for the thrill and excitement, and improving skills / learning new skills. Hodge's studies have focused solely upon college-age subjects and sport participation/discontinuation. While the SOQ was employed as a measure in the 1992 study, the results from the use of this measure have not been reported. There appears to be no existing New Zealand sport motivation research on cricket, or on adult sport participants.

A (1991) study completed for the Hillary Commission by Marketing Diagnostics and Development Ltd focused upon sports and physical education participation of secondary school students. The study noted that the main perceived appeals of sport participation were enjoyment and fun, friendship and team environment, improving skills and challenge and for health. Pupils with lower interest in sport cited lack of awareness of options, being shy or lacking encouragement, feeling of not being good enough, sport being too competitive, and lack of interesting programmes, as being contributing factors. It was also noted that females attending single sex schools have higher participation rates and greater interest in sport than do female pupils at co-ed schools.

SUMMARY/SIGNIFICANCE OF RESEARCH ON SPORT MOTIVATION

The area of achievement motivation is of interest to both sport psychologists and to sport administrators and coaches. For the sport psychologist, whose research role is to provide those working in the field with sound advice based on empirical evidence, testing the waters of athlete motivation is still a key area of interest. While much has been discovered, much more remains to be uncovered.

To summarise the preceding sections, many of the achievement motivation theorists (Ames, 1984b; Dweck, 1986; Maehr, 1984; Nicholls, 1989) agree that there exist interrelationships between goal perspectives, motivational processes, and behaviour. A key tenet in modern thinking on achievement motivation is that the goals we set influence how we construe and respond to achievement events. It is proposed that an individual's goal perspective will influence self-judgements of demonstrated ability, effort given, and attributions for success or failure. Concomitantly, these cognitions are presumed to impact upon achievement-related affect, tactics, and subsequent behaviours such as performance, task choice and persistence (Duda, 1992).

Task involved athletes tend to choose moderately difficult tasks, show intrinsic interest, display sustained effort, and also improved performance and perseverance, notably after failure. As mentioned earlier in the present study, these positive behaviours are also predicted for ego-involved athletes, but only if they are believe they are competent (Duda, 1992). These perceptions of self-efficacy, however, are more fragile in ego-involved individuals that they are in task-oriented athletes (Dweck, 1986). Ego involved individuals who are low in self-efficacy are expected to choose tasks that are either too difficult or too easy, to show less effort, and to downgrade the importance of the event if they are failing. They are also predicted to persevere less (especially after failure) and to demonstrate impaired performance. Ego-involved athletes who question their own

competence are also likely to show reduced intrinsic interest, and are more likely to drop out than more highly task-involved individuals (Chaumeton & Duda, 1988).

Clearly, the present study takes the view that the goal perspective approach has considerable utility as a standpoint from which to more fully understand human motivation in sport settings. The other constructs with which goal orientation is aligned have been clearly outlined. The key issue for the present study is the distinction between elite and non-elite athletes in terms of goal perspective. However, as indicated in the previous section, there seems to be little research existing which has focused upon adult elite athletes, none which has been conducted with cricketers, and none (to the present writer's knowledge) which has taken place in New Zealand (except for Hodge and colleagues' work with school children), therefore the present study seeks to make a contribution by adding to existing knowledge. As elite athletes are more likely to be ego-involved than recreational athletes, there are practical implications for coaches and sport psychologists in terms of the goal orientation which they encourage their athletes to adopt.

Clearly, understanding more effectively the underlying constructs which make up motivation will allow sport programme design which seeks to sustain a focus on intrinsic motives. Such programmes should meet the requirements of participants and become the main element of future participation and performance (Chaumeton and Weiss, 1992). A more in-depth and complete understanding of achievement motivation will help both programme designers and also coaches and sport psychologists to meet the needs of groups and individuals and to design interventions which will enhance athletes' and teams' sporting performance.

THE IMPACT OF SPORT: EFFECTS ON PSYCHOLOGICAL WELL-BEING

The literature on the physical and psychological benefits of sport and exercise is extensive. Sport on the Move (SoM, 1985) reported that over 1.3 million New Zealanders take part in organised sport. This figure does not take into account those who participate in unregistered sport, neither does it include school children playing sport on Saturday mornings. A study on New Zealand youth (Woolford & Law, 1980) showed that youthful criminal offenders were less motivated than non-offenders to join sports clubs and advised that the experience of team sport promotes the development and acceptance of values which are beneficial to both the individual and to society in general. In their submission to the Sports Development Enquiry Committee (SoM, 1985) the National Heart Foundation (NHF) of New Zealand stated that several epidemiological studies "point to a relationship between leisure time and physical activity (including sport) and a lowered incidence of heart disease" (p.19). The NHF considered that these health benefits were often associated with other well-being-promoting aspects of a healthy person's lifestyle including non-smoking, lower blood pressure and psychological well-being.

There is evidence to suggest that exercise is allied to better psychological health. The Berl Report to the Hillary Commission (1993) states that

1) Most people who take regular exercise claim to feel better for it. Regular exercise is associated with less anxiety, less tension, and an improvement in self-esteem.
2) Exercise is useful in professional treatment of depression. Studies suggest it is even equal in effect to other therapeutic interventions such as psychotherapy.
3) Clinical opinion is that exercise has beneficial emotional effects across all ages and in both sexes.

4) Positive conclusions about the effect of exercise on mental health have been issued in consensus statements by the Royal College of Physicians (1991), the International Society of Sport Psychology (1992), and leading North American researchers (Bouchard, Shephard, Stephens, Sutton, & McPherson, 1990; Morgan & Goldston, 1987) (p113).

There is also evidence that physical activity is associated with positive mood and lower levels of anxiety and tension (Stephens, 1988) and improved self-esteem (Sonstroem & Morgan, 1989). Many health professional consider that vigorous exercise is an effective treatment once mental health problems have developed (Morgan & Goldston, 1987).

The vast majority of the studies referred to regarding the link between well-being and participating in exercise and sport have been conducted among populations of recreational and non-elite athletes. However, it seems reasonable to suggest that playing sport at elite level is correlated with higher levels of stress than playing at a recreational level. While elite athletes are prey to similar pressures to those experienced by members of the general public, such as economic, work and relationship difficulties, these problems can be exacerbated by the pressures of playing sport at the elite level. As Martin (1995) points out,

> ...the elite athlete may train anywhere from 20-40 hours a week, leaving little time or energy for work, social and recreational activities. Training demands and time spent away at competition can mean financial strain and employment instability. Many athletes devote so much time to their athletic career that they do not have a regular income or a reliable career path, whereas others work hard at establishing a sports and working career, placing additional and often unrealistic time demands and pressure on themselves. Professional athletes may be supported financially by sponsors, but this may bring additional pressures in promoting and successfully representing the sponsor on the sporting field (p.275).

Research previously mentioned in this thesis has indicated that elite athletes are more likely to show higher levels of ego-involvement than lower level participants, and that these individuals rate their performances normatively. Added to this tendency of the elite to frame goals and assess performances normatively, is the interest from the public and the media. Ego-involved individuals, who judge themselves by the performance of others, could be deemed more likely to be affected by critical comments from media, spectators and others.

Self efficacy is also seen as being less securely developed in win-oriented athletes (Dweck, 1986), and it seems likely that players whose confidence is weaker would be more likely to be anxious before competing, or to be stressed by some aspect of living as an elite athlete. Results of studies by Vealey and Campbell (1988) and Feltz and Ewing (1987) support this hypothesis. In a further study (Duda, Newton & Chi, 1990) high precompetition state anxiety (and low state confidence) were evident among tennis players who were high in ego orientation and did not expect to beat their opponent. The present study seeks to test whether there is a link between being more highly ego-involved and reporting anxiety either before or during competition.

While the link between ego-involvement and anxiety is tested, both elite and recreational groups will be assessed as to their general level of reported psychological well-being. There is reason to suggest that being an elite athlete is negatively related to well-being and happiness. This is an exploratory section of the present study designed to appraise the tentative hypothesis that playing sport at recreational level and/or being more task-oriented would impact positively upon general psychological well-being, while being an elite athlete and/or displaying greater ego-involvement would associate with lower levels of well-being.

THE IMPACT OF SPORT: INTERPERSONAL RELATIONSHIP ISSUES

The present writer's personal experience, and anecdotal reports from the press, indicate that playing cricket at elite levels can have deleterious effects on interpersonal relationships. A number of elite male players known to the present writer have suffered relationship breakups which appeared to be influenced by the time commitment required to play cricket at elite level. Perhaps a correlation could be made with business executives whose work takes them away from their partners and/or family for long periods. For elite athletes, their focus is often very much inward-looking, a focus that, typically, is adaptive and successful for them in their sport. However this egocentrism can be highly dysfunctional when it comes to conducting a successful relationship. Most elite young athletes are encouraged to "eat, breathe and drink" their sport, and are often told they must make sacrifices to "make it to the top" . With some, this intense involvement in sport may deprive them of typical adolescent, young adult or school experience, leading to what may be considered a developmental gap in their ability to relate to others . Elite athletes' self-esteem may also be intertwined with their sport performance, with a slump in form leading to feeling of low self-worth. Compounding this, many elite athletes' relationships emerge out of their elite sporting status, and when that status is threatened, the relationship may strike difficulties (Coppel, 1995).

There is considerable literature existing on the issue of work and non-work linkages. Three main models have been used as a template from which to consider the work-family nexus; namely segmentation, compensation and spillover (Lambert, 1990). In the 'segmentation' model, work and non-work are seen as discrete, independent identities, with little or no interrelationship between the two entities. This discreteness may be a naturally-occurring phenomenon, or workers may actively seek to ensure that the two domains are kept separate (Piotrkowski, 1979). The 'compensation' model proposes that workers seek to satisfy a lack of satisfaction in one area by trying to gain more

satisfaction in the other. Thus a worker who is having difficulties at home may immerse him or herself in giving a full commitment to work. The third model, 'spillover', suggests that both positive and negative features (affect, competencies, attitudes and behaviours) may carry (or spill) over from one environment into the other. A professional cricketer who learns to relax when under competitive pressure may use these learned skills to display more patience with his children (Lambert, 1990). Conversely this same cricketer (or another) may allow the stress of performing under constant pressure to intrude upon his family life, and he may become short-tempered with his partner or children.

A British study (Young and Willmott, 1973) surveyed high level managing directors and found that 65 percent of the sample felt that their work interfered with their family life, the main difficulty being the pressure of time: late hours, trips, tiredness, and needing to take work (and work pressures)home. In a earlier study, Blood and Wolfe (1960) found that husbands' work involvement did influence wives' evaluations of their marital role performance. The satisfaction of wives with their husband's companionship performance was lower at the highest occupational levels, and wives of high income or upwardly-mobile husbands were especially dissatisfied.

When testing these findings using more advanced measurement and data analysis, and controlling for such factors as income, education, and wives' role expectations, however, another study (Clark, Nye & Geckas, 1978) found no evidence of negative work time effects. In this study, wives of high income partners were happy to play a larger share in running the household - perhaps reflecting a process of reciprocity. Clark et al. also suggest that whether or not a wife feels dissatisfied with her husband's performance depends not primarily upon her husband's behaviour, but also upon her own marital role expectations and priorities. It seems clear that the husband's expectations and beliefs could also impact upon the equation. Another article (Gullotta & Donahue, 1981) based upon clinical experiences with the families of "high-flying" corporate executives

supports the findings of Clark et al. (1978), and insists that the value-structure of the family must be considered.

Ex-internationals have also commented to the present writer that after a tour away there is always difficulty in re-establishing the relationship when the player returns to partner and/or family. As one player stated

> When you're away on tour, you have your bed made, nice meals available when you want them, you can have a beer with the boys when you want to, and you tend to be rather introverted, concentrating on your own performance. It's hard to come home and find you've got to fit into the family routine again, especially when your wife has been doing all of your jobs as well as her normal ones while you're away. She may resent you taking over certain roles. All I can say is that it's often a very difficult time.

In talking to experienced ex-international cricketers, several have commented to the present writer that it must be much easier for fully professional cricketers to justify the time and energy they put into playing and practising cricket, and to cope with potential complaints from spouses, compared to amateur or semi-professional players. The rationale given was that both the players and the wives of professional cricketers could justifiably view the time away from home as "just what I have to do to earn a living".

Recently, Zitzelsberger (1994) conducted a qualitative study of 20 (16 male, 4 female) Canadian national team coaches exploring the demands of the job, perceived influences of the occupation on interpersonal relationships, perceptions of the role in the family and recommendations relating to balancing home and work lives. In many ways elite team coaches can be seen as analogous to elite athletes in terms of time and commitment given to their sport, thus Zitzelsberger's study is particularly germane to the present thesis. Coaches questioned were unanimous regarding the pressure that the time and commitment required for their coaching placed upon their relationship with their partners

and families. Most stated that it was important for the coach to make a real commitment to ensuring that the time they did spend with their family was of high quality and characterised by effective communication. Coaches' and spouses' actions prior to the coach leaving for an extended period were very similar to those reported by Bey and Lange (1974). One coach commented (Zitzelsberger, 1994)

> "...the last two or three days before I go away ...I can tell that she's starting to get a bit upset so that's difficult because she's not entirely comfortable...there's always some frustration there...you never leave on the terms you'd like to...it's always bad for a couple of days before I go" (p.15).

While some coaches appreciated the opportunity that travel gave for personal development, for many, especially those whose relationships were in the early stages, there was concern that the lack of time and what was missed would endanger the very survival of the relationship. Three coaches surveyed mentioned that there must exist a strong degree of mutual trust for the partnership to succeed. When asked whether coaching was their top priority, single coaches said that it was, and mentioned how difficult it was to establish a lasting relationship because of the nature of their job. Coaches with partners differed, with the majority saying that their relationships/families were important.

Over three-quarters felt that it was possible to achieve a balance between coaching and family life, although opinions were mixed when they were asked whether they had achieved it. Individual views of what the balance was, understanding of the partner as to the stresses involved and support of the employer sport organisation were seen as mediating influences (Zitzelsberger, 1994). Overall, the coaches were unanimous that their sporting involvement had a definite effect on their partner/family. While these coaches can be compared to previously mentioned occupations, coaches felt that their occupation differed because of insufficient financial compensation, a lack of job security,

little endorsement of the family, and a lack of direction, advocacy and assistance from employing sport organisations. This study (Zitzelsberger, 1994) may be seen as somewhat comparable with the present thesis regarding the impact of elite sport on relationships. While elite coaches are clearly involved in different activities than elite athletes, the time spent and commitment involved in both may be perceived as being similar.

Although recognition of the impact that relationships have on athletes is not an entirely new area of study, little attention has been focused on it in sport psychology. While the impact of significant others (e.g. family members) on youth sport participation has been studied at some length (Greendorfer & Lewko, 1978), there is little published regarding the impact that relationships have upon sport performance, or of the impact that playing sport (especially at elite level) has upon close relationships. As Coppel (1995) points out, the scholarly study of this bidirectional association has been "almost nonexistent" (pp.194-195). Currently however, the interest in this area is gaining, due largely to the experiences of consulting sport psychologists whose work in helping athletes has clearly demonstrated that interpersonal relationships are an important part of the lives of many of their clients, and that these relationships impact on the sport experience, while themselves being influenced by sport.

Another issue in the interpersonal/family relationships of the very elite sportsperson is the "celebrity family" syndrome (Mitchell & Cronson, 1987). Schmitt and Leonard (1986) also describe how the mass media form and maintain the public perceptions of the professional athlete. Both these articles propose that the celebrity family develops an impermeable boundary between the public and themselves. Although this boundary protects against intruders, it can also create social isolation and loneliness. The celebrity is also faced with a conflict between remaining remote from his family in order to maximise his or her career and attempting to maintain family contact. Also, children of

celebrity families often have unrealistic expectations placed upon them by peers, coaches or society at large (Mitchell & Cronson, 1987).

Certainly the elite athlete/interpersonal issue should be of interest to administrators and coaches. Cricket administrators spend considerable sums of money preparing their players for optimal performance and should have at least a passing interest in the interpersonal happiness of their elite players. Applied sport psychology texts indicate clearly that an unhappy player is a player who is unlikely to perform to potential (Martens, 1987; Syer & Connolly, 1990; Terry, 1989). If the present study indicates that elite players' cricket careers are negatively impacting on their psychological and relationship well-being, there may be implications in terms of how these players are managed, and the programmes provided. Strategies to enhance social support or keep to a minimum marital or relationship upsets seem likely to positively impact the athlete in terms of their sport performance and personal adjustment (Coppel, 1995).

ASPECTS OF CRICKET

While studies have been undertaken on athletes competing in a number other sports (swimming - Gould, Feltz & Weiss, 1985; gymnastics - Klint & Weiss, 1986; hockey - Ewing, Feltz, Schultz & Albrecht, 1987; wrestling - Gould, Horn & Spreemann, 1983; basketball - Giannini, Weinberg & Jackson, 1988; figure skating - Scanlan, Stein & Ravizza, 1988), no studies, to the writer's knowledge, have been made of cricketers in the areas of motivation or psychological/interpersonal well-being. There have been a number of studies which have investigated visual and decision-making aspects of batting in cricket (McLeod, 1987), and a number of others which have focused on physiological (Chrisp, 1989; Davis, 1985; Payne, Hoy, Laussen & Carlson, 1987) and biomechanical (Davis, 1991; Harmer, 1993) aspects of cricket performance, especially regarding the stresses and strains placed on the body by fast bowling. While Winter (1994) has written a text on applied psychological skills for cricketers, there are few (if any) studies on motivation, psychological well-being or interpersonal happiness in cricketers. Winter's book is a simply-written, "hands-on" guide for cricket players to improve their mental skills and has no relevance to the focus of the present study.

There are sound reasons for undertaking such research. Cricket is, along with golf and bowls, among the three most popular summer sports played in New Zealand, with over 80,000 registered players. Of these three sports it is by far the most heavily televised, with a steady diet of test, and especially one-day, cricket being shown on television throughout the summer, and also the New Zealand winter when the New Zealand side is competing overseas. As has been extensively reported in the press, the New Zealand men's cricket team has performed poorly over the last two years (currently only Zimbabwe ranked lower in test standings), and has also been racked by controversy, especially during late 1994 and 1995.

Cricket has a number of features that make it different from other sports. As the modern game has evolved, two separate forms of cricket have emerged - one-day cricket, which takes place in one, seven hour, day; and test match (five days) and first class cricket (four days) in which the match is contested over longer periods. In no other sport do elite players compete in a single contest over such an extended period. This has both psychological and physiological implications in terms of the length of time that players must remain at competitive levels of performance.

The duration of each game has further ramifications in that first-class and international players are expected to be away from home for considerable periods of time. The current New Zealand side has spent two weeks in Darwin (in September) and then travelled to India for two months (October-December). First class players commence their season in November and do not finish until late February. While the players play around half their games at "home", players from widely spread associations such as Central Districts and Northern Districts may not play one game in their home town all season. When this schedule is added to extensive practising time, it is very difficult for first class players to hold down a "regular" job. While international players are well-paid for their efforts, and cricket may be termed their employment, many first class players receive only moderate payment, while "B" team and under 20 representative players receive either expenses or nothing at all. Financially and career-wise, many players make considerable sacrifices to play cricket.

Another aspect is the impact of such long absences on interpersonal relationships and family life. While no formal research exists on the topic, informal research carried out by the present writer over a number of years indicates that playing cricket at elite level carries an interpersonal cost. Alongside the time away from home and work, there is also the "fame" aspect to be considered. As previously mentioned, some elite players are, often at times when they are least able to deal functionally with it, subjected to persistent and unwanted attention from the media and the public - a close scrutiny of

their public and private life. A number of cricketers in New Zealand have publicly (in press or autobiographies) reported that this media scrutiny has been highly stressful for them and their partners.

SUMMARY OF THE RESEARCH

To recap, the general aim of this research has been to investigate and compare elite and recreational cricketers across the following areas: achievement goal orientation; relationship satisfaction; psychological well-being, general attitudes and feelings and also general motivations for playing cricket. Before considering the present research however, a general overview of sport and its place in New Zealand society was given, followed by an overview of sport motivation. Common misunderstandings of motivation were considered, and the three major existing approaches to sport motivation - participation and discontinuation motives, intrinsic and extrinsic motivation and achievement goal orientations - were outlined. Some conceptual and nomenclature issues in goal perspective research were then explored, and the strengths and weaknesses of Weiss and Chaumeton's (1992) model of sport motivation considered.

Existing pertinent goal orientation research was described, and then the elite vs non-elite athlete dichotomy was explored, particularly as it links with achievement motivation. A section then followed that considered issues surrounding measurement of achievement motivation orientation, and supported the choice of the SOQ for the present study. Studies done in New Zealand on sport motivation were outlined, and a summary considered the significance of research in the achievement motivation area.

The next section addressed the impact of sport on psychological well-being, and suggested that while sport was generally considered to be positively linked with good psychological health, the effects of playing sport at elite levels may run counter to this due to the various stresses and strains of playing at this level. The succeeding section considered the effects of playing sport at elite level on relationships (marriages, defactos etc.), and indicated that, although there has been very little research done in this area, that the time and commitment required to successfully compete at this level could negatively impact upon relationship satisfaction. Some unique aspects of cricket were then considered.

RESEARCH GOALS

Achievement Motivation Orientation

The present study seeks to establish whether there is a significant difference between elite and recreational cricketers regarding each of win (ego), goal (task) and competitiveness motivational orientations. As indicated by previous research (Chaumeton & Duda, 1988; White & Duda, 1994), it is expected that elite cricketers will score more highly on win and competitiveness than their recreational counterparts. It is also tentatively predicted that high scores on ego-orientation may be associated with lower psychological well-being scores.

Psychological well-being and competition anxiety

The present study aims to show whether there is a significant difference in general psychological well-being and competition anxiety between elite and recreational groups, and also how the cricketers' psychological well-being scores compare with a general population tested with the same measure. While there is a large amount of research which shows clearly that exercise benefits psychological well-being, recent writers (Coppel, 1995; Martin, 1995) have suggested that the pressures of elite sport may actually be deleterious to psychological well-being.

Relationship satisfaction

The present study seeks to determine whether there is a significant difference in relationship satisfaction (as measured by a "satisfaction with partner" index) between elite and recreational cricketers who are currently partnered. Both Coppel (1995) and informal information gathered by the present writer have indicated that playing sport at the elite level can act as a stressor on relationships, due to the considerable time and effort elite athletes must devote to their sport to remain competitive. Recreational cricketers, on the other hand, spend considerably less time and effort, and it is proposed that playing cricket would be less potentially harmful to their relationships.

General attitudes to and motivations for playing cricket.

In accord with furthering the study of differences between elite and non-elite athletes, the present study aims to establish whether there are significant differences between the groups on satisfaction with cricket (SATCRIC), commitment to cricket (COMCRIC), effect of playing on partner (EPP), general motivations for playing (fun/stimulation; affiliation needs; and achievement) and intrinsic/extrinsic motivation for playing. This part of the present study is exploratory in nature, but it would seem likely that the elite group would score more highly on COMCRIC and EPP, due to the greater time and effort they expend on their sport. The work of Duda and colleagues (e.g. Chaumeton & Duda, 1988) suggests that elite athletes will score more highly than recreationals on extrinsic motivation, while the present writer surmises that the elite group will score higher on achievement needs, and lower on affiliation and fun/stimulation needs. Previous research (White & Duda, 1991b) has indicated that high-ego athletes were more likely to participate in sport for competition, recognition and status and less likely to play for affiliation needs and comradeship. Other research (Gill et al., 1983; Gould et al., 1987) has found that the primary motives for playing sport include affiliation, competition and fun.

As an extension of this exploratory section of the present study respondents are asked two open-ended questions: (a) what are the best things; and (b) what are the worst things about playing cricket at the level you currently do? This qualitative data may provide further information as to the differences in feelings about the game, and reasons for playing, between elite and recreational players.

Associations between constructs

The present study also aims to ascertain whether there are links between certain constructs. This section intends to test the findings of previous researchers (e.g. Chaumeton & Duda, 1988) that linked high scores on win-orientation with higher scores on extrinsic motivation, and a positive association between goal-orientation and intrinsic

motivation. The other correlations tested are exploratory in nature. The correlations tested will be between:

1. Goal orientation and intrinsic motivation.
2. Win orientation and extrinsic motivation (among elites).
3. Anxiety and intrinsic/extrinsic motivation
4. Motivational orientation and psychological well-being.
5. Achievement motivation needs and anxiety.

METHOD

Participants

A total of 86 (55 elite, 31 recreational) subjects were recruited from the ranks of elite and recreational cricketers throughout New Zealand. The elite group were either currently playing at International level (n = 1), Shell Cup or Trophy level (n = 40) - the highest grade domestic competition, at National B level (n = 5), at National under 20 level (n = 2), or had played at Shell Cup/Trophy level within the last 2 years (n = 7). Elite subjects were drawn from all 6 major cricket associations in New Zealand. Recreational subjects were currently playing either lower or social grade cricket. In total 225 questionnaires were administered, with 86 returned (38.2%). Since the cut-off date, there have been a further 8 questionnaires returned.

Measures

Sport Orientation Questionnaire (SOQ). The SOQ is a 25 item, multi-dimensional scale developed by Gill and Deeter (1988). As outlined in the Achievement Orientation Measure section, the SOQ measures an individual's achievement motivation orientation across three dimensions - win, goal and competitiveness. Responses to the 25 statements pertaining to sport situations were indicated on a 5 point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Scores were calculated by a total sum across items for each subscale. The SOQ has been found to demonstrate acceptable levels of reliability and validity through the work of Gill and colleagues (Gill & Deeter, 1988; Gill & Dzewaltowski, 1988; Gill, Dzewaltowski & Deeter, 1988).

Affectometer 2. A 10-item adjective short form of the Affectometer 2 (Kamman & Flett, 1983a, 1983b) was used as a measure of general psychological well-being. The Affectometer 2 measures both positive and negative affect and psychological well-being (positive affect minus negative affect). The score on the Affectometer is thought to capture aspects of both state and trait components of well-being. The Affectometer 2 is

reliable (alpha level .95), valid, and also correlates highly with the best alternatives (Kammann & Flett, 1983). This instrument has been widely reported in the literature and is recommended for use by Diener (1984) in his extensive review of subjective well-being research and measures. Responses to the 10 adjectives (e.g. satisfied, helpless, depressed, confident, withdrawn) pertaining to subjective feelings were indicated on a 5 point Likert scale ranging from "not at all" (0) to "all of the time"(4). Scores for each subscale were calculated by means across items (psychological well-being score = mean positive affect minus mean negative affect).

Partner Satisfaction Index (PSI). This index measured subjects' (who were currently married, or in a relationship) satisfaction with their partner. The PSI lists 11 attributes (e.g. financial resources, sexual attractiveness, reliability/trustworthiness) and subjects were asked to indicate their feelings by completing a 7 point Likert scale ranging from "terrible"(1) to "delighted" (7). This scale has been reported in the literature and shows acceptable reliability and validity (Simpson, 1987). A total satisfaction score was derived by summing the ratings across the 11 items.

General Motivations/Feelings/Attitudes to Cricket Questionnaire (GMFACQ). This exploratory questionnaire was designed by the present writer to measure five separate constructs, namely - satisfaction with cricket (4 item scale), commitment to cricket (6 item), relative importance of cricket in respondent's life (3 item), competitive anxiety (2 item), general motivations for playing (fun/stimulation; affiliation needs; and achievement)(single item) and intrinsic/extrinsic motivation for playing (single item). Responses to the 20 statements pertaining to motivation/attitudes to cricket were indicated on a 5 point Likert scale ranging from "not at all true for me" (1) to extremely true for me" (5). With the multi-item scales scores were derived by calculating the means across items.

Qualitative data -feelings about playing cricket. Qualitative data was gathered by asking 2 open-ended questions to all subjects - namely "What are the best things about playing cricket at the level you currently do?" and "What are the worst things about playing cricket at the level you currently do?". This data was content analysed following accepted procedures (Lincoln & Guba, 1985; Patton, 1990) and grouped into themes or categories.

Procedure

General issues

An information page at the front of the questionnaire named the researcher and provided contact addresses and telephone number. The purpose and a basic outline of the research was given, and instructions given as to the procedure for completing the questionnaire. Respondents were instructed that they had the right to: (a) contact the researcher at any time, (b) refuse to answer any question or withdraw from the study at any time, (c) provide information in complete confidence to be used solely for the purposes of the research, and (d) receive information about the results of the study on its completion. A separate "consent form" was provided with its own envelope. A copy of the questionnaire is provided in the Appendix.

Elite group

The coaches of 5 of the major cricket associations (Auckland, Northern Districts, Wellington, Canterbury and Otago), who are all known to the present writer, were contacted and asked if they would cooperate with the present study by handing out questionnaires to their Shell Squad players and encouraging players to complete them. Central Districts players were approached personally as these players were all known to the present writer.

Recreational group

Recreational players were either approached personally by the present writer or by two coaches (colleagues of the present writer) in Auckland and Canterbury and asked to complete the questionnaire.

RESULTS

Response rate

The questionnaire response rate for the present study was very low at 38.2%. Without encouragement from the present writer given to the coaches of the various teams, the response rate may have been lower still. Possible reasons for the low response rate will be discussed in a later section.

Quantitative results

Demographics

Table 1 displays a summary of participants' demographic information. Of the elite (n=55) cricketers, 25.5% had no current partner, 30.9 % were married (or defacto), and 41.8% had a current girlfriend. Of the recreational group (n=31), 12.9% had no current partner, 51.6% were married (or defacto), and 25.8% had a current girlfriend. With regard to formal qualifications, 31% of the elite group had either an undergraduate or postgraduate degree, compared to 9.7% of the recreational players. Eleven percent of the elite cricketers classed themselves as professional cricketers, while 25.5% were in part-time employment, 43.6% in full-time employment, and 10.9 percent were unemployed. For the recreational players, 6.5% were employed part-time, 80.6% full-time and 9.7% were unemployed. The elite group practised, on average, 7.8 hours per week during the cricket season, and played for 21.1 hours per week. For the recreational group, the figures were 3.8 hours (practice) and 5.8 hours (play).

Table 1. Demographics.

Demographics	*Elite*	*S.D.*	*Recreational*	*S.D.*
Age (mean)	25.0	4.2	33.7	10.0
Marital Status (%)				
Single	25.5		12.9	
Married	30.9		51.6	
Current girlfriend	41.8		25.8	
Qualifications (%)				
No formal quals	3.6		3.2	
School Cert.	5.5		25.8	
6th form Cert.	18.2		22.6	
Bursary	21.8		6.5	
Polytech Cert /Dipl.	20.0		25.8	
Undergrad. Degree	25.5		9.7	
Postgrad. Degree	5.5		0.0	
Employment (%)				
Part -time	25.5		6.5	
Full-time	43.6		80.6	
Unemployed	16.4		9.7	
Prof. cricketer	10.9		----	
Practice (hrs/wk.)	7.8	2.7	3.8	3.9
Playing (hrs/wk.)	21.1	8.9	5.8	1.1

Questionnaire descriptive statistics and reliabilities

The means, standard deviations and alpha reliabilities (Cronbach's alpha) for the questionnaires (and subscales) employed in the present study are shown in Table 2. The

alpha reliabilities for the SOQ subscales (competitiveness = 0.89, win = 0.81, goal = 0.86), the Affectometer (alpha = 0.79) and the PSI (alpha = 0.95) were high. Among the attitudes/feelings subscales, commitment (alpha = 0.85) and competitive anxiety (alpha = 0.75) were relatively high, while satisfaction and effect of playing on partner (both alpha = 0.63) were lower.

Table 2. Means, standard deviations and Cronbach's alphas on questionnaires and subscales.

Measure	*Alpha*	*M*	*SD*
Partner.sat. (PSI)	0.95	63.2	13.0
SOQ			
Competitiveness	0.89	21.5	7.1
Win	0.81	13.7	4.9
Goal	0.86	11.5	4.4
Affectometer			
Positive affect	0.79	13.5	2.9
Negative affect	0.79	4.0	3.0
Attitudes/feelings etc.			
Commitment	0.85	16.6	6.4
Satisfaction	0.63	15.5	3.0
Eff. Play on Part	0.63	6.6	3.1
Comp. Anxiety	0.75	5.9	2.5

Achievement Motivation Orientation

The results (means, standard deviations, t test scores, and p levels) are presented in Table 3. The differences between elite and recreational groups were analysed using the *t* test. In all cases in the present study where *t* tests were employed, an *F* test of sample variances was performed for each comparison, and if the probability of *F* was >.05, then equality of sample variances was assumed and t statistics based on pooled variance estimates were used. If the probability of *F* was <.05, then inequality of sample variances was assumed and statistics based on separate variance estimates were used (Snedecor & Cochran, 1980). Results showed that elites scored significantly higher than recreationals on competitiveness (p<.01) and win (p<.001), but no significant difference was found on goal orientation.

Table 3. Mean (SD) differences between elite and recreational cricketers for competitiveness, win and goal orientation.

	Elite (n = 55)	Rec. (n = 31)	Mean diff.	t	p<
Competitiveness	58.5(4.5)	52.5(9.3)	6.0	3.34	0.01
Win	23.8(3.6)	19.4(5.6)	4.4	3.98	0.001
Goal	25.1(3.7)	23.3(5.2)	1.9	1.96	ns

In order to make a comparison between the results on the SOQ of the present study and previous studies (Gill, 1993), Table 4 shows scores from the present study, scores from the following groups: non-athletes in Taiwan and Iowa (USA), US woman swimmers, Taiwanese university and international athletes, and US ultramarathon runners. New Zealand elite cricketers score higher on competitiveness (58.5) than any other group, and

higher on win orientation (23.8) than any other group except Taiwanese international level athletes (25.3). Both elite and recreational cricketers show relatively low scores on goal orientation compared to other groups.

Table 4. Athlete group comparisons on SOQ scores.

Group	*Competitiveness*	*Win*	*Goal*
Cricketers (NZ)			
Elite	58.5	23.8	25.1
Recreational	52.5	19.4	25.3
Non-athletes[a]			
Iowa	45.9	18.6	25.2
Taiwan	45.7	20.8	26.5
Taiwanese athletes[a]			
International level	54.9	25.3	27.7
University level	50.0	22.9	27.3
Ultramarathoners	48.9	15.8	27.6
Woman swimmers	51.7	18.2	27.1

[a] Data from Gill (1993).

Psychological well-being

Mean (SD) differences between elite and recreational cricketers on negative affect, positive affect and psychological well-being are presented in Table 5.). As a comparison, normative data from the general population is also included. Results showed no significant difference between elite and recreational groups on negative

affect, positive affect or psychological well-being (positive affect minus negative affect). The cricketers' well-being scores seem in line with those of the general population.

Table 5. Mean (SD) differences between elite and recreational cricketers on psychological well-being score (and general population comparison scores).

	Elite (n = 55)	Rec. (n = 31)	Mean diff.	t	p<
Cricketers					
Negative affect	0.7 (0.63)	0.8 (0.55)	0.1	-1.13	ns
Positive affect	2.7 (0.57)	2.7 (0.58)	0.0	0.04	ns
Well-being	1.8 (1.1)	2.0 (1.0)	0.1	0.62	ns
General pop.(n=112)[a]					
Negative affect	0.9 (0.68)				
Positive affect	2.5 (0.63)				
Well-being	1.5				

[a] Data from Kammann & Flett, 1983.

Partner satisfaction

Mean differences (SD) between elite and recreational cricketers on partnership satisfaction are presented in Table 6. There was no significant difference between the groups.

Table 6. Mean (SD) differences between elite and recreational cricketers on partnership satisfaction.

	Elite (n = 55)	Rec. (n = 31)	Mean diff.	t	p<
Partner satisfaction	64.5 (12.3)	60.8 (14.1)	3.7	1.12	ns

General Motivations/Feelings/Attitudes to Cricket

Mean differences between elite and recreational groups on general motivations/feelings and attitudes to cricket are presented in Table 7. Results showed that elite cricketers scored significantly higher than recreational cricketers on *commitment to cricket (p<.001), intrinsic motivation (p<.005), extrinsic motivation (p<.005), achievement needs* (p<.01) and *competitive anxiety (p<.001),* and lower on *fun/stimulation needs(p<.01)* There were no significant differences between the groups on *satisfaction with cricket, relative importance of cricket* and *affiliation needs.*

Table 7. Mean (SD) differences between elite and recreational cricketers on general motivations/feelings and attitudes to cricket.

	Elite (n = 55)	Rec. (n = 31)	Mean diff.	t	p<
Commitment	3.2 (0.9)	2.0 (0.8)	1.2	-5.57	0.001
Satisfaction	3.8 (0.8)	4.0 (0.7)	0.2	1.00	ns
Rel. importance	2.1 (0.9)	2.4 (1.2)	0.3	1.11	ns
Comp. Anxiety	3.4 (1.0)	2.3 (1.1)	1.1	-4.72	0.001
Fun/stimulation	3.1 (1.1)	3.9 (1.2)	0.7	2.73	0.01
Affiliation	3.4 (1.0)	3.8 (1.1)	0.4	1.73	ns
Achievement	4.3 (0.8)	3.5 (1.3)	0.7	-2.86	0.01
Intrinsic mot.	2.9 (1.1)	2.0 (1.4)	0.9	-3.51	0.005
Extrinsic mot.	4.4 (0.8)	3.6 (1.1)	0.7	-3.34	0.005

Associations between constructs

In accordance with the research goals of the present study, correlations (Pearson *r*'s) were carried out on the following variables: goal orientation and intrinsic motivation; win orientation and extrinsic motivation; anxiety and intrinsic/extrinsic motivation; goal orientation and psychological well-being; and achievement motivation needs and anxiety.

No significant correlation was found between goal orientation and intrinsic motivation, *r* (83)= 0.12, p = .27; or between win orientation and extrinsic motivation, *r* (53)= .08, p=.55. There was no significant correlation found between competitive anxiety and intrinsic motivation, *r*(83)=.17, p= .11, but a significant correlation was found between competitive anxiety and extrinsic motivation, *r*(83)=.30, p= .004. As reported below, there was no significant correlation between competitive anxiety and extrinsic

motivation when the groups were tested separately. Although the association showed the same trend with both elites and recreationals, due to the reduced *n* in each group, the correlations were not significant.

In view of the significant differences between groups shown in Table 7, correlations were carried out on elites and recreationals separately. For elites, no significant correlation was found between goal orientation and intrinsic motivation, *r* (54)= 0.15, p = .29; nor between win orientation and extrinsic motivation, *r* (54)= .08, p=.55. There was no significant correlation found between competitive anxiety and intrinsic motivation, *r*(54)=.08, p= .11, nor between competitive anxiety and extrinsic motivation, *r*(54)=.14, p= .31.

For the recreational group, no significant correlation was found between goal orientation and intrinsic motivation, *r* (30)= -0.06, p = .72; nor between win orientation and extrinsic motivation, *r* (30)= -.10, p=.57. There was no significant correlation found between competitive anxiety and intrinsic motivation, *r*(30)=.08, p= .65, nor between competitive anxiety and extrinsic motivation, *r*(30)=.22, p= .23.

No significant correlation was found between goal orientation, partner satisfaction and psychological well-being (positive affect minus negative affect). These correlations are shown in Table 8 (df=64). Neither was there a significant correlation between these variables when elite and recreational groups were tested separately.

Table 8 Correlations between goal orientation and psychological well-being among elite and recreational cricketers.

Correlations	Part.sat	Pos.aff.	Neg.aff.	Wellbe.
Competitiveness	.07	.01	.06	-.03
Win	-.10	-.07	.15	-.12
Goal	-.11	.00	-.06	.04

Qualitative data

Content analysis was employed to elicit prominent themes from the answers to the two questions "What are the best ... and what are the worst things about playing cricket at the level you currently do?". The thematically organised responses to these questions are shown in Table 9. Responses from elite players indicating that the best aspect of playing cricket was the chance to achieve were separated into two streams. Those answers that indicated players liked to achieve well compared to other players were labelled *achievement (win)*, while the responses of players who indicated that they wished to achieve by bettering their own past performances were labelled *achievement (goal)*.

For elite players (in order of response prevalence), the best aspects of playing cricket were the challenge of competing against the best of their peers (58.1%), comradeship, achievement (win-oriented), achievement (goal-oriented), status achieved, travel/new experiences, and playing in a quality environment. For best aspects, comments included: "Competing against other regional cricketers and finding out how good I really am", and "competing against N.Z's best players and comparing myself to them". One elite player listed "the enjoyment, the competition, the comradeship, the prestige". The worst aspects for the elites were relationship sacrifices (40%), opportunity costs (money), travel, opportunity costs (career), opportunity costs (time away), failure and pressure to

perform. Under worst aspects comments included "time away from my wife especially at Xmas and New Year", "time required away from family and work", and "the financial struggle .i.e. taking unpaid leave from job with mortgage to pay".

For the recreational group, the best aspect was comradeship (with 83.8 % stating this was the best feature of playing cricket), enjoyment and achievement (goal). Comments included "the social aspect, meeting people, being part of a team", "enjoying the social interaction", "playing with a good team who get on well socially", "having a beer after the game with the opposition team members", and "the best things about playing at this level is enjoying it and having fun with my cricketing mates". The worst features for the recreationals were overcompetitive players, cheating or incompetent umpires, rain-interruptions and games between teams of mismatched ability. Comments included "some people are too serious and take the fun out of the game", "some games are too easy", "a one-side game that finishes early", "people who think they're still playing senior cricket", "sub-standard umpiring - batting team has members umpiring and bias occurs", and "poor umpiring - not many LBWs (Leg Before Wicket - a subjective decision by the umpire) from player umpires".

Table 9. Categorical responses from elite and recreational cricketers to open ended questions - best and worst aspects of playing cricket.

Responses - elite group	%		%
Best features		Worst features	
Challenge of competing	58.1	Relationship sacrifices	40.0
Comradeship	54.5	Opp. cost- money	30.9
Achievement (win)	43.6	Travel	29.0
Achievement (goal)	34.5	Opp. cost - career	25.4
Status	32.7	Opp.cost - time	18.2
Travel/new experiences	29.0	Failure	16.3
Quality sport environment	23.6	Pressure to perform	11.0
Responses - Recreational group	%		%
Comradeship	83.8	Overcompetit. players	29.0
Enjoyment	38.7	Cheating umpires	25.8
Achievement (goal)	22.6	Rain	25.8
		Mismatches	16.1

DISCUSSION

This discussion section will consider the results of the present study following the format of the research goals. Firstly the achievement motivation orientation results will be discussed and interpreted . Psychological well-being and competitive anxiety results will then be considered and then relationship satisfaction differences between the elite and recreational groups will be clarified and interpreted. The results of the exploratory questionnaire section on general attitudes to and motivations for playing will be considered along with qualitative data, and then the correlational results will be examined.

The main thrusts of the present study were to augment research indicating differences in achievement motivation orientation between athletes competing at different levels, to further investigate other differences between elite and recreational cricketers, and to test the influence that playing at elite level had on relationship satisfaction.

Achievement Orientation Motivation

The present study sought to establish whether there is a significant difference between elite and recreational cricketers regarding each of win (ego), goal (task) and competitiveness motivational orientations. As indicated by considerable previous research (e.g. Chaumeton & Duda, 1988; White & Duda, 1994), it was anticipated that elite cricketers would score more highly on win and competitiveness than their recreational counterparts. As results indicated, this prediction was borne out by the present study. Elite players scored significantly higher on both competitiveness and win orientation than their recreational counterparts. There was, however, no significant difference in scores on goal orientation. Again, this result is in line with those of previous studies which have found that mastery of skill performance is sought by both

learner and master athletes and by both elite and non-elite groups. The significance of the difference between the two groups on competitiveness provides further evidence that elite players are keener than are non-elites to put themselves in a situation where their skills will be judged by others. When this result is taken in tandem with the qualitative result which showed that 58% of the elite cricketers nominated the challenge of competing against the top players in the country as being one of the best features of playing, it indicates, not surprisingly, that the competitive spirit burns brightly within this group of elite cricketers.

The results clearly support those of previous studies that show there is a clear difference between athletes and non-athletes, and non-elite and elite athletes on measures of win (ego) orientation and competitiveness. This is, perhaps, to be expected when it is remembered that performance is the key to survival as an elite athlete. Those selecting athletes for elite teams or competitions are unquestionably adopting an ego or win approach when considering their selections. That is to say that they are clearly comparing one athlete with another and deciding which is currently performing at the highest level in order to make their choice. It is little surprise to find that elite athletes tend to take the same approach when considering their own achievements.

Existing research covered in the present study has brought into clear focus however, that operating from the goal or task perspective is more beneficial to young and developing athletes, yet elite athletes tend to score higher than non-elites on win-orientation. There appears to be a contradiction here. Strong evidence exists that setting sporting goals which are self-referenced and self-controllable is more functional than setting ego or win-oriented goals. A number of coaching and sport psychology texts and articles (e.g. Martens, 1987; Gould, 1993) strongly recommend the setting of task-oriented goals for all coaches and athletes. Yet evidence from previous research and from the present study also shows that elite athletes demonstrate a strong tendency to set other-referenced or win-oriented goals. It might be asked "why do our elite athletes, who are self-evidently

highly successful, appear to be high in ego-orientation, yet sport psychologists consistently argue for the use of task-oriented goals?".

From an applied perspective however, perhaps the whole issue may be somewhat of a non-event. From the present writer's perspective, there seems little harm in athletes setting win or ego-oriented goals, or in considering their sporting achievements in this light, as long as they realise that the performance of their opponents is largely or partly outside their own locus of control. In cricket, bowlers should not be discouraged from setting outcome goals such as taking so many wickets in a game or tournament, as long as they realise that the achieving of those goals includes them overcoming a number of factors outside their control (e.g. the umpires, the type of pitch, the captain, the weather, injuries etc.). If they realise that it is bowling accurately, demonstrating high skill level, persisting, and operating with sound tactical understanding (all of which are under the control of the bowler) that will lead to the capturing of wickets, then there seems little harm in a bowler setting these outcome goals, or in comparing him or herself to others.

The results of the present study, and previous studies, regarding the number of differences between elite and recreational athletes, suggests that adding "level of competition" to Weiss and Chaumeton's (1992) integrated model of sport motivation would add another important factor to the motivational recipe. The present study, although conducted with a small sample, shows clearly that there is a difference in motivational orientation between elite and recreational athletes - at least in a population of New Zealand cricketers.

Psychological well-being and competitive anxiety

An indicated by the results, there was no significant difference between the elite and recreational groups on the psychological well-being score. In fact the scores on both negative affect and positive affect for the two groups were nearly identical. So the exploratory proposal that elite players would be under more stress than the recreational

players and that this would be reflected in psychological well-being score was not supported. However, results showed that compared to the general population both groups of cricketers scored higher on positive affect, lower on negative affect, and consequently higher on psychological well-being. However there was a significant difference in competitive anxiety between the groups. These two results together may suggest that while playing cricket contributes positively to psychological health, the pressures of playing at elite level contribute to an increase in state anxiety. Of the 55 elite cricketers surveyed, 20 (36%) stated, when responding to the open-ended questions, that they felt the pressure of playing at the top level, failure, and pressure from selectors were among the worst aspects of playing cricket at that level.

Relationship satisfaction

Contrary to what may have been expected, results indicated no significant difference between the elite and recreational groups on a measure of partnership satisfaction. Yet the qualitative data showed that the most prevalent negative factor of playing among the elite players was relationship sacrifices. It is difficult to interpret these conflicting results with any degree of assurance. The partner satisfaction index was, in hindsight, not the best measure to use in the present study. Asking the cricketers how satisfied they were with their partner did not really tap the construct of interest - the quality of the relationship, and the effect upon it, of having one member or the partnership away playing and practising cricket. Conceivably, the qualitative data may provide a clearer picture of the effect of playing elite cricket on relationships than does the qualitative data. In-depth interviews with both elite athletes and their partners may provide a more profound fund of knowledge regarding the nature of the bi-directional association between competing in sport and interpersonal relationships.

Another feature that may impact upon the situation is the nature of cricketing wives and partners. In the present writer's experience, many partners of cricketers meet their spouses in and around cricket matches, which presupposes that they may have some

interest in or understanding of the game of cricket. This may ameliorate some of the inherent difficulties, but if the qualitative responses in the present study and anecdotal evidence is anything to go by, relationship problems are still a thorny issue for elite athletes.

It is certainly an area in which little study has been done, and it is, in the present writer's view, a fertile and vital area for future study. As Coppel (1995) states

> Research in sport psychology concerning athletes and relationship issues has been almost non-existent. As sport psychology has become more aware of the relationship of social supports or resources to mood, the adjustment to retirement from sport, or to the life stress-injury relationship, the importance of relationships in sport psychology has increased...Strategies to enhance social support or minimise relationship or marital stress appear to have the potential to positively impact the athlete in terms of sport performance and personal emotional adjustment...Future research into the relationship difficulties facing athletes is crucial (pp-195).

There appears to be enough evidence to suggest that this is an area that should be of interest to coaches and administrators. If, by providing counselling to their elite athletes regarding how best to optimise relationship happiness, they can improve the psychological well-being and relationship quality of their elite athletes, it seems sensible to suggest that this intervention should be undertaken. A happy athlete should be a better-performed athlete.

General attitudes to and motivations for playing cricket.

As outlined in the research goals section, the present study aimed to establish whether there would be significant differences between the groups on satisfaction with cricket, commitment to cricket, effect of playing on partner, general motivations for playing (fun/stimulation; affiliation needs; and achievement) and intrinsic/extrinsic motivation for playing. This part of the present study was exploratory in nature, but it was tentatively proposed that the elite group would score more highly on commitment to cricket and effect of playing on partner, due to the greater time and effort they expend on their sport. The work of Duda and colleagues (e.g. Chaumeton & Duda, 1988) suggests that elite athletes will score more highly than recreationals on extrinsic motivation, while the present writer surmised that the elite group would score higher on achievement needs, and lower on affiliation and fun/stimulation needs, in line with Martens (1987). Previous research (White & Duda, 1991b) has indicated that highly ego-oriented athletes were more likely to participate in sport for competition, recognition and status and less likely to play for affiliation needs and comradeship.

As indicated by results, there was no difference between groups regarding their satisfaction with playing cricket. This finding is not overly surprising, but the lack of difference in the *effect of playing on partner* measure counters what could be expected to occur. In line with what was proposed would happen with relationship satisfaction, it seemed logical to assume that, as the elite players were making a far greater commitment and more sacrifices to compete at the top level, that this would be manifested by them scoring higher on the EPP scale. This scale asked respondents to respond to the statements "My playing cricket negatively affects my relationship with my partner; my partner gets angry or frustrated at my being away at cricket; and my partner is supportive of me playing cricket. In fact, the elites (2.1) scored lower than the recreationals (2.4) although the difference was not significant. In light of the fact that for most of the elite players there is considerable financial and other opportunity costs incurred through their

playing cricket, it seems likely that spouses may be less than supportive of their endeavours. As alluded to in the relationship satisfaction section above, it may be that many of the wives knew "what they were letting themselves in for" when they chose their partner and have continued to support their partner in his sporting endeavours. Nevertheless, scores of 2.1 (elite) and 2.4 (recreational) on a 5 point Likert scale indicate that there is some resentment from partners at their spouse's cricket playing activities..

In line with predictions, there was a significant difference between the groups on commitment to cricket. It seems rational to expect that the elite group, who make considerable sacrifices and who appear to have more "invested" in their cricket than the recreational group, would display more commitment to the game.

The next section was concerned with general reasons for playing . Of the single item questions, all but one yielded significant differences between the two groups. There was no significant difference between the groups on affiliation needs with both groups scoring relatively highly (elite=3.4, recreational=3.8). However the qualitative data showed a somewhat different picture. Fully 83% of the recreational players cited comradeship ("being with the boys, playing with my mates" etc.) as being one of the best features of paying cricket, while 54% of elites answered in a similar manner. The difference in the open-ended question responses is clear. However, what is perhaps more notable is the importance of affiliation to both groups. It may be assumed that athletes playing a team sport would have a greater desire for social contact during sport than individual-sport athletes, but the results of the present study show that the need for social contact is very strong among this group of cricketers. While it may have been expected that the recreational group would score highly on affiliation needs, the elite group results are interesting. Even though this group are the best group of players in the country (outside the New Zealand team members) and have invested considerably in terms of time and sacrifices to pursue their cricketing destinies, their affiliation needs are still high.

With regard to the other two of Martens' (1987, also Gill et al., 1983; Gould et al., 1987) reason-for-playing constructs, as expected the elite players scored significantly higher on achievement needs, and significantly lower on fun/stimulation needs. Clearly, the recreational players play more for fun and comradeship, while the elite players, while they also may experience fun, and obviously enjoy the comradeship, are necessarily more concerned with their actual performance. For the elite players, if they fail to perform, they will be dropped from the team, while in the present writer's experience, quality of performance has little impact upon selection for lower grade and social teams. Nevertheless, the responses to the questionnaires showed considerable individual differences among group members, and there is a clear message here for coaches. When using Martens' (1987) reasons-for-competing "recipe" it is apparent that while there may be differences between elite and recreational athletes, there are also differences among group members. In order to assist their players optimally, coaches should understand the individual "recipe" of each players. In this way they will better understand each player's motivations for competing and be better able to tailor effectively any intervention.

With regard to the questions concerning extrinsic ("My cricket playing is motivated by external rewards - such as awards, praise, money, media") and intrinsic ("My cricket playing is motivated by an internal desire to achieve") motivation, the elite players scored significantly higher on both variables than the recreationals. These results show that elite athletes are generally more motivated both intrinsically and extrinsic factors than recreationals. The two forms of motivation are clearly not mutually exclusive. Previous research has been somewhat contradictory and confused in this area, with North American athletes tending to adopt a more extrinsic approach as they develop through the ranks (Ryan, 1980), and Australian athletes becoming more intrinsically and less extrinsically focused as they become older and more skilled (Watkin & Youngen, 1988).

The present study has reinforced previous research that has indicated differences between elite and non-elite athletes across a range of psychological variables.

Associations between constructs

The present study aimed to establish whether there existed links between certain constructs to test the findings of previous researchers (e.g. Chaumeton & Duda, 1988) that linked high scores on win-orientation with higher scores on extrinsic motivation, and a positive association between goal-orientation and intrinsic motivation. The other correlations tested were exploratory in nature, namely between goal orientation and intrinsic motivation; win orientation and extrinsic motivation (among elites), anxiety and intrinsic/extrinsic motivation; motivational orientation and psychological well-being; and achievement motivation needs and anxiety.

Somewhat surprisingly, the only significant correlation found was between competitive anxiety and extrinsic motivation. Perhaps this correlation can be explained by considering that those who are motivated more extrinsically are relying for motivation upon factors (awards, media praise etc.) which are outside their locus of control. It seems sensible to suggest that one might be more anxious about something over which one has little or no control rather than about something over which one's behaviour has an influence.

The present study failed to support the many previous studies which have found significant relationships between goal orientation and extrinsic/extrinsic motivation.

Consideration of the Weiss and Chaumeton Integrated Model of Sport Motivation

In light of the findings of the present study, it is proposed that the Weiss and Chaumeton model would more fully reflect the interactional constructs which form and impact upon motivated behaviour, by including two new moderating factors and conceptually altering a further factor. Suggested changes are shown in Figure 2. Changes to the model are in shaded areas shown in bold and italics type.

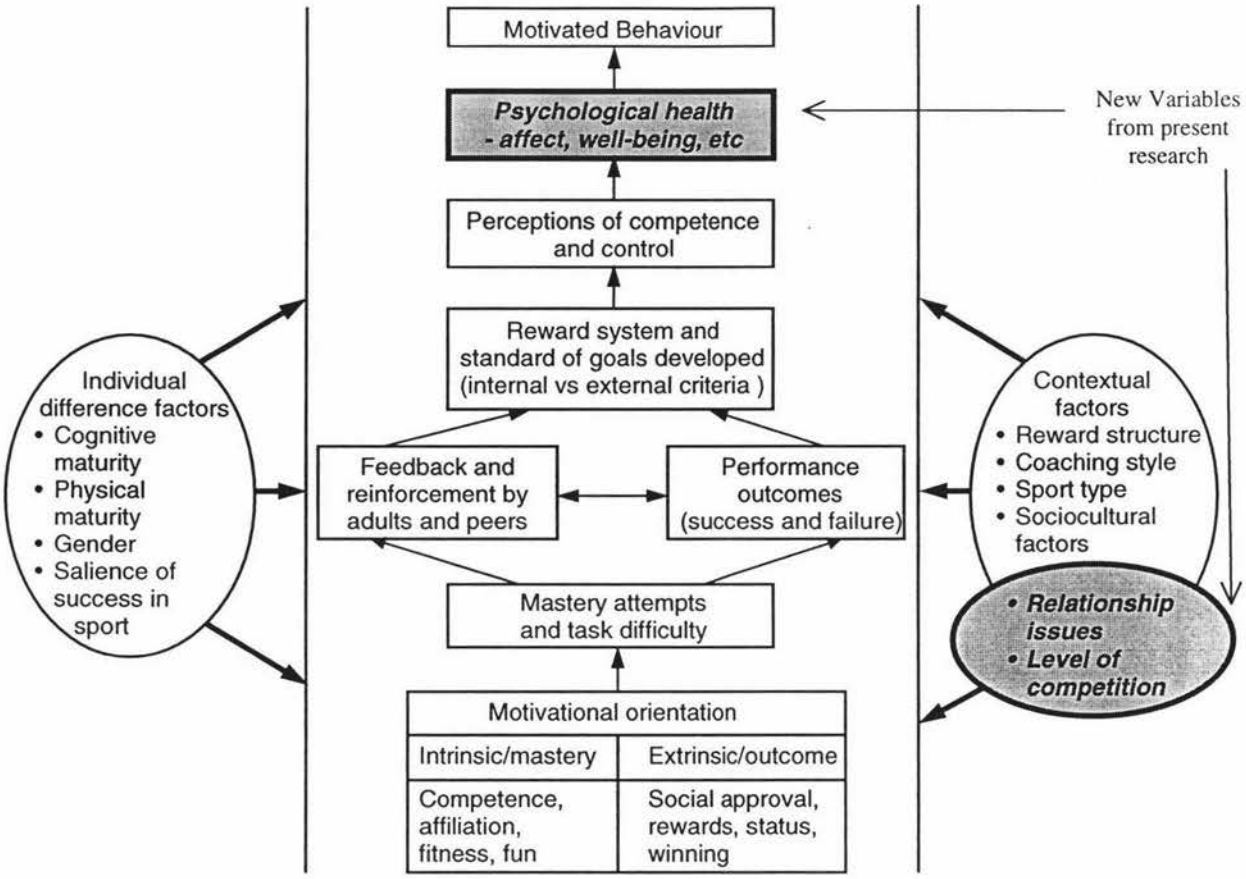

Figure 2. Suggested Changes to Weiss and Chaumeton's (1992) integrated model of sport motivation.

While the findings of the present study provide no clear evidence to support the change, the present writer considers that Weiss and Chaumeton's original construct of "affect" does not fully reflect the psychological variables involved. Changing this to "psychological health" allows the inclusion of not only affect but also psychological well-being or ill-being. The results of the present study have tentatively indicated the justification for including both relationship issues and level of competition as further moderating variables of motivation. There is clear evidence that level of competition impacts upon motivated behaviour as evidenced by differences in achievement motivation orientation. There is growing evidence that the bidirectional association between sport competition, especially at elite levels, and relationships can also be considered as a moderating variable of motivated behaviour.

LIMITATIONS OF THE PRESENT STUDY

Although there were several significant results emanating from the present study, there were a number of limitations that should be noted.

Firstly, it must be noted that the present study's sample was small. While the sample of elite players may reflect the population effectively (although the non-response issue will be addressed later in this section), a sample of 31 is a tiny percentage of the total number of recreational players. This should be borne in mind when considering the results of the present study.

It must also be noted that the relationship identified between competitive anxiety and extrinsic motivation is correlational, not causal. Causality may be suggested, but is in no way proven.

While previous work has shown the SOQ, Affectometer and PSI scales to be valid and reliable instruments, the scales on general feeling/attitudes and motivations for playing devised for the present study can only be considered as exploratory. Although the competitive anxiety scale (alpha=.85) and the commitment to cricket scale (alpha=.75) showed satisfactory reliability, the other scales (satisfaction with playing; and effect of playing on partner; both alpha=.63) showed less satisfactory internal reliability. All of these measures are, of course, untested as to validity and test-retest reliability.

A better measure of motivation for playing may be have been provided by using the Participation Motivation Questionnaire (Gill et al., 1983), a specifically designed and validated questionnaire tapping competitive motivation factors. Competitive anxiety could have been better measured by employing Martens, Vealey and Burton's (1990) Sports Competitive Anxiety Test. Also an adaptation of the Intrinsic/Extrinsic Motivation Scale (Weiss, Bredemeier & Shewchuk, 1985), designed for youth athletes,

could have provided a better measure of intrinsic and extrinsic motivation. Nevertheless, the present writer believes that more extensive questionnaires would have only added to the low response rate recorded for the present study, and so for an exploratory section perhaps the simple scales employed served their purpose. As mentioned previously, a better measure of relationship happiness should be used which taps into the effect that playing at elite levels of sport has on relationships.

The present study was carried out among a population of cricketers, and it may be that there are unique characteristics associated with cricket and cricketers that limit the generalisability of these results. Nevertheless, the significant difference between the elite and recreational groups on win and goal orientation indicate that previous results can be replicated in New Zealand using a population which, to the present writer's knowledge, has not been tested.

The low response rate was disappointing. Despite the fervent efforts of the researcher, the response rate was less than 40%. It was considered that the best chance of ensuring that the elite players completed and returned the questionnaire lay with getting the coaches of the various elite teams to hand out the questionnaire and explain the reasons for the survey to the players. All of these coaches were known to the present writer, whereas many of the players were not. There is little reason to suggest that this was not the best approach in the circumstance. Perhaps one of the main reasons for the low response rate is that the players could see little personal gain in them filling out the questionnaire, although the majority of those who have done so requested that they be posted a summary of the study.

There is also the question of a possible non-response bias with a response rate as low as that experienced with the present study. This is not a matter of sample size, but rather the danger of making the assumption that those who did not respond share the characteristics of those who did respond. This assumption should not be made, and there

could have provided a better measure of intrinsic and extrinsic motivation. Nevertheless, the present writer believes that more extensive questionnaires would have only added to the low response rate recorded for the present study, and so for an exploratory section perhaps the simple scales employed served their purpose. As mentioned previously, a better measure of relationship happiness should be used which taps into the effect that playing at elite levels of sport has on relationships.

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remains the possibility that non-respondents differ from respondents in some meaningful way (Aaker & Day, 1980; Brown, 1980). Although the sample gathered in the present study of represents around half of the total population of elite players, it cannot be taken for granted that there is no difference between those who responded and those who did not. Perhaps non-respondents could be resurveyed.

SUGGESTIONS FOR FURTHER STUDY

Achievement Motivation Orientation

There is already a considerable body of research on achievement motivation orientation, yet much remains to be discovered. More work is required to examine systematically the tenets of this theoretical perspective and the other perspectives of participation/discontinuation motives and intrinsic/extrinsic motivation. Duda (1992) suggests specifically suggests that researchers begin to:

1. Develop ways by which we can assess perceived siuational goal perspective and determine the effect of these perceptions on sport participants;
2. Study specific ways in which practitioners can create a task-involving sport climate;
3. Examine the socialization processes by which individuals become disposed to being more task- (goal) or ego-(win) oriented in sport; and
4. Investigate the developmental change on goals, conceptions of ability, and related cognitive mediators of behaviour(p.89).

From the present writer's perspective the influence of coaching environment on motivational orientation is an area which is in particular need of further study.

Interpersonal relationships and elite sport

This area has been largely covered earlier in the present study, but as mentioned previously, the bi-directional association between elite athletic involvement and performance and relationships is another area which is vitally in need of further study. As Coppel (1995) states:

> General relationship issues such as independence identity, security, intimacy, power, control and communication can become even more complex in the structure and demands of sport involvement (p.193).....Relationship enrichment might indeed prove to be a strong

> influence on level of performance and effort. The other (bidirectional) arrow directional deals with the impact of both sport and sport-related behaviour and attitudes on the development of relationships - in terms of quality and quantity, problem areas, and suggestions for enrichment (p.203).

Coppel further suggests that retrospective interviewing of athletes may help to investigate the role of relationships in their sport goals, and that these perceptions may help to more fully understand current relationship patterns or problems. Like the present writer, Coppel believes that exploring how athletes' (and elite athletes' in particular) involvement in sport impacts upon their relationship behaviour patterns would make a significant contribution to sport psychology.

In the present writer's view, the time is ripe for administrators to take heed of the early findings regarding the effects of playing elite sport on personal relationships. Sport administrators demand optimal performance from their elite athletes, yet at present it seems to be a case of all care and no responsibility when it comes to divorces and relationship breakups directly and indirectly caused by the time and commitment the athletes must give to their sport. While the present writer has little knowledge of help and relationship counselling available to elite athletes overseas, these sorts of programmes seem to be sadly lacking, at least within cricket and rugby circles, in New Zealand. Heyman (1987) cites the lack of understanding of training demands, travel away from home, jealousy, infidelity possibilities and spouse identity issues as problem areas for athletic relationships and suggests that in some cases "the role of athletics and sport can play a unique role in maintaining the patterns that will be dysfunctional in the marriage" (p.142). While some top athletes are well-paid for their deeds, it is time that those administering sport realised the personal cost incurred by many of these sportsmen and women, and moved to make a positive intervention in this area.

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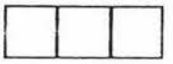
APPENDIX



CONSENT FORM

I _____ (full name) agree to take part in the study described in the introduction to this questionnaire.

The nature and purpose of this study have been explained to my satisfaction.

- I understand the questions concern general feelings about cricket and motivations about playing the game as well as questions on my personal wellbeing and relationship satisfaction
- I understand that my responses are confidential.
- I understand that I can skip any question that I wish to.
- I understand that I can withdraw from the study at any time.
- I understand that I can get feedback of the results of this study by filling in my name and address below.

_____ (signature) _____ date

"I would like some feedback about the results of this study"

Please tick one Yes ☐

No ☐

Please print your name and address below.

Name: _____

Address: _____

_____

_____

PLEASE REMOVE THIS SHEET AND PLACE IN THE SMALL PREPAID ENVELOPE MARKED "CONSENT FORM"

Return your completed questionnaire in the larger prepaid envelope.

The following statements describe feelings about cricket. Using the scale below, please circle the one number, that indicates how true each statement is for you.

1 = Not at all true for me
2 = Slightly true for me
3 = Moderately true for me
4 = Very true for me
5 = Extremely true for me

1. I get bored with cricket 1 2 3 4 5
2. I feel like giving cricket up sometimes 1 2 3 4 5
3. Cricket is very important to me 1 2 3 4 5
4. Cricket is more important than my relationship with my partner 1 2 3 4 5
5. I am totally committed to cricket 1 2 3 4 5
6. I find playing cricket highly satisfying 1 2 3 4 5
7. Cricket is more important than my work 1 2 3 4 5
8. At times I feel stressed when I am playing cricket 1 2 3 4 5
9. I feel nervous before games 1 2 3 4 5
10. My playing cricket negatively affects my relationship with my partner . . 1 2 3 4 5
11. My partner gets frustrated or angry with my being away at cricket 1 2 3 4 5
12. I always enjoy playing cricket 1 2 3 4 5
13. Cricket is more important to me than my friends 1 2 3 4 5
14. Cricket is more important than other leisure activities 1 2 3 4 5
15. My partner is supportive of me playing cricket 1 2 3 4 5
16. I play cricket mostly for fun/stimulation 1 2 3 4 5
17. I play cricket mostly for the comradeship of team-mates 1 2 3 4 5
18. I play cricket mostly for the sense of achievement I gain when I perform well 1 2 3 4 5
19. My cricket playing is motivated by external rewards (such as awards, praise, money, media) 1 2 3 4 5
20. My cricket playing is motivated by an internal desire to achieve 1 2 3 4 5

The following statements describe reactions to sports situations. We would like to know how you *usually* feel about sports and competition. Using the scale below, please circle the one number, that indicates how much you agree or disagree with each statement.

1 = Strongly agree
2 = Slightly agree
3 = Neither agree nor disagree
4 = Slightly disagree
5 = Strongly disagree

1. I am a determined competitor 1 2 3 4 5
2. Winning is important 1 2 3 4 5
3. I am a competitive person 1 2 3 4 5
4. I set goals for myself when I compete 1 2 3 4 5
5. I try my hardest to win 1 2 3 4 5
6. Scoring more points than my opponent is very important to me 1 2 3 4 5
7. I look forward to competing 1 2 3 4 5
8. I am most competitive when I try to achieve personal goals 1 2 3 4 5
9. I enjoy competing against others 1 2 3 4 5
10. I hate to lose 1 2 3 4 5
11. I thrive on competition 1 2 3 4 5
12. I try hardest when I have a specific goal 1 2 3 4 5
13. My goal is to be the best athlete possible 1 2 3 4 5
14. The only time I am satisfied is when I win 1 2 3 4 5
15. I want to be successful in sports 1 2 3 4 5
16. Performing to the best of my ability is very important to me 1 2 3 4 5
17. I work hard to be successful in sports 1 2 3 4 5
18. Losing upsets me 1 2 3 4 5
19. The best test of my ability is competing against others 1 2 3 4 5
20. Reaching personal performance goals is very important to me 1 2 3 4 5
21. I look forward to the opportunity to test my skills in competition 1 2 3 4 5

1 = Strongly agree
2 = Slightly agree
3 = Neither agree nor disagree
4 = Slightly disagree
5 = Strongly disagree

22. I have the most fun when I win 1 2 3 4 5

23. I perform my best when I am conpeting against an opponent 1 2 3 4 5

24. The best way to determine my ability is to set a goal and try to reach it . 1 2 3 4 5

25. I want to be the best every time I compete 1 2 3 4 5

Affectometer 2 - Short Form

DIRECTIONS: These next questions concern **how often** you have had certain positive and negative feelings over the **past few weeks.**

For each item please circle the number that best describes how often you have felt that way over the past few weeks.

	Not at all	Occasionally	Some of the time	Often	All of the time
satisfied	0	1	2	3	4
free-and-easy	0	1	2	3	4
helpless	0	1	2	3	4
depressed	0	1	2	3	4
good natured	0	1	2	3	4
discontented	0	1	2	3	4
insignificant	0	1	2	3	4
confident	0	1	2	3	4
useful	0	1	2	3	4
withdrawn	0	1	2	3	4

The following statements are concerned with <u>how you feel</u> about your current <u>partner/girlfriend</u>. To show how you feel, circle a number from 1 to 7 where each number has the following meaning:

7 = delighted
6 = pleased
5 = mostly satisfied
4 = mixed
3 = mostly dissatisfied
2 = unhappy
1 = terrible

<u>"HOW SATISFIED ARE YOU WITH YOUR PARTNER'S/GIRLFRIEND'S.....?"</u>

1. Ability to be kind and understanding 1 2 3 4 5 6 7
2. Similarity of activity interests 1 2 3 4 5 6 7
3. Similarity of attitudes and values 1 2 3 4 5 6 7
4. Social status 1 2 3 4 5 6 7
5. Financial resources 1 2 3 4 5 6 7
6. Physical attractiveness 1 2 3 4 5 6 7
7. Ability to provide emotional support 1 2 3 4 5 6 7
8. Sexual attractiveness 1 2 3 4 5 6 7
9. Stability and pleasantness of personality 1 2 3 4 5 6 7
10. Reliability/trustworthiness 1 2 3 4 5 6 7
11. Ability to be close and intimate 1 2 3 4 5 6 7

Please answer the following questions:

1. What are the **best things about playing cricket** at the level you currently do?

2. What are the **worst things about playing cricket** at the level you currently do?

THESE ARE ALL THE QUESTIONS I HAVE.

THANKS FOR TAKING THE TIME TO FILL THE QUESTIONNAIRE OUT.

PLEASE PUT THE COMPLETED QUESTIONNAIRE IN THE LARGE BROWN ENVELOPE AND MAIL IT BACK TO ME (NO STAMP NEEDED)